FINAL CONSULTATION: TARIFF METHODOLOGY ADJUSTMENTS

Disclaimer:
The original document which was published on 14 October 2021 is in Danish and has been translated to English. If there are discrepancy between the Danish and the English version, the Danish version will apply.
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1. Introduction

In pursuance of section 36a(1) and section 40(1) para (1) of Danish Consolidation Act no. 126 of 6 February 2020 on natural gas supply, as amended (the ‘Danish Gas Supply Act’ (Gasforsyningsloven)) and section 2(1) para (1) of Danish Executive Order no. 822 of 27 June 2014 on rules for application for approval of prices and terms and conditions, etc. for natural gas supply, Energinet must submit method approval applications to the Danish Utility Regulator for its prices, terms and conditions, etc. for access to the transmission system.

This application/Final Consultation Document for Energinet’s tariff methodology contains elements to be carried over which the Danish Utility Regulator approved in a decision on 31 May 2019, as well as certain adjustments in relation to the current, approved tariff methodology.

This tariff methodology will come into force on 1 October 2022. However, the adjustment to the collection period will only apply from 1 January 2023.

The method has been in consultation from 14 September to 28 September 2021. The consultation was held based on an English description, to give all shippers the opportunity to participate in the consultation process. The English description is attached as Appendix 6. Three consultation responses were received, which are attached as Appendix 7. This version of the method/Final Consultation Document was also submitted for consultation between 14 October and 14 December 2021.
2. Background

In a decision on 31 May 2019, the Danish Utility Regulator approved Energinet’s current tariff methodology for gas tariffs. In addition to adjusting the tariff methodology, the method application also implemented COMMISSION REGULATION (EU) 2017/460 of 16 March 2017 establishing a network code for harmonised transmission tariff structures for gas (’TAR NC’). The method approval was limited to the period from 1 October 2019 to 30 September 2022.

TAR NC, Article 27(5) states that tariff methods must be reviewed at least every five years. However, the Danish Utility Regulator limited its approval of the method to the period from 1 October 2019 to 30 September 2022. The time limit was set due to the changes facing the Danish gas market, including the reconstruction of the Tyra field, new financial regulation for Energinet and Baltic Pipe commencing operation.

The Danish Utility Regulator must therefore decide on Energinet’s tariff methodology that will apply from 1 October 2022.

Articles 26 and 27 of TAR NC contain a detailed consultation procedure and several related requirements. On 21 September 2021, the Danish Utility Regulator asked Energinet to coordinate the procedure stated in Articles 26 and 27 in connection with this tariff methodology.

2.1 Method content

In its decision of 31 May 2019, the Danish Utility Regulator approved the following elements in Energinet’s tariff methodology:

- Reference price methodology (RPM) based on uniform capacity tariffs – i.e. the same capacity tariffs for all entry and exit points in the Danish transmission system
- A 100% discount on the transmission tariff to and from the Danish virtual storage point
- Multipliers and seasonal factors for short-term capacity products with terms of less than one year
- The methods behind tariffs and fees for non-transmission services

The Danish Utility Regulator did not approve the following elements:

- A multiplier (discount) on the capacity tariff for long-term capacity contracts of 5 years or more, where the multiplier drops from 0.95 for capacity contracts of 5 years, down to 0.9 for capacity contracts of 10 years or more
- The distribution between capacity and volume in the total transmission tariff, whereby the volume share may not exceed 40% of TOTEX

The Danish Utility Regulator changed the capacity and volume distribution to 70/30 for the regulation period from 1 October 2019 to 30 September 2022.

The approval applies from 1 October 2019 to 30 September 2022.

This tariff methodology application contains the following elements:

- Discontinuation of the volume tariff (adjustment)
• A 100% discount on the transmission tariff to and from the virtual storage point (continuation)
  • Multipliers:
    o Short-term capacity products less than 1 year (continuation).
    o Long-term capacity products of 5 years or more (new element).
  • The reference price methodology is retained as a uniform tariff methodology with an ex post entry/exit distribution (continuation).
  • Payment for capacity availability in the EP II branch pipeline (upstream part of Baltic Pipe) is included in the cost base for the transmission tariff (new element).
  • Change in the collection period from the gas year (1 October to 30 September) to the calendar year (1 January to 31 December) (new element).

The methodology application is thus a continuation of an already implemented and recognised tariff principle, with adjustments to accommodate outstanding issues in the Danish Utility Regulator’s decision on the tariff methodology from 2019 regarding the commissioning of Baltic Pipe and the transition to new financial regulation for Energinet.

Energinet is requesting that the Danish Utility Regulator approve the above elements, effective from 1 October 2022.

However, the adjustment to the collection period will only apply from 1 January 2023.

Energinet’s description, justification and assessment of the methodology are described below under the various elements.

\[ \text{The concept of an availability agreement is part of Energinet’s notification of the establishment of a joint market zone, which was registered with the Danish Utility Regulator on 15 September 2021.} \]
3. Description of the various method elements

3.1 Discontinuation of the volume tariff

The current methodology contains a fixed capacity/volume split of 70%/30%.

Article 4(3) of TAR NC states that transmission service revenue shall be recovered by capacity-based transmission tariffs. However, in a decision on 31 May 2019, the Danish Utility Regulator approved a division of the transmission tariff into a capacity share and a volume share. This division aimed to reflect Energinet’s capital expenses (CAPEX) and operating expenses (OPEX), subject to the volume share not exceeding 40% of the total income.

When approving the division of the transmission tariff, the Danish Utility Regulator placed emphasis on the resulting gradual transition from the previous 52%/48% split between the capacity and volume share in the tariff, towards implementation of TAR NC, and that the effects of a higher capacity share were unknown and the supply situation during the Tyra shutdown was critical. The decision therefore set a fixed capacity/volume ratio of 70%/30%.

However, the Danish Utility Regulator assessed that a suitable capacity/volume split upon full implementation of TAR NC would be 90/10 or 85/15.

These estimates are based on the expectation that flow-related costs will constitute approx. 8% of the total cost base.

Despite the approval, the relatively high volume share was challenged, as TAR NC Article 4 (3)(a)(i) stipulates the following requirement in relation to a gas flow-based fee:

“a) a flow-based charge, which shall comply with all of the following criteria: a:
  i) levied for the purpose of covering the costs mainly driven by the quantity of the gas flow.”

Energinet has therefore analysed the share of costs driven by the gas flow volume. These types of costs will primarily be linked to operation of the compressor stations in Egtved and Everdrup (electricity consumption). The expected electricity costs for compressor operation are DKK 82 million in 2023. However, Energinet only has to pay DKK 6 million of the total electricity costs for the compressor station in Egtved. This is because GAZ-SYSTEM has undertaken to pay the first DKK 90 million of the electricity costs for the compressor station in Everdrup.

Given that the variable cost is expected to only be DKK 6 million, in relation to an expected exit gas flow of 129,978 GWh, the volume tariff will be very low – probably around DKK 0.00005/kWh. Energinet’s total flow-related costs are thus currently expected to constitute less than 1% of the total cost base.

Energinet therefore deems that the current volume-driven cost base is not sufficient for it to be meaningful to continue with a division of the transmission tariff into a capacity and volume component, for example by switching to a capacity/volume split of 90/10. Energinet therefore believes that the volume tariff should be discontinued for now.

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3 Based on the electricity price from ‘Analysis assumptions 2020’
4 Polish Gas TSO

Doc.21/03915-5  Til arbejdsbrug/Limited
Discontinuing the volume tariff so that only capacity-based transmission tariffs are charged will be in conformity with the principle in TAR NC that transmission service income should be collected as capacity-based transmission tariffs. This also means that the volume risk described in TAR NC Article 7(d) is eliminated.

The figure below also shows that volume tariffs are not used in neighbouring countries. Based on the goal of increasing harmonisation, it also makes sense to harmonise the tariff principles.

*Figure 1 Use of volume tariffs in Europe*

In conclusion it should be noted, however, that if the flow-based costs ever reach a level where it again becomes meaningful to cover these costs via a volume tariff, Energinet may, after market consultation, seek approval for adjustment to the method.

3.2 Discount on the transmission tariff to and from the virtual storage point

In its decision of 31 May 2019, the Danish Utility Regulator gave approval for Energinet to continue the principle of a 100% discount on the transmission tariff to and from the virtual storage point.

Historically, there have been no transport tariffs to and from the virtual storage point in the Danish entry-exit market model. The virtual storage point is viewed as an internal system point in the Danish market model. If tariffs were also set for gas transport to/from storage facilities, it would mean that tariffs were charged multiple times for the same gas volume. It is thus natural to continue to uphold this principle.

TAR NC Article 9(1) states that a discount of at least 50% shall be applied to capacity-based transmission tariffs at entry points from and exit points to storage facilities, unless and to the extent a storage facility, which is connected to more than one transmission or distribution network, is used to compete with an interconnection point.
In its decision of 31 May 2019, the Danish Utility Regulator found that it was in accordance with TAR NC Article 4(1) that Energinet had a 100% discount on both the capacity and volume tariff when using the virtual storage point, even though the volume tariff is not explicitly mentioned in TAR NC.

In this method application, Energinet assumes that there will only be a capacity-based tariff in future, i.e. that the volume tariff will be abolished, as discussed above.

The discount on the transport tariff will therefore only apply to the capacity tariff, as described in TAR NC Article 9(1). Energinet therefore deems that the described 100% discount on the transmission tariff to and from the virtual storage point continues to be in compliance with TAR NC.

Energinet believes that the discount will allow equal opportunity to meet flexibility requirements through the purchase of a storage product, compared to other alternatives (e.g. exchanges or hubs) – where there is no separate tariff for the use of the trading point.

3.3 Multipliers and season factors

3.3.1 Multipliers for short-term capacity products less than 1 year

In its decision of 31 May 2019, the Danish Utility Regulator gave approval for Energinet to continue the principle of multipliers for short-term capacity products (less than 1 year). In its decision, the Regulator found that the proposed multipliers were within the permitted ranges for multipliers for short-term products, as described in TAR NC Article 13(1). The Regulator noted that the multipliers must not result in the tariffs for short-term capacity products becoming so high that it would in reality cease to be attractive to trade gas across borders. At the same time, a multiplier should also aim to make it continue to be attractive for shippers to reserve annual capacities, and thereby contribute to greater security for Energinet’s tariff income and greater predictability in the tariffs.

Energinet wants to maintain the current structure for multipliers for capacity products less than 1 year. The reason for having multipliers for capacity products less than 1 year is the desire to give shippers an incentive to book longer term products, thereby helping to support the market and ensure tariff stability.

The structure Energinet wishes to extend encompasses the following multipliers:

- Quarterly multiplier: 1.1 – if **quarterly products** corresponding to 1 year are booked, this will result in an additional 10% payment in relation to an annual product
- Monthly multiplier: 1.25 – if **monthly products** corresponding to 1 year are booked, this will result in an additional 25% payment in relation to an annual product
- Daily and within-day multiplier: 1.40 – if **daily and within-day products** corresponding to 1 year are booked, this will result in an additional 40% payment in relation to an annual product

The multipliers thereby lie within the ranges described in TAR NC Article 13(1). Energinet also believes that there are still sound reasons for maintaining the multipliers, one of which is that they give shippers an incentive to book longer products, thereby supporting the market and tariff stability.
Finally, it should be noted that the German regulator has announced similar multipliers (except for within-day multipliers, which is 2.0)\(^5\)

### 3.3.2 Multipliers on capacity products of 5 years or more

In its decision of 31 May 2019, the Danish Utility Regulator considered Energinet’s application of multipliers for long-term capacity contracts (5 years and more). Energinet had applied a multiplier which resulted in a discount on capacity contracts, ranging from 0 to 10% depending on the length of the contract. Five-year contracts received a 5% discount, while a contract for 10 or more years received a 10% discount.

The Danish Utility Regulator found that it was generally sound to have a multiplier on the tariff for long-term capacity contracts, as long-term contracts secure a given income for the transmission system operator over a longer period of time, and thus send a robust investment signal to the TSO. The Regulator also noted that it could be sound and reasonable to compensate shippers for their willingness to undertake contracts with the reduced flexibility and greater financial/regulatory risk.

However, the Danish Utility Regulator found overall that the proposed multiplier for long capacity bookings would result in unequal treatment of shippers, as Energinet did not offer capacity contracts of 5 years or more. It would thus only be relevant to contracts already in force, including contracts related to Baltic Pipe. Although the multiplier (the discount) was registered as a general principle, in reality, discrimination would occur. The Regulator deemed that this would breach the principle that tariffs or methods for calculating tariffs must be applied in a non-discriminatory manner, in line with Article 13(1) of the European Gas Regulation. The Regulator also found that it could potentially impede competition, depending on how each market participant chose to use the capacity.

The Danish Utility Regulator therefore decided that Energinet’s proposed multiplier could not be approved in the applied form.

The Danish Utility Regulator encouraged Energinet to work on a multiplier in a future method application which would allow all existing and new shippers in the Danish transmission system to get a discount via the multiplier when purchasing long-term capacity products, contributing to greater financial security overall for the Danish gas system.

With this application, Energinet aims to introduce such a multiplier for capacity bookings of 5 years or more, in order to encourage long-term contracts and bookings supporting the system.

The aim is to introduce a stepped model which increases the size of the discount in step with the number of years booked, resulting in a discount of 2-6%, depending on the length of the capacity booking.

The multiplier will apply to all capacity bookings of 5 years or more, including allocated capacity in connection with Open Season 2017 on Baltic Pipe. The principle is thus extended to all users with long-term capacity products, which Energinet deems to be the least discriminatory approach.

\(^5\) MARGIT 2022 (https://www.bundesnetzagentur.de/DE/Beschlusskammern/1_GZ/BK9-GZ/2020/2020_bis0999/BK9-20-0612/BK9-20-0612-Festlegungsentwurf.html;jsessionid=01A8920A457046FE8A98210F02C83E137nni=364474)

\(^6\) I.e. a multiplier between 0.94 and 0.98
Energinet is applying for a long-term multiplier calculated using the following formula:

**Equation 1: Multiplier for 5 years or more**

\[
\text{Multiplier} = (1 + x) - (x \times \text{antal år})
\]

where

\[X = 0.004 \text{ and the number of years } \geq 5\]

This will result in a discount of 5.60% for a capacity booking of 15 years, which is the maximum length. The discount will be deducted from the reference price for the annual product for each of the 15 years.

The figure below shows the discount over time from the multiplier using \(x = 0.004\), as well as \(x = 0.002\) and \(x = 0.006\).

