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Cc: All interested parties

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Dear colleagues,

**Decision to grant the Electricity System Operator an extension to derogation from Standard Licence Condition C28.4(h)(i) for Net Transfer Capacity**

We<sup>1</sup> received a request on 31 August 2023 from the National Grid Electricity System Operator ("ESO") to extend a derogation from Standard Licence Condition ("SLC") C28,<sup>2</sup> allowing them to continue procurement of a non-frequency balancing service, Net Transfer Capacity ("NTC"), following non-market-based procedures.

**This letter sets out our decision to grant the ESO an extension to the temporary derogation previously granted under our powers as described in Part C of SLC C28 and outlines the next steps to be taken.**

**Background**

The ESO is responsible for maintaining the security of the electricity system in Great Britain ("GB"). There are certain conditions and constraints that the ESO must work within, including: protection of the system against the so-called 'largest loss',<sup>3</sup> managing system thermal constraints,<sup>4</sup> and ensuring sufficient operational margin.<sup>5</sup>

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<sup>1</sup> The terms "we", "us", "our", "Ofgem" and "the Authority" are used interchangeably in this document and refer to the Gas and Electricity Markets Authority. Ofgem is the office of the Authority.

<sup>2</sup> The ESO's Standard Licence Conditions can be found at:  
<https://epr.ofgem.gov.uk/Content/Documents/Electricity%20transmission%20full%20set%20of%20consolidated%20standard%20licence%20conditions%20-%20Current%20Version.pdf>

<sup>3</sup> Largest loss events refer to situations where the single largest connected generation or demand site unexpectedly disconnects from the network. The ESO must control frequency to within set limits when this occurs.

<sup>4</sup> Thermal constraints represent the limit of power that can flow from one region to another over the network due to equipment capability / maximum capacity.

<sup>5</sup> Operating margin is the available spare generation capacity over that needed to meet demand.

Interconnectors ("IC"s) between the GB synchronous area and other European countries can represent large electricity flows. At a given time, depending on the direction and magnitude of electricity flows, ICs can present large losses to the system, either from importing electricity (generation loss) or exporting electricity (demand loss). ICs can also flow electricity into an area which is subject to a thermal constraint at that time.

The ESO holds the position that NTC continues to be required to manage the amount of energy flowing across ICs where other market-based options have not provided a suitable solution ensuring system security. NTC is used to set a maximum transfer capacity which is less than the rated capacity determined at that point by the IC owner (which may be considered the gross transfer capacity).<sup>6</sup>

NTC operates under a commercial compensation methodology which aims to ensure that IC owners are kept whole when NTC is applied to their capacity.<sup>7</sup> We note that NTCs are applied by the ESO at the intraday stage or, where no suitable intraday mechanism exists, at the day-ahead stage. We further note that NTC should be a tool of last resort to ensure system security,<sup>8</sup> used on a temporary basis ahead of a methodology for capacity calculations which is being developed under the EU-UK Trade and Cooperation Agreement ("TCA").<sup>9</sup>

Condition C28.4(h)(i) of its transmission licence requires the ESO to ensure that the procurement of balancing services is "subject to transparent, non-discriminatory and market-based procedures". The ESO, in agreement with the relevant IC owners, has established that it cannot procure NTC following market-based procedures, and hence the ESO's procurement of NTC will not comply with this licence condition. The ESO has therefore identified a need for derogation against this requirement under SLC C28.9, whereby the Authority has the power to derogate having determined that market-based provision is 'economically not efficient'.

On 18 June 2021, we received a request from the ESO for a derogation from the requirements of SLC C28 to allow procurement of a non-frequency balancing service, NTC,

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<sup>6</sup> Note that the actual limit on the IC capacity may be set by the connected Transmission System Operator or the IC itself if they apply a restriction greater than the ESO for the same time period.

<sup>7</sup> Here 'kept whole' means there is a no loss – no gain principle, and therefore NGESO may need to pay ICs, or ICs may need to pay back to the ESO (on behalf of GB consumers), as detailed in the NTC commercial compensation methodology.

