

CMP446 Increasing the lower threshold in England and Wales for Evaluation of Transmission Impact Assessment

Workgroup Meeting 3, 03 February 2025

Online Meeting via Teams

WELCOME

Agenda

| Topics to be discussed | Lead |
|--|----------|
| Welcome | Chair |
| Action updates and follow ups from Workgroup 2 | Proposer |
| Workgroup Consultation Update | Chair |
| Any Other Business | All |
| Next Steps | Chair |

Public Expectations of a Workgroup Member

Contribute to the discussion

Be respectful of each other's opinions

Language and Conduct to be consistent with the values of equality and diversity

Do not share commercially sensitive information

Be prepared - Review Papers and Reports ahead of meetings

Complete actions in a timely manner

Keep to agreed scope

Email communications to/cc'ing the .box email

Your Roles

Help refine/develop the solution(s)

Bring forward alternatives as early as possible

Vote on whether or not to proceed with requests for Alternatives

Vote on whether the solution(s) better facilitate the Code Objectives

Workgroup Membership

| Role | Name | Company |
|--------------------------|--------------------|--|
| Proposer | Martin Cahill | NESO |
| Workgroup Member | Brian Hoy | Electricity North West |
| Workgroup Member | Ciaran Fitzgerald | Scottish Power Renewables |
| Workgroup Member | Dan Clarke | National Grid Electricity Transmission (nominated by NESO) |
| Workgroup Member | Drew Johnstone | Northern Powergrid |
| Workgroup Member | Garth Graham | SSE Generation |
| Workgroup Member | Grant Rogers | Qualitas Energy |
| Workgroup Member | Helen Stack | Centrica |
| Workgroup Member | Jack Purchase | National Grid Electricity Distribution |
| Workgroup Member | Joe Colebrook | Innova Renewables |
| Workgroup Member | Kate Teubner | Low Carbon |
| Workgroup Member | Kyran Hanks | WWA (nominated as a CUSC Panel Member) |
| Workgroup Member | Nina Sharma | Drax |
| Workgroup Member | Ross O'Hare | SSEN |
| Workgroup Member | Zivanayi Musanhi | UK Power Networks |
| Authority Representative | Alasdair MacMillan | Ofgem |

What is the Alternative Request?

What is an Alternative Request? The formal starting point for a Workgroup Alternative Modification to be developed which can be raised up until the Workgroup Vote.

What do I need to include in my Alternative Request form? The requirements are the same for a Modification Proposal you need to articulate in writing:

- a description (in reasonable but not excessive detail) of the issue or defect which the proposal seeks to address compared to the current proposed solution(s);
- the reasons why you believe that the proposed alternative request would better facilitate the Applicable Objectives compared with the current proposed solution(s) together with background information;
- where possible, an indication of those parts of the Code which would need amending in order to give effect to (and/or would otherwise be affected by) the proposed alternative request and an indication of the impacts of those amendments or effects; and
- where possible, an indication of the impact of the proposed alternative request on relevant computer systems and processes.

How do Alternative Requests become formal Workgroup Alternative Modifications? The Workgroup will carry out a Vote on Alternatives Requests. If the majority of the Workgroup members or the Workgroup Chair believe the Alternative Request will better facilitate the Applicable Objectives than the current proposed solution(s), the Workgroup will develop it as a Workgroup Alternative Modification.

Who develops the legal text for Workgroup Alternative Modifications? ESO will assist Proposers and Workgroups with the production of draft legal text once a clear solution has been developed to support discussion and understanding of the Workgroup Alternative Modifications.

Timeline for CMP446 on 31 January 2025

| Workgroups | | High Level Objectives |
|--|-------------------------|---|
| CMP446 Workgroup Meeting 1 | 24/01/2025 | Full solution and ToR assessment |
| CMP446 Workgroup Meeting 2 | 30/01/2025 | Any Alternative requests suggestion/ Review of Workgroup Consultation |
| CMP446 Workgroup Meeting 3 | 03/02/2025 | Review of Workgroup Consultation / Contingency |
| CMP446 Workgroup Consultation | 07/02/2025 - 13/02/2025 | |
| CMP446 Workgroup Meeting 4 | 19/02/2025 | Workgroup Consultation feedback and any Alternative votes |
| CMP446 Workgroup Meeting 5 | 24/02/2025 | Finalise legal text and ToR Confirmation, Workgroup Vote |
| CMP446 Workgroup Meeting 6 | 26/02/2025 | ToR confirmation and Workgroup Vote/ Contingency |
| CMP446 Workgroup Report to Panel | 05/03/2025 | |
| CMP446 Panel for ToR sign off | 10/03/2025 | |
| Post Workgroups | | |
| CMP446 Code Administrator Consultation | 10/03/2025 - 17/03/2025 | |
| CMP446 Draft Final Modification Report to Panel | 24/03/2025 | |
| CMP446 Panel Recommendation Vote | 28/03/2025 | |
| CMP446 Final Modification Report to Panel to check Votes | 28/03/2025 | |
| CMP446 Final Modification to Ofgem | 28/03/2025 | |
| CMP446 Decision Date | 29/04/2025 | |
| CMP446 Implementation Date | 02/05/2025 | |