**Figure 2: Resulting multiplier with different x values**

The main reason why the Danish Utility Regulator did not approve the proposed multiplier in 2019 was that the discount was only available to shippers who had participated in the Open Season bookings in either 2010 or 2017, and the model would thus be discriminatory for other users of the system. Energinet has subsequently – in 2019 – introduced long-term capacity products \(\geq 5\) years at all IP points on the capacity platform and at Nybro Entry. This makes it possible for all shippers to obtain the discount, including participants in the Open Season 2017 and 2019.

The long-term contracts give Energinet security of income over a longer period of time, and also facilitate an investment signal to Energinet in connection with bookings made in future as part of the European Incremental Capacity process\(^7\). A discount for long-term capacity products provides an incentive for shippers to enter into long-term capacity contracts, even though they must thereby accept less flexibility and a greater financial and regulatory risk, compared to shippers who purchase and use capacity in the short term in relation to current market price signals and an assessment of the current rules in force.

\(^7\) Network code on capacity allocation mechanisms in gas transmission systems and repealing Regulation (EU) No 984/2013, ch. 5
Energinet finds it reasonable and justified to compensate shippers for their willingness to undertake such risks in relation to the financial security that long-term capacity contracts offer the transmission system operator – and thus other shippers. Energinet also notes that the gas system will face challenges in the future due to the investment needed for the green transition, and the continued decline in gas consumption in Denmark. It therefore also makes sense for these reasons to give the gas market incentives to enter into long-term capacity contracts, which benefit the economic balance of the whole system.

In relation to the competition and market situation, Energinet believes that a tariff structure with an appropriate balance between the price of short and long-term products, which reflects the risks to shippers in the product, will support competition in the Danish gas market. Equal access conditions for shippers with different gas portfolio structures will intensify competition on the wholesale market, as having more types of gas traders will make the Danish gas market attractive as a trading place.

On this basis Energinet finds that the described method for multipliers on long-term capacity contracts is based on transparent and non-discriminatory principles. Energinet also finds that it contributes to efficient gas trading and market competition, while avoiding cross-subsidies between network users and providing incentives for investment and maintaining or creating interoperability for transmission networks. In addition, the tariffs do not limit market liquidity or distort trade across borders between different transmission systems. The method thus complies with Article 13 of the Gas Regulation.

3.3.3 Seasonal factors
In connection with the Tyra shutdown in 2019, Energinet applied, and had approved, seasonal factors at the Danish-German border point (Ellund) for a limited period of 2 gas years, i.e. from 1 October 2020 to 1 October 2022.

The aim of seasonal factors is to boost security of supply during the Tyra shutdown, where almost all of the Danish-Swedish gas consumption has to be covered by gas from Germany. This premise will change on 1 October 2022 when Baltic Pipe begins operation. Energinet therefore does not currently wish to extend the seasonal factors, despite the extension of the Tyra shutdown.

Energinet will therefore have no seasonal factors after 1 October 2022.

3.4 Uniform tariff methodology
In its decision of 31 May 2019, the Danish Utility Regulator gave approval for Energinet to use a uniform tariff methodology as the reference price methodology (RPM). This means that the capacity tariff is the same in all entry-exit points.

Energinet would like to carry on the uniform tariff methodology. This method has been thoroughly explained to the market, the Danish Utility Regulator and ACER in connection with the method application underlying the approval in 2019, and the arguments have not changed. This method refers to the previous method application, while the main arguments are briefly summarised in the following section.

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8 Decision [https://forsyningsstilsynet.dk/gas/afgoerelser/saesonfaktorer-i-tariffen-for-ellund-punktet-under-tyra-nedlukning](https://forsyningsstilsynet.dk/gas/afgoerelser/saesonfaktorer-i-tariffen-for-ellund-punktet-under-tyra-nedlukning)
Energinet still believes that a uniform allocation of costs has a number of advantages for the market.

**Transparency**
The methodology results in a transparent price signal with resulting low transaction expenses and provides equal access costs – geographically and for different shippers. The tariff method also provides a solid basis for assessing the income/costs of future system expansions.

The uniform method provides a more transparent price signal compared to CWD. By definition, all points have the same tariffs. This reduces the risk of distortion losses associated with essentially artificial price differences between the points.

Energinet also finds that it is an advantage for users of the Danish transmission system that the uniform tariff methodology contributes to increased transparency via a relatively simple methodology, while there seem to be no opposing arguments in favour of a different cost allocation.

**Cost-reflective – historical investment decisions are of limited relevance to future system use**
In reality, geographical distances are only a limited driver in relation to costs in the Danish transmission system.

Given that many of the capacity and investment decisions date back to the 1980s, Energinet finds that the written down book value of fixed assets can largely be regarded as sunk costs in relation to sending a meaningful price signal. It would not be reasonable to allocate historically based costs to the current individual points/users. The way the system is currently used is also significantly different from the assumptions underlying the original investment decisions, and most current transmission users have not been part of the historical system expansion.

**Uniform tariffs do not create new congestion**
The general absence of congestion and the use of an auction-based allocation mechanism reduce the need for differentiated reference prices.

One of the challenges of using the CWD method is also that costs are to some extent allocated based on historical capacity decisions, which current users have only had limited influence on.

**Distortion losses are limited**
As documented in section 4, 6.2.1 and 6.3, on the CAA parameter, the uniform tariff methodology is only surpassed by the CWD tariff methodology. However, the CWD tariff methodology has considerable distortion loss.

**Ability to handle sudden, temporary, and lasting changes in system utilisation**
Uniform cost allocation for capacity tariffs is generally robust in relation to changes in volumes and flow patterns. The method supports changes primarily having a scaling effect, whereby the tariffs of all entry-exit points are pushed up or down, while auction-based allocation counteracts congestion, and sends adequate investment signals about the need for future system expansions.

**Non-discriminatory: Fair distribution of costs and benefits of the Baltic Pipe project**
All users of the Danish transmission system benefit from Baltic Pipe, as much higher gas volumes reduce the general tariff level in the system. It is therefore reasonable that both costs
and benefits (lower tariffs) are distributed proportionally between new and existing system users via the uniform capacity tariffs (the reduction in tariffs will be distributed to all points in the system – thereby benefitting both new and existing system users).

**Efficient support for the competitive market**
Energinet also find that the uniform tariff methodology is better for promoting efficient gas trading and competition in the gas market, as it ensures equal price access for transit, imports, domestic production, and production from North Sea fields.

**Harmonisation with adjacent systems**
Finally, the methodology leads to harmonisation with adjacent systems, as large parts of North-West Europe use the same methodology, including Germany and Poland.\(^{11}\)

### 3.5 Uniform tariff for the joint market zone

On 15 September 2021, Energinet applied a methodology to establish a joint market zone for the section of Baltic Pipe that connects the Norwegian gas system, i.e. the upstream pipeline (EP II branch pipeline) and the Danish transmission system.

The purpose of the joint market zone is to create simple market access for the players (shippers), efficient operation of the pipeline systems through utilisation of synergies, and competitiveness for the transit route from Norway to Poland by avoiding costly intermediaries:

- **Easy market access for shippers**: The shippers only have to operate in one joint market zone (entry/exit system) and in one balancing area, whether this is in the upstream pipeline or in the transmission pipeline.
- **Efficient operation of the pipeline systems** by exploiting synergies: It is important to ensure there are synergies, even though there are different rules and other differences in the pipeline infrastructure. Examples of synergies include savings in costs for billing and IT systems and double staffing in administrative functions.

The establishment of large-scale integrated market systems also follows the Agency for the Co-operation of Energy Regulators’ (ACER) Gas Target Model, as different regulation of the gas pipeline infrastructure must not constitute a barrier or increase the complexity for the shippers. ACER therefore launched an updated Gas Target Model in 2015.\(^{12}\)

The joint market zone will require an agreement between the Energinet business areas for transmission and upstream – an ‘availability agreement’. Under the availability agreement, the upstream business area makes the full capacity in the EP II branch pipeline available to the transmission business area in exchange for payment, if the capacity has not been sold to another party because of the provisions of the upstream executive order on negotiated access. A detailed description of the availability agreement and its terms is provided in the method application for the joint market zone of 15 December 2021.

A key element in the joint market zone is that a uniform tariff applies to the entire zone. This means that it must be possible to include the transmission area’s costs of purchasing capacity

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\(^{11}\) However, Poland has an entry-exit split of 45%/55%.

\(^{12}\) This part has been explained in Energinet’s notification of the establishment of a joint market zone, which was notified to the Danish Utility Regulator on 15 September 2021.
in the EP II branch pipeline in the uniform tariff as a non-transmission service element that is charged as a capacity tariff (DKK/kWh/h/year).

The need to include costs related to upstream assets in the transmission tariffs has been clearly communicated in the ‘Tariff principles and market design in a Baltic Pipe Open Season’ consultation from 2016 and in connection with application of the current methodology. The Danish Utility Regulator has also made the following statement in connection with the approval of the current methodology:

“The Danish Utility Regulator commented on the envisaged principles for the market zone and tariffs on 31 January 2017 in connection with Open Season 2017, and the Regulator (Secretariat) has also approved the rules for capacity allocation which apply to Open Season 2017. The comment from the Danish Utility Regulator is not a binding approval, and is conditional on a formal method application, i.e. in this case [Energinet’s emphasis]. Energinet will notify of the principle of introducing a joint Danish market zone for gas transport through Baltic Pipe in a separate method application.”

The Danish Utility Regulator has confirmed to Energinet that the highlighted sentence means that the application and subsequent approval of the tariff methodology from 2019 means that the condition for the non-binding approval of tariff principles from 2016 can be regarded as having been met with the Danish Utility Regulator’s tariff methodology approval from 2019.

TAR NC, Article 4(4) states:

“The non-transmission services revenue shall be recovered by non-transmission tariffs applicable for a given nontransmission service. Such tariffs shall be as follows:

(a) cost-reflective, non-discriminatory, objective and transparent;
(b) charged to the beneficiaries of a given non-transmission service with the aim of minimising cross-subsidisation between network users within or outside a Member State, or both.

Where according to the national regulatory authority a given non-transmission service benefits all network users, the costs for such service shall be recovered from all network users.”

Energinet believes that incorporating the EP II branch pipeline into a joint market zone benefits all users of the transmission system, as a number of synergies are achieved in the operation of the overall system, and it leads to much lower tariffs for grid users, as acknowledged in the Danish Utility Regulator’s statement of 31 January 2017 on the principles of the market zone and method for determining tariffs in connection with the Baltic Pipe project. The Regulator thus expressed in point 95 that “the Danish Utility Regulator finds that a uniform tariff method may be designed in such a way that it facilitates the realisation of the project, while also giving existing shippers the possibility of benefiting in the form of generally lower transmission tariffs than would otherwise have been the case.”
Energinet therefore deems that the transmission business area’s costs of purchasing capacity in the EP II branch pipeline constitute costs for a non-transmission service, which can be recovered from all network users in accordance with TAR NC Article 4(4). The inclusion of these costs in a uniform tariff for the entire joint market zone is therefore in accordance with TAR NC.

For comparison, Appendix 6.1 shows alternative tariff methodologies for the desired expansion of the uniform tariff principle to the joint market zone.

Energinet finds it essential to keep complexity in the Danish transmission system as low as possible, as this increases transparency and thereby ensures predictability in tariff developments.

3.6  Change to tariff period

As of 1 January 2023, Energinet will be covered by a new financial regulation\(^\text{16}\), which will increase the need for precision in its accounting. To support this transition, and to harmonise in relation to neighbouring countries, Energinet wants to change the tariff period from the gas year (1 October to 30 September) to the calendar/financial year (1 January to 31 December).

This means that the other applied adjustments will take effect from 1 October, while the change in the collection period will only take effect on 1 January 2023. A month before the PRISMA auction, on the first Monday in July 2022, a uniform capacity tariff will thus be announced which applies exclusively to Q4 2022. At the same time, a tariff will be announced for the annual product from 1 January 2023 to 31 December 2023. It should be noted that the annual capacity at interconnection points and Nybro will still follow the gas year. It is only the tariff period that will change from the gas year to the calendar year.

*Figure 3: Map showing tariff periods in adjacent transmission systems*
Energinet has been calculating tariffs based on the gas year (1 October to 30 September) since it was established. This is because the gas market was characterised by long-term contracts with this periodisation for many years. To ensure greater cohesion, it made sense for transmission tariffs to be collected using the same periodisation. Times have since changed. Many of the old gas contracts have expired, and adjacent systems have begun to use the calendar year for settlement. To reduce unnecessary complexity and increase harmonisation, Energinet therefore wishes to convert to settlement based on the calendar year. This is also expected to reduce the risk of differences resulting from periodisation between the accounting and tariff years leading to large fluctuations in tariffs from one tariff year to the next.
4. Resulting tariffs

The above tariff methodology adjustments will essentially result in the following tariffs and route costs as of 1 January 2023 (before the multiplier for long-term products).

The tariff calculation for the uniform tariffs is described by the following formula:

\[
\text{Tariff}_{\text{uniform}} = \frac{\text{Total cost base}}{\text{Total capacities}} = \frac{1.036 \text{ mDKK}}{30.229 \text{ MWh/}h} = 34.29 \text{ kr./kWh/h/year}
\]

The table below shows the total route costs between the various points in the system.

**Table 1: Resulting tariffs – Uniform 2023**

<table>
<thead>
<tr>
<th>Entry</th>
<th>Exit zone</th>
<th>Ellund</th>
<th>Faxe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage/GTF/ETF</td>
<td>34.29</td>
<td>34.29</td>
<td>34.29</td>
</tr>
<tr>
<td>Nybro</td>
<td>34.29</td>
<td>68.57</td>
<td>68.57</td>
</tr>
<tr>
<td>RES</td>
<td>34.29</td>
<td>68.57</td>
<td>68.57</td>
</tr>
<tr>
<td>EPII</td>
<td>34.29</td>
<td>68.57</td>
<td>68.57</td>
</tr>
<tr>
<td>Ellund</td>
<td>34.29</td>
<td>68.57</td>
<td>-</td>
</tr>
<tr>
<td>Faxe</td>
<td>34.29</td>
<td>68.57</td>
<td>-</td>
</tr>
</tbody>
</table>

Energinet applies the tariff methodology for a 5-year period. This form is therefore the expected tariff trend for the entire period.

