

Minded-to Decision

Minded-to Decision: Connections Network Design Methodology

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This Minded-to Decision relates to and is subsidiary to the document titled 'Consultation: TMO4+¹ Connections Reform Proposals – Code Modifications, Methodologies & Impact Assessment', which invites responses to questions on connections reform proposals, including our Minded-to Decisions relating to proposed Methodologies.

Subject to a final decision by the end of March 2025, we² intend to approve the Connections Network Design Methodology (CNDM).³

CNDM approval would be contingent on the adoption of proposed licence conditions, in particular new proposed licence condition E16. The licence conditions, if implemented following the statutory consultation, would be the basis for CNDM coming into force.

CNDM approval would be contingent on CMP434 and CMP435 also being approved. CMP434 sets out the enduring process for applications and offers in Section 17 of the Connections and Use of System Code (CUSC) and CMP435 sets out the Gate 2 to Whole Queue process for existing agreements in CUSC Section 18.

We have reached this minded to position by assessing the CNDM against the policy intent and objectives we set for this Methodology in the draft NESO licence conditions, which are being consulted on and are also subject to a final decision. We have also taken into account our principal policy objective, wider statutory duties, the legal text in CMP434 and CMP435 and stakeholder feedback.

¹ TMO4+ / TMO4+ reform package interchangeably throughout this document and refers to the entire package, including the code modifications CMP434, CMP435, CM095, and the three methodologies: Gate 2 Methodology, Connections Network Design Methodology, and Project Designation Methodology.

² References to the "Authority", "Ofgem", "we" and "our" are used interchangeably in this document. The Authority refers to GEMA, the Gas and Electricity Markets Authority. The Office of Gas and Electricity Markets (Ofgem) supports GEMA in its day-to-day work. This decision is made by or on behalf of GEMA.

³ The CUSC refers to the 'Gate 2 Criteria Methodology' which is the same as the 'Gate 2 Methodology'.

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1. Summary

1.1. The Connection Network Design Methodology (CNDM) is an important part of NESO's proposed connections process design known as TMO4+. TMO4+, requires changes to industry codes (CMP434, CMP435 and CM095), licences (NESO, Transmission and Distribution) and the introduction of new Methodology documents (Gate 2 Methodology, Connections Network Design Methodology and Project Designation Methodology). Methodologies are only required and can only be approved as part of the entire TMO4+ reform package. Ofgem's 'Minded-to' Decision on the TMO4+ code modification proposals and the statutory consultation on licence changes have been published simultaneously with our minded-to decisions on the Connections Methodologies.

1.2. Readers should refer to the Gate 2 Methodology for details of the criteria and processes. However, as a broad summary, the CNDM contains the process that NESO, Transmission Owners (TOs) and Distribution Network Operators (DNOs) would follow to assess connection applications and determine offers for generation, interconnection, storage and transmission-connected demand. Significantly it includes the approach to applying Strategic Alignment Criterion B in the Gate 2 Methodology to relevant projects informed by the capacities in the Clean Power 2030 Action Plan ("**CP2030 Action Plan**").

1.3. The CNDM facilitates delivery of both the Connections Action Plan ("**the CAP**")⁴ objectives (see section 2) and the CP2030 Action Plan.⁵ Our primary consultation document 'Consultation: TMO4+ Connections Reform Proposals – Code Modifications, Methodologies & Impact Assessment' provides further detail on both of these documents.

1.4. Overall, the CDNM is necessary to:

- determine and order the existing connections queue and future connections applications in a way that reflects both project readiness and strategic need
- facilitate the design of a more efficient enabling network infrastructure for connections that aligns with the CP2030 Action Plan and future strategic plans

1.5. In this Minded-to Decision, we have assessed the CNDM against:

- our principal objective to protect the interests of existing and future gas and electricity consumers

⁴ [Connections Action Plan: Speeding up connections to the electricity network across Great Britain](#)

⁵ [Clean Power 2030: Action Plan: A new era of clean electricity](#)

- our other statutory duties (for a fuller description, see 'Consultation: TMO4+ Connections Reform Proposals – Code Modifications, Methodologies & Impact Assessment')
- the objectives for this Methodology in proposed NESO licence condition E16
- compatibility with the intention of CMP434 and CMP435 and relevant legal text
- stakeholder feedback on the draft CNDM

1.6. Subject to a final decision, we intend to approve the CNDM coming into force. Our current view is that the CNDM delivers the policy objectives for this Methodology as set out in the draft NESO licence conditions and accords with our principal objective (see section 3). Our current view is that NESO has appropriately considered and responded to stakeholder feedback on its connections design proposal as a whole and on the CNDM in particular.

1. Policy context and intent

The role of the Connections Network Design Methodology

NESO's Connections Methodologies (Gate 2 Methodology, Project Designation Methodology, and CNDM) collectively deliver connection policy reform objectives in line with code reform proposals, as required and enabled by the proposed new licence conditions.

This section sets out the role of the Methodologies and relevant policy objectives. This context augments the rationale for the decision in section 3.

Context and policy objectives relevant to the CNDM

- 2.1. The Connections Methodologies are intended to allow NESO to discharge its new enhanced role in coordinating a whole system approach to energy system planning and connections.
- 2.2. NESO is responsible for the planning and operation of the energy system, taking into account whole system needs and ensuring that the network can be designed accordingly by network companies. With its enhanced responsibilities, it is appropriate for NESO, through its licence, to be charged with having greater control over the connections process to support the delivery of the CP2030 Action Plan and future strategic plans. Accordingly, the Methodologies contain the transparent processes that NESO and network companies would adhere to within the new proposed connections process, alongside appropriate safeguards.
- 2.3. If, following a consultation, the relevant Code Modification proposals and the proposed licence changes (published alongside this Minded-to Decision) are adopted, the new licence requirements would give rise to three Connections Methodologies.
- 2.4. A summary of each Methodology as well as further overall background on the policy context informing the TM04+ proposal is provided in our primary consultation document 'Consultation: TMO4+ Connections Reform Proposals – Code Modifications, Methodologies & Impact Assessment' and is not repeated in full here. This section highlights the key points relevant to CNDM only.
- 2.5. As set out in the context for the Gate 2 Methodology Minded-to Decision, the CNDM responds to the intent in the CP2030 Action Plan "to prioritise projects needed for 2030" while maintaining "a robust pipeline beyond 2030". The

conception and development of the CNDM responds to the policy intent to prioritise the projects needed for 2030 as well as maintain a robust, net zero consistent, pipeline beyond 2030.

