

**ANNEX C: Proposed changes to IUK's Charging Methodology (clean version)**

# **Interconnector (UK) Limited**



**Charging Methodology**

**related to the**

**IUK Access Agreement**

**and**

**IUK Access Code**

**March 2016**

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## 1 Introduction

This document sets out the methodology that Interconnector (UK) Limited (“IUK”) will apply to charging for transportation services provided under an IUK Access Agreement (the “IAA”) and the IUK Access Code (the “IAC”) from March 2016. Any available capacity will be offered in auctions on the PRISMA platform in accordance with Regulation (EU) 984/2013 (“CAM Code”). In addition, capacity may be made available via a subscription or other process with the relevant NRA approval. Until 1 October 2018 transportation services under the long term Standard Transportation Agreements (“STA”) will continue to run in parallel with transportation services under the IAAs.

This document sets out how all the charges that apply under an IAA will be derived. Capitalised terms not defined in this document have the meaning given in Appendix B to the IAA.

Nothing in this charging methodology affects what IUK may include in future modifications, particularly in relation to the post 2018 period.

### 1.1 Background

Following open seasons, the technical capacity of the Interconnector has been designed to meet the level of demand and all of IUK’s capacity has been sold until the end of September 2018 under the standard form STAs between IUK and each shipper (“STA Shipper”).

During the course of its operation, IUK has developed a number of mechanisms that make interruptible capacity available and enable parties who are not currently shippers to access capacity in the IUK system via the secondary market<sup>1</sup>. IUK capacity has been actively traded since 1998.

The STA was amended to introduce the CMP requirements, including capacity surrender and LTUIOLI. Until 1 October 2018, any revenue from sales of capacity sold under the IAA and IAC made up of these types of capacity will be returned to the respective STA Shippers who released this capacity, with returns to such STA Shippers (and any Sub-Lessees under the STA) whose capacity was subject to LTUIOLI being capped at their relevant payment obligations for that capacity. A further STA amendment was developed to facilitate CAM and BAL implementation within the IAA including allowing sales of longer term capacity.

To access IAA Capacity a prospective IAA Shipper signs an IUK Access Agreement and the terms of that agreement and the IUK Access Code have effect between IUK and the IAA Shipper from that date. Any person can sign up for these transportation services subject to meeting the criteria set out in the IAA to be an IAA Shipper, including meeting the credit criteria set out in the IAA by no later than ten days before the capacity start date. Existing STA Shippers will also need to sign up as an IAA Shipper if they wish to access transportation services under the IAA and IAC. The IAA transportation services will operate in parallel to the STA services until 1 October 2018.

### 1.2 Units

Charges are expressed and will be billed as follows:

- Entry Capacity – pence per kWh per hour per capacity duration
- Exit Capacity – pence per kWh per hour per capacity duration
- Buy-back Prices – pence per kWh per hour per day

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<sup>1</sup> For further information on the ways in which an interested party can access capacity from existing shippers see the website [www.interconnector.com](http://www.interconnector.com)

- Registration Fee and Monthly Administration Fee – Pounds sterling
- Imbalance Charges – Pounds sterling
- Fuel Gas Charges – Pounds sterling
- Electricity Charges - Euros

All charges are rounded to 4 decimal places and invoiced amounts will be either in Pounds sterling to the nearest penny or Euros to the nearest cent.

## 2 Capacity Price

### 2.1 General Principle

Entry and Exit Capacity will be made available by IUK for sale under an IAA by means of auctions, subscription processes, or other process subject to relevant NRA approval. In any given auction or subscription process the same terms and conditions apply to all Shippers.

The prices for capacity sales for Entry and Exit Capacity will be set by IUK to ensure objective and non-discriminatory treatment across shippers taking part in the capacity sales.

The key factors determining the prices are:

- Competitive forces and the prices of competing and complementary services;
- Operating costs for operating and maintaining the company and its assets;
- Capital expenditures required to maintain the service;
- Projected customer demand for IUK capacity and the forecast volume of both long term and short term sales under a range of market scenarios;
- Ensuring no cross-subsidy from STA shippers in the period to 1 October 2018.