**Table 2 Uniform tariff – 2023 to 2027**

<table>
<thead>
<tr>
<th>Uniform resulting tariffs (DKK/kWh/h/year)</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
<th>2027</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity tariff (all entry and exit points)</td>
<td>34.29</td>
<td>34.06</td>
<td>34.32</td>
<td>34.94</td>
<td>35.54</td>
</tr>
</tbody>
</table>

The introduction of the multiplier described in section 3.3.2 for capacity contracts of 5 or more years will have an impact on the annual tariff level, and the opposite effect on the booking price for shippers buying capacity products of 5 or more years. However, Energinet’s regulation means that these shippers will also be co-financed by such a reduction, with the result that the reduction is not carried over 1-to-1. This effect is illustrated in the figure below.
Figure 4: Effect of multiplier on capacity contracts of 5 years or more

Market effects
Energinet believes that a diversified portfolio of multi-year, annual and short-term capacity products best supports supply and competition in the Danish gas market. Longer term capacity products send effective investment signals and are sunk from the moment the contracts are agreed. The marginal costs in the transmission system are therefore low in relation to responding to market price signals. This was the experience from the OS09 contracts and the interplay between shippers and market customers from 2012 to 2021, where the various capacity products supplemented each other.

The proposed multiplier will increase the shippers’ incentive to purchase multi-year capacity contracts. The market has increasingly demanded shorter capacity products in recent years. This in itself indicates that longer term capacity contracts do not contain reasonable pricing of the larger built-in risk.

A discount for one type of contract must naturally increase the tariffs on the other capacity products. In that sense, the tariffs are a zero-sum game to cover the regulated tariff cost base. Other shippers that do not choose to buy a multi-year capacity product will therefore, all else being equal, pay a marginally higher price.

At the same time, Baltic Pipe’s investment business case showed that the tariffs are not a zero-sum game if volume increases, slightly simplified, exceed the additional marginal costs. The tariffs following the completion of Baltic Pipe are expected to help keep all other tariffs at a significantly lower level than if the project had not been completed. This factor should be considered when the market and the Danish Utility Regulator assess the proposal for a discount on multi-year capacity products.

There is currently still spare capacity available at all Energinet’s entry and exit points. At the request of the Danish Utility Regulator, Energinet also annually transfers 10% of capacity to products shorter than a year. It is a price risk if capacity is not reserved, that will impact the other capacity products, all things being equal. This should also be considered when assessing the discount on multi-year products.

Despite the transfer to short-term capacity products, there is still available capacity at all entry and exit points. The market can therefore reserve more annual and multi-year products. Ener-
ginet therefore deems that the introduction of a multiplier on long-term products will not result in any negative market effects, as there does not seem to be a shortage of annual and multi-year capacities. In fact, a multiplier on long-term capacity contracts gives market players more opportunities and flexibility to choose an optimal mix of short and long-term capacity products.

**Economic distribution effects**

If a multiplier is introduced for capacity contracts of 5 years or more, a redistribution will undoubtedly take place among shippers. The tables below show the annual transport costs for various levels of consumption, and volumes transported at various load factors.

*Table 3 Annual transport costs for various types of consumption, shippers and load factors, with capacity booking > 5 years*

<table>
<thead>
<tr>
<th>Year 2023 Booking &gt; 5 years (DKK)</th>
<th>LF = 1</th>
<th>LF = 0.8</th>
<th>LF = 0.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household with 1,500 m³/year</td>
<td>142</td>
<td>177</td>
<td>355</td>
</tr>
<tr>
<td>Industry with 0.3 million m³/year</td>
<td>28,398</td>
<td>35,497</td>
<td>70,995</td>
</tr>
<tr>
<td>Large company with 5 million m³/year</td>
<td>473,300</td>
<td>591,625</td>
<td>1,183,249</td>
</tr>
<tr>
<td>Small shipper with 125 million m³/year</td>
<td>11,832,492</td>
<td>14,790,615</td>
<td>29,581,231</td>
</tr>
<tr>
<td>Medium-sized shipper with 375 million m³/year</td>
<td>35,497,477</td>
<td>44,371,846</td>
<td>88,743,693</td>
</tr>
<tr>
<td>Large shipper with 1 billion m³/year</td>
<td>94,659,939</td>
<td>118,324,923</td>
<td>236,649,847</td>
</tr>
</tbody>
</table>

*Table 4 Annual transport costs for various consumption groups, shippers and load factors, with capacity booking <= 5 years*

<table>
<thead>
<tr>
<th>Year 2023 booking &lt;= 5 years (DKK)</th>
<th>LF = 1</th>
<th>LF = 0.8</th>
<th>LF = 0.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household with 1,500 m³/year</td>
<td>134</td>
<td>168</td>
<td>335</td>
</tr>
<tr>
<td>Industry with 0.3 million m³/year</td>
<td>26,808</td>
<td>33,510</td>
<td>67,019</td>
</tr>
<tr>
<td>Large company with 5 million m³/year</td>
<td>446,795</td>
<td>558,494</td>
<td>1,116,987</td>
</tr>
<tr>
<td>Small shipper with 125 million m³/year</td>
<td>11,169,873</td>
<td>13,962,341</td>
<td>27,924,682</td>
</tr>
<tr>
<td>Medium-sized shipper with 375 million m³/year</td>
<td>33,509,618</td>
<td>41,887,023</td>
<td>83,774,046</td>
</tr>
<tr>
<td>Large shipper with 1 billion m³/year</td>
<td>89,358,982</td>
<td>111,698,728</td>
<td>223,397,456</td>
</tr>
</tbody>
</table>

As can be seen from the tables above, there is no distortion in the effect due to load factor or consumption level. The percentage difference in the annual transport costs is the same regardless of these parameters.
5. Consultation process

Energinet has completed the consultation process below. This section will discuss the points in the consultation responses received in connection with the consultation process.

i) Shippers Forum and User Group will be held, with discussion of the presented adjustments.

ii) Pre-consultation (2 weeks): 14 September – 28 September 2021

iii) Final consultation (2 months): 14 October – 14 December 2021

iv) Submission to the Danish Utility Regulator (five months’ processing time): 16 December 2021

v) Commencement: from 1 October 2022

Energinet has received three consultation responses from Ørsted, PGNIG and the Danish Energy Association. Thank you for these contributions and the thoughtful considerations that have been put forward.

All the parties understand Energinet’s view that the TAR NC formulation must lead to discontinuation of the volume tariff. However, it is emphasised as being an important prerequisite for one of the parties that the multipliers for capacity products under one year are maintained.

Regarding the introduction of multipliers for long-term capacity products, the consultation responses express different views. Some shippers are positive towards the initiative, although they believe that the multiplier should be lower than what Energinet has proposed. However, the shippers who indicate that they will try out shorter capacity products in the future gas market disagree with the introduction of the multiplier – because they want to strengthen the short-term market. Energinet fundamentally believes that the best way to strengthen the short-term market is to have a diversified portfolio of contracts of varying lengths.

In response to the views expressed in the consultation responses, Energinet has supplemented its justification with a general economic analysis, and further explained the background and the reasonableness of introducing the principle.

In relation to the uniform tariff principle and its expansion, the background of expanding the tariff principle to also include the upstream part of Baltic Pipe (EPII branch pipeline) is acknowledged. However, interest has been expressed in the financial consequences of this, and in alternative tariff principles, which Energinet has sought to accommodate in Appendix 2 of this document.

Overall, there is agreement on discontinuing the gas year, with the advantages this simplification will lead to. The description in section 3.6 has been expanded with a detailed overview of how the change is expected to be implemented.
6. Appendix

6.1 Appendix 1: Assumptions

6.1.1 Qualifying statement

All assumptions are based on Energinet’s current level of knowledge. It is therefore also important to emphasise that the tariffs are only indicative, with the aim of illustrating the effects of the proposed changes.

It is important to note that cost bases etc. are based on the current break-even principle and not the future revenue adjustment\(^\text{18}\), as this is not yet sufficiently well known for the consequences to be calculated.

The tariff calculations also assume an accumulated excess/deficit of zero, and therefore do not take into account any change in this.

6.1.2 Cost base

The table below shows the cost base for 2023-2027, divided into the segments that support the tariff principles presented. The cost base contains all approved projects.

The table shows the costs related to the total system excluding the Baltic Pipe project, and for the Baltic Pipe project – divided into upstream and downstream. Together, this constitutes the total cost base for Energinet.

Table 5: Tariff cost base 2023-2027

<table>
<thead>
<tr>
<th>Cost base (DKK millions)</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
<th>2027</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing excl. Baltic Pipe</td>
<td>430</td>
<td>441</td>
<td>453</td>
<td>465</td>
<td>477</td>
</tr>
<tr>
<td>Baltic Pipe project</td>
<td>606</td>
<td>597</td>
<td>587</td>
<td>577</td>
<td>569</td>
</tr>
<tr>
<td>Downstream component</td>
<td>352</td>
<td>346</td>
<td>338</td>
<td>330</td>
<td>324</td>
</tr>
<tr>
<td>Upstream component</td>
<td>254</td>
<td>252</td>
<td>249</td>
<td>246</td>
<td>245</td>
</tr>
<tr>
<td>Total cost base</td>
<td>1,036</td>
<td>1,038</td>
<td>1,040</td>
<td>1,042</td>
<td>1,046</td>
</tr>
</tbody>
</table>

\(^{18}\) [https://kefm.dk/media/6889/aftale-om-fremtidssikret-reguleringsaf-energinet.pdf](https://kefm.dk/media/6889/aftale-om-fremtidssikret-reguleringsaf-energinet.pdf)
6.1.3 Capacities and volumes

The assumptions below are based on the consultation version of Analysis Assumptions 2021. Based on these assumptions and its own models and load factors, Energinet has calculated the expected capacity bookings below.

Table 6: Volumes 2023-2027

<table>
<thead>
<tr>
<th>Annual volumes in GWh - Exit</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
<th>2027</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint Exit Zone</td>
<td>31,923</td>
<td>30,109</td>
<td>29,406</td>
<td>27,472</td>
<td>25,879</td>
</tr>
<tr>
<td>Ellund</td>
<td>700</td>
<td>700</td>
<td>700</td>
<td>700</td>
<td>700</td>
</tr>
<tr>
<td>Faxe</td>
<td>91,355</td>
<td>91,355</td>
<td>91,355</td>
<td>91,355</td>
<td>91,355</td>
</tr>
<tr>
<td>Total Exit</td>
<td>129,978</td>
<td>128,164</td>
<td>127,461</td>
<td>125,527</td>
<td>123,934</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Annual volumes in GWh - Entry</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
<th>2027</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nybro</td>
<td>8,184</td>
<td>25,903</td>
<td>24,082</td>
<td>24,771</td>
<td>28,574</td>
</tr>
<tr>
<td>Ellund</td>
<td>24,360</td>
<td>9,373</td>
<td>10,246</td>
<td>6,763</td>
<td>754</td>
</tr>
<tr>
<td>RES</td>
<td>7,736</td>
<td>8,657</td>
<td>8,903</td>
<td>9,762</td>
<td>10,376</td>
</tr>
<tr>
<td>EPII</td>
<td>83,699</td>
<td>78,230</td>
<td>78,230</td>
<td>78,230</td>
<td>78,230</td>
</tr>
<tr>
<td>Faxe</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total Entry</td>
<td>129,978</td>
<td>128,164</td>
<td>127,461</td>
<td>125,527</td>
<td>123,934</td>
</tr>
</tbody>
</table>

Source: Analysis assumptions 2021, 12 October 2021
Note: There was an error in the corresponding table in the consultation document. This has been corrected in the above table.

Based on the annual volumes from the analysis assumptions, annual profiles have been estimated on a monthly basis at the various entry and exit points, and the volumes of the expected capacity products have been estimated (yearly, quarterly and monthly products) at all relevant entry and exit points (Exit Zone, Exit Dragør, Exit Ellund, Entry Ellund, Entry Nybro and Entry BNG). This work forms the basis of the annual capacities shown in the figure below.

Table 7: Expected capacity bookings 2023-2027

<table>
<thead>
<tr>
<th>Capacity in kWh/h/year</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
<th>2027</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exit JEZ</td>
<td>3,836,027</td>
<td>3,618,013</td>
<td>3,533,477</td>
<td>3,301,070</td>
<td>3,109,737</td>
</tr>
<tr>
<td>Exit Ellund</td>
<td>88,787</td>
<td>88,787</td>
<td>88,787</td>
<td>88,787</td>
<td>88,787</td>
</tr>
<tr>
<td>Exit Faxe</td>
<td>10,641,483</td>
<td>10,641,483</td>
<td>10,641,483</td>
<td>10,641,483</td>
<td>10,641,483</td>
</tr>
<tr>
<td>Exit capacity</td>
<td>14,566,297</td>
<td>14,348,283</td>
<td>14,263,747</td>
<td>14,031,340</td>
<td>13,840,007</td>
</tr>
<tr>
<td>Storage Exit</td>
<td>3,100,000</td>
<td>3,100,000</td>
<td>3,100,000</td>
<td>3,100,000</td>
<td>3,100,000</td>
</tr>
<tr>
<td>Entry Nybro</td>
<td>1,038,038</td>
<td>3,285,560</td>
<td>3,054,552</td>
<td>3,141,939</td>
<td>3,624,300</td>
</tr>
<tr>
<td>Entry Ellund</td>
<td>3,089,739</td>
<td>1,188,926</td>
<td>1,299,550</td>
<td>857,815</td>
<td>95,613</td>
</tr>
<tr>
<td>Entry RES</td>
<td>981,262</td>
<td>1,098,079</td>
<td>1,129,231</td>
<td>1,238,260</td>
<td>1,316,138</td>
</tr>
<tr>
<td>Entry EPII</td>
<td>10,553,608</td>
<td>10,553,608</td>
<td>10,553,608</td>
<td>10,553,608</td>
<td>10,553,608</td>
</tr>
<tr>
<td>Entry Faxe</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Entry capacity</td>
<td>15,662,647</td>
<td>16,126,173</td>
<td>16,036,941</td>
<td>15,791,622</td>
<td>15,589,659</td>
</tr>
<tr>
<td>Storage Entry</td>
<td>5,350,000</td>
<td>5,350,000</td>
<td>5,350,000</td>
<td>5,350,000</td>
<td>5,350,000</td>
</tr>
</tbody>
</table>

19 https://ens.dk/service/fremskrivninger-analyser-modeller/analyseforudsætninger-til-energinet
6.1.4 Point assumptions

In connection with the calculations in both the capacity weighted distance tariff methodology (section 6.2.1) and the cost allocation assessment (section 6.3), it is a condition that the points and distances are represented in a coordinate system.

