AMENDMENTS TO THE METHODOLOGY FOR PROCUREMENT OF COUNTERTRADE ENERGY

1. Background and objective

Energinet's group parent company (an independent public enterprise), hereinafter Energinet, hereby submits for approval amended terms and conditions in Energinet's methodology for procurement of countertrade energy.

Reference is made to Energinet's methodology submission dated 21 December 2021 ('the methodology submission'), where the methodology is described in section 4 of the submission for approval ('the original methodology'), and the Danish Utility Regulator's decision to approve the methodology dated 28 June 2022 (DUR j.no. 21/01999) ('Approval by the Danish Utility Regulator').

The following amendments have been made:

- 1. The traded period for the first trading slot has been defined
- 2. Net countertrade volumes have been made subject to publication on NUCS
- 3. Publication of trading slots
- 4. The defined request deadlines for countertrade for the individual trading slots have been removed from the methodology text.

The need to make amendments to the original methodology has arisen from deliberations, after the submission for approval of the methodology, with the external supplier who will procure countertrade energy for Energinet about the practicalities of this procurement, as well as further dialogue with TenneT on their calculation of countertrade needs.

2. Amendments to terms and conditions

The original methodology is attached as Appendix 1. Amendments submitted for approval are indicated in the text with 'Track Changes'.

3. Explanation of terms and conditions submitted for approval

Four minor specifications and adjustments to Energinet's methodology for procurement of countertrade energy are hereby submitted for approval.

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Author: ABG/TMP The adjustments to the original methodology are made to counteract a few simple practicalities, which Energinet has become aware of in connection with the implementation of the countertrade model. This primarily relates to which information to release to the market prior to trading.

Below, the amendments implemented with the revised methodology text, see section 2, are reviewed.

3.1 Definition of the traded period for the first trading slot

The traded period of the first slot is defined as (T24 (D-1) - T23(D)).

The clarification is made to ensure that the traded period is linked to the time of release of capacity to the market (on the Nordic borders) in order to optimise the competitive situation.

Normally, capacity on the intraday market is released on the Nordic borders at 15:00 (D-1) for T24 (D-1) – T23(D)¹. If the traded period T1-24 (D) were used in this situation, there would be no capacity released on the Nordic borders at the time when countertrade energy for the last hour of the 24-hour period is traded (T24(D)). Consequently, trading would be performed in the intraday market, but in an isolated Danish market where only Danish balance-responsible parties' bids would be matchable to the offered countertrade energy for the last hour of the 24-hour period.

On the other hand, all market participants, including those from neighbouring countries, can participate in the competition for the countertrade energy offered for the last hour of the day if the traded period is shifted so that the last hour of any given 24-hour period is traded together with the first 23 hours of the coming 24-hour period.

The aim of the specification of the traded period is thus to effectively utilise the advantages of the countertrade model, <u>also</u> during the last hour of the day.

Energinet finds that the definition of the traded period is information which may affect the market participant' behaviour in the market. Therefore, the methodology should clearly state that the traded period for the first slot is T24 (D-1) – T23(D) – and not T1-24 (D). Thus, the amendment is worked into the original methodology so that the current examples – all based on a traded period corresponding to a standard 24-hour period – are replaced by figures illustrating the actual timeline of the defined traded period for the first trading slot.

Furthermore, the text specifies that only the traded period for the following slots is determined in consultation with neighbouring TSOs and that, in any case, the last hour of any traded period will be T23(D).

3.2 Information about countertrade volumes published on the NUCS publication platform

The original methodology is amended so that individual countertrade requests are not published on NUCS prior to trading, but instead the net volume of energy that will either be procured or sold in the intraday market per bidding zone per MTU. In other words, Energinet nets opposite requests for countertrade prior to publication of its procurement need.

¹ Due to ramp restrictions on HVDC connections in the Nordic region, capacity for the last hour of the intraday day is not released until the day-ahead auction for the following 24-hour period has ended. This is because knowledge about allocation to the market for the first hour of a given day is necessary in order to be able to keep within the ramp restrictions for the last hour of the previous 24-hour period.

