

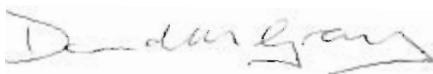
**APPROVAL OF METHODOLOGY STATEMENT FOR DETERMINATION OF
SYSTEM-TO-SYSTEM FLOWS IN RELATION TO THE INTERCONNECTOR
BETWEEN FRANCE AND ENGLAND**

Whereas:

- (a) the National Grid Electricity Transmission ("NGET") holds a licence to participate in the transmission of electricity treated as granted under section 6(1)(b) of the Electricity Act 1989 as amended;
- (b) paragraph 1 of standard condition C3 (Balancing and Settlement Code (BSC)) of that licence requires NGET to have a balancing and settlement code ("BSC") in force at all times, and NGET has such a code in force;
- (c) the BSC has been modified with effect from 21 March 2001 to incorporate, among other things, Section R7.5 which relates to system-to-system flows (as defined in the BSC);
- (d) Section R7.5.3 of the BSC requires NGET to determine system-to-system flows on a basis for the time being approved in writing by the Gas and Electricity Markets Authority (the "Authority");
- (e) NGET has prepared a methodology as the basis for its determination of system-to-system flows in relation to the Interconnector (as defined in the BSC) with France;
- (f) NGET has submitted the methodology annexed hereto as the basis for its determination of such flows in relation to the Interconnector with France to the Authority for its approval pursuant to Section R7.5.3 of the BSC,

NOW the AUTHORITY, for the purposes of Section R7.5 of the BSC, hereby approves the methodology prepared by NGET as annexed hereto as the basis for NGET's determination of system-to-system flows in relation to the Interconnector with France. This methodology replaces the methodology approved by the Authority on 30 March 2006. This approval shall be in force from 14 August 2006 until 1 April 2007 and shall lapse on expiry of such period.

Dated: 10 August 2006



SIGNED on behalf of the Authority and authorised for that purpose by the Authority by
David Gray, Managing Director, Networks

ANNEX**METHODOLOGY STATEMENT FOR DETERMINATION OF SYSTEM-TO-SYSTEM FLOWS IN RELATION TO THE INTERCONNECTOR BETWEEN FRANCE AND ENGLAND****1. Requirement for Methodology Statement**

- 1.1 This Methodology Statement is produced for the purposes of paragraph 7.5 of Section R of the Balancing and Settlement Code (BSC).

2. Objective of Methodology

- 2.1 The methodology given in section 3 below describes the basis on which the system-to-system flow will be determined for the purposes of paragraph 7.5.3 of Section R of the BSC. This description is supported by the information on implementation of the methodology set out in section 4.

3. Methodology

- 3.1 The system-to-system flow will be determined from instructions issued by the Transmission Company (NGET) or the Externally Interconnected System Operator (RTE SA), or issued automatically by equipment owned by National Grid Interconnectors Ltd (NGIL) or RTE SA to respond to events on the Total System or the External System. The acceptance by the Transmission Company of any Bid or Offer submitted by an Interconnector User in respect of an Interconnector BM Unit does not constitute an Interconnector instruction in this Methodology.
- 3.2 The system-to-system flow will be determined in manner consistent with paragraph 7.5 of Section R of the BSC. Accordingly any system-to-system flow on the Interconnector will not affect, or form part of, the Interconnector Scheduled Transfer (IST). If the difference between the IST and the physical capability of the Interconnector is reduced after an Interconnector instruction has been issued the system-to-system flow may be reduced as necessary.

4. Implementation

- 4.1 The implementation of this methodology is agreed between NGET and RTE SA. For information purposes an outline of the current plans to implement this methodology is given in Appendix A. However NGET recognises that any material changes to the way in which the methodology is implemented (as described in Appendix A) will require a revised Statement to be resubmitted to the Authority for further approval.

5. Definitions

- 5.1 Unless stated otherwise, terms and expressions used in this methodology statement shall have the same meanings given to them in the BSC.

Appendix A

Operational Process for Determining the System-System Flow on the France-England Interconnector (from 29 March 2004)

A1 Calculate the Interconnector Scheduled Transfer (IST)

The Interconnector Scheduled Transfer is based on Mid Channel Nominations (MCN) submitted by Interconnector Users in accordance with the IFA Access Rules and associated IFA User Agreements. MCN data will be consistent with Physical Notifications submitted to NGET and must be within the Interconnector User's Interconnector Capacity Entitlement (ICE).