- 2.6. The CNDM also responds to the CAP and, in particular, its vision for a reformed connections process aligned with strategic network build and spatial energy planning. It does this by setting a strategic approach to ordering the connections queue following batched applications and an approach to assessing the enabling network in a way that aligns with wider strategic plans.
- 2.7. The proposed objectives of the CNDM are in the new proposed licence condition E16.3 of the NESO Licence. According to this proposed licence condition, which is subject to statutory consultation, the CNDM should:
- be clear, transparent and objective
 - facilitate a net zero energy system
 - facilitate an economic, consistent, efficient, sustainable and coordinated network
 - facilitate appropriate anticipatory investment
 - take into consideration the readiness of applicants to connect
 - facilitate a safe and secure electricity supply
- 2.8. These objectives are identified as the basis for the Authority’s review and approval in the proposed NESO licence conditions. We note that in carrying out its principal functions in accordance with the Energy Act 2023, NESO should act in the way that it considers is best calculated to promote net zero, security of supply, and efficiency and economy objectives.⁶
- 2.9. Section 3 will assess whether feedback on the draft CNDM has been taken into consideration, in addition to whether and how the CNDM meets these objectives, as well as our principal policy objective and relevant statutory duties.
- 2.10. Section 3 also affirms our current view on the compatibility of this Methodology with the intention of the proposer of CMP434 and CMP435 and relevant legal text relating to the CNDM.

⁶ As described in section 163(1) of the Energy Act 2023

2. Rationale for Minded-to Decision

An assessment of the CNDM against licence objectives, our principal policy objective and stakeholder feedback

This section provides the rationale for our Minded-to Decision. It summarises the key themes of feedback received on the CNDM, primarily through NESO's consultation on Methodologies, and NESO's response to that feedback. This section gives Ofgem's view on whether and how key themes of stakeholder feedback relevant to the CNDM have been addressed.

This section also assesses whether the CNDM meets the objectives in the proposed licence condition, compatibility with CMP434 and CMP435, as well as whether approving it would be in line with Ofgem's principal policy objective and wider statutory duties.

Key themes in stakeholder consultation responses

Overall themes in response to NESO's connections reform design

- 2.1 This section reflects the feedback to NESO's consultation on its Connections Methodologies⁷ as well as our consultation 'proposed licence changes to enable TMO4+ Connections Reform'. The Gate 2 Methodology and CNDM work in tandem to determine which projects are eligible for a firm connection date and how the queue would be ordered.
- 2.2 Section 3 in the Gate 2 Methodology Minded-to Decision sets out some of the key themes in the feedback that are relevant to both the Gate 2 Methodology and the CNDM. That section assesses four overall themes where views were mixed or where substantive concerns were raised by multiple stakeholders. The themes are:
 - a lack of a holistic view and concerns about the data informing the capacity pathways in the CP2030 Action Plan
 - calls to increase protections for more advanced projects
 - mixed views on attrition and the impact on competition
 - calls for alternative treatment of hybrid projects
- 2.3 This section does not repeat that assessment to avoid repetition and only contains the key themes specific to the CNDM.

⁷ NESO shared both confidential and non-confidential responses with Ofgem following closure of their consultation on proposed Methodologies.

Specific themes in NESO's consultation relating to the CNDM

- 2.4 There was broad support for the concept and creation of the CNDM as a Methodology to order the queue and design the enabling infrastructure required to prepare connection offers. Stakeholders broadly agreed with the need for the key processes in the CNDM: queue ordering, advancement, connection point and capacity reservation, capacity reallocation and the approach to studying projects. NESO's sentiment analysis of 154 consultation responses indicated that there was ~48% positive feedback and ~15% negative feedback on the CNDM with the remainder neutral.
- 2.5 However, there were calls from some stakeholders for increased transparency, clarity, and more specific guidance for some processes in the draft CNDM presented at consultation stage. This section sets out key themes in stakeholder feedback relating to the CNDM and our view on how this feedback has been addressed.

CNDM theme 1: fairness/desirability of using NESO countersignature to determine relative queue position

- 2.6 NESO countersignature is the point at which the contract between NESO and connections customer⁸ (or NESO and the DNO) becomes legally valid. Some respondents challenged the NESO countersignature date being used as the basis for establishing existing relative queue position as part of CNDM queue ordering during the Gate 2 to Whole Queue exercise. In particular, this was cited as unfair for embedded generation projects that had suffered delays in projects being submitted, signed, or countersigned.

Actions taken and Ofgem view

- 2.7 In NESO's view, moving away from NESO countersignature to determine relative queue position would disadvantage existing customers. While it may improve queue position for some projects that have experienced delays, other transmission and distribution customers could receive worse queue positions and potentially worse connection dates. Accordingly, NESO has decided to maintain the use of its countersignature date to provide certainty for projects that are ready and needed in line with the capacity pathways in the CP2030 Action Plan.
- 2.8 In CNDM section 5.3.1 NESO has clarified that if it countersigned an agreement 28 or more days later than the customer signed the agreement, the customer

⁸ 'User' as per CUSC

signature date would be used instead. We welcome this addition. NESO has also committed to take steps to address significant delays in countersignature where this can be achieved without changing the relative order in which projects were assessed and placed in the original queue.

- 2.9 We recognise that some historical delays between project progression and/or customer signature and NESO countersignature would be crystallised in the 'Gate 2 to Whole Queue' exercise if the latter is used as the basis for establishing relative queue position. The alternatives to NESO countersignature or customer signature are the submission of a Project Progression or the DNO application. Both of these alternatives come with downsides that revolve around the order in which the need for reinforcements was assessed and how resultant changes would impact other projects.
- 2.10 Using the DNO application date or Project Progression submission may result in significant reordering of relative queue position, a reordering of reinforcements, and adversely impact the dates of other existing customers. Accordingly, our provisional view is that there is no alternative solution to NESO countersignature that does not introduce further unfairness and increase the overall risk of projects needed for 2030 receiving worse connection offers.
- 2.11 In our current view, delivering the projects needed for Clean Power by 2030 must be the priority. In our current view, maintaining NESO countersignature continues to be the most pragmatic way to minimise the risk of unpredictable outcomes and make offers to projects that meet Gate 2 as soon as practicable.
- 2.12 Overall, we are minded to agree with NESO's rationale for maintaining countersignature as the metric to determine relative queue position in most instances, while welcoming the commitment to reduce the adverse impact on those impacted by longer delays where it is possible to do so without changing original relative queue order.