Terms of Reference*

Workgroup Term of Reference

| | |
|----|--|
| a) | Consider EBR implications |
| b) | Consider the scope of work identified and whether this is achievable within the timeframe outlined in the Ofgem Urgency decision letter. |
| c) | Consider the legal and practical implementation of this modification alongside CMP434/CMP435 and any other relevant in flight CUSC modifications. |
| d) | Consider any cross-code impacts. |
| e) | Consider data and any other requirements from DNOs to implement |
| f) | Consider how CMP446 would be compatible with the requirement for the NESO acting in a non-discriminatory manner |
| g) | Consider how CMP446 would be compatible with the requirement for harmonised rules for generator connections in GB. |
| h) | Consider what the MW capacity relates to: for example, export capacity or installed capacity or developer capacity? |
| i) | Consider if the change applies only to new projects (up to 5MW) or also to existing D connected projects that increase their capacity by up to 5MW (4MW to 6MW), and projects that reduce to be below the threshold. |
| j) | Consider potential for interlinked impact of cumulative/aggregated <5MW projects which would otherwise breach the proposed 5MW threshold. |
| k) | Consider the interaction with Technical (Planning) limits and Distribution (DNO) managed Active Network Management (ANM) schemes |

Public Actions

| Action number | Action | Status |
|---------------|--|--------|
| 1 | Develop a table or flowchart to illustrate various scenarios for how generators will be treated under the proposed threshold change. This will provide clarity and will be reviewed by the Workgroup to help to refine the proposed solution. To include different MW sized generators, new vs change to capacity, and demand connections with generation attached | Open |
| 5 | The Proposer took an action to develop the implementation timelines for CMP446 in relation to CMP434 and CMP435 further, considering different decision outcomes | Open |
| 7 | Clarify the definition of MW capacity to be used, as different terms such as installed capacity, export capacity, and developer capacity are used inconsistently | Open |
| 11 | Workgroup members discussed GSPs that have no fault level headroom and therefore would be subject to current processes. A Workgroup member took an action to investigate whether a list of these GSPs could be provided. | Open |
| 12 | A Workgroup member took an action to update the table of different scenarios with columns for existing and requested capacities. This table will include columns for installed and export capacity and whether a TIA would be required for each capacity type per scenario. | Open |
| 13 | The proposer took an action to send an up-to-date pie chart confirming total accepted DER by technology in MW to Workgroup members and to ensure the up-to-date figures are added into the Workgroup consultation. | Open |
| 14 | The Proposer took an action to make it clear that implementation refers to legal text implementation, to add some example timings, and to make it clear that removal of existing REPs only refers to yet to be connected | Open |
| 15 | Confirm the plan for communications for existing projects, whether they do or do not have to do apply for Gate 2. It was noted that this could be the responsibility of DNOs, however this will be confirmed. | Open |
| 16 | The Proposer took an action to update the wording in the proposed legal text to change "it is agreed that" to "it is acknowledged that"... "only an Embedded Small Power Station which is 5MW or above is a Relevant Embedded Power Station requiring the submission of an Evaluation of Transmission Impact to The Company in accordance with Paragraph 5.1(a)" | Open |
| 17 | Following feedback from Workgroup 2, NESO to determine whether the proposal should include a definition of capacity to be used in the legal text and whether this should be based on Registered Capacity, Developer Capacity or anything different. | Open |
| 18 | A Workgroup Member took an action to create a list of scenarios where there could be a cross over between this Modification and Clean Power 2030 to look at in the next Workgroup meeting. | Open |

