

**CHARGING METHODOLOGY STATEMENT  
FOR THE  
IFA AND IFA2 INTERCONNECTORS**

**CONSULTATION DRAFT**

**[DATE TO BE ENTERED POST-APPROVAL]**

## Document Location

National Grid Interconnectors website:

<http://ifa1interconnector.com/>

## Distribution

Name	Organisation
The Gas and Electricity Markets Authority	<a href="http://www.ofgem.gov.uk">www.ofgem.gov.uk</a>
IFA Interconnector Users	Various

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## 1 INTRODUCTION

- 1.1 National Grid Interconnectors Limited (NGIC) and RTE Réseau Transport d'Électricité (RTE) are jointly responsible for the transmission of electricity across the Anglo-French Interconnector known as "Interconnexion France Angleterre" (IFA). This interconnector connects the national electricity transmission systems of France (owned and operated by RTE) and Great Britain (owned by three companies but operated by National Grid Electricity System Operator (NGESO)). NGIC is a wholly owned subsidiary of National Grid Plc holding an Interconnector Licence (the Licence) to operate IFA, and designated as a Transmission System Operator (TSO) under the European Third Package.
- 1.2 National Grid IFA2 Limited (NGIFA2) and RTE Réseau Transport d'Électricité (RTE) are jointly responsible for the transmission of electricity across the Anglo-French Interconnector known as IFA2, which is currently in development and planned to enter into commercial operation in Q2 2020. NGIFA2 is a wholly owned subsidiary of National Grid Plc holding an Interconnector Licence (the Licence) to operate IFA2, and will be designated as a Transmission System Operator (TSO) under the European Third Package.
- 1.3
- 1.4 NGIC and NGIFA2 (and RTE) facilitate commercial access to IFA and IFA2, whereby third parties are able to gain rights to transfer electricity across these interconnectors, between the power markets of GB and France. Each of NGIC's and NG IFA2's Licences requires them to each publish a Charging Methodology Statement to set out the terms under which commercial access to each of IFA and IFA2 is made available.
- 1.5 This document sets out the charging methodology which will be applied by NGIC and NGIFA2 with effect from the date of implementation of the following platforms:
- (i) the Single Allocation Platform (SAP), as required by Regulation 2016/1719 on Forwards Capacity Allocation
  - (ii) Regional Allocation Platform (RNP), required as part of the phasing out of IFA's DAMAS-based Capacity Management System.
  - (iii) a new Intraday explicit auction platform.
- Note if all platforms aren't implemented at the same time, then this Charging Methodology shall take effect upon the first of the above platforms to be implemented.
- 1.6 Whilst some business processes and associated timings may change with the implementation of the above platforms (the details of which would be communicated to market participants in due course), the underlying commercial principles and charging mechanisms associated with interconnector capacity allocation will continue as before, and are described in the document.

1.7 The suite of documents which make up the Access Rules for IFA and IFA2 applicable for operation of the above platforms (hereinafter referred to as the “Access Rules”) are as follows:

- (i) Harmonised Allocation Rules (HAR), plus the GB-France Border-Specific Annex (BSA)
- (ii) JAO Shadow Allocation Rules
- (iii) Access Rules for Intraday Capacity Allocation
- (iv) CHANNEL Region Nomination Rules for Long-term Physical Transmission Rights
- (v) Explicit Day Ahead and Intraday Nomination Rules

1.8 An electronic version of all of the above documents can be obtained via the following link: <http://ifa1.interconnector.com/notices/consultation/>

1.9 Further information on NGIC’s and NGIFA2’s activities and the information contained within this document can be obtained by contacting us by email or in writing:

E-mail: [ifa.customerenquiries@nationalgrid.com](mailto:ifa.customerenquiries@nationalgrid.com)

Post: National Grid Interconnectors Limited, 35 Homer Road, Solihull,  
West Midlands, B91 3QJ

1.10 All further references to NGIC and NGIFA2 in this document relate to their respective roles and participation in the administration of the third party access arrangements for the IFA and IFA2 interconnectors and in relation to their obligations as interconnector operators and Interconnector Licensees in Great Britain.