The purpose of the amendment is to ensure that market participants are informed about the countertrade volumes to be procured in the intraday market without having to summarise requests on different borders when these are published.

The original methodology proposes that countertrade requests for all international connections per bidding zone per MTU must be published on the NUCS countertrade platform, but as opposite countertrade requests are netted before being traded in the intraday market to ensure that Energinet does not both procure and sell in the same bidding zone in the same MTU in the intraday market, this means that requested volumes will not match the volumes bought or sold in the intraday market. The share of countertrade volume that can be deducted from countertrade needs on other borders (into the same bidding zone) depends on the timing of the various countertrade requests and on whether formerly requested volumes have been traded before a new request is made. If countertrade is requests on several borders, it may be difficult for market participants to determine what volumes Energinet will trade in the relevant bidding zone. Consequently, Energinet will amend the original methodology so that the publication on NUCS reflects the net volume in the relevant bidding zone per MTU that Energinet wants to either sell or buy in the intraday market. This is also supplemented by a publicly available description of the instructions for netting of countertrade requests.

3.3 Publication of trading slots

The methodology will be amended so that the number of trading slots and their timing are published.

Trading slots will be published on Energinet's website well before go-live of the countertrade model. Any subsequent changes to the trading slots are published in the same way.

Which information to publish prior to trading, hereunder volumes, price, timings of trading, etc. was subject of an intense, but good and constructive dialogue with the market participants during the process which resulted in the original methodology.

Some market participants supported the publication of the bulk of information about Energinet's trades, while others, like the Danish Utility Regulator, were critical of the effect on the market of Energinet publishing much information beforehand. The main concern of these market participants was the resulting impact of a market participant as large as Energinet trading in the market in a way that significantly differed from that of an 'ordinary' market participant.

As the Danish Utility Regulator pointed out in its decision to approve the original methodology, the degree of advance transparency about Energinet's procurement of countertrade energy must be carefully weighed up against the consideration of a well-functioning market. The schism is reflected in the following sections of the Danish Utility Regulator's decision:

"Ørsted mentions that it is not transparent when Energinet states that "the number of trading slots, the length of trading slots, and the traded periods are agreed between the TSOs and are not published" and that the minimum price of Energinet's bids is not published. The Danish Utility Regulator finds that transparency means only that Energinet clearly announces the countertrade volume. Were Energinet to also announce the exact time and price, it would no longer be a market-based procurement." Energinet agrees that the methodology originally submitted for approval represents a fine balancing act between these two considerations. Nevertheless, Energinet now finds that when the practical side of the trades is taken into account, as discussed with the external supplier who will handle the trades on behalf of Energinet, there are a number of basic practicalities which should also be included in the deliberation on this matter. The conclusion of these is that the best solution is to publish the trading slots.

Thus, it should be recognised that – in practice – it will be almost impossible to keep the mentioned information about the trading slots confidential. Firstly, market participants trading countertrade energy will rather quickly get an idea of the timing of the trading slots. Consequently, these market participants will quickly gain an advantage over new bidders, giving 'new' and 'old' participants different outsets in the competition. Secondly, all participants in Energinet's internal implementation project, Energinet's employees in the control centre, all neighbouring TSOs that now – or in future – countertrade with Energinet will inevitably gain knowledge of the trading slots.

The instructions concerning minimum/maximum price from the TSO that requests countertrade will still not be published, and neither will one specific time when bids are placed in the market. In Energinet's opinion, the publication of information about the timing of trading slots – during which trades are made over many hours using a non-disclosed trading strategy – does not change the Danish Utility Regulator's conclusion that the procurement of countertrade energy is market-based.

As matters stand, Energinet finds it best to make information about trading slots publicly available.

3.4 The defined request deadlines for countertrade for each trading slot are removed from the methodology text.

The original methodology explicitly states the deadline for TSOs wanting countertrade in a given structural trading slot to request this from Energinet.