Action updates and follow ups from Workgroup 2

Martin Cahill / Alex Markham - NESO



Action 1 - Scenarios

| | | Existing | | Requested | | TIA Required? | | |
|--|--|--------------------|-----------------|--------------------|-----------------|----------------------|-----------------------------|---------------|
| | Example Scenario | Installed Capacity | Export Capacity | Installed Capacity | Export Capacity | capacity as criteria | Export capacity as criteria | Outcome check |
| New projects | New DG connection eg 4MW | 0 | 0 | <5MW | <5MW | No | No | same |
| | New DG connection eg 6MW | 0 | 0 | ≥5MW | ≥5MW | Yes | Yes | same |
| | New DG connection with reduced export eg 6MW installed but 3MW export | 0 | 0 | ≥5MW | <5MW | Yes | No | different |
| Changes to existing projects currently under both thresholds | Existing project 2MW to increase to 4MW for both | <5MW | <5MW | <5MW | <5MW | No | No | same |
| | Existing project 2MW to increase to 6MW for both | <5MW | <5MW | ≥5MW | ≥5MW | Yes | Yes | same |
| | Existing project 2MW to increase to 6MW installed but 4MW export | <5MW | <5MW | ≥5MW | <5MW | Yes | No | different |
| Changes to existing projects currently over both thresholds | Existing project of 6MW for both | ≥5MW | ≥5MW | ≥5MW | ≥5MW | Yes | Yes | same |
| Changes to existing projects currently over installed only | Existing project 6MW installed but 2MW export, no new installed but export added | ≥5MW | <5MW | ≥5MW | <5MW | Yes | No | different |
| | Existing project 6MW installed but 2MW export, increasing installed to 8MW | ≥5MW | <5MW | ≥5MW | <5MW | Yes | No | different |
| | Existing project 6MW installed but 2MW export, increasing installed to 8MW and adding export | ≥5MW | <5MW | ≥5MW | ≥5MW | Yes | Yes | same |

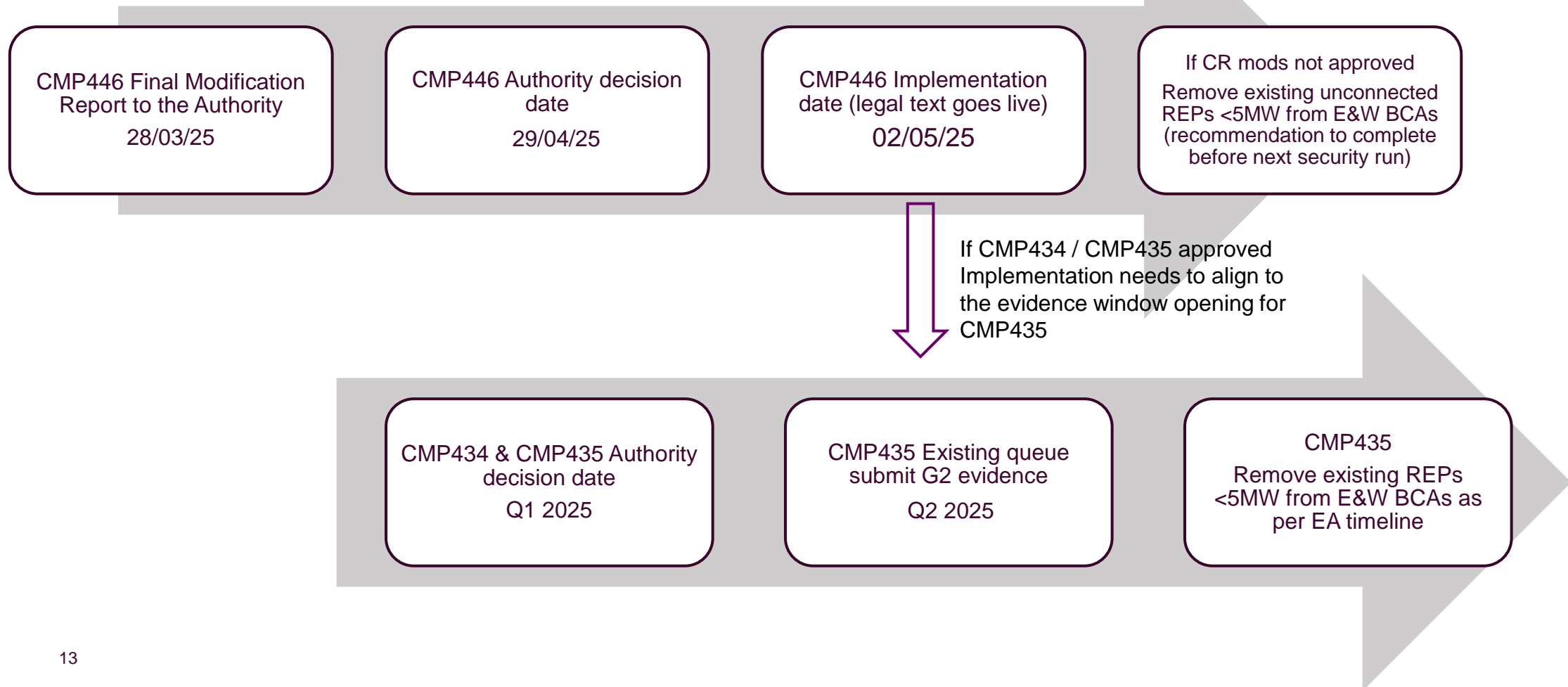
Notes.
Existing projects would cover already connected or changes to contracted not yet connected
These are the options assuming no fault level issues at GSP
These situations would also apply to existing demand connections adding generation