CNDM theme 2: approach to queue ordering

- 2.13 NESO presented three approaches to queue ordering. There was a reasonable degree of support for NESO's preferred option, which proposed using planning milestones to implement alignment with capacity limits in the CP2030 Action Plan and then reverting to relative queue position. However, there was a significant cohort of respondents who opposed reverting back to relative queue position and argued that the most mature projects should be pushed towards the front of each phase in the new queue. However, some respondents argued the opposite case.

Actions taken and Ofgem view

- 2.14 NESO has adapted its approach to sorting the queue in response to feedback, essentially adopting a hybrid of its recommended option (which would still apply to phase 1⁹ of the queue) and the alternative approach that gives more preference to well-advanced projects. We are inclined to agree with this response.
- 2.15 Extensive changes to the original relative queue positions for projects needed by 2030 would require more extensive reassessment of enabling reinforcements required up to 2030; delays could be caused by this more extensive network redesign, which would likely be necessary if projects were not reverted to the relative queue position that they held prior to the reform process. Moreover, not reverting projects to their original relative queue position may change reinforcements that are underway or planned for 2030, and this could result in changes to relatively advanced reinforcement plans that could delay phase 1 projects, particularly in locations where projects advance ahead of others due to planning milestones. This would, ultimately, increase the risk that more projects needed for 2030 could receive pushed back dates through changes to those reinforcements.
- 2.16 As delivering Clean Power by 2030 is the priority, we are inclined for these reasons to agree that sorting by planning status up to the capacity threshold needed for 2030 (i.e. 'phase 1' of the queue) and then reverting to the original relative queue position represents the best balance between prioritising more ready projects and minimising the risks of connection offer delays and/or later connection dates for projects needed for 2030.
- 2.17 We are also minded to agree that it is preferable *not* to revert to original relative queue position for phase 2 of the queue. This would maximise the opportunity for faster connection of 'protected' and mature projects in phase 2, without the same risk to projects needed to deliver Clean Power by 2030 in a phase of the queue where there is more scope for network re-design.
- 2.18 We are therefore minded to consider this feedback theme to have been appropriately addressed.

CNDM theme 3: limiting of advancement requests and concern about the outcome of applying for advancement

⁹ Capacities needed to 2030 in line with the CP2030 Action Plan

2.19 There was general support for the option of advancement requests.¹⁰ However, there were calls for advancement requests to be limited to more advanced projects (for example, those with planning consent or that have reached their final investment decision) that can demonstrate sufficient progress. There were also some concerns that applying for advancement could result in an unfair outcome with the loss of the previous relative queue position because following an advancement request a customer would not necessarily be able to revert to its original connection location or date.

Actions taken and Ofgem view

2.20 NESO has provided further detail on how advancement requests would be assessed but has chosen not to limit advancement requests to only more advanced projects. NESO has also maintained its stance on the limitations relating to reoffers and reverting to original queue position following an advancement request. We are inclined to support this stance for the following reasons.

The importance of advancement

- 2.21 As set out in our accompanying Impact Assessment, we expect advancement of dates for projects in the existing queue, and particularly for projects with later dates (for example, after 2030) that are: aligned with the CP2030 Action Plan; hold relative queue positions behind projects that have been removed; and are capable of meeting earlier dates.
- 2.22 NESO and network companies would need to connect more capacity than is needed for 2030 drawing on 2035 capacities in the CP2030 Action Plan (see 'overall theme 3: mixed views on attrition and the impact on competition' in our Minded-to Decision on the Gate 2 Methodology). In our current view, NESO's advancement process complements this aim, including by allowing advancement of projects which align to 2035 permitted capacities rather than 2030 permitted capacities so long as there is sufficient capacity available on the network.
- 2.23 Advancement requests and capacity reallocation are an important (but not the only) mechanisms in the CNDM to allow for sufficient pre-2031 connection offers to achieve Clean Power by 2030. Accordingly, our current view is that it is the right approach to allow projects that meet Gate 2 to apply for advancement and

¹⁰ Users can request that their project is considered for advancement (an earlier date than their existing agreement) as part of the Gate 2 to Whole Queue exercise.

to allow for advancement in future application windows rather than further limit advancement to more advanced projects with, for example, planning consent.

The impact of advancement

- 2.24 It is important to underscore that while advancement is, in our view, an important mechanism to support acceleration of needed projects capable of achieving earlier connection, it has potential impacts for all customers.
- 2.25 Advancement comes with uncertainty for customers that request advancement. The advancement of projects may also have an impact on the reinforcements needed and, therefore, the time taken to connect, other projects. While preserving the relative queue position of projects in phase 1 minimises the risk of projects being negatively impacted by the reassessment of other projects, it does not eliminate this risk.
- 2.26 Accordingly, we also acknowledge that, as is the case for the 'Gate 2 to Whole Queue' exercise overall, it is possible that advancement may result in pushed back dates for both projects that request advancement and existing customers impacted by advancements. This is possible in certain circumstances including:
- in cases where well advanced projects (for example, with planning consent) are accelerated ahead of less advanced projects (for example, that have submitted a planning application or have land rights). If these less advanced projects had a pre-2030 date, it is possible that they would be in 'phase 2' of the queue if 'phase 1' consists of more advanced or protected projects. If they had an existing post 2031 connection date, they may receive a pushed back queue position due to NESO's proposal to order the 'phase 2' by planning milestones and not revert to original relative queue position.
 - in cases where a project is due to connect after 2030 and does not request advancement to 2030 or earlier. In the location they request to connect, it is possible that more projects request to connect by 2030 than were previously contracted to connect by 2030. Facilitating these connections could push projects in phase 2 back.
 - in cases where more efficient works are identified as a result of the Gate 2 to Whole Queue exercise that benefit the majority of a group of projects, but could result in a worse date for a single project (or minority of projects relative to those that benefit).
- 2.27 NESO expects these types of scenarios to occur more in the 2031-2035 period as it has limited the extent of network reassessment before 2031, including by

reverting to relative queue position after sorting by planning milestones for phase 1 of the queue. However, we acknowledge this creates a further element of uncertainty as the trade-off for accelerating dates and altering reinforcement works.