*Figure 5: Illustration of point locations and distances*

For simplicity, Energinet has used the same points that were used in the application in 2019, with the addition of the Baltic Pipe EPII and Faxe points. The locations and distances are illustrated in the figure below.
6.2 Appendix 2: Alternative tariff methodologies

To ensure the robustness of the tariff methodology in relation to the approval of a uniform tariff for a joint market zone, Energinet has outlined two alternatives to the method applied by Energinet.

6.2.1 Capacity Weighted Distance (CWD)

Capacity Weighted Distance (CWD) is the tariff methodology TAR NC identifies as the preferred tariff methodology. All other reference price methodologies must thus be assessed in relation to this tariff principle.

Energinet believes that CWD is unnecessarily complicated in relation to the very small and simple transmission system Energinet operates.

Energinet therefore also believes that choosing CWD as a reference price methodology will complicate tariff calculation to such a degree that it will reduce transparency and make it more difficult for shippers to calculate tariffs.

The calculations of the CWD tariffs follow all 15 steps described in TAR NC Article 8, and can be found in the associated Excel file for all the years in the period 2023-2027.

The above leads to the tariffs and route costs below.

Table 8 Resulting tariffs – Capacity Weighted Distance 2023

<table>
<thead>
<tr>
<th>Entry</th>
<th>Exit Storage/GTF/ETF</th>
<th>Exit zone</th>
<th>Ellund</th>
<th>Faxe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage/GTF/ETF</td>
<td>-</td>
<td>27.90</td>
<td>26.08</td>
<td>38.42</td>
</tr>
<tr>
<td>Nybro</td>
<td>25.10</td>
<td>53.00</td>
<td>51.18</td>
<td>63.52</td>
</tr>
<tr>
<td>RES</td>
<td>19.03</td>
<td>46.94</td>
<td>45.11</td>
<td>57.45</td>
</tr>
<tr>
<td>EPII</td>
<td>38.34</td>
<td>66.24</td>
<td>64.24</td>
<td>76.76</td>
</tr>
<tr>
<td>Ellund</td>
<td>22.29</td>
<td>50.19</td>
<td>-</td>
<td>60.71</td>
</tr>
<tr>
<td>Faxe</td>
<td>0.00</td>
<td>27.90</td>
<td>26.08</td>
<td>-</td>
</tr>
</tbody>
</table>

Using the above tariffs, the BP points (EPII and Faxe) would generate approx. 78% of the income in the total transmission system, while the capacities account for approx. 70% of the total capacity bookings.

6.2.2 Differentiated tariff principle

Energinet used a differentiated tariff methodology between 2013 and 2019. This tariff methodology was applied and approved based on the situation at the time concerning the expansion towards Germany by looping the pipeline between Ellund and Egtved and the compressor station. Like the Baltic Pipe project, the expansion was the result of an Open Season process completed in 2010.

However, in the subsequent dialogue with the market regarding the tariff methodology, it became clear that the expansion benefited only a few shippers. The approved tariff methodology was therefore a differentiated tariff methodology based on a benefit principle. The fixed asset investments for the project were therefore distributed among the points/users of the system who benefited from the investment.
However, this approach was discontinued during the last methodology application. This is particularly because the market has a common understanding that the nature of the future Baltic Pipe investment means that, all else being equal, it will benefit all the original users of the Danish transmission system.

The tariff methodology has therefore only been considered to ensure robustness in the overall method application. The equations below show the tariff calculation based on this principle in 2023.

**Equation 3 Differentiated tariffs 2023 – base element for collection at all entry and exit points**

\[
\text{Tariff}_{\text{Diff. base}} = \frac{\text{Total costbase excl. upstream}}{\text{Total capacities}} = \frac{782 \text{ mDKK}}{30.229 \text{ MWh/h/year}} = 25.89 \text{ kr./kWh/h/year}
\]

**Equation 4 Differentiated tariffs 2023 – extra element for collection at EPII Entry**

\[
\text{Tariff}_{\text{Diff. plus}} = \frac{\text{Cost base upstream}}{\text{EPII Entry capacities}} = \frac{254 \text{ mDKK}}{10.554 \text{ MWh/h/year}} = 24.05 \text{ kr./kWh/h/year}
\]

The differentiated tariff methodology, where upstream is added as EPII as an additional tariff element, will result in the tariffs and route costs shown below. All else being equal, this would make EPII the most expensive point in the system.

**Table 9 Resulting tariffs – differentiated tariffs 2023**

<table>
<thead>
<tr>
<th>DKK/kWh/h/y</th>
<th>Storage/GTF/ETF</th>
<th>Exit zone</th>
<th>Ellund</th>
<th>Faxe</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Entry</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Storage/GTF/ETF</td>
<td>-</td>
<td>25.89</td>
<td>25.89</td>
<td>25.89</td>
</tr>
<tr>
<td>Nybro</td>
<td>25.89</td>
<td>51.78</td>
<td>51.78</td>
<td>51.78</td>
</tr>
<tr>
<td>RES</td>
<td>25.89</td>
<td>51.78</td>
<td>51.78</td>
<td>51.78</td>
</tr>
<tr>
<td>EPII</td>
<td>49.94</td>
<td>75.83</td>
<td>75.83</td>
<td>75.83</td>
</tr>
<tr>
<td>Ellund</td>
<td>25.89</td>
<td>51.78</td>
<td>-</td>
<td>51.78</td>
</tr>
<tr>
<td>Faxe</td>
<td>25.89</td>
<td>51.78</td>
<td>51.78</td>
<td>-</td>
</tr>
</tbody>
</table>

Using the above tariffs, the BP points (EPII and Faxe) would generate approx. 77% of the income in the total transmission system, which is strikingly similar to the income share using CWD.

**6.2.3 Marginal tariff principle**

In the responses to the consultation document received, a few stakeholders expressed scepticism in relation to the uniform tariff principle. This tariff principle otherwise enjoyed broad acceptance during the Open Season process. Energinet believes that the project cannot be compared with the Ellund-Egtved expansion. Why? Energinet is also of the opinion that it would be unfair for Open Season shippers to be put at a disadvantage compared to the uniform tariff principle, which was presented as an assumption throughout the Open Season process.
However, Energinet wishes to meet the request of the original shippers that calculations be presented where these shippers do not bear the costs of the Baltic Pipe project.

**Equation 5 Marginal tariff, existing – for collection in Nybro Entry, RES Entry, Ellund Exit and Joint Exit Zone**

\[
\text{Tariff}_{\text{Existing}} = \frac{\text{Total cost base excl. Baltic Pipe}}{\text{Total capacities excl. Baltic Pipe}} = \frac{430 \text{ mDKK}}{9.034 \text{ MWh/h/year}} = 47.62 \text{ kr./kWh/h/year}
\]

**Equation 6 Marginal tariff, existing – for collection in EPII Entry, Faxe Exit and Faxe Entry**

\[
\text{Tariff}_{\text{Baltic Pipe}} = \frac{\text{Cost base Baltic Pipe}}{\text{Baltic Pipe capacities}} = \frac{606 \text{ mDKK}}{21.195 \text{ MWh/h/year}} = 28.60 \text{ kr./kWh/h/year}
\]

The above would result in the following tariffs and route costs.

**Table 10 Resulting tariffs – marginal tariffs 2023**

<table>
<thead>
<tr>
<th>DKK/kWh/h/y</th>
<th>Exit</th>
<th>Storage/GTF/ETF</th>
<th>Exit zone</th>
<th>Ellund</th>
<th>Faxe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entry</td>
<td></td>
<td>Storage/GTF/ETF</td>
<td>47.62</td>
<td>47.62</td>
<td>28.60</td>
</tr>
<tr>
<td></td>
<td>Nybro</td>
<td>47.62</td>
<td>95.23</td>
<td>95.23</td>
<td>76.22</td>
</tr>
<tr>
<td></td>
<td>RES</td>
<td>47.62</td>
<td>95.23</td>
<td>95.23</td>
<td>76.22</td>
</tr>
<tr>
<td></td>
<td>EPII</td>
<td>28.60</td>
<td>76.22</td>
<td>76.22</td>
<td>57.21</td>
</tr>
<tr>
<td></td>
<td>Ellund</td>
<td>47.62</td>
<td>95.23</td>
<td>-</td>
<td>76.22</td>
</tr>
<tr>
<td></td>
<td>Faxe</td>
<td>28.60</td>
<td>76.22</td>
<td>76.22</td>
<td>-</td>
</tr>
</tbody>
</table>

Not surprisingly, using the above tariffs, the BP points (EPII and Faxe) would only generate approx. 58% of the income in the total transmission system – significantly less than the capacity share of approx. 70%. Using the uniform tariff principle, the capacity share and the income share will be more closely aligned, all else being equal. Energinet sees this as another argument for the reasonableness of the uniform tariff principle.
6.3 Appendix 3: Cost allocation assessment (CAA)

The aim of cost allocation assessment is to determine the degree of cross-subsidisation between use within the system, and across systems, based on the proposed reference price methodology (uniform capacity tariffs) in comparison with the CWD tariff methodology and the other two methods described in section 6.2.

The method for cost allocation assessment is described in more detail in TAR NC Article 5. The results, components and the details of the components in the cost allocation assessments regarding the income to be collected from the transmission service via capacity tariffs are shown in Table 11.

The cost allocation in relation to capacity tariffs is based on the cost factors for the expected capacity booking and distance. The capacity-weighted average distances are therefore used.

Energinet has performed CAA calculations using all four tariff methods presented in this document. The results are presented in the table below and show that the Capacity Weighted Distance (CWD) methodology is the only methodology of the four that will lie within the 10% limit set in TAR NC Article 5(3)(c).

**Table 11 Cost allocation assessment**

<table>
<thead>
<tr>
<th></th>
<th>CWD</th>
<th>Uniform tariff</th>
<th>Differentiated</th>
<th>BP Marginal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratio intra</td>
<td>103</td>
<td>112</td>
<td>120</td>
<td>251</td>
</tr>
<tr>
<td><strong>Revenue intra (DKK millions)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>361</td>
<td>394</td>
<td>422</td>
<td>880</td>
</tr>
<tr>
<td><strong>Driver intra</strong></td>
<td>3,505,384</td>
<td>3,505,384</td>
<td>3,505,384</td>
<td>3,505,384</td>
</tr>
<tr>
<td>Ratio cross</td>
<td>100</td>
<td>95</td>
<td>91</td>
<td>87</td>
</tr>
<tr>
<td><strong>Revenue cross (DKK millions)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>676</td>
<td>642</td>
<td>614</td>
<td>587</td>
</tr>
<tr>
<td><strong>Driver cross</strong></td>
<td>6,779,812</td>
<td>6,779,812</td>
<td>6,779,812</td>
<td>6,779,812</td>
</tr>
<tr>
<td><strong>Comparison Index</strong></td>
<td>3%</td>
<td>17%</td>
<td>28%</td>
<td>97%</td>
</tr>
</tbody>
</table>

*Note: The calculations are based on the indicative tariffs shown in Table 2*

**Table 12 Comparison indices for each tariff principle**

<table>
<thead>
<tr>
<th>Comparison Index [-]</th>
<th>CWD</th>
<th>Uniform tariff</th>
<th>Differentiated</th>
<th>BP Marginal</th>
</tr>
</thead>
<tbody>
<tr>
<td>2023</td>
<td>3%</td>
<td>17%</td>
<td>28%</td>
<td>97%</td>
</tr>
<tr>
<td>2024</td>
<td>5%</td>
<td>22%</td>
<td>33%</td>
<td>101%</td>
</tr>
<tr>
<td>2025</td>
<td>5%</td>
<td>21%</td>
<td>33%</td>
<td>104%</td>
</tr>
<tr>
<td>2026</td>
<td>5%</td>
<td>21%</td>
<td>33%</td>
<td>107%</td>
</tr>
<tr>
<td>2027</td>
<td>6%</td>
<td>22%</td>
<td>34%</td>
<td>111%</td>
</tr>
</tbody>
</table>

In relation to the above, Energinet notes that the uniform tariff principle is the best scoring tariff principle, if one rules out CWD, which Energinet deems to be an unnecessarily complex tariff principle for a relatively small and simple transmission system like the Danish one. The same conclusion was reached in connection with the method approval in 2019.
### 6.4 Appendix 4: TAR NC, article 26 og 27

<table>
<thead>
<tr>
<th>Article:</th>
<th>Description:</th>
<th>Reference:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art. 26 1. (a) (i)</td>
<td>the indicative information set out in Article 30(1)(a), including: (1) the justification of the parameters used that are related to the technical characteristics of the system; (2) the corresponding information on the respective values of such parameters and the assumptions applied.</td>
<td>See section: 6.5 Appendix 5: Article 30, stk. 1, litra a) 6.1 Appendix 1: Assumptions</td>
</tr>
<tr>
<td>Art. 26 1. (a) (ii)</td>
<td>the value of the proposed adjustments for capacity-based transmission tariffs pursuant to Article 9;</td>
<td>See section: 3.2 Discount on the transmission tariff to and from the virtual storage point</td>
</tr>
<tr>
<td>Art. 26 1. (a) (iii)</td>
<td>the indicative reference prices subject to consultation;</td>
<td>See section: 4 Resulting tariffs</td>
</tr>
<tr>
<td>Art. 26 1. (a) (iv)</td>
<td>the results, the components and the details of these components for the cost allocation assessments set out in Article 5;</td>
<td>See section: 6.1 Appendix 1: Assumptions</td>
</tr>
<tr>
<td>Art. 26 1. (a) (v)</td>
<td>the assessment of the proposed reference price methodology in accordance with Article 7;</td>
<td>See section: 3.4 Uniform tariff</td>
</tr>
<tr>
<td>Art. 26 1. (a) (vi)</td>
<td>where the proposed reference price methodology is other than the capacity weighted distance reference price methodology detailed in Article 8, its comparison against the latter accompanied by the information set out in point (iii);</td>
<td>See section: 6.2.1 Capacity Weighted Distance (CWD) 6.3 Appendix 3: Cost allocation assessment (CAA)</td>
</tr>
<tr>
<td>Art. 26 1. (b)</td>
<td>the indicative information set out in Article 30(1)(b)(i), (iv), (v);</td>
<td>See section: 6.1.2 Cost base 6.6 Appendix 6: Article 30 stk. 1, litra b)</td>
</tr>
<tr>
<td>Art. 26 1. (c) (i)</td>
<td>the following information on transmission and non-transmission tariffs: where commodity-based transmission tariffs referred to in Article 4(3) are proposed: (1) the manner in which they are set;</td>
<td>N/A, see section: 3.1 Discontinuation of the volume tariff</td>
</tr>
</tbody>
</table>
| Art. 26 1. (c) (ii) | where non-transmission services provided to network users are proposed:  
1) the non-transmission service tariff methodology therefor;  
2) the share of the allowed or target revenue forecasted to be recovered from such tariffs;  
3) the manner in which the associated non-transmission services revenue is reconciled as referred to in Article 17(3);  
4) the indicative non-transmission tariffs for non-transmission services provided to network users; | See section:  
• 3.5 Uniform tariff for the joint market zone  
• 6.7 Appendix 7: Article 26 1(c)(ii) |
| Art. 26 1. (d) | the indicative information set out in Article 30(2); | See section:  
• 6.8 Appendix 8: Article 26 (1)(d) – tariff trend |
| Art. 26 1. (e) | where the fixed payable price approach referred to in Article 24(b) is considered to be offered under a price cap regime for existing capacity: (i) the proposed index; (ii) the proposed calculation and how the revenue derived from the risk premium is used; (iii) at which interconnection point(s) and for which tariff period(s) such approach is proposed; (iv) the process of offering capacity at an interconnection point where both fixed and floating payable price approaches referred to in Article 24 are proposed. | N/A |
6.5 Appendix 5: Article 30, stk. 1, litra a)

i. technical capacity at entry and exit points and associated assumptions;

