Charging Methodology

Contents

Introduction

This document describes the Charging Methodology (CM) that BBL Company (BBLC) proposes to use for future sales of capacity by means of a Capacity Allocation Mechanism under the provisions set out in the BBLC General Terms & Conditions. The capacity allocation mechanism is an auction mechanism as required by the CAM NC, for which the PRISMA platform is used, or any other mechanism that has NRA approval.

This CM applies to all available non-exempt capacity sold under BBLC's General Terms & Conditions (GT&C). This CM applies to both forward flow capacity, for gas flows towards Great Britain (GB), and reverse flow capacity, for gas flows towards the Netherlands. Capacity that was sold before the effective date of this CM is subject to the CM that was valid at the time this capacity was originally allocated to the shipper. Congestion management procedures are an exception to this rule. The surrender of capacity and long-term use-it-or-lose-it mechanisms apply to all non-exempt capacity irrespective of the date of allocation.

Background

The BBL Interconnector provides services to flow gas physically from The Netherlands to GB as well as from GB to The Netherlands.

Commercial forward flow operations began in December 2006 with extra capacity provided in 2010 as a result of the installation of the 4th Compressor at Anna Paulowna.

In 2004 an open season was held to gauge market interest in constructing the BBL pipeline. A CM was developed which met the criteria of transparency, objectivity and non-discrimination. From the CM BBLC derived the tariffs for the various products on offer.

Sufficient market interest was shown to enable a business case to be made for the construction of the pipeline. The three launching contracts were accepted by the relevant regulatory authorities as being contracts exempt from regulations on tariffs and access rules.

In 2008 the 4th Compressor project was mooted and the relevant authorities agreed that the initial CM could be used for any capacity made available following the installation of the extra compressor. A similar open season was held and as a result five contracts were signed with shippers. It was agreed that the contracts signed in 2010 could not be regarded as exempt contracts.

In 2017 BBLC took the decision to undertake a project which would enable physical reverse flow capability on the BBL pipeline for up to one third of the forward flow capability. From 1 July 2019 BBLC has been offering firm and interruptible reverse flow services. This CM is applicable to both forward flow and reverse flow capacity products for which tariffs and underlying values are calculated separately.

Objectives

Standard Licence Condition 10(6) requires BBLC to comply with a direction from Ofgem to amend its CM for the purposes of meeting the four Standard Licence Conditions objectives.

Standard Licence Condition 10(11) notes that BBLC shall not make a modification to the CM unless all reasonable steps have been taken to ensure that all persons, including those in other Member States, who may have a direct interest in the CM, including the Authority, are consulted on the proposed modification and has allowed such persons a period of not less than 28 days within which to make written representations.

BBLC considers that this CM is compliant with CMP, the CAM NC and the TAR NC. Derogation from several NC TAR articles was approved by Ofgem. Following the 28 days consultation period and after considering any representations received to the proposed modifications the CM will be submitted to Ofgem for approval.

Market Environment

BBLC operates the pipeline in a commercial and competitive market environment. BBLC has no captive customers and therefore there is no certainty of recovery of costs. As long as BBLC is operating in a competitive environment, it needs to be able to respond quickly to developments in the market. The CM acknowledges this market environment.

From the approved CM BBLC is able to derive charges for the various products sold and is able to adjust tariffs as appropriate to reflect the competitive situation in the market. Tariffs for forward flow capacity products and reverse flow capacity products will vary according to the market situation at any one time.

Tariff predictability is judged as important by shippers and traders. Therefore, together with the publication of the reserve price for the annual yearly capacity auction, BBLC publishes the range of the multipliers for all non-yearly capacity products for the upcoming gas year. In addition, BBLC also sets the relevant reserve price for its capacity products by applying a multiplier which is within the range described hereunder: BBLC can adjust reserve prices derived from these multipliers taking into account the minimum notification periods outlined below.

Charging Methodology

BBLC's CM consists of four components described below. Each component is subject to one or more key factors. This CM has been the basis of BBLC's operations since the start of the project in 2004 and was approved on the basis that it met the objectives as set out in Standard Licence Condition 10(4) namely that the CM is objective, transparent and non-discriminatory. This CM received the approval of both Dutch and GB authorities.

Subsequently a fourth objective was added to Standard Licence Condition 10(4) which requires the CM to be compliant with relevant European decisions including Codes. Compliance with this fourth objective is achieved by incorporating the principles of the relevant European decisions into the CM, which may be subject to revision as and when new European Regulations are introduced.