IUK will set prices which are competitive and responsive to market forces. The prices will not be mechanically determined by a formula. The prices will be attractive to shippers, and will reflect the value of the services. Appendix 1 provides more information regarding the prices for the period till 1 October 2018 to ensure no cross-subsidy from the STA shippers.

For any given auction, the price paid for Entry Capacity and Exit Capacity will be the reserve price plus any premium bid at the time of the allocation process. This means the capacity price would be fixed at the time of allocation (but subject to future indexation) providing price certainty to IAA Shippers.

For ascending clock auctions held on PRISMA, the determination of the large price step shall seek to minimise as far as reasonably possible, the length of the auction process. The determination of the small price step shall seek to minimise, as far as reasonably possible, the level of unsold capacity where the auction closes at a price higher than the reserve price.

### 2.2 Short term prices

The same principles as outlined in 2.1. will be used to determine the level of the price multiplier for each entry and exit product less than a year in duration relative to the annual price. This includes, but is not limited to, the reserve price multiplier for standard capacity products<sup>2</sup>. The multipliers can differ

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<sup>2</sup> Transmission system operators are required to offer standard capacity products as specified in Article 9 of Commission Regulation (EU) No 984/2013. These standard capacity products are yearly, quarterly, monthly, daily and within day capacity products.

for different entry and exit points, types of capacity, durations and time periods to reflect the different underlying market and cost conditions.

### 2.3 Publication of the capacity price

The relevant price will be published at least:

- Twenty eight days ahead of any capacity product sale with a capacity duration equal to, or greater than one year
- Fourteen days ahead of any capacity product sale with a duration equal to, or greater than, a quarter.
- A day ahead of any capacity product sale with a duration greater than one day and less than a quarter.
- An hour ahead of any daily and within day capacity product sale.

### 2.4 Principles for price structure of any Subscription Process

Various incentives could be included in any subscription process to encourage long term bookings subject to NRA approval.

For example, the main principles for the price structure of any subscription process may include, but are not limited to, the following:

- The price paid for Entry Capacity and Exit Capacity will be fixed at the time of allocation (but subject to future indexation) providing price certainty to IAA Shippers.
- A booking incentive on the price for bookings for Annual Capacity Products that are longer in duration (such as booking incentive 10% for bookings of 5-7 Gas Years, 15% for bookings of 8-9 Gas Years and 20% for bookings of 10 Gas Years or longer).
- The option of booking Quarterly Capacity Products for shippers who book Annual Capacity Products for a Capacity Period of 5 successive Gas Years or more. Quarterly Capacity Products for two quarters or three quarters of entry and exit can be available in addition to the Annual Capacity Products. The 2 Quarter Capacity Product can be made available at a premium of 50% to the price of Annual Capacity Products corresponding to the same duration (i.e. the price after any booking incentives are applied) and the 3 Quarter Capacity Product can be made available at a premium of 20%.
- A Capacity Transaction for a Firm Annual Capacity Product for 5 or more successive Gas Years benefits from a “lowest price guarantee” in that the Capacity Charge is the lower of: (i) the sum of the reserve price and the premium; and (ii) the lowest price for which such Firm Annual Capacity Product is allocated in a PRISMA auction for that Gas Year or if there is no allocation for that Gas Year, the lowest IUK price for that Firm Annual Capacity Product for that Gas Year.

## 2.5 Indexation

When calculating the Entry or Exit capacity charges to apply in a future year, the price will be subject to indexation as provided for in the IAC.

## 3 Buy-back Prices

If, at any time, aggregate nominations exceed, or are predicted to exceed, the physical capability of the system, IUK will initiate the Buy-back process. IUK will determine the quantity and category of capacity that it needs to buy back from shippers to reduce the aggregate nominations to within the physical capability of the system.

### 3.1 Maximum Buy-back Price

All shippers will be informed, via IUK's Bulletin Board, when IUK needs to buy back capacity and both STA Shippers and IAA Shippers will be invited to sell capacity back to IUK in a pay-as-bid auction known as Voluntary Buy-back ("VBB").