<table>
<thead>
<tr>
<th>Point</th>
<th>Technical capacity (GWh/h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entry Nybro</td>
<td>6.9</td>
</tr>
<tr>
<td>Entry Ellund</td>
<td>7.7</td>
</tr>
<tr>
<td>Entry RES U</td>
<td>Unlimited</td>
</tr>
<tr>
<td>Entry EPII</td>
<td>13.4</td>
</tr>
<tr>
<td>Entry Faxe</td>
<td>3.8</td>
</tr>
<tr>
<td>Entry Storage</td>
<td>8.2</td>
</tr>
<tr>
<td>Exit JEZ</td>
<td>15.2</td>
</tr>
<tr>
<td>Exit Faxe</td>
<td>13.4</td>
</tr>
<tr>
<td>Exit Ellund</td>
<td>10.0</td>
</tr>
<tr>
<td>Exit Storage</td>
<td>4.4</td>
</tr>
</tbody>
</table>

ii. forecasted contracted capacity at entry and exit points and associated assumptions;
   - See section 6.1, Table 7: Expected capacity bookings 2023-2027

iii. the quantity and the direction of the gas flow for entry and exit points and associated assumptions, such as demand and supply scenarios for the gas flow under peak conditions;
   - See section 6.1, Table 6: Volumes 2023-2027

the structural representation of the transmission network with an appropriate level of detail;
iv. additional technical information about the transmission network, such as the length and the diameter of pipelines and the power of compressor stations.

<table>
<thead>
<tr>
<th>Pipeline</th>
<th>Length (km)</th>
<th>Diameter (mm/’’)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPII tie-in – Nybro</td>
<td>124</td>
<td>769 mm/32’’</td>
</tr>
<tr>
<td>Nybro – Egtved (dobbelt)</td>
<td>56</td>
<td>743 mm/30’’</td>
</tr>
<tr>
<td>Egtved – Ll. Torup MR</td>
<td>127</td>
<td>494 mm/20’’</td>
</tr>
<tr>
<td>Ll. Torup MR – Ålborg</td>
<td>60</td>
<td>343 mm/16’’</td>
</tr>
<tr>
<td>Ellund – Egtved I</td>
<td>88</td>
<td>595 mm/24’’</td>
</tr>
<tr>
<td>Ellund – Egtved II</td>
<td>88</td>
<td>740 mm/30’’</td>
</tr>
<tr>
<td>Egtved – Nyborg</td>
<td>117</td>
<td>886 mm/36’’</td>
</tr>
<tr>
<td>Egtved – Lillebælt</td>
<td>34</td>
<td>743 mm/30’’</td>
</tr>
<tr>
<td>Taulov – Skærbaekværket</td>
<td>3</td>
<td>308 mm/16’’</td>
</tr>
<tr>
<td>Lillebæltsforbindelsen (dobbelt)</td>
<td>4</td>
<td>736 mm/30’’</td>
</tr>
<tr>
<td>Lillebælt – Nyborg</td>
<td>78</td>
<td>743 mm/30’’</td>
</tr>
<tr>
<td>Storebaelsforbindelsen (dobbelt)</td>
<td>32</td>
<td>737 mm/30’’</td>
</tr>
<tr>
<td>Kongsmark – CS Everdrup</td>
<td>60</td>
<td>990 mm/40’’</td>
</tr>
<tr>
<td>Kongsmark – Torslundne</td>
<td>79</td>
<td>743 mm/30’’</td>
</tr>
<tr>
<td>Stenlille – Torslundne</td>
<td>43</td>
<td>595 mm/24’’</td>
</tr>
<tr>
<td>Torslundne – Lynge</td>
<td>26</td>
<td>386 mm/16’’</td>
</tr>
<tr>
<td>Torslundne – Hvidovre</td>
<td>17</td>
<td>743 mm/30’’</td>
</tr>
<tr>
<td>Hvidovre – Avedøre II</td>
<td>2</td>
<td>289 mm/14’’</td>
</tr>
<tr>
<td>Hvidovre – Dragør Border</td>
<td>12</td>
<td>743 mm/30’’</td>
</tr>
<tr>
<td>Vestamager – Sydhavn</td>
<td>8</td>
<td>311 mm/14’’</td>
</tr>
</tbody>
</table>

Compressor station:
In the transmission system, there is currently a compressor station in Egtved. The Baltic Pipe project also includes a compressor station in Everdrup.

Output at the CS Egtved is 5.4 MW per unit. There are four units on CS Egtved, one of which is always backup. The output of CS Everdrup is 18.8 MW per unit. There are three units on CS Everdrup, one of which is always in backup.
6.6 Appendix 6: Article 30 stk. 1, litra b) v)

the following ratios for the revenue referred to in point (iv):

1. capacity-commodity split, meaning the breakdown between the revenue from capacity-based transmission tariffs and the revenue from commodity-based transmission tariffs;
   - N/A

2. entry-exit split, meaning the breakdown between the revenue from capacity-based transmission tariffs at all entry points and the revenue from capacity-based transmission tariffs at all exit points;

<table>
<thead>
<tr>
<th>Split</th>
<th>2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entry</td>
<td>52%</td>
</tr>
<tr>
<td>Exit</td>
<td>48%</td>
</tr>
</tbody>
</table>

3. intra-system/cross-system split, meaning the breakdown between the revenue from intra-system network use at both entry points and exit points and the revenue from cross-system network use at both entry points and exit points calculated as set out in Article 5.

<table>
<thead>
<tr>
<th>Split</th>
<th>2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intra</td>
<td>16%</td>
</tr>
<tr>
<td>Cross-use</td>
<td>84%</td>
</tr>
</tbody>
</table>
6.7 **Appendix 7: Article 26 1(c)(ii) – non-transmission services**

The emergency tariff is a ‘non-transmission tariff’ which is set in accordance with TAR NC Article 4(4) and collected directly from domestic electricity consumers. Non-protected customers pay less than protected customers, as they can be disconnected in the event of an emergency. There are therefore two emergency tariffs. Emergency tariffs are collected via the distribution companies.

The Danish Energy Agency is the competent authority under the European emergency supply regulation, and therefore determines the types and shares of protected and non-protected consumers.

The emergency tariff is an independent accounting segment, separate from the transport tariff accounting. The tariff is calculated to cover the costs of purchasing emergency supply mechanisms. These are all at market-set prices and income-neutral for Energinet. Emergency tariffs are set in such a way that they support the principles in TAR NC Article 4(a) on reflecting costs, non-discrimination, objectivity and transparency. The cost allocation to domestic consumers only and the distribution of costs to protected/non-protected consumers must support the provisions in Article 4(b).

Danish consumers are guaranteed security of supply through Energinet’s obligation to make use of a number of emergency supply mechanisms. During the current period, these mechanisms are emergency storage and filling requirements. Emergency storage (i.e. reservations in the two domestic underground storage facilities in Stenlille and Lille Torup) is the primary mechanism. In this way, all consumers in Denmark are basically ‘insured’ in emergency supply situations, as required by the law. All consumers therefore help to pay for the emergency supply measures.

Energinet manages a ‘supporting volume’ of gas in the storage facilities, which is based on the estimated need during an emergency event. Both the purchase and sale of emergency gas take place in the gas market via auction, and separate accounts are kept. Changes in the value of the emergency gas are also adjusted between accounting periods.

The emergency supply costs have been falling since 2008/2009. They reached their lowest level in 2015/2016 at DKK 47 million, and have remained at a stable level since then. Renovation of the Tyra field will lead to higher emergency supply costs from 2019/20 until 2021/22. Production at Tyra is expected to resume in summer 2022. Energinet expects the costs to drop back to the same level following the Tyra renovation. However, this will always depend on the specific market situation, including the gas price.

The emergency supply segment has previously covered parts of the Ellund-Egtved investment. However, this principle will be discontinued with the introduction of the uniform tariff principle.
6.8 Appendix 8: Article 26 (1)(d) – tariff trend

a) report on:
   i) the difference in the level of transmission tariffs for the same type of transmission service that applies to the current tariff period and the tariff period the published information relates to
   ii) the estimated difference in the level of transmission tariffs for the same type of transmission service that applies to the tariff period the published information relates to, and for each tariff period during the rest of the regulation period.

The figure below shows the historical tariff changes, together with the expected future tariff changes for the coming tariff period.

Table 13: Tariff trend – 2018 (2017/2018) to 2027

Historically, the effect of including excess revenue can be seen, while looking forward, a clear impact on the capacity tariff can be seen due to discontinuation of the volume tariff.

b) at least one simplified tariff model, which is updated regularly, accompanied by an explanation of how to use it, so that grid users can calculate the transmission tariffs applicable to the current tariff period and estimate possible future changes beyond the tariff period.

Published on the website
6.9 Appendix 9: Retsgrundlag (in Danish)

Gasforsyningsloven (lovbekendtgørelse nr. 126 af 6. februar 2020 om gasforsyning med senere ændringer)

"[...]
Stk. 2. Energi-, forsynings- og klimaministeren kan fastsætte nærmere regler om indholdet af de metoder, der anvendes til at beregne eller fastsætte betingelser og vilkår, herunder tariffer.
[...]


"[...]

Artikel 1

Genstand og anvendelsesområde

Denne forordning har til formål at:
a) fastsætte ikke-diskriminerende regler om betingelserne for adgang til naturgastransmissionsnet, idet der tages hensyn til de nationale og regionale markeders særlige kendetegn, med henblik på at sikre et velfungerende indre marked for gas
b) fastsætte ikke-diskriminerende regler om betingelserne for adgang til LNG-faciliteter og lagerrum under hensyntagen til de nationale og regionale markeders særlige kendetegn, og
c) fremme udviklingen af et funktionsdygtigt og gennemsnitligt engrosmarked med et højt forsyningssikkerhedsniveau for gas og fastlægge mekanismer til harmonisering af reglerne for adgang til net for grænseoverskridende gasudveksling.

Artikel 13

Tariffer for netadgang

1. De tariffer eller metoder til beregning af disse, som transmissionssystemoperatører anvender, og som er godkendt af de regulere myndigheder i medføl med artikel 41, stk. 6, i direktiv 2009/73/EF, samt de tariffer, der er offentliggjort i medføl med artikel 32, stk. 1, i samme direktiv, skal være gennemgående, tilgodese behovet for systemintegritet og forbedring deraf og afspejle de faktiske omkostninger, for så vidt sådanne omkostninger svarer til en effektiv og struktureelt sammenlignelig netoperatørs omkostninger og er gennemgående, samtidig med at de giver et rimeligt investeringsaftast, og der skal, hvor det er rimeligt, tages hensyn til de regulere myndigheders benchmarking af tariffer. Tariferne eller metoderne til beregning af disse skal anvendes på en ikke-diskriminerende måde.

Medlemsstaterne kan beslutte, at tariferne også kan fastsættes gennem markedsbaserede ordninger, såsom auktioner, forudsat at sådanne ordninger og indtægterne herfra er godkendt af den reguleringen myndighed.

Tariferne eller metoderne til beregning af disse skal bidrage til en effektiv handel med gas samt konkurrence på markedet, samt med at krydsubsidier mellem netbrugerne undgås, og samtidig med at der anspores til investeringer og opretholdes eller skabes interoperabilitet for transmissionsnet.

Tariffer for netbrugere skal være ikke-diskriminerende og skal fastsættes særskilt for hvert indfødningspunkt til og udtagningspunkt fra transmissionssystemet. Mekanismer til omkostningsfordeling og metoder til takstfastsættelse i forbindelse med indfødningspunkter og udtagningspunkter
KOMMISSIONENS FORORDNING (EU) 2017/460 af 16. marts 2017 om fastsættelse af en netregel for harmoniserede transmissionstarifstrukturer for gas (TAR NC)

*[...]*

**Artikel 4**

**Transmissions- og ikke-transmissionstjenester og -tariffer**

1. En given tjeneste anses for at være en transmissionstjeneste, hvis begge de følgende kriterier er opfyldt:
   a) omkostningerne ved tjenesten er forårsaget af omkostningsfaktorerne i form af både teknisk eller forventet kontraktuel kapacitet og afstand
   b) omkostningerne ved tjenesten er relateret til investeringen i og driften af den infrastruktur, som er en del af det regulerede aktivgrundlag for levering af transmissionstjenester.

Hvis et af de kriterier, der er anført i litra a) og b), ikke er opfyldt, kan en given tjeneste anses for at være enten en transmission- eller en ikke-transmissionstjeneste afhængigt af resultaterne af den periodiske høring af transmissionssystemoperatøren(-erne) eller den nationale reguleringsmyndighed og beslutningen truffet af den nationale reguleringsmyndighed, jf. artikel 26 og 27.

2. Transmissionstarifferne kan fastsættes på en måde, så der tages hensyn til betingelserne for uafbrydelige kapacitetsprodukter.