<sup>8</sup> By 'last resort tool', we understand this to mean that NTC should only be applied where other market-based business as usual tools are not available or have proven insufficient to ensure system security, accounting for the difference in timing of different actions and the information that the ESO has available at those times. Our expectation is that NTCs are applied on an as-needed basis, which should not be routine.

<sup>9</sup> The TCA can be accessed here:

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/982648/TS\\_8\\_2021\\_UK\\_EU\\_EAEC\\_Trade\\_and\\_Cooperation\\_Agreement.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/982648/TS_8_2021_UK_EU_EAEC_Trade_and_Cooperation_Agreement.pdf)

following non-market-based procedures. We approved that request,<sup>10</sup> with the derogation set to expire 1 May 2023.<sup>11</sup>

On 26 April 2023, we approved a short term extension to the initial derogation which was due to expire 30 September 2023.<sup>12</sup> While we agreed at that point that the ESO still required NTC to help manage electricity system security in GB, we wanted the ESO to conduct further work during the extension period to address feedback relating to the associated commercial compensation methodology and to improve the evidence and transparency around the application of NTCs.

The ESO held a consultation<sup>13</sup> on the terms of the commercial compensation methodology and made amendments as a result. Further, the ESO has worked to improve the transparency of information available around the reasons for use of NTCs and the data relevant to individual NTC applications. Following this, we received a request from the ESO on 31 August 2023 to further extend the derogation, allowing them to continue to procure NTC, applying the updated commercial compensation methodology.

## **Decision rationale**

We have reviewed the ESO's latest request in line with the requirements of SLC C28 and our statutory duties. We have also engaged with the ESO to clarify our understanding of the rationale for the request for extension of the derogation due to expire on 30 September 2023. In making this decision, we considered:

*i. the need for the ESO to have a tool of last resort for IC capacity management*

We recognise the need for the ESO to ensure system security for the GB synchronous area. We also recognise that individual ICs can represent large generation or demand sources and can therefore need managing to ensure system security. We understand that certain system conditions, which vary with time and are outside of the ESO's

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<sup>10</sup> Our initial decision to grant the ESO a derogation to procure NTC in a non-market-based manner can be accessed here: <https://www.ofgem.gov.uk/publications/decision-grant-national-grid-electricity-system-operator-derogation-standard-licence-condition-c28-procure-net-transfer-capacity-non-market-based-manner>

<sup>11</sup> Our derogation decision against that initial request expired either on establishing a Capacity Calculation Methodology under the Trade and Cooperation Agreement or 1 May 2023. The Capacity Calculation Methodology was not established in these timeframes and so the date 1 Mar 2023 applied.

<sup>12</sup> Our decision to extend the initial period of derogation can be accessed here: <https://www.ofgem.gov.uk/publications/decision-grant-national-grid-electricity-system-operator-extension-derogation-standard-licence-condition-c28-net-transfer-capacity>

<sup>13</sup> The ESO's consultation ran from 5 June 2023 to 3 July 2023 and can be accessed here: <https://www.nationalgrideso.com/industry-information/codes/balancing-settlement-code-bsc/c16-statements-and-consultations#NTC-commercial-compensation-methodology-consultation>

control,<sup>14</sup> can influence the volume (in either direction) at which IC flow represents a system security concern.

The ESO makes the case that until a Capacity Calculation Methodology is agreed under the TCA, they foresee a need for NTC as a continued tool of last resort. We understand that the ESO cannot currently manage IC flows in a firm manner without an NTC option.

We agree with the ESO that there is a continued need for them to have a service that enables the system to be secured under certain circumstances and that presently NTCs are thus required. We continue to expect the ESO to reduce the use of tools procured through non-market-based procedures<sup>15</sup> in favour of bankable market-based balancing services wherever possible, while maintaining system security.

*ii. the availability of alternative actions to the ESO*

In general, we expect the ESO to resolve system issues by taking actions that are market-based and close-to-real time. We also understand that the ESO often needs to make decisions on whether to call on tools such as NTC at times where information available is based, at least partly, on forecasts. The ESO should only use NTCs where it foresees that alternative options will not outturn sufficiently to provide system security.