- 2.28 Due to these consequential impacts, we are minded to agree that applications for advancement should only be undertaken for projects that are genuinely capable of achieving an accelerated date. We are also inclined to agree with NESO's stance that certain customers would need to be restricted from requesting a reoffer¹¹ or reverting to the original connection date to ensure that advancement remains bound to realistic self-assessment of a project's capability to accelerate connection and not viewed as a tactic to gain queue position.
- 2.29 Taking this into account, we are inclined to support NESO's stance that if, as a result of an advancement request, the connection date offered in the 'Gate 2 to Whole Queue' exercise is later than the contracted connection date, there should not be an option to revert to the original connection date¹² because the original conditions under which the contracted connection date was issued would no longer exist following reordering of the queue and restudying of projects.
- 2.30 We expect NESO to work with network companies to ensure that pushed back dates for existing customers as a result of the 'Gate 2 to Whole Queue' exercise, including as a result of advancements, are both rare and only occur where it facilitates Clean Power by 2030 or where there is clear system benefit.
- 2.31 As identified in the assessment of proposed licence objective 1 (below), WACM 1 for CMP435 and WACM 7 for CMP434 would direct NESO to publish Gate 1 and Gate 2 information as soon as reasonably practicable after the Gate 2 Criteria have been applied. This could allow customers to decide whether they wish to update their existing advancement request (in the case of CMP435) ahead of the design period in 'Gate 2 to Whole Queue' exercise.
- 2.32 Overall, we are minded to consider this feedback theme to have been appropriately addressed.

CNDM theme 4: approach to capacity reservation and reallocation

- 2.33 NESO intends to reserve connection points and capacity for notional, not yet known, projects (for example, where there is undersupply against a CP2030

¹¹ For example as per 5.28.5 the option to request reoffer would not be available if the customer had a connection date of 2031 or after, but had requested advancement to pre-2030 and as a result their project capacity is deemed to align to the 2030 permitted capacity

¹² As per 5.28.7 of the CNDM

Action Plan capacity pathway) and for Gate 1 projects that require it.¹³ There were calls for further clarity and transparency in the approach taken to reserving capacity, including some calls for more explicit guidance as to when capacity would be reserved, the process for doing so, and the imposition of limits to guard against too much capacity being reserved, particularly for projects that do not progress. Some respondents also put forward the view that projects that can provide significant system benefits should be prioritised for reservation.

- 2.34 There were also calls to improve the capacity reallocation process by either making the guidance more specific or more flexible, to allow (for example) developers to adapt their projects and reduce their capacity export requirements to become eligible for capacity reallocation.

Actions taken and Ofgem view

- 2.35 Firstly, we are minded to agree with NESO that there is a need to reserve capacity in some instances, not least to manage undersupply of technologies against the capacities in the CP2030 Action Plan. It also makes sense to reserve capacity ahead of Crown Estate and Crown Estate Scotland leasing rounds or other cases where there is a defined need and where efficiency would be improved by factoring in the not yet known or known projects into the design process before such projects are able to meet Gate 2. However, an important point, is that these projects are still subject to Gate 2 Criteria and reservations for undersupply would only be made against 2030 capacities in the CP2030 Action plan.
- 2.36 Our provisional view is that connection point and capacity reservation is a pragmatic way to increase the efficiency of network design and increase the chances of bringing forward projects needed for 2030 more quickly than is currently possible under the status quo.
- 2.37 NESO acknowledged the benefit of increasing transparency around the process for connection point and capacity reservation (as part of enhancing transparency as a whole). To increase transparency NESO intends to publish anonymised data on project-specific connection point and capacity reservation, as well as information and justification on non-project specific reservation. This would come before, and is in addition to, publishing information on Gate 1 and Gate 2 projects

¹³ Examples of reservations NESO may make include reservations for: a) undersupply against CP30 Action Plan 2030 permitted capacities b) future Network Services Projects ahead of tendering c) facilitating network competition d) facilitating future leasing rounds initiated by The Crown Estate and Crown Estate Scotland e) ad-hoc Interconnector, Offshore Hybrid Asset, or non-GB Generation projects

once updated agreements have been signed.¹⁴ NESO has also clarified that reservation for undersupply would only be used where substitution options have been exhausted.

- 2.38 In our view NESO has responded appropriately to the call for increased transparency in this area by providing anonymous and then project-specific information, including on capacity reservations, at the earliest opportunity. Its clarification that substitution options take precedence over capacity reservation for undersupply, and the limited scope of reservation for undersupply, guard against overuse of reservation and constitute a proportionate response to the objective pursued.
- 2.39 In relation to capacity reallocation, NESO has recognised in the revised draft CNDM that while the most comprehensive approach to reallocating capacity would be to reassess every project in the queue behind the exiting project, there is a need for a more pragmatic approach to identifying projects for reallocation in a way that fits with the design window timeline. We are inclined to agree that there is a need to be pragmatic and for NESO to work with the relevant network company to identify the most suitable projects for reallocation.
- 2.40 In section 7.22.5 of the CNDM NESO has clarified that users would be able to indicate their ability to advance and keep that declaration up to date and that *"suitable projects may also be approached by NESO to discuss the potential for advancement as a result of capacity reallocation. This could involve discussing the possibility of reducing capacity to align to the MW capacity made available by another project exiting the queue."* In our current view this is an appropriate response to calls to be more flexible and provide the chance to reduce export capacity without introducing too much complexity into the design process.
- 2.41 Overall, we are minded consider this feedback theme to have been appropriately addressed.