3. Transmissionstjenesteindtægter skal opkræves som kapacitetsbaserede transmissionstariffer.

Som en undtagelse, og med forbehold af den nationale reguleringsmyndigheds godkendelse, kan en del af transmissionstjenesteindtægterne kun opkræves som følgende produktbaserede transmissionstariffer, som fastsættes hver for sig:

a) et gasstrømbaseret gebyr, som skal opfylde alle følgende kriterier:
   i) det opkræves med henblik på at dække de omkostninger, som primært skyldes gasstrømmængden
   ii) det beregnes på grundlag af forventede eller historiske gasstrømme, eller begge dele, og fastsættes på en sådan måde, at det er det samme i alle entropunkter, og det samme i alle exitpunkter
   iii) det udtrykkes i penge eller naturalier

b) et supplerende gebyr for opkrævede indtægter, som skal opfylde alle følgende kriterier:
   i) det opkræves med henblik på at administrere under- og overindtægter
   ii) det beregnes på grundlag af forventede eller historiske gasstrømme eller begge dele
   iii) det anvendes i andre punkter end sammenkoblingspunkter
   iv) det anvendes, efter at den nationale reguleringsmyndighed har foretaget en vurdering af, hvorvidt det afspeler omkostningerne, og dets indvirkning på krydssubsidiering mellem sammenkoblingspunkter og andre punkter end sammenkoblingspunkter.

4. Ikke-transmissionstjenesteindtægter opkræves som ikke-transmissionstariffer, som gælder for en given ikketransmissionstjeneste. Sådanne tariffer skal:
a) afspør omkostningerne og være ikke-diskriminerende, objektive og gennemskuelige
b) opkræves hos dem, der nyder godt af en given ikke-transmissionstjeneste, med henblik på at
   minimere krydssubsidiering mellem netbrugere i eller uden for en medlemsstat eller begge
dele.

Hvis en given ikke-transmissionstjeneste ifølge den nationale reguleringsmyndighed er til gavn for
   alle netbrugere, opkræves omkostningerne for en sådan tjeneste hos alle netbrugere.

REFERENCEPRISMETODER

Artikel 6

Anvendelse af referenceprismetoden

1. Referenceprismetoden skal fastsættes eller godkendes af den nationale reguleringsmyndighed,
jf. artikel 27. Den referenceprismetode, der skal anvendes, er underlagt resultaterne af de i artikel
26 fastsatte periodiske høringer af transmissionssystemoperatør(-en)(erne) eller den nationale
reguleringsmyndighed, som besluttet af den nationale reguleringsmyndighed.

2. Anvendelsen af referenceprismetoden skal give en referencepris.

3. Den samme referenceprismetode anvendes på alle entry- og exitpunkter i et givent entry- og
exitsystem, dog med forbehold af undtagelserne i artikel 10 og 11.

4. Tilpasninger af anvendelsen af referenceprismetoden på alle entry- og exitpunkter må kun ske i
overensstemmelse med artikel 9 eller som følge af en eller flere af følgende årsager:

a) benchmarking udført af den nationale reguleringsmyndighed, hvorved referencepriser i et
givet entry- og exitpunkt tilpasses, således at de resulterende værdier overholder et konkurre-
cencedygtigt niveau for referencepriser
b) udligning udført af transmissionssystemoperatør(-en)(erne) eller den nationale regulering-
smyndighed, som besluttet af den nationale reguleringsmyndighed, hvorved den samme refe-
rencepris anvendes i nogle eller alle punkter inden for en homogen gruppe af punkter

Artikel 7

Valg af referenceprismetode

Referenceprismetoden skal være i overensstemmelse med artikel 13 i forordning (EF) nr.
715/2009 og følgende krav. Den skal sigte mod, at:

a) give netbrugere mulighed for at reproducerere beregningen af referencepriser og præcis
   fremskriving af dem
b) tage hensyn til de faktiske omkostninger for levering af transmissionstjenester og samtidig
tage transmissionsnettets grad af kompleksitet i betragtning
c) sikre ikke-forskelshandling og hindre uønskede krydssubsidiering, herunder ved at tage
   hensyn til omkostningsfordelingsvurderingerne, jf. artikel 5
d) sikre, at betydelig volumen-risiko, navnlig i forbindelse med transmission på tøvæs af et
   entry- og exitssystem, ikke pålægges slutkunderne i det pågældende entry- og exitssystem

e) sikre, at de resulterende referencepriser ikke er konkurrenceforvridende for handel på
   tøvæs af grænserne.

Artikel 8
Referenceprismetode for kapacitetsvægtet afstand

1. Parametrene for den kapacitetsvægtede afstandsreferenceprismetode er som følger:
   a) andelen af transmissionstjenesteindtægter, som skal opkræves som kapacitetsbaserede transmissionstariffer
   b) den forventede kontraktuelle kapacitet i hvert entrypunkt eller en klyngning af entrypunkter og i hvert exitpunkt eller en klyngning af exitpunkter
   c) hvis entrypunkter og exitpunkter kan kombineres i et relevant gasstrømscenario, den korteste afstand af rørledningsruterne mellem et entrypunkt eller en klyngning af entrypunkter og et exitpunkt eller en klyngning af exitpunkter
   d) den entry- og exitopdeling, der er nævnt i artikel 30, stk. 1, litra b), nr. v), 2), skal være 50/50.

Hvis entrypunkter og exitpunkter ikke kan kombineres i et gasstrømscenario, tages denne kombination af entry- og exitpunkter ikke i betragtning.

2. Referencepriserne afdedes i følgende sekventielle trin:
   [konkrete formler er udeladt]

   Artikel 9
   Regulering af tariffer i entrypunkter fra og exitpunkter til lagerfaciliteter samt i entrypunkter fra LNG-anlæg og infrastruktur, som afhjælper isolation

   1. En rabat på mindst 50 % skal anvendes på kapacitetsbaserede transmissionstariffer i entrypunkter fra og exitpunkter til lagerfaciliteter, medmindre og i det omfang en lagerfacilitet, der er forbundet til mere end ét transmissions- eller distributionsnet, anvendes til at konkurrere med et sammenkoblingspunkt.

   Artikel 13
   Multiplikatorers og sæsonfaktorers niveau

   1. Multiplikatorers niveau skal ligge inden for følgende intervaller:
      a) for kvartalsstandardkapacitetsprodukter og månedsstandardkapacitetsprodukter må den respektive multiplikators niveau ikke være lavere end 1 og ikke højere end 1,5
      b) for dagsstandardkapacitetsprodukter og intradagstandardkapacitetsprodukter må den respektive multiplikators niveau ikke være lavere end 1 og ikke højere end 3. I behørigt begrundede tilfælde kan de respektive multiplikatorers niveau være lavere end 1, men højere end 0, eller højere end 3.

   2. Hvis sæsonfaktorer anvendes, skal det aritmetiske gennemsnit over gasåret af produktet af multiplikatorer, som gælder for det respektive standardkapacitetsprodukt, og de relevante sæsonfaktorer, ligge inden for samme interval som niveauet af de respektive multiplikatorer i stk. 1.

      a) ændringer i reservationsadfærd
      b) virkninger på transmissionstjenesteindtægter og deres opkrævning
      c) forskelle mellem niveauet af transmissionstariffer gældende for to på hinanden følgende tarifperioder
d) krydssubsidiering mellem netbrugere, som har kontraheret års- og ikke-årssstandardkapacitetsprodukter

e) indvirknings på gasstrømme på tværs af grænsenerne.

HØRINGSKRAV

Artikel 26

Periodisk høring

1. Der gennemføres en eller flere høringer af den nationale reguleringsmyndighed eller transmissionsystemoperatør(-en)(-erne), som besluttet af den nationale reguleringsmyndighed. I det omfang, det er muligt, og for at gøre høringsprocessen mere effektiv bør høringsdokumentet offentliggøres på engelsk. Den endelige høring inden den beslutning, der er omhandlet i artikel 27, stk. 4, skal opfylde kravene i nærværende artikel og artikel 27 og skal omfatte følgende oplysninger:

a) beskrivelsen af den foreslåede referenceprismetode samt følgende punkter:
   i) de vejledende oplysninger i artikel 30, stk. 1, litra a), herunder:
      1) begrundelsen for de anvendte parametre, der vedrører systemets tekniske karakteristika
      2) de tilsvarende oplysninger om de respektive værdier af disse parametre og de anvendte forudsætninger
   ii) værdien af de foreslåede justeringer for kapacitetsbaserede transmissionstadder
       i henhold til artikel 9
   iii) de vejledende referencepriser, som er underlagt høring
   iv) resultaterne, komponenterne og detaljene i disse komponenter til vurderingen af omkostningsfordelingen, som er fastsat i artikel 5
   v) vurderingen af den foreslåede referenceprismetode i overensstemmelse med artikel 7
   vi) hvis den foreslåede referenceprismetode er en anden end referenceprismetoden for kapacitetsvægtet afstand, der er beskrevet i artikel 8, en sammenligning med sidstnævnte, ledsaget af de oplysninger, der er anført i nr. iii)

b) de vejledende oplysninger i artikel 30, stk. 1, litra b), nr. ii), iv) og v)

c) følgende oplysninger om transmissions- og ikke-transmissionstadder:
   i) hvis der foreslås produktbaserede transmissionstadder, jf. artikel 4, stk. 3:
      1) måden, hvorpå de er fastsat
      2) andelen af den tilladte eller tilstræbte indtægt, som forventes at komme fra sådanne tadder
      3) de vejledende produktbaserede transmissionstadder
   ii) hvis der foreslås levering af ikke-transmissionstjenester til netbrugerne:
      1) tarifmetoden for ikke-transmissionstjenester
      2) andelen af den tilladte eller tilstræbte indtægt, som forventes at komme fra sådanne tadder
      3) måden, hvorpå den tilhørende indtægt fra ikke-transmissionstjenester afstemmes, jf. artikel 17, stk. 3
      4) de vejledende ikke-transmissionstadder for ikke-transmissionstjenester, der leveres til netbrugerne

d) de vejledende oplysninger i artikel 30, stk. 2

e) hvis metoden med fast betalingspris, jf. artikel 24, litra b), anser for at være tilbudt under en ordning med prisloft for eksisterende kapacitet:
   i) det foreslåede indeks
   ii) den foreslåede beregning, og hvordan indtægter fra risikotillægget anvendes
   iii) i hvilke sammenkoblingspunkter og for hvilke tarifperioder en sådan fremgangsmåde foreslås
   iv) processen for at tilbyde kapacitet i et sammenkoblingspunkt, hvor både metoden med fast betalingspris og metoden med variabel betalingspris tilbydes, jf. artikel 24.
2. Den endelige høring, inden den i artikel 27, stk. 4, omhandlede beslutning, skal være åben i mindst to måneder. Høringstilslutninger for alle høringer omhandlet i stk. 1, kan indebære, at svar afgivet i forbindelse med høringen skal indeholde en ikke-fortrolig version egnet til offentliggørelse.

3. Senest en måned efter afslutningen af høringen skal transmissionssystemoperatør(-en) eller den nationale reguleringsmyndighed, afhængigt af den enhed, der offentliggør høringstilslutningen i stk. 1, offentliggøre de indkommne høringssvar og et resumé heraf. I det omfang, det er muligt, og for at gøre høringsprocessen mere effektiv, bør resuméet foreligge på engelsk.


Artikel 27

Den nationale reguleringsmyndigheds periodiske beslutningstagnning

1. Ved lanceringen af den endelige høring i henhold til artikel 26, inden den i artikel 27, stk. 4, omhandlede beslutning, skal den nationale reguleringsmyndighed eller transmissionssystemoperatør(-en), som besluttede af den nationale reguleringsmyndighed, fremsende høringstilslutningen til agenturet.

2. Agenturet analyserer følgende aspekter af høringstilslutningen:

a) om alle de oplysninger, der er omhandlet i artikel 26, stk. 1, er blevet offentliggjort
b) om de elementer, der er genstand for høring i overensstemmelse med artikel 26, overholder følgende krav:
   1) om den foreslåede referenceprismetode overholder kravene i artikel 7
   2) om kriterierne for fastsættelse af produktbaserede transmissionstariffer, jf. artikel 4, stk. 3, er opfyldt
   3) om kriterierne for fastsættelse af ikke-transmissionstariffer, jf. artikel 4, stk. 4, er opfyldt.

3. Senest to måneder efter afslutningen af den høring, der er omhandlet i stk. 1, offentliggør agenturet konklusionen på analysen udført i overensstemmelse med stk. 2 og sender denne på engelsk til den nationale reguleringsmyndighed eller transmissionssystemoperatøren, afhængigt af hvilken enhed der offentliggjorde høringstilslutningen, og til Kommissionen.

Agenturet behandler alle kommercielt følsomme oplysninger fortroligt.


Artikel 28
Høringer om rabatter, multiplikatorer og sæsonfaktorer

1. På samme tid som den endelige høring i overensstemmelse med artikel 26, stk. 1, skal den nationale reguleringsmyndighed foretage en høring af de nationale reguleringsmyndigheder i alle direkte forbundne medlemsstater og de relevante interesseparter om følgende:
   a) niveauet af multiplikatorer
   b) hvis det er relevant, niveauet af sæsonfaktorer og beregningerne fastsat i artikel 15
   c) niveauet af rabatter, der er fastsat i artikel 9, stk. 2, og artikel 16.

Efter afslutningen af høringen træffes en begrundet beslutning i overensstemmelse med artikel 41, stk. 6, litra a), i direktiv 2009/73/EF om de aspekter, der er nævnt i litra a)-c) i dette stykke.

Hver national reguleringsmyndighed skal overveje de synspunkter, der fremsættes af nationale reguleringsmyndigheders i direkte forbundne medlemsstater.

2. De efterfølgende høringer gennemføres hver tariffperiode fra datoen for beslutningen nævnt i stk. 1. Efter hver høring og som fastsat i artikel 32, litra a), skal den nationale reguleringsmyndighed træffe og offentliggøre en begrundet beslutning om de aspekter, der er nævnt i stk. 1, litra a)-c).

3. Ved vedtagelsen af beslutningerne i stk. 1 og 2 skal den nationale reguleringsmyndighed tage hensyn til de indkomne høringssvar og følgende aspekter:
   a) for multiplikatorer:
      i) balancen mellem at lette kortfristet handel med gas og give langsigtede signaler til effektiv investering i transmissionssystemet
      ii) indvirkninger på transmissionstjenesteindtægter og opkrævningen heraf
      iii) behovet for at undgå krydssubsidiering mellem netbrugere og at forbedre mindsteprisers afspejling af omkostningerne
      iv) situationer med fysiske og kontraktuelle begrænsninger
      v) indvirkningen på gasstrømme på tværs af grænserne
   b) for sæsonfaktorer:
      i) indvirkningen på at lette den økonomiske og effektive udnyttelse af infrastruktureren
      ii) behovet for at forbedre mindsteprisers afspejling af omkostningerne.