## **2 INTERCONNECTOR CHARGING METHODOLOGY**

### ***Introduction***

- 2.1 Standard Licence Condition (SLC) 10 of each of the Licences requires NGIC/NGIFA2 to establish a methodology showing the methods and principles on which charges for the use of IFA/IFA2 are based. This charging methodology is required to be approved by the Gas and Electricity Markets Authority (Authority) before it takes effect. Subsequent to this it may be modified from time to time in accordance with SLC 10(11) – (14) of the Licences.
- 2.2 This publication sets out the use of interconnector charges which apply from the date of implementation of the SAP / RNP project.

## **Objectives of the charging methodology**

- 2.3 As a minimum the interconnector charging methodology has to comply with the objectives set out in SLC 10(4) of the Licences (“relevant objectives”) which require that the charges and their underlying methodology are:
- (a) Objective;
  - (b) Transparent;
  - (c) Non-discriminatory; and
  - (d) Compliant with the Regulation<sup>1</sup> and any relevant and legally binding decision of the European Commission and/or the Agency<sup>2</sup>.
- 2.4 In addition to this minimum set of relevant objectives NGIC and NGIFA2 each have their own objectives for the charging regime. These are that the use of interconnector charges should:
- (a) Be simple to understand and implement; and
  - (b) Promote efficient use of the interconnector within the context of the differing market structures which it connects.
- 2.5 Where changes are proposed to this charging methodology these will be consulted upon with the industry in accordance with SLC 10(11). The Authority has the right to amend any proposed changes to the methodology before the changes would otherwise take effect.
- 2.6 NGIC and NGIFA2 consider that the methodology it has prescribed for charges for using either of the interconnectors facilitates all objectives as described above.

## **Explicit and Implicit auction principles**

- 2.7 It is necessary to distinguish between implicit and explicit auctions of capacity. Long term and Intraday capacities are allocated through an explicit allocation process. An Implicit auction mechanism applies for Daily Auctions; however by exception, explicit auctions for Daily Capacity may be invoked as a fallback in the event that Implicit Daily Auctions are not available.
- 2.8 Under each of the separate IFA and IFA2 explicit auctions participants may gain rights to nominate power transfers on IFA/IFA2, with such nomination to be made in a subsequent step. In the explicit auction, participants declare how much they are willing to pay for IFA/IFA2 capacity and place bids accordingly. These bids are then ordered by price and, starting from the highest one, allocated until all the available capacity is accounted for, whereupon the price for the capacity payable by all successful bidders is set to the bid price of the lowest allocated bid. This methodology both reflects and applies the widely-recognised principle typically characterised as “clearing” or “marginal” pricing.
- 2.9 Under the Regulation /2016/1719 on Forwards Capacity Allocation, HVDC Interconnectors are required to adopt the Single Allocation Platform for all Long Term capacity allocations by December 2019. The Allocation platform operator of this

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<sup>1</sup> Regulation 2009/714/EC of the European Parliament and of the Council of 13 July 2009 on conditions for access to the network for cross-border exchanges in electricity and repealing Regulation 2003/1228/EC(12)

<sup>2</sup> The Agency for the Cooperation of Energy Regulators established by Regulation 2009/713/EC of the European Parliament and of the Council of 13 July 2009(10)

platform is referred to as the “SAP Operator”. NGIC and NGIFA2 will also use the SAP Operator for fallback Day Ahead auctions. NGIC and NGIFA2 shall appoint a platform operator also for explicit Intraday Auctions, the operator of which will be notified to market participants in due course.