CNDM theme 5: substitution flexibility

- 2.42 A strand of stakeholder responses suggested that substitution flexibility should be expanded to allow for flexibility across regions, transmission, distribution, and technologies. There were also suggestions that the CNDM should allow the substitution of projects that are not only geographically adjacent, but also those

¹⁴ As is identified in our assessment of proposed CNDM objective 1, WACM1 for CMP435 and WACM7 for CMP434 may result in earlier information on Gate 2 being available.

that can provide similar benefits in terms of system needs and strategic alignment.

Actions taken and Ofgem view

- 2.43 The key change made by NESO to respond to stakeholder views on substitution flexibility was to work with the Government and network companies to reduce the number of zones and to use 'GB-wide' zones for some technologies. Our present view is that this addresses most of the concerns about substitution rigidity and, in combination with the protections for more mature projects cited in 'overall feedback theme 1: lack of a holistic view and concerns about data informing the CP2030 Action Plan pathways' in the accompanying Gate 2 Methodology Minded-to Decision, reduces the risk that mature projects would suffer detriment.
- 2.44 Before turning to NESO's response to the call for more flexibility around substitutions, it is important to note that 'rebalancing' to account for the impact of protected projects is proposed ahead of substitutions. This means that if a zone is oversubscribed due to protected projects, that zone would have its permitted capacity increased to accommodate the excess protected projects. Conversely, CNDM 5.14.4 Figure 12 illustrates how the permitted capacity of another zone could be reduced to 'rebalance' against the GB total.
- 2.45 Our provisional view is that this is a reasonable step to take to ensure overall alignment with the CP2030 Action Plan. Rebalancing would be partly a consequence of adding 'protections' (which we have considered in the Gate 2 Methodology Minded-to Decision), while still reflecting the policy priority to ensure the queue is aligned with the CP2030 Action Plan.
- 2.46 Turning to substitutions, NESO also agreed that permitting substitutions between transmission and distribution in adjacent or overlapping regions is a reasonable change that does not introduce too much complexity or lead to inefficient network design. However, NESO's view is that other suggestions such as extending substitutions beyond adjacent zones would be too complex and/or subjective to be efficiently incorporated into the 'Gate 2 to the Whole Queue' exercise.
- 2.47 Our initial overall view is that it is important to avoid unintended consequences of inflexible adherence to zonal capacity limits to the extent that ready projects in the existing queue receive Gate 1 offers when there is a strong argument that such a project is needed for Clean Power by 2030.
- 2.48 As set out in more detail in 'overall theme 2: calls to increase protections for more advanced projects' in the Gate 2 Methodology Minded-to Decision, the CNDM provides NESO with a degree of discretion in the way it undertakes the

rebalancing and substitution of zonal capacities. For example, in addressing undersupply as a result of a zonal imbalance against the CP2030 Action Plan, NESO can determine whether adjusting the capacity allocated to the same technology class in adjacent or overlaying zones is appropriate if it does not materially increase constraints.

- 2.49 Our provisional view is that the combination of rebalancing and substitution flexibility provided to NESO by the CNDM, including substitution between overlying or adjacent transmission and distribution zones, is a sensible and necessary part of addressing imbalances and ensuring that rigid adherence to zonal capacity limits does not result in outcomes that run counter to achievement of Clean Power by 2030. We expect NESO to use these flexibilities and its bounded discretion where it supports achieving Clean Power by 2030 and in accordance with its duties under the Energy Act 2023.
- 2.50 Overall, our current view is that the amalgamation of some zones and the increased flexibility of permitting substitution between adjacent or overlapping transmission and distribution zones (for projects of the same technology) is an appropriate response that balances the need for flexibility referred to in feedback with the need for a pragmatic and objective process that seeks to deliver CP2030 Action Plan capacities and does not introduce a level of discretion and flexibility that could undermine the objectives and pathways of the CP2030 Action Plan.
- 2.51 Overall, we are minded to consider this feedback to have been appropriately addressed. However, we are interested in further feedback on flexibilities relating to zonal capacities, noting our overall view (expressed in the Gate 2 Methodology Minded-to Decision) that we expect NESO to share principles and process to balance relevant trade-offs relating to rebalancing and substitutions in time for the 'Gate 2 to Whole Queue' process and that overall alignment to the CP2030 Action Plan should not be diluted.

Assessment of the CNDM against draft licence objectives

Licence objective 1: clear, transparent, and objective

- 2.52 The CNDM sets out, among other things, the approach to applying Strategic Criterion B in the Gate 2 Methodology. It will not always be possible for applicants to know in advance whether the CNDM process of applying the capacities in the CP2030 Action Plan would result in a full Gate 2 or indicative Gate 1 offer.
- 2.53 While the offer outcome is contingent on NESO's assessment and queue ordering process, the CNDM provides upfront transparency on *how* capacity ranges in the

CP2030 Action Plan¹⁵ would be applied. However, as acknowledged in the Minded-to Decision on the Gate 2 Methodology, it remains the case that there would be a cohort of applicants that would not be able to know in advance whether they are likely to meet, or have met, Strategic Alignment Criterion B until the CNDM queue ordering process is completed.

- 2.54 This is a consequence of aligning the connections queue with the Government's capacity pathways while seeking to ensure that the relative readiness of projects is reflected in the queue ordering process. Our provisional view is that this is a rational approach to achieving alignment and we acknowledge that there would always be some cases where it is unclear whether the projects would be under or over the relevant capacity limit. This may be particularly acute in the first 'Gate 2 to Whole Queue' exercise as existing projects would have less information than would be available in the future application windows once Gate 2 information is published.
- 2.55 The limitations of an existing customer or applicant being able to determine whether it meets the Gate 2 Criteria prior to applying cannot fully be mitigated by NESO publishing information at the earliest opportunity. However, we encourage efforts to do this. NESO currently intends to publish Gate 1 and Gate 2 outcomes for the first design window once updated agreements have been signed. WACM 1 for CMP435 and WACM 7 for CMP434 would direct NESO to publish such information as soon as reasonably practicable after the Gate 2 Criteria have been applied. This would allow for customers to decide whether they wish to proceed (or apply for advancement/update their existing advancement request, where the customer is an existing User in the context of CMP435) ahead of the design period and would also further support transparency in the period after initial checks and before offers are prepared.
- 2.56 Some stakeholder feedback to NESO's consultation requested further clarity and detail across aspects of the CNDM. As set out in our assessment of how stakeholder feedback has been addressed, our view is that NESO has addressed the calls for enhanced clarity and detail as far as it is reasonably possible to do so while maintaining the core of a pragmatic, expeditious, and objective process.
- 2.57 We are also inclined to acknowledge and accept that it is necessary for the CNDM to allow NESO and network companies to have some scope for discretionary judgements (for example, in aspects of substitution, capacity reallocation and

¹⁵ [CP2030 Action Plan: A new era of clean electricity: Connections reform annex](#)

advancement). These assessments are technical and would always require some element of case-by-case consideration, for example to understand and determine the most pragmatic and fair approach to filling a capacity gap while not having a material impact on constraints.