In conjunction with predefined trading slots, the provision aims to reduce the number of manual adjustments which Energinet must make in order to execute countertrade requests from neighbouring TSOs so that manual processes must not be performed every time a countertrade request is made.

Energinet still believes that deadlines should be defined for TSOs' requests for structural countertrade for the individual trading slots. It should, however, be recognised that there are TSO specific operational conditions which plays a crucial role in determining suitable deadlines, and Energinet therefore needs to be able to continuously adjust the deadlines mentioned together with neighbouring TSOs. This applies both to specific cases and in general. The methodology is therefore amended so that defined deadlines for requesting countertrade from Energinet are removed.

The amendment has no bearing on the market. The reason is that, in any event, the volumes to be countertraded are subject to prior publication as described in section 4.3.2.4.

4. Legal basis and rules

THE DANISH ELECTRICITY SUPPLY ACT (CONSOLIDATED ACT NO. 984 DATED 12 MAY 2021 AS AMENDED)

Section 1

The purpose of the Danish Electricity Supply Act is established in section 1 of the act:

1 (1) The purpose of the act is to ensure that the national power supply is organized and carried out considering climate, environment, security of supply, consumer protection, and economy.

- (2) Pursuant to the provisions in subsection (1), the Act shall
- 1) ensure electricity customers access at reasonable prices,
- 2) promote the use of renewable and environmentally friendly energy sources,
- 3) promote efficient energy use,
- 4) promote flexibility in the energy system,
- 5) ensure efficient use of financial resources,
- 6) ensure competition in the electricity sector, and
- 7) promote sector integration.

The general comments in paragraph 3.1.1.3 to bill L53 presented on 27 October 2021, which led to the wording of the provision of purpose of the Danish Electricity Supply Act referred to above, state:

"It is proposed that the purpose of the Danish Electricity Supply Act be to ensure that the electricity supply in Denmark is organised and carried out in line with considerations of climate, environment, security of electricity supply, consumer protection, and economy.

The proposed approach will give the above-mentioned considerations equal status as main considerations according to which the electricity supply must be organised and carried out. However, individual provisions of the Act outside the scope of the provision of purpose may be founded in the safeguarding of one or several of the considerations. The considerations provide an overall guideline for the regulation of the Act as well as a legal contribution to interpretation indicating the light in which the individual provisions of the Act are to be seen.

The objective in the provision of purpose must still reflect the consideration of a balance between, on the one hand, overall societal conditions such as security of electricity supply and the fulfilment of climate and environmental obligations, and, on the other, the consideration of electricity customers through consumer protection and access at reasonable prices.

It is also suggested that the Act, within the objective of planning and carrying out electricity supply in line with the above considerations, must promote and safeguard a number of conditions.

These constitute ensuring reasonable prices for electricity customers, promoting the use of renewable and environmentally friendly energy sources, promoting efficient energy use, promoting flexibility in the energy system, ensuring the efficient use of financial resources, ensuring competition in the electricity sector, and promoting sector integration. The proposed will entail that the Act must ensure and promote the conditions mentioned above in connection with planning and carrying out electricity supply pursuant to one or more of the considerations mentioned in section 1(1)."

SECTION 27A SUBSECTION 2, PARAGRAPH 1

Under section 27 a(2), paragraph 1, of the Danish Electricity Supply Act, Energinet must use market-based methodologies to procure energy and other services to maintain the fixed level of security of electricity supply. Section 27 a(1) and (2), paragraph 1, of the Danish Electricity Supply Act is worded as follows:

Section 27 a [...]

(2) When procuring energy and other services to ensure the established level of security of (power) supply, Energinet applies market-based methodologies.

The comments in the bill's section 1, paragraph 10, on Section 27 a of the Danish Electricity Supply Act also include the following: [...]