[...]
6.10 Appendix 10: Pre-consultation document

https://en.energinet.dk/Gas/Gas-news/2021/09/10/Pre-consultation-gas-tariffs
6.11 Appendix 11: Consultation responses Pre-consultation

- PGNIG
- Ørsted
- Dansk Energi
PGNiG Group input into the pre-consultation process of the „ADJUSTED GAS TRANSMISSION TARIFF METHODOLOGY”

0. Introduction

PGNiG Group ("PGNiG") would like to confirm strong interest in the pre-consultation of the potential gas transmission tariff methodology and would like to send its comments to the Pre-Consultation of the Adjusted Gas Transmission Tariff Methodology ("Consultation Document"). Having in mind the historical development of the infrastructural projects in Denmark, PGNiG has the reasons to believe to be the largest shipper in Baltic Pipe project ("BP"). PGNiG is also committed to actively cooperate with other participants of the Danish gas market in order to provide transparent and fair market rules. It needs to be emphasized that PGNiG is market-oriented energy trading company, acting in challenging and competitive European environment and thus being under pressure to achieve the best possible business results on the international field.

Therefore, the proposed methodology was analyzed in the wider context related to experience from other markets, the possible transportation routes through Germany as well as sourcing natural gas in other balancing areas. Fair transportation cost is a key success factor for our long-term vision of natural gas exploration on the Norwegian shelf and transportation through the Danish natural gas transmission system.

PGNiG's understanding of the tariff structure in Denmark as well as comparative calculations provided by ENDK lead to the conclusion, that completion of the Baltic Pipe project shall result the increase of the volume of gas transmitted through Danish transmission system (more than 250%) and increase of the entry and exit capacities (more than 225%). This increase is expected to be disproportionately greater than the increase of costs of operating the transmission system (only by 130%), which in consequence shall significantly reduce the overall tariff for all users of gas in Denmark (expected reduction of at least 30%).

Having been actively involved in all forms of market discussion and consultations held since the inception of the BP project, we are committed to remain an active participant in the process of finalizing the key principles of the Danish gas tariff design. The purpose of this document is to express PGNiG's understanding of ENDK's proposals included in the Consultation Document and to provide our views and suggestions on what we see as key issues.

We acknowledge that ENDK continues to lead the consultation process in a transparent manner and once again creates a space for interested gas market participants to express their opinion on key market issues. We would hereby like to thank ENDK for inviting PGNiG to the consultation process and enabling us to share our ideas with you.

We believe that the Consultation Document is a strong foundation for further discussion. Thus, in this document we present our comments on 4 areas presented in the document published by ENDK, which we believe to be crucial from the point of view of integrating BP with the Danish gas market, as well as from the point of view of the general market design.

PGNiG's comments have been presented on further pages of this document.
1. Adjustment 1: Capacity/commodity split

On 31st May 2019 DUR approved a new tariff methodology for DK which introduced a 70 / 30 fixed / variable tariff split (in the place of a 50 / 50 split, which corresponded to ENDK's actual CAPEX / OPEX structure). That adjustment increases the total amount that a shipper is be obliged to pay in tariffs regardless of whether the capacity is used.

In line with information provided on the ENDK Gas Market Data webpage, the total bookings at the Ellund entry point1 in the last three years materialized in the range of 35 – 40 TWh / year. These bookings were predominantly annual bookings (> 90% of total Ellund entry capacity booked).

Whereas it is speculative what the booking profile of the existing DK system users will look like when BP is commissioned2, but assuming that the current structure remains unchanged, the total annual profile of bookings in the DK system will be the following:

- **BP users** – ca. 87 TWh / y of 15 years capacity bookings (ca. 72% of total bookings)
- **Existing users** - ca. 32 TWh / y of 1 year capacity bookings (ca. 26% of total bookings)
- **Existing users** - ca. 3 TWh / y of below 1 year capacity bookings (ca. 2% of total bookings)

The booking profile in the DK network will be very heavily weighted towards 15 years bookings with only 28% total bookings being applicable to bookings of a duration of a 1 year and shorter. This will be true in the first years after BP commissioning, as with the expected decline in DK domestic demand the profile will become even more asymmetric and the share of 15-year bookings in the total profile will increase even more.

It is worth to emphasize that PGNiG’s 93 TWh/year capacity booking (and its future utilization) will result in a very significant reduction of tariff fees to be incurred by an average system user. As a shipper covering ca. 2/3 of the Danish system cost base, PGNiG will also cover majority of the costs related to the 100% discount on tariffs to/ from to the virtual Danish storage point.

Whereas increasing the capacity / commodity split from the current 70/30 to 100/0 may be justified by regulatory reasons, moving away from the current situation may result in a significant unjustified cross-subsidization of the existing shippers by the OS 2017 shipper.

At present capacity bookings with a 1-year duration are required to keep tariffs low and predictable in the DK system, this may, however, change after BP is commissioned. The significant amount of stable ‘baseload capacity’ booked in the system by the OS 2017 shipper after 2022 is likely to provide strong incentives to the existing system users to shorten the duration of their bookings, thus reducing the volume of “wasted” (paid for but not used) capacity. Thus they will continue to benefit from stable and low tariffs (thanks to the OS 2017 baseload and despite multipliers on shorter-term capacity). Even under a 100/0 split conditions, flexibility of the existing system users will in fact increase, because they will only book capacity when they require to do so (and will use exactly the amounts that they booked). Effectively, by shortening the duration of their bookings, users of the existing system will in fact move towards a 0/100 capacity/commodity split. We point to the fact that this significant difference in market flexibility does not only apply to players booking for the long term (year and more) vs players booking for the short term (less than a year). Even in the category of market players booking for the long term there is a significant difference in market flexibility between the OS 2017 shipper booking for 15 years and a shipper booking for 1 year, who can adjust their booking levels every year.

PGNiG wonders if in the case of the 100/0 capacity/commodity split, the higher price level for short-term bookings will be maintained. Currently, the average increase is between 110% and 177%, depending on the product, delivery period and point of entry / exit. If the higher level of fees for short-term bookings is neither maintained nor increased, the switch from 70/30 to 100/0

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1 Given the Tyra shutdown Ellund currently remains the only possible import point for the Danish and Swedish gas markets
2 with Tyra coming back onstream and a number of new capacity products expected to be launched by ENDK
split is not justified, as shippers can mainly book short-term capacities and the operator's revenues will not be stable (which, as we understand is the main goal of the change).

On the other end of the spectrum lies the OS 2017 shipper which, as a result of providing the significant 'baseload booking' will act as a flexibility facilitator for other users of the system. Under a 100/0 split the whole cost of providing the flexibility to the market may fall on the OS 2017 shipper, who individually will not experience any flexibility at all.

We point to the fact that the above is not only the case in a potential situation where existing shippers shorten the duration of their bookings, but also applies to the current structure of bookings. A shift from the existing 70/30 to a 100/0 split even under the current structure completely takes away any flexibility of the OS 2017 shipper and transfers value from the OS 2017 shipper to shippers booking for the shorter term. As a result, we believe that the proposal to change the current 70/30 to a 100/0 capacity / commodity split should be investigated on premises of discrimination and undue cross-subsidization.

We further note that a shift to a 100/0 split is a very significant deviation from tariff principles that were presented to us prior to making the binding Open Season bid. All tariff simulations outlined in the Information Packages were prepared under a 50/50 split. Whereas we made the booking in good faith with the intention to use the booked capacity to the highest possible extent, the 50/50 split was an important factor on which we made the decision to place the bid. Under a 100/0 split we will be unable to defend ourselves from adverse, unanticipated changes in the tariff methodology by rerouting our gas supply to other routes.

Even though PGNiG, whose load factor can be 0.89, in some circumstances could be a beneficiary of the transition from the current 70/30 to 100/0 division, we would like to point out that the actual result may be completely different. Greater interest in short-term products by other market participants may result in an increase of the standard products rates, including long-term ones. For this reason, we propose that the decision on the capacity/commodity split should be supported by additional analysis regarding the impact of changes in the structure of ordered products on transmission rates in the following years.

Moreover, there seems to be a inconsistency in the Consultation Document in table 1 (point 3.1) on page 12. In our opinion, a change in capacity/commodity split from 70/30 to 100/0 should result in a drop in transmission costs for shippers with load factor equal 1. Our opinion results from the fact that the operator's regulated revenue will increase (because there are shippers with a lower load factor in the operator's portfolio) and this extra revenue should be taken into account to lower the average transmission rates for all system users.

Additionally, the document should present the value of the load factor, which guarantees the cost neutrality of changing the methodology for a user with such a factor.
2. Adjustment 2: Discount for long term capacity bookings

The concept for introducing deescalators for capacity bookings longer than 5 years is an extension of the multiplier principle currently applied in Denmark for capacity bookings with a duration shorter than 1 year (i.e. the shorter the booking, the higher its cost). In line with the proposed concept, the deescalation would increase proportionally to the duration of the capacity booking.

The deescalator concept has been well-consulted with the market and a general consensus has been reached (i.e. during Shipper Taskforce meetings organized by ENDK as a primary platform for dialogue between gas market players and the Danish TSO on key issues related to the new tariff methodology) that introduction of the deescalators is in the best interest of the market. Eventually, ENDK included the deescalator concept in its tariff proposal submitted to DUR in December 2018. In line with ENDK’s proposal the discount should be 5 - 10% on capacity contracts with a duration of 5 years or more and should increase with the length of the contract.

In its tariff decision, DUR recognized the benefits and general regulatory possibility to introduce the proposed deescalator solution, however, did not approve the deescalators for 2019-2022 highlighting (among other things) three key obstacles:

- discrimination between OS and non-OS shippers (capacity booking products for more than 1 year were not historically available)
- competitive advances for OS 2009 in Ellund under a critical situation with the Tyra redevelopment
- need for an impact assessment which shows the likely market- and economic impact (redistributive effects) between different groups of shippers

In the same time DUR stated that it would be potentially possible to introduce a deescalator scheme in the future. DUR encouraged ENDK to submit a proposal for a deescalator scheme in the tariff proposal for the next regulatory period.

ENDK’s position on the issue

As we understand, ENDK plans to implement the deescalators for long-term bookings in the next tariff application. Energinet seeks mandate to set a stepwise increasing long-term multiplier within the range of 0.94 – 0.98 depending on duration (length) of bookings to address the greater risk of unused surplus capacity for long-term booking system users.

Since 2019, to meet concerns raised by DUR in the 2019, Energinet has introduced the option to book long term capacity ≥ 5 years for Danish entry/exit points on the capacity booking platform. Hence, the option to obtain a discount for capacity bookings ≥ 5 years will be available for all shippers on the Danish gas market including Open Season 2017 bookings.

ENDK provided the following formula as an illustrative example:

\[ Multiplier = (1 + x) - (x \times number\ of\ years) \]

where \[x = 0.004 \text{ and number of years} \geq 5\ \text{years}\]

This will lead to a discount of 5.60% with a capacity booking of 15 years which is maximum length of the capacity booking period. The multiplier shall be applied to capacity bookings equal to or exceeding 5 years including allocated capacity in the Open Season 2017 for the Baltic Pipe project.

PGNiG’s position on the issue

PGNiG would like to thank ENDK for continuing to work on introducing the deescalators for long-term bookings in the tariff application for the next regulatory period. We appreciate the efforts that are being made by ENDK to overcome the obstacles identified by DUR, preventing the Danish NRA from approving this solution.
We support the direction outlined to the market by ENDK and we generally see that is consistent with what was communicated to us prior to making binding Open Season bookings. This especially relates to the following aspects:

- longer-term commitments should benefit from a higher tariff discount (as we understand - applied only to the capacity part of the tariff)
- we find the formula presented by ENDK as illustrative to actually be very understandable, intuitive and reflect the principle outlined above very well. We believe it is a good starting point for further works on the deescalators.

Regarding proposition described in the Consultation Document, PGNiG has analyzed influence of different values of multipliers on the final result of the discount. In order to achieve the desired level of discount of at least 10% with 15-year contracts, multipliers of 0.007 and 0.008 need to be considered as the most relevant. The chart below shows the relationship between the analyzed levels of multipliers and the obtained discount of the transmission tariff. Discount of 10% is approximately 1/3 of savings of system users resulting from BP launch.

*Figure 1: The relationship between the analysed levels of multipliers and the obtained discount of the transmission tariff.*

We would like to express our appreciation to ENDK for continued efforts to ensure that the deescalators are approved for the next regulatory period. We consider it extremely important that negative multipliers for long-term bookings are implemented into the new tariff perspective and are applicable to bookings made during OS 2017. At the same time, we emphasize that considering the expected transportation costs via alternative routes and unfavorable changes in the tariff methodology affecting predominantly the long-term shipper (outlined earlier) it is crucial to implement at least a 10% discount to bookings made for the longest possible term (15 year).
3. Adjustment 3: Collection period

PGNiG does not see any contraindications for changing the billing period now (especially when it synchronizes the process with the other transit countries), however, we are concerned about the process of the change itself.

It would be beneficial to market participants to get more explanations of how the process of changing the settlement period is planned and how it will affect the termination of the capacity reservation periods, in particular - whether it will extend them by three months.
4. Adjustment 4: Inclusion of upstream

The JMM (Join Market Model) concept revolves around integrating the upstream part of the BP Project (the tie-in to the Gassled network) with the downstream part of the Danish transmission system. It is important to note that the existing Danish upstream pipelines are not part of this concept and would remain an element separate from the JMM.

The JMM is well-known to any interested party (shippers, traders and regulators) as it has been the subject or presentations, discussions, consultations and regulatory decisions since at least 2016. The relevant consultation milestones included:

- "Tariff principles and market design in a Baltic Pipe Open Season" document published by ENDK on 2nd November 2016
- "Opinion on principles for market zone and the methodology for determining tariffs in connection with the Baltic Pipe project" published by DERA on 31st January 2017
- BP Open Season 2017 ("OS 2017") documents
- Multiple instances of presenting this market design concept to market participants during Shippers’ Fora, User Groups and Tariff Taskforce meetings
- "Tariff methodology for the Danish transmissions system" issued by DUR on 31st May 2019

Consequently, the currently proposed JMM concept is a consensus stemming from 5 years of discussion and various regulatory decisions.