- 2.10 In contrast, the implicit auction mechanism is designed to enable available capacity to be used by integrating the respective spot markets in France and Great Britain (and other participating countries), with the flow on each of the IFA/IFA2 interconnectors being dependent on the matching of energy Bids submitted by market participants to the respective Nominated Electricity Market Operators (NEMOs). Thus the auctioning of capacity is included (implicitly) in the power exchange auctions of electrical energy. The Congestion Rent receivable by the TSOs NGIC, NGIFA2 and RTE is derived from any surplus of receipts/payments to/from market participants in GB and France, and is a function of the price difference between these two energy markets. This implicit auction methodology is known as Multi-Regional Coupling (MRC) Day Ahead Market Coupling, and is the solution that achieves the Single Day Ahead Coupling requirements as described in Regulation 2015/1222 on Capacity Allocation and Congestion Management (CACM).

### **3 ACCESS RULES AND USE OF INTERCONNECTOR**

#### ***Introduction***

- 3.1 This Charging Methodology should be read in conjunction with the suite of documents which comprise the IFA/IFA2 Access Rules, which set out the conditions and processes for allocation and use of IFA/IFA2 capacity.
- 3.2 NGIC and NGIFA2 each have an obligation to ensure that the Access Rules documents fulfil the requirements of this Charging Methodology. To the extent that changes in the Access Rules documents result in a requirement to modify this Charging Methodology Statement then this shall be carried out in accordance with SLC 10(11) – (14) of the Licences.

#### ***Eligibility to use the Interconnector***

- 3.3 Details of the registration and third party access regime applicable to IFA/IFA2 in accordance with SLC 11 can be found via the following link:  
<http://ifa1interconnector.com/trade-with-us/register/>

A market participant wishing to become a Registered Participant on IFA or IFA2, and thus be able to participate in explicit auctions, can apply via a non-discriminatory eligibility process administered jointly by the SAP Operator, and respectively NGIC and NGIFA2. The eligibility requirements are set out in:

- (a) Harmonised Allocation Rules - Chapter 2, and
- (b) Shadow Allocation Rules – Chapter 2, and
- (c) Access Rules for Intraday Capacity Allocation – Chapter 2, and

- (d) CHANNEL Rules for Long Term PTR Nominations – Article 3, and
- (e) Day Ahead and Intraday Nomination Rules – Article 3.

These documents include the requirements for parties to accede to the Access Rules via separate Participation Agreements for IFA and IFA2 as follows:

- i) JAO Participation Agreement for access to Long Term and fallback Day Ahead auctions;
- ii) IFA Participation Agreement, for access to explicit intraday auctions;
- iii) RNP Nomination Agreement for access to the Regional Nominations Platform. In addition, in order to Nominate explicit Capacity participants are required to accede to the relevant market codes in GB and France including the Balancing & Settlement Code and Connection & Use of System Code in GB, and Accord de Participation in France.

### ***Interconnector access rights***

- 3.4 IFA and IFA2 have the following maximum physical capabilities, measured at mid-CHANNEL:
  - (i) IFA 2000MW
  - (ii) IFA2: 1000MW.
- 3.5 NGIC and NGIFA2, in conjunction with the French transmission system operator RTE, instruct their auction platform operators to conduct explicit interconnector capacity Auctions on a non-discriminatory basis.
- 3.6 Registered Participants may acquire explicit interconnector capacity in accordance with the Access Rules. Obtaining explicit capacity permits the Registered Participant the right to nominate a transfer of electricity from one end of IFA/IFA2 to the other (“the transmission right”).

### ***Transmission rights***

- 3.7 All access rights (explicit capacity) relate to a particular product period and direction and to each hour within that period. Advance purchase of such transmission rights is available in a series of capacity product Auctions on a directional basis ranging currently from up to one year ahead to intraday. As such, capacity is offered in units (multiples of 1MW/period, where the period is per hour for Daily/Intraday Auctions, and per weekend, month, quarter, season, year (as the case may be) in LT Auctions). Note the further criteria as described below in section 4.
- 3.8 The range of products available is reviewed periodically and changes may be made by providing notice to Registered Participants accordingly.
- 3.9 The capacities offered respectively on IFA/IFA2 will be 100% (subject to the implementation and operation of CACM and FCA Capacity Calculation Methodologies) of the physical IFA/IFA2 capabilities in all hours for any given day after taking into account any outage requirements, comprising both planned and



unplanned outages. Details of planned outages are published and can be found by clicking on:

<http://ifa1interconnector.com/notices/outages/>

In the event of an unplanned outage, curtailment will be applied where necessary in accordance with the Access Rules.