- 2.58 Our provisional view, informed by views from the network companies as well as NESO's consultation responses, is that NESO has gone as far as it is feasible to go in removing such discretionary judgments, without making the CNDM too complex or likely to produce unintended consequences. It is also worth noting here that the CNDM does not replace any existing methodology or guidance document and is therefore increasing transparency on how offers are prepared overall.
- 2.59 Overall, and considering the explicit policy intent to align with the capacities in the CP2030 Action Plan, we currently consider that NESO has established a well-defined process in the CNDM that is clear, transparent and objective.
- 2.60 Accordingly, we currently consider that the CNDM meets this proposed licence objective. Where there is room for discretion, we expect NESO and network companies to be open about the way in which criteria have been applied and we expect NESO to update the CNDM in the future where there is an opportunity to include detail that enhances fairness and objectivity.

Licence objective 2: facilitate a net zero energy system

- 2.61 As set out in our accompanying Impact Assessment, slow moving, speculative and unnecessary projects hold queue positions and block networks from releasing physical resources, such as substation bays. A more effective connections process that takes into account strategic network plans is essential to unlock investment in the locations and technologies that meet GB's future electricity needs and net zero objectives.
- 2.62 The CNDM sets out the process for applying Strategic Alignment Criterion B in the Gate 2 Methodology to existing customers and new applications. Applying this criterion using the CNDM process for ordering the queue up to the capacity limits in the CP2030 Action Plan facilitates net zero as the capacities in the Action Plan ranges are mostly derived from NESO's net zero-aligned Future Energy Scenarios ("**FES**").
- 2.63 The CNDM also provides a process for reserving capacity against undersupply in the CP2030 Action Plan. Our provisional view is this is a necessary component of delivering the mix of generation and storage needed for Clean Power by 2030 followed by a net zero energy system.

- 2.64 The CNDM also provides the approach to advancement for projects that are ready and needed, as well as the approach to reallocating capacity following projects exiting the queue. Taking these two processes in turn:
- Advancement can bring forward net zero aligned projects in the queue. We expect this process to result in improved dates for projects in the existing queue, and particularly for projects with later dates (for example, after 2030) that are aligned with the CP2030 Action Plan.
 - Capacity reallocation would become increasingly vital to achieving net zero if and when Gate 2 projects exit the queue for failing to meet projects progression milestones; as such the capacity reallocation process in the CNDM can work in conjunction with existing queue management processes to rapidly reallocate capacity to net zero aligned projects.
- 2.65 Overall, the process contained in the CNDM allows for the ordering of projects to achieve a net zero aligned energy mix. We are minded to conclude that the Gate 2 Methodology meets this proposed licence objective.

Licence objective 3: facilitate an economic, consistent, efficient, sustainable and coordinated network

- 2.66 We are minded to conclude that CNDM facilitates a more holistic approach to designing enabling network for connections that achieve this objective.

Economy and efficiency

- 2.67 The current first-come, first-served connections queue necessitates an assessment of the impact of each connection application on the network before a connection is offered to a new customer. This is inefficient on two counts. Firstly, many projects never reach construction stage, so new connection offers are increasingly contingent on incremental reinforcement works that may never be needed. Secondly, it means that the impact of each project on the network is studied individually. CNDM directly addresses both of these inefficiencies by studying projects as a batch and considering more optimal, holistic, network designs.

Coordination

2.68 The CNDM enhances coordination in two ways. Firstly, the assessment of the queue in phases and the 'End of Queue study'¹⁶ concept enable NESO and network companies to take a holistic view of the enabling reinforcements needed to facilitate connections and take a view of the optimal enabling network build. Secondly, the CNDM signposts interactions with strategic energy planning processes.

Consistency

2.69 At present the infrastructure required to enable connections and wider reinforcements can be misaligned. The CNDM seeks to address this misalignment. For example:

- the first design window following the refreshed Transitional Centralised Strategic Network Plan (tCSNP) would adopt the latest network assumptions from that plan.
- the process contained in the CNDM relates to offer preparation and enabling works up to 2035. The wider network reinforcements recommended in the Centralised Strategic Network Plan ("**CSNP**") would be informed by the SSEP beyond 2030, and SSEP capacities are also expected to inform Gate 2 eligibility for new applications once it is published and the Methodology is updated.

Sustainability

2.70 The current connections queue contains a volume of contracts that is not needed or deliverable. This results in network companies planning to deliver physical reinforcements such as substations and overhead lines that would never be needed. This is unsustainable. The processes contained in CNDM offer a more sustainable approach which consider the end state network needed for strategically aligned projects. The outcomes of CNDM (a set of Gate 1 and Gate 2 contracts) would allow networks to invest to connect a more certain and streamlined queue of projects that contains the energy mix Great Britain needs.

2.71 While the impact of CNDM on coordination and holistic network planning are mainly positive, we do note that using FES-derived capacities out to 2035 as the basis for connections may result in a degree of divergence between SSEP and the connections pipeline. Any such misalignment is a reasonable trade-off for the

¹⁶ For assessing Phase 1 and Phase 2, an "End of Queue" study would be conducted to allow the TOs to understand the infrastructure required to facilitate connection of the Phase 1 projects by 2030 and the Phase 2 projects by 2035 and any 2035+ projects if required.

certainty provided by using a 10-year time horizon. We expect misalignment between SSEP and reformed connections queue would be worked through and managed by NESO, network companies and Ofgem to minimise wider system constraints.