When IUK implements the VBB auction, it will accept offers from STA Shippers or IAA Shippers subject to paying no more than the Maximum Buy-back Price. This is the price that IUK will pay for Entry and Exit Capacity from STA Shippers and/or the aggregate of offered Entry Capacity and Exit Capacity from IAA Shippers. This price will be calculated on the relevant Gas Day as the weighted average price paid for that day's Entry Capacity and Exit Capacity plus a premium. The premium is set to strike a reasonable risk-reward balance and limit the exposure of IUK (see IUK's Charging Statement<sup>3</sup> for details of the level of the premium).

### 3.2 Forced Buy-back Price

Forced Buy-back will be initiated on IAA Shippers only, if:

- there is unfulfilled Buy-back requirement following VBB, due to insufficient capacity being offered to satisfy the Buy-back requirement at prices up to the Maximum Buy-back Price, or
- the Buy-back requirement occurs when the net OS revenue account has reached its maximum deficit (see next section), or
- the Buy-back requirement occurs after 21:00 (UKT) / 22:00 (CET) within day as there is insufficient time to run a VBB auction and implement the resulting renominations.

When IUK implements Forced Buy-back, IAA Shippers who bought day-ahead or within day capacity will have such capacity pro-rated downwards to reduce aggregate nominations to within the physical capability of the IUK system and IUK will pay an IAA Shipper for the reduction in Entry Capacity and Exit Capacity (taking into account any capacity already offered and accepted in the VBB auction) at the Forced Buy-back Price. This price shall be the price paid by the IAA Shipper for such capacity plus a premium equal to 5% of the weighted average price paid for all Entry Capacity and Exit Capacity for that day.

This premium recognises that capacity has had to be forcibly bought-back from IAA Shippers, but is low enough to ensure that there is an incentive for IAA Shippers to bid in the VBB auction (rather than wait for Forced Buy-back).

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<sup>3</sup> "IUK's Charging Statement" sets out IUK's charges related to the IUK Access Agreement and IUK Access Code. This is available at [www.interconnector.com](http://www.interconnector.com)

### 3.3 Net OS Revenue Account

IUK will keep track of an account (“Net OS Revenue Account”) which will be equal to the revenue from OS Capacity sales, on a cumulative basis over the Gas Year, minus any payments made for Buy-back during that time. This account will be allowed to go negative (if Buy-back costs exceed sales revenue) up to a limit set out in IUK’s charging statement. At this level, if further Buy-back is required, IUK will implement the Forced Buy-back process.

It is thought to be unlikely that the limit will be reached however setting this limit of exposure enables IUK Shareholders to know in advance the risk to which they would be exposed for Buy-back. In addition, there is an exposure to the 5% premium to be paid in Forced Buy-back to be taken into account in the event that this scenario is reached.

## 4 Initial Registration Fee

An Initial Registration Fee is a one-off charge by IUK on any new IAA Shippers signing an IAA. This is to cover IUK’s legal, administrative and training costs and must be paid before the new IAA Shipper can access IUK’s Information System and purchase capacity. This fee is not payable by an existing STA Shipper or sub-lessee of an STA Shipper who is already receiving transportation services from IUK and who then signs up to the IAA service.

The fee is set out in IUK’s Charging Statement related to the IAA and IAC.

## 5 Monthly Administration Fee

A Monthly Administration Fee is payable by each IAA Shipper under an IAA. This covers IUK’s on-going costs supporting contract administration, principally an IAA Shipper’s access to IUK’s information system (e.g. user accounts, requests for help, interface issues, e-learning modules, etc.), on-going credit review and invoicing. STA shippers will also pay the same level of monthly fee. If an STA Shipper is also an IAA Shipper only one monthly fee is payable.

The fee is set out in IUK’s charging statement related to the IAA and IAC.

## 6 Balancing Charges

An IAA Shipper has the obligation to ensure on an hourly basis that the nomination for the quantity of Natural Gas to be redelivered from the Interconnector at Exit Points and any quantities of Natural Gas it disposes of is equal to the nominations for the quantity of Natural Gas to be delivered by the IAA Shipper to the Interconnector at Entry Points and the quantities of Natural Gas acquired. IUK will be operating an operational balancing account at Bacton and Zeebrugge under which allocations to an IAA shipper will equal its relevant nominations hence IAA Shippers will be in balance. In exceptional circumstances (e.g. an operational balance account is not being applied), where there is a difference between an IAA Shipper’s allocated Inputs and Outputs such differences will be dealt with as per Section E and F of the IAC.

