

Interconnection in North West Europe

A consultation jointly issued by the following companies (the “companies¹”)

nationalgrid



Gestionnaire
du Réseau
de Transport
d'Électricité



Purpose

The purpose of this consultation is to seek feedback from market participants and stakeholders regarding:

1. Additional interconnection capacity between GB and France
2. New multi-year capacity products for a proportion of available capacity of up to 10 years duration, uni- or bi-directional, potentially made available to the market across more than one interconnection border
3. The most appropriate fora in which to consider the broad regime relating to interconnection capacity between Continental Europe and GB, these being:
 - a. the proposed 1GW interconnector between the Elia and National Grid transmission systems (GB/BE)
 - b. the existing 2GW IFA (Interconnexion France-Angleterre) interconnector (GB/FR)
 - c. future RTE – National Grid (FR/GB) interconnectors
 - d. or any other interconnectors between continental Europe and GB

Currently only the existing IFA is explicitly considered on a regional level via the Electricity Regional Initiative (ERI) in the France-UK-Ireland (FUI) region.

¹ For the purposes of this consultation “National Grid” refers to the wholly owned subsidiary National Grid Interconnectors Limited, an Interconnector Licence holder.

Background

General

The issues set out above are periodically reviewed amongst the companies and this consultation has been issued at this time in light of a number of factors including but not limited to:

- 3rd Legislative Package
- TENE Priority Interconnection Plan
- EU Emissions targets
- Developing renewables generation picture and managing intermittency
- Transmission capacity
- Studies for interconnector projects
- Large Combustion Plant Directive timescales
- Increasing range of joint activities between the companies as part of the Electricity Regional Initiatives and the emerging ENTSO(E) organisation foreseen by the 3rd Package
- Recent studies considering the evolving requirements of regional and inter-regional market integration. Reference the ETSO/Europex report and consultation concerning the model for regional and inter-regional congestion management.

Interconnection Capacity

Existing, committed and future GB-continent interconnection is depicted below:



The companies conduct various assessments of potential additional future interconnectors and the potential regulatory treatment. Additionally, key stakeholders will be the participants who will utilise interconnectors for energy transfers and their feedback will be a valuable part of the overall assessment of potential product offerings.

The existing 2GW IFA was commissioned in 1986 and Third Party Access arrangements were introduced in 2001. A range of capacity products are sold to IFA Users with annual capacity currently the longest duration and typically sold 2-3 months ahead of time. A 3-year product was sold in 2001 but discontinued. Potential interest in a 2-year product was identified at an IFA User Forum in November 2007.

National Grid and Réseau de Transport d'Electricité (RTE) are investing €70m (£56m) over the next 3 years in the mid-life refurbishment of IFA. A joint contract was awarded² on 16th May 2008 to replace power conversion and control equipment at the converter stations at Sellindge and Les Mandarins. This will maintain high availability and enhance reliability for customers on today's 2GW IFA interconnector.

In addition to the existing and committed interconnectors, studies are ongoing into the viability of additional submarine interconnectors GB-Belgium and GB-France.

Elia and National Grid announced on 6th February 2008 the signature of a joint development agreement to investigate the potential for a 700MW to 1,300MW interconnector between Belgium and GB.

National Grid and RTE are examining the potential for a further high capacity interconnection between GB-France with studies due to conclude later this calendar year.

Multi-Year Products

Recent months have seen an increase in participation on IFA with over 25 eligible Users. In addition to seeking short-term opportunity, Users may have or may wish to develop long term supply obligations in markets that they may wish to increasingly hedge via cross-border capacity and trades. The companies perceive this to be on the basis of changes in European plant mix, the need for strategic network investment to meet Europe's 2020 renewables target and new power station build. Other topics, such as carbon capture strategies or uncertainty regarding overall generation-supply position may enter into Users' considerations.

² Joint National Grid-RTE press release 2nd July 2008 refers.

France-UK-Ireland Electricity Regional Initiative (FUI ERI)

The recent focus has been on:

- Congestion Management – CM Guideline being addressed and compliance in progress via the new Capacity Management System (CMS) and refreshed IFA Access Rules
- Balancing – interim and enduring solutions in progress
- Transparency – enhanced data provision for ETSO Vista 2 via CMS and other systems

The following is already in place:

- A single system for the explicit auction of all capacity on IFA in both directions has been in use since 2001
- A range of products are auctioned from annual to daily with no reserve prices
- Six re-nomination gates are available to IFA Users through the Contract Day
- Balancing trades are facilitated using a single day ahead price offered between System Operators

Outcomes of the Congestion Management Workstream require new arrangements and systems for the allocation of interconnector capacity. The timeline on the remaining developments is as follows:

- National Grid and RTE were given the go-ahead by regulators in October 2007 for their preferred solution to replace today's allocation system on IFA
- National Grid and RTE awarded a joint contract³ on 31st July 2008 for a new Capacity Management System for go-live in mid-2009.