Energinet must, in pursuance of section 28(2), paragraph 16, of the Danish Electricity Supply Act use transparent, non-discriminatory, market-based methodologies when procuring the energy it uses to perform its duties. Section 28(2), paragraph 16, implements Article 15(6) of [Directive 2009/72/EC] (electricity directive). Article 15(6) of the Electricity Directive thus states that transmission system operators use transparent, non-discriminatory market-based methodologies when procuring the energy they use to cover energy losses and reserve capacity in their systems when performing this activity.

It follows from the proposed new wording of section 27 a(2), paragraph 1, that when procuring energy and other services to maintain the fixed level of security of electricity supply, Energinet uses market-based methodologies.

[...]

The use of market-based methodologies will reduce Energinet's need for forced intervention to the fullest extent possible.

SECTION 28, SUBSECTION 2, PARAGRAPH 16

Pursuant to section 28(2), paragraph 16, of the Danish Electricity Supply Act Energinet must use transparent, non-discriminatory, and market-based methodologies when procuring the energy used by Energinet to perform the duties of the enterprise. Section 28(2), paragraph 16, of the Danish Electricity Supply Act is worded as follows:

Section 28. [...].

(2) Energinet must perform the following duties:

[...]

16) use transparent, non-discriminatory, market-based methodologies to procure the energy used to perform its duties.

SECTION 73 A, SUBSECTION 1

Pursuant to Section 73 a(1) of the Danish Electricity Supply Act, the Danish Utility Regulator must approve the methodologies of public electricity supply enterprises for determining prices

and conditions of using transmission and distribution grids. Section 73 a(1) of the Danish Electricity Supply Act is worded as follows:

Section 73 a. Prices and conditions for the use of transmission and distribution grids are determined by the public electricity supply enterprises based on published methodologies approved by the Danish Utility Regulator.

Section 73 a(1) was added to the Danish Electricity Supply Act by Act no. 494 dated 9 June 2004. The following can be seen, among other things, from the comments in no. L 236 dated 21 April 2004 relating to section 73 a(1):

[...] The provision laid down in section 73 a entails that the transmission system operator and transmission and grid enterprises must prepare a report on the methodologies expected to be used when laying down terms and conditions, including tariffs, for the use of transmission and distribution grids. The purpose is to ensure that these methodologies comply with the provisions of the Danish Electricity Supply Act. [...]

The obligation to report the methodologies used to calculate or lay down terms and conditions for access to the transmission grid also includes methodologies for calculating or laying down terms and conditions for the provision of balancing services, [...]. No separate provision for this is stated in the Act [...] because balancing services are an integral part of the transmission system operator's activities and can thus be considered covered by subsection 1. [...] The report on methodologies is submitted to the Danish Energy Agency, see [...] section 76(1), paragraph 1, of the Danish Electricity Supply Act. The methodologies must be approved by the Danish Energy Agency and published by the enterprises before tariffs and conditions determined according to the methodologies can come into force [...]

5. Assessment

5.1 Basis for submission for approval of the amendments

In its decision dated 28 June 2022 on Energinet's methodology for procurement of countertrade energy (DUR j. no. 21/01999), the Danish Utility Regulator stated that the methodology must be approved in pursuance of sections 73 a(1), 27 a(2), paragraph 1, and 28(2), paragraph 16, of the Danish Electricity Supply Act.

Thus, according to the Danish Electricity Supply Act section 27 a(1), Energinet is responsible for ensuring the established level of security of electricity supply and for monitoring the development thereof. Pursuant to § 27 a(2), paragraph 1, Energinet must use market-based methodologies when procuring energy and other services to ensure the established level of security of electricity supply.

Section 28(2), paragraph 16, of the Danish Electricity Supply Act states that Energinet must use transparent, non-discriminatory, and market-based methodologies when procuring the energy used by Energinet to perform the business of the enterprise.

This submission for approval of amendments is made on the same legal basis that the original procedure was approved on. Consequently, an explanation is given below of the amendments' compliance with the market-based criterion of section 27 a(2), paragraph 1, and section 28(2),

paragraph 16, of the Danish Electricity Supply Act as well as the amendments' conformity with the criteria on transparency and non-discrimination.