## 7. Fuel Charges

### 7.1 Fuel Gas

Fuel Gas is consumed in the operation of the Interconnector comprising:

- (a) Fuel Gas used for the operation of compressors at Bacton when gas is flowing from UK to Belgium; and
- (b) Fuel Gas used for the operation of heaters at Zeebrugge when gas is flowing from UK to Belgium; and
- (c) Fuel Gas used for the operation of heaters at Bacton when gas is flowing from Belgium to UK.

#### 7.1.1 For the period to 1 October 2018

Fuel Gas is allocated to IAA Shippers (and STA Shippers) in proportion to their allocations of gas flowing into and out of the Interconnector.

A Fuel Gas Charge shall be payable by an IAA Shipper in respect of any Gas Day on which any Fuel Gas is allocated to the IAA Shipper. Such charge shall be an amount (in Pounds Sterling) equal to the Negative Imbalance Daily Gas Price - multiplied by the total quantity of Fuel Gas allocated to that IAA Shipper on that Gas Day.

Fuel Gas will be taken from the pipeline inventory. The STA Shippers will therefore have to source gas to maintain their inventory within their inventory limits. Income from Fuel Gas Charges paid by IAA Shippers will be returned to STA Shippers.

#### 7.1.2 From 1 October 2018 onwards

Fuel Gas will be allocated to an IAA Shipper for a Gas Day calculated based on its entry allocations multiplied by a fixed percentage factor notified in advance by IUK. Such Fuel Gas must be provided by the IAA Shipper for the purposes of balancing its inputs and outputs, taking into account any Natural Gas acquired from or disposed to other IAA Shippers.

## 7.2 Electricity

Electricity is consumed in the operation of the compressors at Zeebrugge when gas is flowing from Belgium to UK. The daily metered quantity of electricity used by the compressors is allocated as follows:

- (a) in the period to 1 October 2018, to IAA Shippers (and STA Shippers) in proportion to their allocations of gas flowing into and out of the Interconnector;
- (b) from 1 October 2018, to an IAA Shipper based on its entry allocations multiplied by a fixed percentage factor notified in advance by IUK.

#### 7.2.1 For the period to 1 October 2018

Before each Gas Year IUK shall notify all shippers of its best estimate of the "Estimated Compressor Electricity Unit Cost", expressed in Euro/kWh based on historical reverse flowrate data, forecast information concerning reverse flowrates for that Gas Year, the costs for the supply of electricity to IUK and any other available and relevant information.

Each IAA Shipper (and STA Shipper) shall pay a monthly electricity charge, an amount (in Euros) equal to the Estimated Compressor Electricity Unit Cost multiplied by the total amount of electricity allocated to that IAA Shipper in that month.



As soon as practicable (but in any event within 60 days, or such longer period as may be necessary to allow for the receipt by IUK of all relevant invoices and data relating to the supply of electricity) after the end of each Gas Year, IUK shall calculate in respect of that Gas Year the "Actual Compressor Electricity Unit Cost", expressed in Euros/kWh, based on the actual total consumption of electricity and the actual total electricity costs.

IUK shall then calculate:

- (a) the aggregate amount of all monthly electricity charge payments made by each shipper to IUK in respect of each month during that Gas Year; and
- (b) the aggregate amount of all monthly electricity charge payments that would have been made by each IAA Shipper (and STA Shipper) to IUK over the same period had the monthly electricity charge payments of that IAA Shipper (or STA Shipper) in respect of each month during that Gas Year been calculated and paid by reference to the Actual Compressor Electricity Unit Cost (rather than the Estimated Compressor Electricity Unit Cost) for each month in such Gas Year.