Any change to BBLC's CM has to be compliant with decisions taken by the relevant national regulatory authorities. This means that the CM has to be compatible with both jurisdictions. This has been achieved by incorporating a further level of detail in the Great Britain CM by adding a section that ensures compliance with SLC 10(4) while leaving the remainder of the CM, that is already objective, transparent and non-discriminatory and approved by the Dutch authorities, untouched.

Charging Methodology components

The charges applied to all capacity products are derived from three of the CM's four components:

1. a fixed fee for the relevant capacity product
2. an adjustment formula for the duration of the contract, and
3. an indexation for inflation

The fourth component is not part of the charges for the capacity products and is invoiced to shippers separately based on the allocated use of the capacity rights:

4. a variable fee to cover the cost of energy used to transport the gas

Key factors in the determination of the components

1. The **fixed fee** for capacity was first established in 2006 at the start of commercial operations and confirmed in 2008 prior to the installation of the fourth compressor. The fixed fee has been adjusted with indexation every year since. In the underlying business case the fixed fee reflected the project costs which were originally based, in this case, on the capital costs of the pipeline and installations, operating costs incurred as a result of performing normal business operations and a reasonable return of capital.

   In addition, the current market environment requires BBLC to be able to respond quickly to changing market circumstances and competitive forces from suppliers of similar services. As a result, the fixed fee was redefined as the combination of four key factors: the **base price**, the **competitive forces factor**, the **reserve price discount factor** and the **risk premium**.

   - The **base price** is what used to be the original fixed fee based on the underlying business case. The base price is still expressed at the 2006 price level and is subject to annual indexation per gas year.
   - The key factor '**competitive forces** from suppliers of comparable services' enables BBLC to adjust the reserve price for the yearly capacity product in order to reflect competitive market circumstances. Prices of competing services are taken into consideration in the determination of the appropriate fixed fee.
   - **Reserve price discount factor** - To encourage network users to book annual capacity products on a long-term basis the Y +1 reserve price may be discounted for future years, namely Y+2 to Y+15. Such discount will be reflected in the reserve price for the relevant years. Any discount will apply to individual years. Shippers will be able to book capacity for individual years: it will not be necessary for them to book consecutive years of capacity, unless capacity products are explicitly offered as such.
   - A **risk premium** reflecting the benefits of certainty regarding the level of transmission tariff as a result of the fixed payable price approach. This is a TAR NC requirement.

The fixed fee and the underlying key factors are published on the BBLC website.

From 1 July 2019 BBLC has offered firm and interruptible reverse flow capacity products. The four factors used to calculate the fixed fee for reverse flow capacity are the same as for forward flow capacity. The fixed fees for forward flow and reverse flow capacity are calculated separately.

2. The adjustment formula for the duration of the contract consists of two key factors:

- a multiplier applied to the respective proportion of the reference price in order to calculate a price for a non-yearly capacity product.

  The multipliers (M) are determined for each capacity product with a duration of less than one year:

  Quarterly capacity products
  Monthly capacity products
  Day-Ahead capacity product
  Within-Day capacity product

  The multipliers for these products are set to ensure sufficient revenues for an economic and financial stable company result and to enable BBLC to react to competitive forces from suppliers of comparable services for specific capacity products

  These published multipliers will fall within the following range:

Capacity product	Quarterly	Monthly	Day-ahead	Within-day
Lower limit	0.5	0.5	0.1	0.1
Upper limit	1.5	3	6	6

  Ahead of the auction, in line with the lead times on page 11, BBLC may adjust the actual multipliers within the upper and lower limits of the table above.

- a seasonal factor reflecting the variation of demand within the year.

  The seasonal factors enable BBLC to take demand fluctuations within the year into account and are determined for each month separately.

  The seasonal factors are published on the BBLC website.

3. The reserve price for available capacity is subject to annual indexation. For the annual indexation the consumer price index is used as published by the Dutch statistics office CBS (Centraal Bureau voor de Statistiek, series 'Total Expenditure, 2015=100'). The applicable annual indexation to the reserve price is 100% of the CBS indexation.