The MCN data is submitted by Interconnector Users to both NGET and RTE SA. At Interconnector Gate Closure (the earlier of Gate Closure in France and Gate Closure in England and Wales) a comparison of MCN data held by NGET and RTE SA will be made. If differences are identified resubmission of MCN data may be requested from the Interconnector Users, otherwise correction rules will apply such that the agreed MCN data may be based on data submitted to RTE SA. The IST will be based on the agreed MCN data. Hence the IST could be based on the RTE SA data.

A2 Calculate the Scheduled Mid-Channel Reference Program (SMCRP)

The Scheduled Mid Channel Reference Program is based on the same MCN data that is used to determine the IST. The IFA facilitates multiple Users on the Interconnector, for this reason the dynamic characteristic of the Interconnector is not fully included in the MCN data submitted. The SMCRP will, as far as possible, give the same energy transfer in each trading period as the MCN data used to determine the IST, within the agreed dynamic characteristic for the Interconnector. The effect on System-System Flows caused by intraday capability on the IFA is included in Section A7 of this Appendix. Section A7 refers to day-ahead Scheduled Mid Channel Reference Programme (SMCRP), intraday SMCRPs and the Final Scheduled Mid Channel Reference Programme (FSMCRP).

A3 Variations to the FSMCRP

After the FSMCRP has been agreed it may be necessary to vary the Mid-Channel Reference Program (MCRP). When this occurs for reasons other than those specified in paragraph 7 of section R of the BSC this will constitute a system-to-system flow (which may for example be recorded as Emergency Assistance or Constraint).

A4 Volume of System-to-System Changes

Where the instruction to change the MCRP has been given for a reason that will give rise to a system-to system flow then the change to the MCRP will be a system-to-

system change. The volume associated with a system-to-system change will be calculated from the previous MCRP as described below:

Consider the simple FSMCRP shown in figure 1.

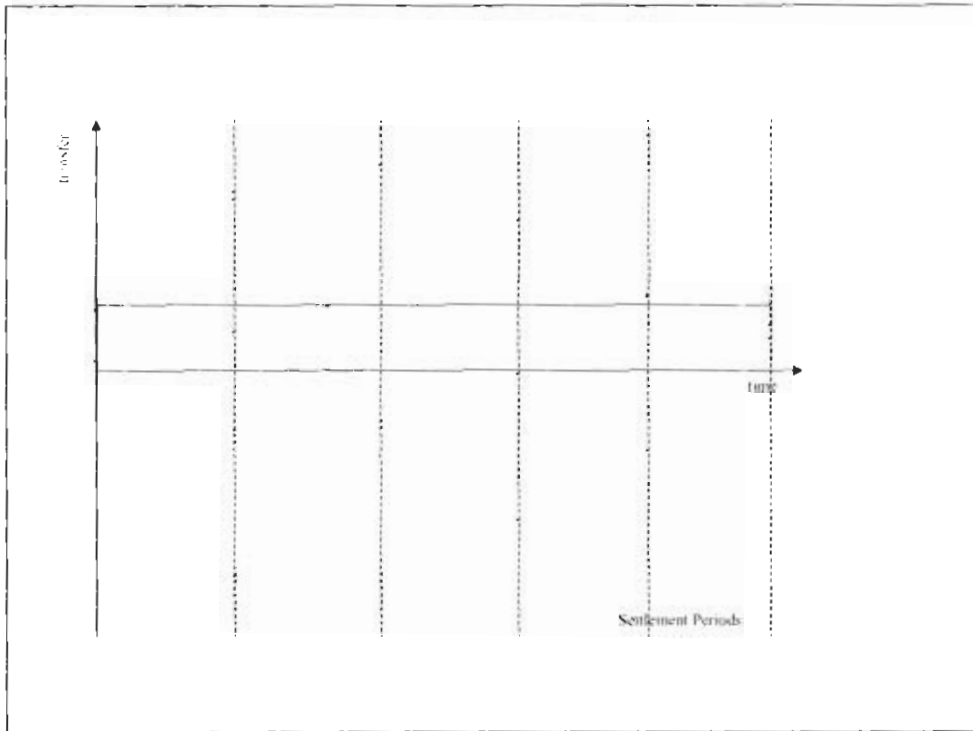


Figure 1 Final Mid Channel Reference Programme

NGET or RTE SA makes a request to vary the MCRP (this request being accepted by the other party, or following an automatic instruction is issued by equipment armed by NGIL and/or RTE SA to respond to events on the Total System or the External System.