This new allocation system will:

- continue to be a one-stop shop for Users for IFA capacity allocation and allow single User nominations to both System Operators
- yield full compliance with the Congestion Management Guideline with refreshed IFA Access Rules (enhanced secondary trading facilities including Use It or Sell It (UIoSI), hourly Day-Ahead and Intraday capacity)
- incorporate Balancing trades in the scheduling process for the High Voltage Direct Current (HVDC) interconnector
- provide enhanced data transparency to ETSO Vista 2

Whereas much of the FUI ERI focus to date has been on enhancing shorter term issues such as Day Ahead and Intraday allocation, the interest of some stakeholders in a wider product/capacity range including longer term products and increased interconnection capacity also has to be measured and answered accordingly.

³ National Grid-RTE awarded the software contract to Unicorn s.a.

There is currently 3GW of existing and committed⁴ GB-continent interconnection. This may increase to over 7GW in the next decade with the addition of new interconnectors.

Hence, National Grid has already joined with companies in the Central West Europe (CWE) region to begin a technical study of the impact of this increase in interconnectivity in order to assess the regional mutual benefits, the possible routing options for these links and the mutual System support agreements which will be important in order to offer reliable interconnection capacities to market participants and in order to maintain security of supply in each national electrical system.

⁴ National Grid and Tennet awarded contracts in May 2007 for an investment totalling around €600m for the 1GW Britned interconnector between GB and Holland. Construction is underway with commissioning expected end-2010 and full commercial operation in early 2011.

Consultation Timeline

- Questionnaire circulated 8th September 2008
- Responses required by 30th September 2008
- Companies collate responses and run technical and commercial studies late-Autumn 2008
- Companies publish findings end-2008
- Conclusions Spring 2009

Specific Questions

To complement the companies' studies, stakeholders may have comments to make based on their long-term energy views, which the companies will welcome as part of this overall assessment.

Answers to all of the questions in the appendix are kindly requested in order to obtain the maximum feedback. We also welcome additional comments and points of view which will be taken into account as open responses to the questions.

Please indicate in your response whether you wish it to be kept confidential or not and if so, if you would agree on the publication of all general comments received without respondent names.

Responses are invited by 30th September 2008 by email or post to any of the contacts as follows:

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Appendix – Interconnection Capacity

1. What is the market appetite for additional interconnection capacity, beyond that which is already committed, with particular reference to the additional routes as shown in the table below?

Border	Capacity	Status	Operation
GB-France (IFA)	2GW	Existing	1985-86
GB-Netherlands (BritNed)	1GW	Under Construction	2010-11
GB-Belgium	~1GW	Development	c. 2013-14
GB-France ('IFA2')	High Capacity	Feasibility	Targeted before 2015/16
GB-?	Capacity?	Opportunity	Target?

2. Further to the above question, please provide us a feedback on the expected utilisation in the medium to long term range (5 to 15 years) for such additional interconnection capacity.

Multi-Year Capacity Products

3. The current product volume mix on IFA offers 45% capacity in annual products, 45% across within-year products and 10% on a short-term basis. Further to the previous questions, feedback is sought on the following combined proposal:
 - a. A two-year IFA capacity product 2009-11. This could be running across calendar or financial years with volumes of around 10% (200MW) provided from current annual products on IFA.
 - b. As an alternative to (a), multiple annual products sold years rather than months ahead – for example CY 2010 and CY 2011 products sold towards the end of 2008.
 - c. A multi-year product of up to 10 years duration with a total volume of up to 1GW offered potentially across IFA, the proposed GB-Belgium interconnector and an additional GB-France interconnector.

Feedback is sought on the volumes, durations and target commencement dates of the proposed multi-year capacity products. Feedback is also sought throughout on the treatment of product direction and preferences for uni-directional or bi-directional capacity offerings. If customers would not be interested in longer-term products then feedback is also sought on the reasons for this.

Of key importance is respondent feedback on the benefits or otherwise of multi-year as opposed to annual products or short-term products.

4. The focus of the FUI ERI for the last 18 months has been on IFA and day ahead/intraday arrangements and compliance with the Congestion Management Guideline. These short-term aspects are now at the implementation stage. The focus of this consultation is on longer-term aspects and the potential for over 7GW of HVDC interconnection capacity in North West Europe. Feedback is sought on the most appropriate regional structure in which to assess demand for, and delivery of, effective and coordinated development of further interconnection capacity.