In addition to the above, for capacity bookings where the start date lies in a gas year other than the gas year in which the booking was made, BBLC will index the amount chargeable to *Shipper* at the start date of the booking on the basis of the average monthly consumer price indices of the *Year* preceding the gas year in which the booking starts in relation to the average monthly consumer price indices of the *Year* preceding the gas year in which the booking was made. However, in case *Shipper* makes a capacity booking with a start date that lies in a gas year other than the gas year in which the booking was made and other than the next gas year, but *after* *BBL Company*'s yearly announcement of its reserve prices and *before* the start of the next gas year, then the below formula will be applied *as if the booking was made in the next gas year*. In other words, *BBL Company* will then use the average monthly indices of the *Year* preceding the next gas year *instead of* the average monthly indices of the *Year* preceding the gas year in which the booking was made.

For clarity: *BBL Company* will thus not only on a yearly basis index annual capacity bookings, but will also apply such indexing to seasonal, quarterly and monthly capacity bookings with a start date in a gas year other than the gas year in which the booking(s) was (were) made.
BBL Company will apply the above indexation to the amount chargeable to *Shipper* at the start date of the booking in accordance with the following index factor formula:

$$I = \frac{Average\ monthly\ indices\ of\ the\ Year\ preceding\ the\ gas\ year\ in\ which\ the\ capacity\ booking\ starts}{Average\ monthly\ indices\ of\ the\ Year\ preceding\ the\ gas\ year\ in\ which\ the\ booking\ was\ made}$$

However, *BBL Company* will not index the amount chargeable to *Shipper* for a capacity booking with a start date in the next gas year if the booking was made after *BBL Company*'s yearly announcement of its reserve prices for the next gas year.

The components 1, 2 and 3 and the underlying key factors result in the following formula to calculate the reserve price (RP) for each capacity product separately:

RP = FF x D x I

FF= BP x CF x DF x RP
D = M x S

Where:

RP = reserve price in €/kWh/h/product period
FF = fixed fee component in €/kWh/h/product period
D = duration component for non-yearly capacity products
I = indexation factor to adjust the base price to the current price level

BP = base price in €/kWh/h/product period expressed in the 2006 price level
CF = competitive forces factor for the yearly capacity product
DF = discount factor for individual relevant yearly reserve prices of Y+1 to Y+15
RP = risk premium

M = multiplier for non-yearly capacity products
S = seasonal factor

Interruptible forward flow or reverse flow capacity is auctioned when all firm capacity for a product has been sold. An ex-ante discount is applied based on the probability of interruption in line with Article 16 of the TAR NC. In the event that technical firm (non-CMP) capacity becomes available after interruptible capacity has been sold, this interruptible capacity will be upgraded to firm without additional charges.

The reserve prices of all capacity products are published on the BBLC website.

4. The variable fee to cover the energy costs.

The fourth component is not part of the reserve price for the capacity products and is invoiced to shippers separately based on the allocated use of capacity rights. This component relates to the electricity required to drive the compressors at Anna Paulowna and fuel gas to heat the gas.

For both forward and reverse flow capacity products the commodity charge will be calculated on a daily basis, using the daily NL baseload price via EPEX day ahead auctions.

BBL Company may vary the gas price component of the commodity charge to take into account market circumstances and will publish the appropriate index.

The following formula is used to determine the **Energy Costs (E)**:

E = A x Pe + B x Pg + F

Where:

E = variable fee to cover the energy costs in €/MWh
where E ≥ 0 €/MWh
A = constant (either for forward or reverse flow)
Pe = electricity price in €/MWh
B = constant (either for forward or reverse flow)
Pg = gas price in €/MWh
F = fixed fee to cover electricity connection costs

Both constants and the resulting variable fee to cover the energy costs are published each day on the BBLC website before 15.00 hours CET.

The **total costs (TC)** are the combination of the booked capacity, the reserve price (RP), the auction premium (P) [if any], and the energy costs (E) for the use of the capacity rights.

TC = booked capacity x (RP + P) + (allocated use of capacity rights x E)

Where:

TC = total costs in €
RP = reserve price in €/kWh/h/product period
P = auction premium in €/kWh/h/product period
E = variable fee to cover the energy costs in €/MWh

Capacity bookings and energy costs are invoiced separately on a monthly basis. When invoicing the capacity charges for a future year, the reserve price is subject to annual indexation per gas year. Any auction premium will remain fixed.

Congestion Management Procedure (CMP)

CMP does not apply to exempt capacity.