2.72 Accordingly, we are minded to conclude that the CNDM meets this proposed licence objective.

Licence objective 4: facilitate appropriate anticipatory investment

2.73 There are three broad ways in which the CNDM facilitates appropriate anticipatory investment:

- facilitating more economic and efficient network solutions
- progressing network build for certain Gate 1 reservations
- forecasting future connections and progressing network build

2.74 The priority is building the network that is needed to deliver the 2030 and 2035 capacities identified in the CP2030 Action Plan. The application of Gate 2 criteria and CNDM processes, including the 'End of Queue study', enable a view of the network that would be needed at a future point in time (for example, 2035). This allows network companies to plan and build towards that future end-state with more certainty and sooner than would otherwise have been possible.

2.75 The CNDM's introduction of connection point and capacity reservation at Gate 1 facilitates anticipatory investment both where there is a project and customer associated with the reservation and in some instances (for example, undersupply against the capacities in the CP2030 Action Plan) where there is not yet an associated project, but a strategic capacity need is known. Reserving connection points and capacity in this way is an efficient way to incorporate notional or real projects that are likely to be needed for 2030 into the design process ahead of meeting Gate 2. This informs and facilitates anticipatory investment where it is efficient to do so earlier than waiting for confirmation of Gate 2 eligibility. Our provisional view is that this process is coherent with NESO's enhanced role in energy system planning and facilitates better outcomes, including faster connections for projects that meet a defined strategic or system need.

2.76 Once the first SSEP is published the CNDM can continue to provide the foundation for queue ordering and offer preparation in line with a longer-term view of need beyond 2035. This would give NESO and network companies further confidence to invest on an anticipatory basis beyond 2035.

- 2.77 Overall, our current view is that the CNDM facilitates certainty for both projects and network companies. A more streamlined queue of ready and needed projects with Gate 2 contracts allows network companies to progress investment in the strategic enabling infrastructure required to connect those projects. This is expected to solidify investment needs cases and decrease the risk of building stranded assets as enabling works are increasingly tied to strategic plans and strategic needs, and eventually less tethered to individual projects. The introduction of Gate 1 assessments also facilitates the reservation of connection points and capacity for eligible projects and informs anticipatory investment.
- 2.78 Accordingly, we are minded to conclude that the CNDM meets this proposed licence objective.

Licence objective 5: take into consideration the readiness of applicants to connect

- 2.79 The Gate 2 Methodology introduces Readiness Criteria, which projects in the existing queue and new applicants must meet to be eligible for a Gate 2 offer. It also reflects readiness and provides certainty to more advanced projects through the protections in the 'Gate 2 to Whole Queue' exercise.
- 2.80 The CNDM would work in conjunction with the Gate 2 Methodology to reward readiness for both existing projects in the queue and new applicants; it also allows for the acceleration of more ready projects that are capable of achieving earlier connections.
- 2.81 The readiness of applicants is accounted for in the CNDM's approach to queue ordering, which uses planning milestones to apply Strategic Alignment Criterion B in the Gate 2 Methodology up to capacity limits in the CP2030 Action Plan. In using these planning milestones CNDM preferences protected and other well progressed projects.
- 2.82 The queue ordering process following the application of capacity limits then reverts to original relative queue position for 'phase 1' of the queue (capacities needed to 2030). As set out in 'CNDM theme 3: approach to queue ordering', our current view is that sorting by planning status up to the capacity threshold needed for 2030 and then reverting to the original queue position represents the best balance between prioritising well-progressed projects and minimising the risks of connection offer delays and/or later dates for projects needed for 2030 due to more extensive network design that would otherwise be necessary by not reverting to relative queue position.

- 2.83 The CNDM further takes into consideration the readiness of projects by sorting them according to their planning milestones and not reverting to their original relative queue position for phase 2 of the queue. It also enacts the protections contained in the Gate 2 Methodology, including protections for projects that have submitted an application for planning consent on or before 20 December 2024 and have secured planning consent by the close of the Gate 2 to Whole Queue evidence submission window.
- 2.84 On an enduring basis, if a project has obtained planning consent and can evidence this in the application window, then this would result in the project being prioritised behind prioritised Designated Projects and ahead of projects that have not yet obtained planning consent. These projects would be ordered by the date planning consent was obtained.
- 2.85 It is our current view that the use of readiness in the CNDM processes as relevant to the ordering of the queue (that is, beyond the Gate 2 Readiness Criteria) has been properly taken into account and strikes the right balance between advancing more mature projects whilst ensuring an efficient and pragmatic approach to network design. Further, it ensures a greater level of certainty for projects that are ready and needed.
- 2.86 Accordingly, we are minded to conclude that the CNDM meets this proposed licence objective.

Licence objective 6: facilitate a safe and secure electricity supply

- 2.87 As set out in the Gate 2 Methodology Minded-to Decision, the capacity market (CM) is a primary mechanism for ensuring security of supply. Protecting projects with a CM contract in the manner proposed in Criterion A protection clause 2a and 2b as set out in the CNDM facilitates security of supply by ensuring well advanced projects are connected.
- 2.88 The CP2030 Action Plan sets out a pathway towards deploying low carbon flexible capacity technologies alongside interconnectors, nuclear, and gas generation, which can provide more consistent export capacity. Therefore, Gate 2 Methodology Strategic Alignment Criterion B facilitates security of supply as it reflects the alignment with capacity pathways that provide for secure supply. The CNDM contains the process for applying this criterion up to the capacity limits in the CP2030 Action Plan. Security of supply informed NESO's advice to the Government and is inherent in the capacity mix contained in the Government's Action Plan.

- 2.89 Strategic Alignment Criterion C (designation) provides an explicit tool to define and respond to security of supply issues as they emerge. The Project Designation Methodology contains more detail on this criterion and how it supports defined energy system needs. The CNDM contains a process to prioritise projects in the design window once designated.
- 2.90 The specific mechanisms in the CNDM to address undersupply against capacity pathways and to reserve connection points and capacity are further tools to maintain security of supply, which did not exist in the first-come, first-served approach to queue formation.
- 2.91 The approach to studying each project and identifying the enabling and wider reinforcements required to make connections in the CNDM would also be consistent with the Security and Quality of Supply Standard (SQSS). It is only in limited circumstances that there may be a requirement for NESO and network companies to request a derogation from SQSS in order to facilitate a connection. In this way, safety and quality of supply is also embedded in the CNDM processes.
- 2.92 Accordingly, we are minded to conclude that the CNDM meets this proposed licence objective.