The excess of the aggregate amount referred to in (a) above over the aggregate amount referred to in (b) above or (as the case may be) the excess of the aggregate amount referred to in (b) above over the aggregate amount referred to in (a) above shall be payable by IUK to the applicable IAA Shipper (or STA Shipper) or (as the case may be) by the applicable IAA Shipper (or STA Shipper) to IUK together with interest (from the date when each successive monthly electricity charge fell due for payment until payment of such excess) at a rate equal to the aggregate of Euro LIBOR plus two per cent (2%).

If, for any Gas Year, the Actual Compressor Electricity Unit Cost exceeds the Estimated Compressor Electricity Unit Cost by more than 15%, then the Actual Compressor Electricity Unit Cost shall be deemed to be an amount equal to 115% of such Estimated Compressor Electricity Unit Cost.

IUK's charging statement related to the IAA and IAC provides the Estimated Compressor Electricity Cost.

#### 7.2.2 From 1 October 2018 onwards

An IAA Shipper shall pay a monthly electricity charge in respect of any days during a Month that electricity was allocated to it based on the electricity allocation multiplied by the unit cost of electricity calculated and notified by IUK.

#### 7.3 Shrinkage

Shrinkage will be allocated to an IAA Shipper for a Gas Day calculated based on its entry allocations multiplied by a fixed percentage factor notified in advance by IUK. Such Shrinkage must be provided by the IAA Shipper for the purposes of balancing its inputs and outputs.

### 8 Annual Distribution of Net OS Revenues

At the end of the Gas Year, if the Net OS Revenue Account is negative, then IUK will bear 100% of this loss and return the balance to zero. At the end of the Gas Year, if the Net OS Revenue Account is positive, then this amount will be paid out so that the balance returns to zero. 25% will be paid to IUK and 75% (the Net Revenue Share) will be distributed to all shippers (STA and IAA Shippers, and Sub-Lesseees under the STA) based on their allocated flow over the year.

## Appendix 1 – Reserve price for OS capacity for Gas year 2014/15

The tariff paid by STA Shippers under the STA, is based on two elements: the construction cost of the Interconnector pipeline and its Bacton and Zeebrugge terminals, and the operating costs. Until the STA contracts expire the base value of the reserve price for IAA Capacity is calculated from the average cost of capacity for STA Shippers derived from IUK's Financial Statement for year ending 30<sup>th</sup> September 2013, as follows:

Stated values (page 17 of 2013 statement) -

- Tariff payments based on construction costs = £142,883,000
- Tariff payments to recover operating costs = £34,901,000
- Total Capacity (kWh/h) = 59,731,735 (equivalent to 45.5 bcm/yr)

Therefore, the average cost of capacity in the gas year 2012/2013 (p/(kWh/h)/year)  
 $= (£142,883,000 + £34,901,000) * 100 / (59,731,735) = 297.6374 \text{ p/(kWh/h)/year}$

An escalation factor is used to calculate the total reserve price for IAA Capacity for subsequent years. Until the STA contracts expire, this is similar to the way the STA tariff is escalated each Gas Year. For illustration, the reserve price for capacity for Gas Year 2014/15 is calculated as follows:

- Escalation Factor = ratio based upon the Producer Price Index (PPI) =  $PPI_r / PPI_o$  (see IUK's Charging Methodology Statement for PPI reference numbers).
- $PPI_r$  = the average value of the PPI for the twelve month period ending on 30 June immediately prior to the commencement of the Gas Year which ends on 30 September in year r in respect of which the price is calculated
- $PPI_o$  = average PPI for twelve months ending 30 June 2012 = 106.1083
- $PPI_r$  for 2014/15 = 108.6583
- Escalation to 2014/15 =  $108.6583 / 106.1083 = 1.0240$

TOTAL RESERVE PRICE FOR OS CAPACITY FOR GAS YEAR 2014/2015 (p/(kWh/h)/year)  
 $= 297.6374 * 1.0240$   
 $= \underline{\underline{304.7807 \text{ p/(kWh/h)/year}}}$

The total price above will be split 50:50 into a yearly Entry Capacity Reserve Price (152.3904 p/(kWh/h)/year) and yearly Exit Capacity Reserve Price (152.3904 p/(kWh/h)/year).