We expect that the ESO continually identifies risks to system security and develops market-based options for managing them ahead of need, wherever feasible. The ESO should provide the correct signals to industry where system risks can be resolved. We recognise that, on occasion, system risks may arise before such solutions can be put in place and tools such as NTC may be needed as interim solutions. Where appropriate, the ESO should continue working to introduce new services and / or develop existing services to ensure system security such that they do not rely routinely on non-market-based tools and / or tools of last resort.

We note that the ESO has increased its procurement of Dynamic Containment<sup>16</sup> volumes in recent months which has enabled them to reduce the frequency of NTC use for securing the largest loss.

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<sup>14</sup> Conditions including amount of GB connected wind generation, system inertia and GB network outages, etc.

<sup>15</sup> We set out in our Final Determinations for the assessment period 1 April 2023 to 31 March 2025 that this will be one criterion which we will monitor and use to assess ESO performance under the ESO's RIIO-2 incentive framework. Our Final Determination can be accessed at: <https://www.ofgem.gov.uk/publications/business-plan-2-final-determinations-electricity-system-operator>

<sup>16</sup> Dynamic Containment is a dynamic frequency response service that the ESO procures. Further details can be accessed here: <https://www.nationalgrideso.com/industry-information/balancing-services/frequency-response-services/new-dynamic-services-dcdmdr>

We recognise that the ESO does not have alternative actions for all scenarios currently, and that alternative actions may not always provide a firm option for managing system security. Therefore it is prudent for the ESO to have tools such as NTC available to provide a firm option for managing system security as a last resort option when necessary. Our view is that NTCs should only be used *in extremis*, where the ESO has no viable market-based alternative beyond emergency actions.

*iii. whether procuring NTC using market-based procedures is 'not economically efficient'*

The ESO explained that the system issue which NTC solves can often only be achieved through the application of NTC restriction to a small number of ICs, or in some cases only a particular IC. The ESO argues that as there are therefore limited providers who can bid into any such market, there would be no downwards pressure on costs due to lack of competition in the market. Thus, the cost to establish a market for NTC would be unrecoverable and thus inefficient.

We generally agree with the ESO that, at this point in time, a market-based approach to NTC procurement would not be economically efficient. We note that the NTC commercial compensation methodology attempts to recreate the market value of any restricted capacity. We agree that this is a sound principle as it uses a proxy for market value on the restricted capacity, and intends to prevent ICs from losing or gaining through NTC application.

However, we expect the ESO to keep this efficiency under review, especially as a greater number of ICs connect to the system. Particularly, we consider that the application of NTC in some instances<sup>17</sup> could potentially be procured through a market-based approach. Despite a lack of market-based procurement, we also expect that the ESO ensures equitable application of NTCs.<sup>18</sup>

*iv. the suitability of the NTC commercial compensation methodology*

In our previous decision to grant the ESO an extension of this derogation until 30 September 2023, we set out that a review of the consultation on the NTC commercial compensation methodology was required. This was necessary as both we and the ESO had received a significant amount of feedback from stakeholders. The required review

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<sup>17</sup> Such as to provide system margin, which is generally not linked to flows over a specific IC.

<sup>18</sup> For example, where multiple interconnectors all contribute to a similar system issue, while their number may still be insufficient for a market-based approach to procurement, curtailment should be on an equitable basis and the ESO should clearly define how this is achieved across different realistic scenarios.

was to include a period of consultation with interested stakeholders on proposals to address concerns which had been raised.

We acknowledge that the ESO has now conducted a review, including an appropriate period of consultation. Following this, the ESO has presented to us (and relevant stakeholders) an updated version of the methodology<sup>19</sup> which has addressed issues raised.

**We thereby confirm that the revised NTC commercial compensation methodology should be implemented as of 1 October 2023**, in line with the requirement of C28.4(i)(ii).<sup>20</sup>

We note that it is our expectation that the ESO maintains efficient procurement of balancing services, and therefore should regularly and proactively engage with stakeholders to ensure processes are working and providing correct market incentives. While the methodology presented to us indicates ESO's willingness to consult on the methodology before the end of 2025, the ESO should not delay where there is a suitable reason to do so early within that period.