Unfortunately, there is a lot of uncertainty in this area in the Consultation Document. Point 2.4 refers to separate non-transmission tariffs for upstream infrastructure. Will these additional charges apply to BP’s infrastructure? If so, it would be completely contrary to the JMM. Our understanding is that this element can be applicable only within internal cost allocation performed by Energinet.dk and that all shippers will be subject only to uniform tariff. However, this element shall be clarified to avoid doubts for market participants.

Moreover, the figure 7 on page 13 does not reflect the real impact of BP on tariffs in Denmark – it may suggest that the BP project contributes to an increase in rates, while the actual impact of this project on rates is completely different, as shown, on the chart below, which was presented during the previous consultations.

*Figure 2: Expected capacity tariffs in the Danish system – without and with BP (in DKK/kWh/h/y).*

<table>
<thead>
<tr>
<th>Without Baltic Pipe</th>
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<tbody>
<tr>
<td>Entry tariff</td>
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<tr>
<td>2018/19</td>
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<table>
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<th>With Baltic Pipe</th>
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<tbody>
<tr>
<td>Entry tariff</td>
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<tr>
<td>2018/19</td>
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</tbody>
</table>

Based on the current tariff that comes into force on 01/10/2021, it is also possible to demonstrate the significant positive impact of the BP project on transport rates in Denmark. Below calculation of the current tariff shows the charge for a shipper with load factor of 100%.

Current tariff:

entry/exit capacity rate: 20.53 [DKK/kWh/h/y]

variable commodity charge: 0.00223 [DKK/kWh] x 8760 [h/y] = 19.53 [DKK/kWh/h/y]

**TOTAL: 40.06 DKK/kWh/h/y**

Above value is greater than the values expected by ENDK for the coming years, described in point 4.3 (table 5) of the Consultation Document.

In the final document, it should be clearly explained which infrastructure will be included in the JJM and which will be excluded. It should be also clarified which services will be affected by non-transmission tariffs. Moreover, current content of the figure 7 on page 13 of the Consultation Document, may be interpreted by market participants as a forecast of increased charges due to BP launch, which in our opinion is not correct and shall be corrected.
5. Assumptions about costs, volumes and capacities

PGNiG presents preliminary comments on the assumptions presented in Chapter 4:

- The projected costs shown in Table 2 suggest that the costs related to BP’s infrastructure are decreasing and the remaining costs are increasing. It is additional argument to increase discounts for long term capacity bookings.

- It can also be seen that the planned capacities for Denmark are decreasing in the coming years (Table 4). Lower demand for gas in Denmark should result in a reduction of the costs associated with the supply of gas to customers in Denmark, otherwise more costs of supply to Denmark will be subsidized by BP shippers.

- In 4.2 Capacity and flow Table 3: Forecasted flow 2023-2027, entry and exit totals are not equal – please explain the reasons of such situation.

- In 4.2 Capacity and flow Table 4: Forecasted capacity 2023-2027, capacity for entry and exit to/from BP is different – please explain the reasons of such situation.

- In our opinion, the data in Table 3 and 4 are not consistent (e.g. load factor for DK comparable to BP, load factor for Ellund gets values higher than 1).

- The tariff rates in Germany are lower than those proposed in the Consultation Document by about 20%, as shown in the charts below. If such situation will occur frequently in the period of BP exploitation, it may induce PGNiG Group to search for other routes of natural gas transportation.

*Figure 3: Comparison of the expected tariffs in Denmark and Germany*
6. Summary

The PGNiG Group is a company that aims to achieve a positive economic result and must choose such delivery paths and directions that are competitively priced.

We consider three of four proposed adjustments as beneficial for the market participants. These are:

1) Discount for long-term bookings (higher rates shall be considered),
2) Tariff collection period of calendar year
3) Inclusion of upstream (having in mind exclusion of old upstream entities)

Our main concerns are:

1. Values of discounts for long-term bookings. PGNiG proposes 10% of the discount for 15-years bookings. This proposal is supported by the fact that launch of BP introduces 30% of a discount to other natural gas transmission system users in Denmark.

2. 100/0 capacity/commodity split. Introduction of such split shall not cause subsidizing of other market participants, as described in point 1 of this document. In particular, we believe that construction of the tariff should discourage shippers from utilizing only short term capacity (below 1 year) and such product should be significantly more expensive than ordinary bookings (with a duration of at least 1 year). Otherwise, the split of 100/0 can be seen as significant cross subsidization between the long term shippers and traders with the short term speculative position.

3. Lowering gas volumes consumed in Denmark in the coming years shall not increase cross-subsidization and increasing rates for long-term, transit shippers.

4. To ensure competitiveness of the Danish transmission system, other possible transmission routes should be analyzed, and the Danish rates proposed to DUR shall be at the comparative level to alternative routes offered by the neighboring countries.

5. We are willing to accept the "zeroed" storage tariff rate, which is a form of cross-subsidization, as it is part of the larger package, but only if other areas are consistent with previous agreements, in particular in relation to uniform tariff and discount for the bookings exceeding 5 years.

We hope that you find our viewpoint a meaningful contribution to the debate on the construction of a cost effective and fair tariff in Denmark post BP implementation. Thank you once again for including PGNiG in this public consultation procedure and allowing us to voice our concerns.

According to PGNiG, due to large scope of proposed adjustments and the insufficient clarity about the input data and methods of its calculation, additional workshops for market participants should be held, presenting the assumptions and results of the analyzes. Moreover, ENDK has previously established communication standards that allow for a more than 2-week consultation period to be expected.

If there is any need for clarifications on the mentioned matters, we will be happy to assist you. We are also open to participating in a meeting where we can elaborate on the points made in this document.
Pre-consultation on new gas tariff methodology

Ørsted is pleased to get the opportunity to give our input to the above pre-consultation published 14 September 2021. The tariff methodology is a very important element in securing a robust and efficient gas market in Denmark with fair and equal access, and at the same time cater for the inclusion of Baltic Pipe project. The pre-consultation evolves around 4 key elements, and Ørsted would like to offer the following input.

1) **Change the capacity-commodity to 100/0%**.
   Based on NC TAR and the implementation guidelines that have evolved, Ørsted agrees that by far most of the costs would be considered CAPEX. Hence, for practical reasons, a 100/0 split seems appropriate.

2) **Change of collection period from gas year to calendar year**
   This is an administrative change that will bring Denmark in line with other systems in Northwest Europe, and Ørsted supports it.

3) **Discount for long term booking (>5y)**
   The success of the internal gas market, where gas flows react to price signals at different hubs leads to shorter term capacity bookings. Short term capacity bookings thus underpin a flexible market with transparent price discovery. This may create some fluctuations in tariffs levels in different TSO-systems in Europe. However, there is no evidence that indicates that this stifles the market, and that efforts should be made to incentivize long-term bookings. Rather, long term bookings have the inherent risk of creating contractual congestion.

   Further, given the size of the Baltic Pipe project and the long-term bookings that were made to underpin the Baltic Pipe project, the Danish tariff structure is in a comfortable position in a European context. The system is thus already characterized with a uniquely high predictability and financial stability.

   Against the above background, it would seem counter-productive to introduce a discount for long term bookings. Additionally, applying such discounts as a retroactive rebate to certain shippers seems discriminatory, lead to cross-subsidisation and could increase marginal gas price in Denmark to the detriment of all consumers.

   Based on the above, Ørsted can’t support the proposed long-term discount, including the proposal to introduce it retroactively.

28 September 2021
4) **A common entry point for the Norwegian-Danish tie-in in the North Sea and the Danish transmission system**

Ørsted recognises, that Energinet have included a figure (figure 7) on the financial impact on different shippers from socialising the offshore costs with the onshore. This gives at least a glance of the situation comparing a socialised system with the “regulatory baseline”, ie two separate systems. It should also be noted that the documents do not include any considerations if the “common entry” should be offered to Danish gas producers and offshore shippers as well. Finally, Ørsted recognises the overall financial contribution of Baltic Pipe to the Danish gas transport system and the risks on the Danish gas market after the initial 15-year booking terminates.

Against this background Ørsted still finds the document and the analysis presented lacking, and we suggest that the consultation document is expanded with a basic financial model and considerations on the wider impact on Danish North Sea gas producers and shipper (see also Ørsted’s consultation response on “Methodology for integrating Baltic Pipe in the Danish Market Model”, dated 21 January 2021).

We are of course available for questions you may have in relation to our consultation response, and we look forward to participating in the further process.

Yours sincerely
Ørsted

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Tel 99557923
Dansk Energis høringsvar til Energinets pre-consultation om ny gastransmissionstarifmetode

Dansk Energi takker for muligheden for at afgive bemærkninger til Energinets pre-consultation om den nye metode for gastransmissionstariffer.


Nedenfor er vores nærmere bemærkninger til de forskellige forslåede tarifprincipper og -ændringer i Energinets pre-consultation-dokument.

Opkrævningsperioden ændres fra gasår til kalenderår
Energinet lægger op til at ændre opkrævningsperioden fra gasår til kalenderår for at øge gennemsigtigheden og ensrette i forhold til nabo-TSO’erne.

_Dansk Energi finder, at denne ændring kan give mening, hvis implementeringen og skiftet fra gasår til kalender sker hensigtsmæssigt og til mindst mulig gene for transportkunderne._

Splittet mellem capacity- og commodity-tarif ændres fra 70/30 til 100/0
Der lægges op til, at commodity-tariffen (volumentariffen) reduceres til nul, så der fremover kun betales kapacitetstarif. Energinet henviser til, at dette ændres for at leve op til netreglen for gasbalance, som kræver at commodity-tariffen dækker omkostninger "mainly driven by the quantity of the gas flow". Disse omkostninger vil ifølge Energinet kun bestå af 6 mio. kr./år for Egtved-kompressoren, hvilket vil føre til en meget lav volumentarif.

_Dansk Energi støtter op om denne ændring._

Introduktion af multipliers, som giver rabat til long term-reservationer på 5 år eller derover
Energinet foreslår at fastholde aktuelle multipliers for kapacitetskontrakter op til og med et år. Energinet lægger desuden op til at introducere long term-multipliers, som giver rabat på lange kapacitetsreservationer på 5 år eller derover.

Forsyningstilsynet konkluderede i afgørelsen fra 2019, at de transportkunder, som indgik kapacitetsaftaler i Open Season 2017, gjorde et på baggrund af de formelle Open Season-regler samt en udtalelse fra Forsyningstilsynet (dengang Energitilsynet), hvori der ikke diskuteres eller antages mulighed for potentiel rabat på lange kontrakter.

Dansk Energi kan se af materialet til pre-consultation, at Energinet har ændret niveauet for multiplier sammenlignet med metodeanmeldelsen fra 2019, så en 15-årig kontrakt i det aktuelle forslag vil kunne få en rabat på 5,60 % (i 2019 var det op til 10 %). Energinet henviser desuden til, at de siden 2019 har introduceret muligheden for at booke kontrakter på mere end 5 år.


Der er kun få transportkunder på det danske gasengrosmarked, som er store nok at overveje eller købe kapacitetskontrakter på fem år eller mere. Long term-multipliers vil derfor udelukkede være til fordel for store gasaktører – på bekostning af de øvrige aktører på markedet. For danske gasleverandører, som står overfor et faldende gasforbrug, vil en kapacitetsreservation op fem år eller mere være utrolig risikofyldt. Rabatten vil i vid udstrækning til fordel for de store markedsaktører. Derfor vil long term-multipliers ramme konkurrencemæssigt skævt, selvom Energinet har introduceret muligheden for at booke kontrakter på mere end 5 år.


Energinet skriver, at kapacitetsreservationerne i Baltic Pipe er til fordel for alle transportkunder. Det er dog vigtigt at påpege, at alle transportkunder også er med til at betale investerings- og driftsomkostningerne for Baltic Pipe med de uniforme tarife, som Energinet foreslår at fastholde. Desuden medfører Baltic Pipe betydelige risici for fremtidige transportkunder i det danske gassystem, da Baltic Pipe har en økonomisk levetid på 30 år, mens der kun er indgået kapacitetsaftaler for 15 år.

Dansk Energi mener fortsat, at det ikke er hensigtsmæssigt eller rimeligt at indføre en rabat på lange kapacitetsreservationer, som primært er rettet mod allerede indgåede kapacitetsaftaler – dvs. introduk-
tion af en rabat ex post for kapacitetsreservationerne i Baltic Pipe. Der bør ikke introduceres long-term-multipliers for kapacitet på fem år eller mere.

Dansk Energi mener ikke, at det er rimeligt at indføre en rabat med long term-multipliers retrospektivt - særligt ikke en rabat, som tilgodeser de allerstørste aktører på bekostning af de mindre aktører.

Inklusion af opstrømsdelen af Baltic Pipe i den danske transmissionstarif med uniforme tariffer

Energinet lægger op til at inkludere opstrømsdelen af Baltic Pipe, som forbinder det norske opstrømsgassystem til det danske transmissionssystem, i den samlede transmissionstarif i form af en separat "non-transmission tarif". Energinet henviser til, at dette gøres af hensyn til transparens.

I forbindelse med Energinets høring over "methodology for integrating Baltic Pipe in the Danish market model" i januar 2021 påpegede Dansk Energi, at der manglede en nærmere beskrivelse og vurdering af effekter og implikationer ved at foretage denne integrering af to forskellige systemer. Dansk Energi opfordrede derfor dengang Energinet til at foretage en analyse af den foreslåede løsning sammenlignet med den løsning, som reguleringen lægger op til med to forskellige systemer. Det er vanskeligt at vurdere effekterne af Energinets forslag ude at sammenligne med et alternativ. Denne analyse mangler fortsat.

Der mangler desuden en vurdering af konsekvenserne for forskellige typer transportkunder i det danske gassystem. Med idriftsættelsen af Baltic Pipe bliver der endnu større forskel på transportkunder i det danske gassystem, som vil komme til at omfatte meget store transitkunder og mindre gasleverandører, hvilket kun gør det mere relevant at undersøge, hvordan de forskellige aktører påvirkes.

Dansk Energi vil gerne gentage opfordringen til at foretage en sammenligning af Energinets foreslået model med en løsning, hvor de to systemer håndteres separat, for at tydeliggøre fordele, ulemper og omkostninger samt en konsekvensvurdering for forskellige typer transportkunder.

Dansk Energi står selvfølgelig til rådighed, hvis der er behov for uddybning af ovenstående eller der i øvrigt er spørgsmål.

Med venlig hilsen
Dansk Energi

Maria Holm Bohsen