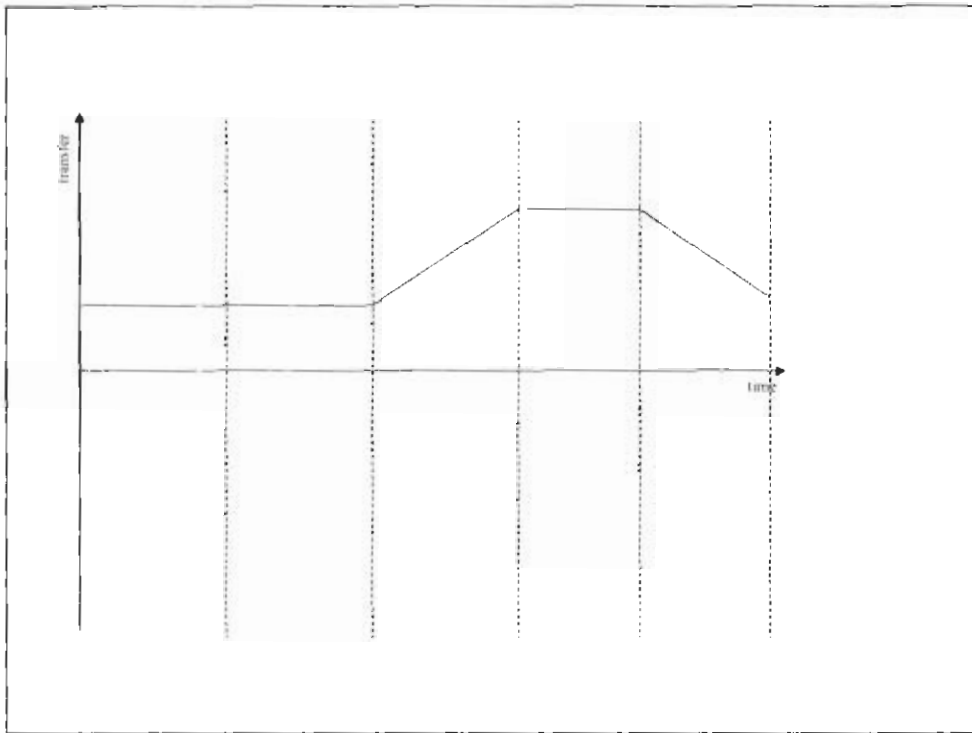


Figure 2 MCRP revised for system-to-system flow

Labelling the FSMCRP as $MCRP_0$, and the revised MCRP as $MCRP_1$ and any subsequent revisions to the MCRP are numbered in sequence then the change in instructed transfer volume is calculated as the difference between the previous and revised programmes ($MCRP_{n-1}$ and $MCRP_n$) for the changes to the MCRP.

The change in the instructed transfer in settlement period j , caused by acceptance of the new Mid Channel Reference Programme n is given by:

$$\Delta T_{n,j} = \int_0^{\infty} \max(-IC_j(t), \min(IC_j(t), MCRP_{n-1}(t))) - \max(-IC_j(t), \min(IC_j(t), MCRP_n(t))) dt$$

where

- $MCRP_{n,j}(t)$ Is the instantaneous transfer t minutes from the start of settlement period j for Mid Channel Reference Programme n
- $\Delta T_{n,j}$ Is the change in transfer volume resulting from the acceptance of the revised MCRP ($MCRP_n$) in settlement period j
- $IC_j(t)$ Is the actual instantaneous interconnector mid channel capacity t minutes from the start of settlement period j . Such that the actual transfer is in the range $\pm IC_j(t)$.