*v. the transparency around the use of NTC*

The ESO has made improvements to the transparency around NTC. However, there are several areas where the ESO could improve further. We are aware that the ESO intends to improve the provision of data on its data portal, and we support a move toward improved granularity and detail of the information provided with respect to NTCs.<sup>21</sup>

While the ESO has met its commitment to provide additional level of information as to the reason for NTC use during summer 2023, we expect the ESO to continue to improve the information that is available to all market parties in relation to use of NTC. The ESO should remain mindful of the requirements set out around information reporting for the balancing services that it procures.<sup>22</sup>

We still encourage the ESO to seek out additional methods of improving NTC transparency, such as including reporting of NTC application within the weekly

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<sup>19</sup> To be Version 2.0.

<sup>20</sup> We expect that the ESO continues to work with stakeholders during the period of this derogation to ensure that the methodology is fair and fit for purpose. If the ESO proposes changes to the commercial compensation methodology, any updated version will need to be submitted for Ofgem approval before being implemented, in line with SLC C28.4(i)(ii).

<sup>21</sup> We also understand that the ESO intends to address issues with accessing this data by moving to provide it in a more acceptable form for interaction with APIs.

<sup>22</sup> Such as under SLC C28.4(e) of the ESO's transmission licence.

Operational Transparency Forum (which may include speaking to reasons for application and cost implications).

There has also been consistent feedback that the principles of use around NTC are not suitably transparent. We understand that the ESO is working on a supplementary document to the commercial compensation methodology which outlines the use cases and method for volume calculation of NTCs. We believe this will aid transparency around NTC application to IC owners and the wider market. As transparency around ESO balancing actions is a key principle of system operation, we expect the ESO to progress this activity with best endeavours.

We previously suggested that the ESO could include NTCs within its Order of Actions list. The ESO has pointed out that this document was created for transparency for Winter 2022/2023 and is not the most suitable location for this information. We still urge the ESO to ensure that information of a similar nature is available to the whole market, including by ensuring there is access to an agreed dedicated document on NTC use policy and potentially by improving the information provided in the documentation required under SLC C16 with respect to procurement and use of balancing services.

## **Decision and next steps**

We accept the ESO's position that NTC is currently required as a tool of last resort for ensuring system security and understand the restrictions faced in procuring this tool with economic efficiency using market-based procedures, therefore we hereby:

- grant the ESO an extension to the derogation from the requirement to procure NTC using market-based procedures under SLC C28.4(h)(i), in accordance with SLC C28.9.

Our decision to derogate the ESO from this requirement of SLC C28.4 is effective as of 1 October 2023, on expiry of the derogation currently in place. This derogation is **valid until 30 September 2026**, ahead of which we expect the ESO to re-evaluate the continued need for NTC, particularly in the context of any revised obligations following expiry of the current TCA arrangements. The associated revised commercial compensation methodology (version 2.0) should become the methodology in use from 1 October 2023.

If an alternative to NTC (such as implementation of a Capacity Calculation Methodology under the TCA) is established within this period, then this should replace the ESO's procurement of NTCs immediately and this derogation would cease to have effect.

The ESO and ICs should now work together to transition to NTCs under version 2.0 of the commercial compensation methodology, ensuring fair, equitable and consistent treatment following application of ESO restriction to interconnector flows.

We expect the ESO to continue to review the commercial and operational principles around this tool with the appropriate stakeholders. This should be conducted at suitable frequency throughout the period of this derogation to ensure that the use of NTC remains appropriate and fair and should build on outturn data from the use of NTCs. Should it become apparent that changes are required to the commercial compensation methodology, the ESO should consult with relevant stakeholders and bring forward an updated commercial compensation methodology for approval by the Authority.

We further expect the ESO to continue taking steps which to improve transparency around NTC application. Finally, the ESO should provide evidence to us on where it is developing alternative solutions which reduce reliance on non-market-based balancing options throughout the period of derogation.

If you have any questions about the contents of this letter, please contact James Hill ([James.Hill@Ofgem.gov.uk](mailto:James.Hill@Ofgem.gov.uk)).

Yours sincerely,

**Charlotte Friel**

Deputy Director – Market Operations and Signals

For and on behalf of the Gas and Electricity Markets Authority