A timetable for LT Auctions is published in advance and can also be found via the following link: <http://ifa1interconnector.com/notices/auctions/>

- 3.10 Transmission rights unsold in longer term auctions may be offered for sale again into auctions closer to the day/hours to which the transmission right applies as per the principles defined within the Access Rules, including, for the avoidance of doubt, the Daily and Intraday Auctions. This ensures that the highest possible amount of capacity remains available to the market up to and on the day of use.

## **4 EXPLICIT AUCTIONS**

### ***Access (capacity) charges***

- 4.1 The Long term explicit auction rules are set out in the HARs and BSA, which describe the basis on which Long term transmission rights are offered, allocated to and may be utilised by eligible Registered Participants. Bids will be accepted by the SAP operator in strict accordance with the criteria set out in the HARs and BSA.
- 4.2 The Intraday and Daily (where applicable) explicit auction rules are set out in the Access Rules for Intraday Capacity Allocation Rules and Shadow Allocation Rules, respectively.
- 4.3 The price which all successful Registered Participants will pay for each transmission right in a given Auction is the price bid for the last accepted unit in descending order of price.
- 4.4 The charge payable by a market participant successful in an explicit auction will be a unit price of capacity (expressed in €/MW/hour) multiplied by the number of units of capacity (MW) multiplied by hours within the product.
- 4.5 Registered Participants who acquire explicit capacity will receive invoices from the relevant auction platform operator. Payment for capacity will be in Euros only.

### ***Secondary trading***

- 4.6 A Registered Participant which holds Long Term transmission rights may relinquish its transmission rights for use by other eligible Registered Participants. There are two mechanisms for achieving this, namely Transfer of Transmission Rights and Return of Transmission Rights, both of which are described in the HAR.
- 4.7 Transfer of Transmission Rights involves the bilateral transfer of explicitly sold transmission rights to another eligible Registered Participant the financial transaction for which is conducted outside of the auction platforms. The involved market Participants will reflect the MW transfer and change of ownership in the auction

platform, however the original Registered Participant retains the obligation to pay the auction platform operator for the originally acquired capacity.

Explicitly sold Long Term capacity may also be offered for Return via a subsequent Auction, and where that capacity is resold, the SAP operator will pass through the proceeds to the Registered Participant who made the Return, whilst retaining the obligation to pay for the original capacity purchase. There is no charge for this Return facility.

### ***Use of Transmission Rights***

- 4.8 A Registered Participant which holds explicit transmission rights on IFA or IFA2 is entitled to use such transmission rights provided it has entered into a Nomination Participation Agreement for the relevant interconnector, and has acceded to the GB and France market codes as described in Paragraph 3.3 and, and subject to any curtailment as described in the Access Rules. In order to exercise its entitlement to use transmission rights, a Registered Participant may nominate a cross-border transfer of one or more unit(s) up to the maximum amount which is available to it, i.e. those units which it has secured by successfully participating in Auctions and/or via the process of Transfer of Transmission Rights referred to above in 4.6.
- 4.9 In accordance with its entitlement as noted above, a Registered Participant may nominate transmission rights separately on each of IFA/IFA2, in one or both direction(s) (as required). Nominations are divided into hourly blocks and the process is conducted on the RNP separately for each of the following timescales: Long Term, Daily and Intraday.