To ensure compliance with BBLC's Interconnector Standard Licence Condition 10(4), the CM must meet the relevant CM objectives, namely being objective, transparent, non-discriminatory and compliant with EU Regulation 2009/715/EC and any relevant binding decision of the European Commission and/or the Agency for the Cooperation of Energy Regulators (ACER).

Several principles of CMP are included in the CM to meet the Standard Licence Condition requirement for compliance with relevant European decisions and have applied from 1 November 2015.

- *Capacity charges for oversubscription capacity*
  The auction reserve price and general terms and conditions of the oversubscription capacity are the same as the auction reserve price and general terms and conditions of the capacity product to which the oversubscription capacity is added:

  The capacity allocation mechanism for oversubscription capacity is the auctioning of capacity on the Prisma platform. Oversubscription capacity is firm capacity. The amount to be offered is determined in accordance with the CMP regulation.

- *Oversubscription capacity revenue account*

  BBLC keeps an account of the cumulative revenues from oversubscription capacity sales minus the buy-back costs. At the end of the calendar year the oversubscription capacity revenues minus the buy-back costs will be split between the network users and BBLC up to a maximum deficit of € 100,000.

- *Maximum buy-back price*

  In the event of a buy-back of capacity usage rights BBLC will accept offers from shippers that are no more than the maximum buy-back price. The maximum buy-back price is equal to the TTF and NBP OTC day-ahead spread as published daily by ICIS Heren. If the cost of the buy-back auction is likely to exceed the maximum yearly deficit of €100,000 the buy-back price will be adjusted proportionally with as a minimum the clearing price of the oversubscription capacity that has to be bought back.

- *Emergency buy-back price*

  If insufficient capacity is offered to maintain system integrity, the required capacity will be bought back on a pro rata basis based on booked capacity under BBLC's General Terms & Conditions. In this event the reimbursement will be the same as the maximum buy-back price of the buy-back auction which preceded the pro rata buy-back.

- *Surrender of capacity and capacity from long-term use-it-or-lose-it for non-exempt capacity*

  Reallocated surrendered capacity offsets the disposing shipper's payment obligation to BBLC to the extent of the revenue gained from the successfully reallocated capacity. Shippers retain their contractual rights and obligations until the capacity is reallocated and to the extent that the capacity is successfully reallocated. Revenues from reallocated LT-UIOLI capacity offset the disposing shipper's payment obligation to a maximum of the price originally paid for the capacity and to the extent the capacity has been reallocated successfully.

Capacity Allocation Mechanisms Network Code (CAM NC)

Effective on all available capacity from 1st November 2015.

several elements of CAM are part of the CM in order as of 1st November 2015 to meet the Standard Licence Condition objective of compliance with relevant European decisions. The elements in the revised CM relating to CAM were implemented on 1st November 2015.

- *Capacity charges for capacity products*

  BBLC will offer standard firm and interruptible forward flow and reverse flow capacity products in accordance with the CAM Network Code.

  Interruptible capacity is offered for auction for the product for which firm capacity has been sold out.

- *Large and small price steps in the ascending clock auction*

  The determination of the large price step will seek to minimise, as far as reasonably possible, the length of the auction process. The determination of the small price step will 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. The level of the price steps can be found on *PRISMA*.

- *Payable price*

  The payable price in a capacity auction is a fixed price, which means that the payable price will not be changed after the auction except for the annual indexation, if applicable. The fixed price consists of the reserve price plus the auction premium, if any. The reserve price is set according to the CM described above. The reserve price is subject to annual indexation, the auction premium, if any, is not. Energy costs (E) are invoiced separately based on the allocated use of capacity rights.

- *Capacity Conversion Service for firm capacity*

  If BBLC approves a Shipper's request for a capacity conversion in line with GT&C Exhibit G, the original unbundled capacity contract will be decreased with the conversion quantity and period.

  For the conversion quantity and period, the shipper shall receive a credit for the reserve price component of the clearing price paid for the relevant bundled capacity auction.

  For the conversion quantity and period, the shipper shall remain liable to pay the auction premium component of the clearing price for the relevant bundled capacity auction, and a credit will not accrue in respect of the premium.

  The shipper shall be liable to pay both the reserve price and premium for any amount that was allocated in the bundled auction and is not part of the conversion quantity.