This is shown graphically below:

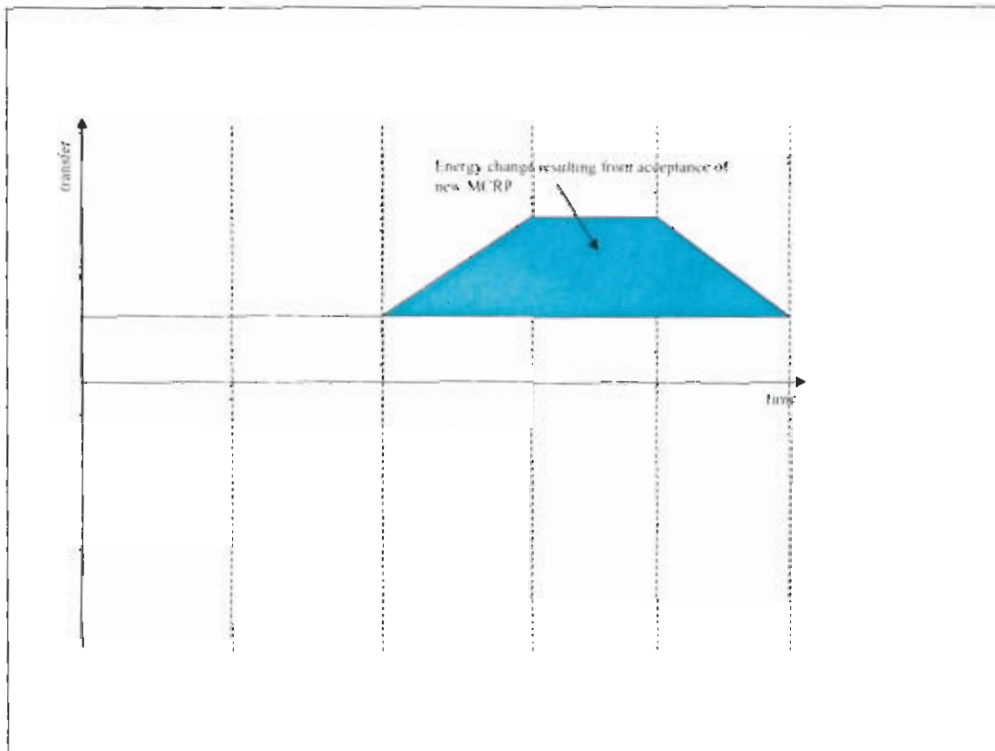


Figure 3: Change in instructed transfer volume arising from change in MCRP

The total volume of system-to-system change (T_1) will be the sum of all changes in instructed transfer volume arising due to system-to-system flows.

A5 Volume of System-to-System Flow (SSF)

The total volume of system-to-system change is calculated at Mid Channel. It is then adjusted for Interconnector Losses to determine the System-to-System Flow. This adjustment uses the Mid Channel Loss Factor (MCLF, currently 0.0117).

A6 Metered Volume for Transmission Company Interconnector BM Units

The system-to-system flow is calculated and the Metered Volume allocated to the Transmission Company Interconnector BM Units (TCIBMU) as shown below:

If direction of SSF is from France to England $SSF = T_1 \cdot (1 - MCLF)$

TCIBMU(Production) = SSF TCIBMU(Consumption) = 0

If direction of SSF is from England to France $SSF = T_1 \cdot (1 + MCLF)$

TCIBMU(Production) = 0 TCIBMU(Consumption) = SSF

A7 Revisions to Appendix A

This appendix is provided for information purposes only. If material changes occur to the planned operational process for determining the system-to-system flow on the France-England Interconnector then this appendix will be revised accordingly.

Revision No. 1 (effective from 29 March 2004)

Appendix A has been revised to take account of the introduction of intraday capability on the Anglo-French interconnector. With intraday capability on the IFA, there will be one day-ahead Scheduled Mid Channel Reference Programme (SMCRP) and between zero and five intraday SMCRPs. The most recent SMCRP produced which affects a particular settlement period is defined as the Final Scheduled Mid Channel Reference Programme (FSMCRP) and is the base against which System-System Flows (SSF) will be calculated.

Revision No.2 (effective from 1 April 2006)

Appendix A has been revised to take account of the name change of NGC to NGET (National Grid Electricity Transmission) with effect from 26th July 2005 and the name change of RTE to RTE SA (EDF Transport SA) with effect from 31st August 2005 when RTE was incorporated as a wholly owned subsidiary of Electricite de France and became a limited liability company.

Revision No.3 (effective from 14 August 2006)

Minor changes to reflect the new business separation arrangements introduced by the Energy Act 2004. In respect of the interconnector between England and France (IFA) a separate legal entity, NGIL is to be created to own and operate the IFA. This is effective from Monday 14th August 2006, where NGIL have received the Electricity Interconnector Licence to operate the IFA from this date.