### ***Non-nominated transmission rights***

- 4.10 If the Registered Participant does not exercise its transmission rights, they may subsequently be purchased by another (or the same) Registered Participant in accordance with the principles and criteria of Use It or Sell It ("UIOSI")/Use It or Lose It ("UIOLI") as described in the Access Rules.
- 4.11 The UIOSI provisions are designed in such a way that any portion of LT transmission rights which is not nominated for an hour ceases to be reflected in a Registered Participant's Rights Documents and is made available to the implicit auction mechanism (or to the Explicit Daily Auctions in the event that Implicit Daily Auctions are unavailable) with the proceeds (if any) being returned to the original Registered Participant.
- 4.12 The UIOLI provisions are designed in such a way that any capacity sold as part of the Explicit Daily Auction which is unused in any hour ceases to be reflected in a Registered Participant's Rights Documents and is made available to the Intraday auction process, with the proceeds (if any) not being returned to the original Registered Participant. Similarly Intraday capacity that has not been used by a relevant UIOLI deadline may be made available in a subsequent Intraday auction, with the proceeds (if any) not being returned to the original Registered Participant.

### ***Curtailment***

- 4.13 In situations where more capacity rights have been sold than can be delivered, typically in the event of an unplanned outage, a process will be

applied whereby the explicit capacity rights and/or nominations are reduced pre-DAFD to limit the surplus of Capacity/Nominations over interconnector capability. This process known as "Curtailment" is set out in the Access Rules.

- 4.14 Registered Participants will be compensated for purchased capacity which NGIC and RTE, or NGIFA2 and RTE as the case may be, have not been able to deliver in accordance with the Access Rules. The compensation mechanism operates on the basis of the following principles:
- (a) Physical Transmission Rights Holders will be compensated at the Mid-Channel Day Ahead Market Spread for Curtailed Physical Transmission Rights. The compensation paid to a PTR Holder will be capped at the interconnector's Monthly Revenue. The calculation of the cap is set out in Article 59(3) of the HARs.
  - (b) Under the GB-Fr BSA and HARs, JAO will curtail on behalf of NGIC (and RTE) Long – Term Transmission Rights in order to ensure that operation remains within Operation Security Limits before the Day Ahead Firmness Deadline (DAFD) (11am CET, 1 hour before the Day Ahead Market Gate Closure Time (DAMGCT)). JAO will ensure that a mathematical calculation is applied to the level of Curtailment and therefore this is defined as Capacity Shortage in the allocation rules and Chapter 9 of the BSA.
    - (i) If there is a need to curtail to ensure operation remains within Operational Security Limits pre-DAFD then the Physical Transmission Rights Holder will be compensated by the Auction Platform on the basis of the following valuation principles: The maximum of (a) 0€/MWh and (b) the Mid Channel Day Ahead Market Spread (subject to the caps set out in Section 9 of the GB-Fr Border Specific Annex) in the direction of the Long Term Transmission Rights of the day-ahead Implicit Allocation or fallback explicit daily allocation in which that Cross Zonal Capacity was reallocated.
    - (ii) When the daily Offered Capacity for the Implicit Allocation or fallback explicit daily allocation is not fully allocated for a specific hour in the direction of the Long Term Transmission Rights in which Cross Zonal Capacity was reallocated then there will be no payment from the Allocation Platform to the Registered Participants for this specific hour.
  - (c) Where Daily Explicit Auctions are invoked and there is an emergency situation giving rise to a Curtailment of Daily Nominated Physical Transmission Rights, Registered Participants will be compensated at the Day Ahead Market Spread if IFA/IFA2 curtails the rights holder for reasons of emergency situation post-DAFD. Holders of curtailed Long Term nominated and non-nominated Physical Transmission Rights under Section 12 of the GB-Fr BSA shall be entitled to receive reimbursement for the corresponding curtailed units on the basis of the following principles:
    - (i) The maximum of (a) 0€/MWh and (b) the Mid Channel Day Ahead Market Spread in the direction of the Long Term Transmission Rights of the day-ahead Implicit Allocation or fallback explicit daily allocation in which that Cross Zonal Capacity was reallocated.

- (ii) When the daily Offered Capacity for the Implicit Allocation or fallback explicit daily allocation is not fully allocated for a specific hour in the direction of the Long Term Transmission Rights in which Cross Zonal Capacity was reallocated then there will be no payment from the Allocation Platform to the Registered Participants for this specific hour.