  The conversion process does not affect existing capacity rights for unbundled capacity, and the shipper shall remain liable to pay the full originally booked unbundled capacity according to the conditions of the original contract to ensure the fixed price nature of the contract.

- *Conditional Firm Products*

  Shippers will be reimbursed for the applicable reserve price if this type of capacity is subsequently interrupted under the criteria of the relevant *Conditional Firm Product.* Such reimbursement will be pro rata based on their nominations.

- *Balance of the Month Product*

  The applicable reserve price for the *Balance of the Month Product* will be the sum of the daily reserve prices for the remaining consecutive days of said current Month. The Balance of the Month Product and related sum of reserve prices has a notification period of two *Days*, (taking into account weekends and Bank Holidays) meaning that this product will become available from the second *Day* onwards after the *Day* the booking has been made via *Implicit Allocation*.

- *Booking incentives*

  Incentives may be offered by BBLC which will encourage more efficient use of the available products, both forward and reverse. The introduction of any incentives will be transparent as well as non-discriminatory and will be notified to the market in a timely fashion.

Harmonised Transmission Tariff Structures for Gas Network Code (TAR NC)

Effective on all available capacity (i.e., non-exempt capacity) from 1 June 2019 and existing contracts concluded after 6 April 2017.

Several elements of TAR NC are part of the CM to meet BBLC's Interconnector Standard Licence Condition objective of compliance with relevant European decisions.

- *Multipliers and seasonal factors*

  The level of the multipliers is subject to a range as detailed earlier.

  The seasonal factor(s) will be published at least three days before the annual yearly capacity auction and is/are then fixed for the *Gas Year*.

- *Risk premium*

  According to TAR NC Article 17.2 where, and to the extent that, the transmission system operator functions under a price cap regime or applies a fixed payable price approach set out in Article 24(b), no revenue reconciliation shall occur and all risks related to under- or over-recovery shall be covered exclusively by the risk premium. In such case Articles 18, 19(1) to (4) and 20 shall not apply.

  BBLC operates under a fixed payable price approach. Therefore, RP is the risk premium reflecting the benefits of certainty regarding the level of transmission tariff, where such premium shall be no less than zero.

- *Tariff publication*

  BBLC will publish tariffs and tariff related information on its website where derogation has not been approved by the NRAs.

  No later than three days before the annual yearly capacity auctions BBLC will publish the reserve prices for the yearly capacity products. No later than three days before the yearly capacity auctions BBLC will publish the reserve prices for the quarterly capacity products.

No later than three days before the annual yearly capacity auctions BBLC will publish the reserve prices for the upcoming *Gas Year* for all other capacity products.

- *Notification period CAM products*

  BBLC may adjust the reserve prices with a minimum notice period of three days for the monthly auction and consecutive quarterly auction capacity products, six hours for the day-ahead auction capacity product and 1 hour for the within-day auction capacity product.

- *Notification period Implicit Allocation products*

  BBLC may increase the reserve price of *Implicit Allocation* products longer than a month in duration with a minimum notice period of three days. BBLC may increase the reserve price of *Implicit Allocation* products equal or less than one month in duration with a minimum notice period of one day. In case of a reserve price reduction the minimum notice period for all *Implicit Allocation* products is one day.

- *Interruptible capacity charges*

  BBLC applies an ex-ante discount based on the probability of interruption in line with TAR NC Article 16.

Glossary

'alternative allocation mechanism' means an allocation mechanism for offering level or incremental capacity designed on a case-by-case basis by the transmission system operators, and approved by the national regulatory authorities, to accommodate conditional demand requests;

'auction premium' means the difference between the clearing price and the reserve price in an auction;

'fixed payable price' means a price calculated in accordance with TAR NC Article 24(b) where the reserve price is not subject to any adjustments;

'**large price step'** means a fixed or variable amount that is defined per interconnection point and standard capacity product;

'**multiplier**' means the factor applied to the relevant proportion of the reference price in order to calculate the reserve price for a non-yearly standard capacity product;

'**oversubscription capacity'** means firm capacity offered in addition to the technical capacity of an interconnection point;

'**seasonal factor'** means the factor reflecting the variation of demand within the year which may be applied in combination with the relevant multiplier;

'**small price step'** means a fixed or variable amount that is defined per interconnection point and standard capacity product which is smaller than the large price step;

'reference price' means the price for a capacity product for firm capacity with a duration of one year;

'**reserve price'** means the eligible floor price in the auction.