5.2 Assessment of whether (the amendments to) the methodology is market-based pursuant to section 27 a(2), paragraph 1, and section 28(2), paragraph 16, of the Danish Electricity Supply Act

In its decision dated 28 June 2022, the Danish Utility Regulator emphasises, in support of its decision to approve the methodology, that:

"The methodology for procurement of countertrade energy increases the marketisation of Energinet's procurement of downward regulation energy and upward regulation energy used for countertrade. Thus, this methodology will enable a wider circle of participants, including balance-responsible parties for both consumption and trade, and market participants from neighbouring countries, to provide these services to Energinet.

The adjustment of the methodology, determining the traded period depending on the time of release of capacity on the Nordic borders, is primarily made to ensure as much marketisation as possible of countertrade volumes – also for the last hour of the day.

No precise time for when bids are placed in the market is published. However, a trading slot which spans many hours during which a non-disclosed trading strategy is used is published so that Energinet still acts like other market participants in the continuous intraday market.

Energinet therefore finds that the number and timing of the trading slots can be made public without this impacting the market-based nature of this procurement.

5.3 Assessment of whether (the amendments to) the methodology is transparent and nondiscriminatory pursuant to section 27 a(2), paragraph 16, of the Danish Electricity Supply Act

5.3.1 Transparency

In its approval of the original methodology

The Danish Utility Regulator here [..] emphasises that the methodology ensures a clear and well-defined framework for how Energinet will trade countertrade energy. The methodology describes a clear process for how Energinet will handle trading [...]"

All but one of these amendments submitted for approval are introduced to ensure maximum transparency in trading.

As regards the determination of the traded period for the first trading slot, Energinet finds that knowledge of this <u>may</u> affect the market participants' trading behaviour. It is therefore important that the methodology is adjusted so that the defined traded period is clear to all market participants. For this reason, not only the methodology text is amended, but also illustrated figures, to make the process that Energinet follows very clear.

With respect to the amendment making net countertrade volumes subject to publication on NUCS, the primary reason is transparency. Publication of the individual requests for counter-trade matches the transparency requirement well in theory. However, when mapping out the actual process for the execution of the trades, Energinet noted that, in practice, the most

transparent solution is for the information published to be the net volumes that Energinet will trade, cf. the explanation above in section 3.2

As part of the reasoning for considering the originally submitted methodology transparent, the Danish Utility Regulator expressly mentions:

The methodology also states that Energinet will announce in advance exactly how much energy they intend to buy or sell in the intraday market."

It should be noted that the amendment does not deny market participant any knowledge of requests received by Energinet. Information about countertrade request volumes on each border is always published on ENTSOE's transparency platform one hour after the delivery hour. In this light, Energinet finds that transparency considerations are favoured even more if net volumes are published prior to trading.

As for Energinet's decision to remove TSO request deadlines from the methodology, it should be emphasised that the market does not have an interest in this information. Thus, this decision does not impact the methodology's fulfilment of the transparency requirement.

5.3.2 Non-discrimination

As mentioned above, the first amendment submitted for approval – determination of the traded period – is introduced to ensure that the market for countertrade energy is not only accessible to Danish market participants, but rather open to as many participants as possible – <u>also</u> for the last hour of the day.

In its decision on the original methodology, the Danish Utility Regulator emphasises that

"[...] the methodology for procurement of countertrade energy moves Energinet's trading to a market where it is considerably easier for market participants to participate than is the case today".

In line with this, Energinet finds that the process for procurement of countertrade energy should be well-described and explicit such that all market participants have access to the same information. The non-discrimination consideration also heavily impacted the decision to publish the number and timing of the trading slots, so that this information is not reserved for the bidders already active in the countertrade energy market.

6. Process

Energinet has conducted a public consultation on this submission for approval of amendments to the methodology.

[Consultation responses and assessment hereof].

7. Commencement

The terms and conditions of this submission for approval will enter into force as of the date when Energinet begins to use the methodology for procurement of countertrade energy – currently expectedly to be 1 May 2023.