## **5 IMPLICIT DAILY AUCTION**

### ***Introduction***

- 5.1 The implicit auction mechanism is facilitated as part of the MRC Day Ahead market coupling arrangements.
- 5.2 Where Implicit Daily Auctions are in operation, the resultant payments from/to market participants are handled in the first instance by the NEMOs.

### ***Non-nominated transmission rights***

- 5.3 The remuneration for an interconnector from the implicit auction mechanism for non-nominated Long Term transmission rights is based on the implicit auction loss-adjusted price differential between France and Great Britain and is returned to the original Registered Participant by the SAP Operator in accordance with HARs and Access Rules documents.

### ***Firmness***

- 5.4 Implicit Nominations on behalf of the NEMO and/or clearing houses are physically firm, and hence are not subject to curtailment.

## **6 ANCILLARY SERVICES**

- 6.1 The interconnector circuits support agreement of ancillary services that may be exchanged between the national network operator TSOs RTE and NGESO, and which may include Emergency assistance, Constraint management, Intertripping. The facility to exchange other ancillary services may be agreed from time to time between NGIC, NGESO and RTE.
- 6.2 Should any TSO-TSO ancillary service be exchanged operationally then currently a charge is applied to NGESO. This charge is applied on a contractual basis between NGIC and NGESO, reflecting the Licence separation between the interconnector and transmission companies and pricing for equivalent services available elsewhere on the market.
- 6.3 In addition to the above Ancillary Services, NGESO is implementing TERRE and MARI projects, as required by Regulation 2017/2195 on Electricity Balancing, for which local settlement arrangements will be established prior to implementation.

## 7 SCHEDULE 1: ACRONYMS AND DEFINITIONS

EXPRESSION	ACRONYM	DEFINITION
Auction Tool		<p>The information technology system used by the Allocation Platform to perform Auctions and to facilitate other procedures described in these Allocation Rules such as transfer or return of Long Term Transmission Rights</p> <p>As defined in the Harmonised Allocation Rules, Article 2 – Definition and interpretation</p>
Implicit Allocation Algorithm		<p>The price coupling algorithm referred to in the Framework Guidelines on Capacity Allocation and Congestion Management for Electricity published by the Agency for the Cooperation of Energy Regulators (FG-2011-E-002, 29 July 2011);</p>
Implicit Daily Auction		<p>The process whereby the Interconnector Operators at day-ahead stage allocate the Daily Offered Capacity via the Implicit Allocation Algorithm</p>
Long Term	LT	<p>Processes relating to Auctions with Product Periods greater than 1 Contract Day and associated Interconnector Capacity activities</p>

National Grid Electricity System Operator Ltd	NGET	National Grid Electricity System Operator , a company incorporated in England and Wales
Pre – Day Ahead Firmness Deadline	Pre-DAFD	As defined in Article 58 of the Allocation Rules for Forward Capacity Allocation and the methodology in accordance with Article 69 of the Commission Regulation (EU) 2015/1222.
RTE Réseau Transport d'Électricité	RTE	RTE Réseau Transport d'Électricité, trading as “RTE” or “Réseau de Transport d'Electricité”
Use It or Lose It	UIOLI	As defined in IFA Access Rules suite, Allocation Rules for Intraday Capacity Allocation in IFA Interconnector Article 2: Definitions and interpretation
Unit		
Allocation Platform		As defined in the IFA Access Rules, suite, Allocation Rules for Intraday Capacity Allocation in IFA Interconnector Article 2: Definitions and Interpretation
Physical Transmission Rights	PTR	As defined in Harmonised Allocation Rules, Article 2: Definitions and Interpretation
Harmonised Allocation Rules	HAR	Rules governing Long term transmission rights
Border Specific Annex: GB-Fr	BSA	Variations from the HARs specific to GB-France border.
Trans-European Replacement Reserve Energy	TERRE	As required by Regulation 2017/2195 on Electricity Balancing
Frequency restoration reserves with manual activation	MARI	As required by Regulation 2017/2195 on Electricity Balancing