Compatibility with the intention of CMP434 and CMP435 and relevant legal text

- 2.93 Subject to their approval, the Methodologies would put in place the connections process as intended by the proposer of CMP434 and CMP435. The Minded-to Decision on the Gate 2 Methodology sets out the intention of these code proposals which is not repeated here.
- 2.94 Our current view is that the CNDM is compatible with the intention of the CUSC code proposals and the relevant legal text. The Minded-to Decision on the Gate 2 Methodology sets out our current view that the need to apply the CNDM to determine whether a customer meets Strategic Alignment Criterion B in the Gate 2 Methodology does not present a conflict with legal text.

Assessment of the CNDM against the Authority's Principal Objective and wider statutory duties

- 2.95 As referenced in section 2, Ofgem's principal objective is to protect the interests of existing and future energy consumers. This includes, but is not limited to, their interests in the achieving net zero by 2050 and the five-year carbon budgets, as well as their interests in the security and supply of electricity to them. In addition,

Ofgem has a new duty to have regard to the desirability of economic growth provided for in the Deregulation Act 2015. A fuller description of Ofgem's statutory duties can be found in 'Consultation: TMO4+ Connections Reform Proposals – Code Modifications, Methodologies & Impact Assessment'.

- 2.96 As to the **interests of consumers**, one important interest is the affordability of energy. An oversized queue misaligned with energy system needs reduces the ability of the NESO and network companies to effectively allocate scarce network capacity and invest in new network infrastructure. Delivery of network build required for an oversized queue would result in additional cost to consumers.
- 2.97 As to the consumer interest in **achieving net zero** and the five-year carbon budgets, the CNDM would execute alignment with the capacities in the CP2030 Action Plan by applying Strategic Alignment Criterion B in the Gate 2 Methodology. As set out in the accompanying Impact Assessment, alignment with the CP2030 Action Plan is expected to reduce dependence on volatile wholesale gas prices, lower energy bills, and lower carbon emissions.
- 2.98 As to the **consumer interest in the security of supply**, as set out above, the CNDM contains the process for applying Strategic Alignment Criterion B up to the capacity limits in the CP2030 Action Plan. Security of supply considerations informed NESO's advice to the Government and is inherent in the capacity mix contained in the Government's Action Plan. There are also specific and appropriate mechanisms in the CNDM to reserve connection points and capacity to better facilitate security of supply and well as an appropriate process to prioritise designated projects, which (as set out in detail in the Project Designation Methodology Minded-to Decision) can include projects specifically meeting requirements to maintain safe and secure supply.
- 2.99 As to **economic growth**, it is important that the UK provides a stable and attractive environment for investment. As set out in more detail in the accompanying Impact Assessment, the status-quo does not provide a sufficiently certain or stable environment, evidenced by the variation of contracts by both networks and customers and a lack of trust that current connection dates can and will be adhered to. This holds back further investment and slows project development. We expect CNDM processes to result in an improved signal for network companies to build what is needed and increased certainty for developers.
- 2.100 Accordingly, we are minded to conclude that approval of the CNDM is in accordance with our principal objective and other statutory duties.

3. Next steps

Approval process

- 3.1 Each of the Methodologies follows an approval process for their development, iteration, and amendment as specified in the new proposed licence conditions.
- 3.2 We expect to make our first approve or reject decision of the CNDM following consultation. Should the decision be to reject the CNDM, we would specify the changes necessary for the Authority to be minded to approve.
- 3.3 Following the first approval and introduction of the CNDM, NESO would be required to review the Methodologies at least annually, and to identify any changes that are necessary to ensure that the objectives are met. Ofgem would also have power to direct NESO to review Methodologies, if it believes that the objectives are not being met.

Expectations for identifying emerging issues and reviewing the CNDM

- 3.4 The introduction of Methodologies provides the opportunity for NESO to have greater control and flexibility; in turn we expect NESO to monitor and act quickly to address emerging issues, as well as continually assessing how each Methodology can be improved in line with connections reform policy objectives, the proposed new licence objectives relating to the Methodologies and other relevant statutory duties/objectives.
- 3.5 While the NESO's consultation received broadly positive responses on the concept and need for the CNDM, some specific concerns, outlined in section 3 above, were raised in responses. Most of these stakeholder concerns have been addressed by NESO in its updated version of the CNDM, but in some instances NESO has maintained its existing position. In respect of these, for the reasons given above, we are inclined to support NESO's rationale.
- 3.6 As set out in the overall themes in the Gate 2 Methodology Minded-to Decision (also relevant to the CNDM), NESO has considered alternative views and maintained its approach to accounting for projects that exit the queue ('attrition'). After receipt of Gate 2 evidence, we expect NESO to consider if, based on new information, there is any reason to review and update Methodologies. In doing so, NESO should consider whether its Methodologies remain likely to result in the connection of expected generation capacities by

2030 as well as faster connections for demand. We also expect to further consider and validate NESO's assumption that no attrition is necessary, including considering the extent to which 2031-35 capacities are likely to receive pre-2031 dates once network company implementation plans are more developed.

- 3.7 Our current view is that the Methodologies contain sensible and necessary flexibilities over and above the more concrete 'protections' described above. However, if and when NESO needs to use discretion as part of addressing the types of imbalances (for example oversupply of solar at transmission and undersupply at distribution cited above and in our Impact Assessment), we expect NESO to share its principles and process to balance relevant trade-offs in time for the Gate 2 to Whole Queue process.
- 3.8 This is in addition to our proposed licence obligation that CNDM is kept under review and that emerging issues are monitored and prompt appropriate change outside of the 12-month update and approval cycle if that is necessary.

Next steps for Ofgem's decision on CNDM

- 3.9 This Minded-to Decision relates to and is subsidiary to 'Consultation: TMO4+ Connections Reform Proposals – Code Modifications, Methodologies & Impact Assessment' which invites responses to questions on connections reform proposals by 14 March 2025, including our conclusions relating to the proposed Methodologies.