Action 12 – Version 2

| Category | Example Scenarios | | Existing | | New | | TIA Required? | | Outcome check |
|--|-------------------|--|--------------------|-----------------|--------------------|-----------------|--------------------|-----------------|---------------|
| | | | Installed Capacity | Export Capacity | Installed Capacity | Export Capacity | Installed capacity | Export capacity | |
| A new generation connection | 1 | New generation connection with 4MW export capacity | N/A | N/A | 4MW | 4MW | No | No | Same |
| | 2 | New generation connection with 6MW export capacity | N/A | N/A | 6MW | 6MW | Yes | Yes | Same |
| | 3 | New generation connection with 6MW installed capacity but only 3MW export | N/A | N/A | 6MW | 3MW | Yes | No | Different |
| Changes to an existing connection with both export and installed capacities below the 5MW threshold | 4 | Existing connection with 2MW export capacity increasing to 4MW | 2MW | 2MW | 4MW | 4MW | No | No | Same |
| | 5 | Existing connection with 2MW export capacity to increasing to 6MW | 2MW | 2MW | 6MW | 6MW | Yes | Yes | Same |
| | 6 | Existing connection with 2MW export capacity increasing to 6MW installed capacity and 4MW export capacity | 2MW | 2MW | 6MW | 4MW | Yes | No | Different |
| Changes to an existing connection with both export and installed capacities above the 5MW threshold | 7 | Existing connection with 6MW of export increasing to 8MW | 6MW | 6MW | 6MW | 8MW | Yes | Yes | Same |
| Changes to an existing connection with installed capacity only above the 5MW threshold | 8 | Existing connection with 6MW installed capacity but only 2MW export increasing to 4MW export | 6MW | 2MW | 6MW | 4MW | Yes | No | Different |
| | 9 | Existing connection with 6MW installed capacity with 2MW export increasing installed capacity to 8MW and export capacity to 4MW | 6MW | 2MW | 8MW | 4MW | Yes | No | Different |
| | 10 | Existing connection with 6MW installed capacity with 2MW export, increasing installed capacity to 8MW and export capacity to 6MW | 6MW | 2MW | 8MW | 6MW | Yes | Yes | Same |
| Changes to an existing connection wanting to reduce capacity | 11 | Existing connection with 6MW of export capacity reducing to 4MW of export capacity | 6MW | 6MW | 4MW | 4MW | No | No | Same |
| | 12 | Existing connection with 6MW of both export and installed capacity reducing export capacity to 4MW | 6MW | 6MW | 6MW | 4MW | Yes | No | Different |

Action 5/14 – CMP446 timeline

This is the current position but timeline for CMP446 reviewed each workgroup



TM04+ and CMP446 Timing



Following implementation, impacted projects are no longer considered “in scope existing connection contracts” for the purpose of CMP435 Gate 2 criteria. Later a non-material change will be required if CMP435 WACM1 approved, standard legal text applies at implementation. CMP435 will need updated baseline with Appendix G/Schedule 2 exhibit 1A clauses removed.



Because implementation is before CMP435, impacted projects are no longer considered “in scope existing contracts” for Gate 2. If WACM1 is approved then alternative legal text is used for CMP446. CMP435 will need updated baseline with Appendix G/Schedule 2 exhibit 1A clauses removed.



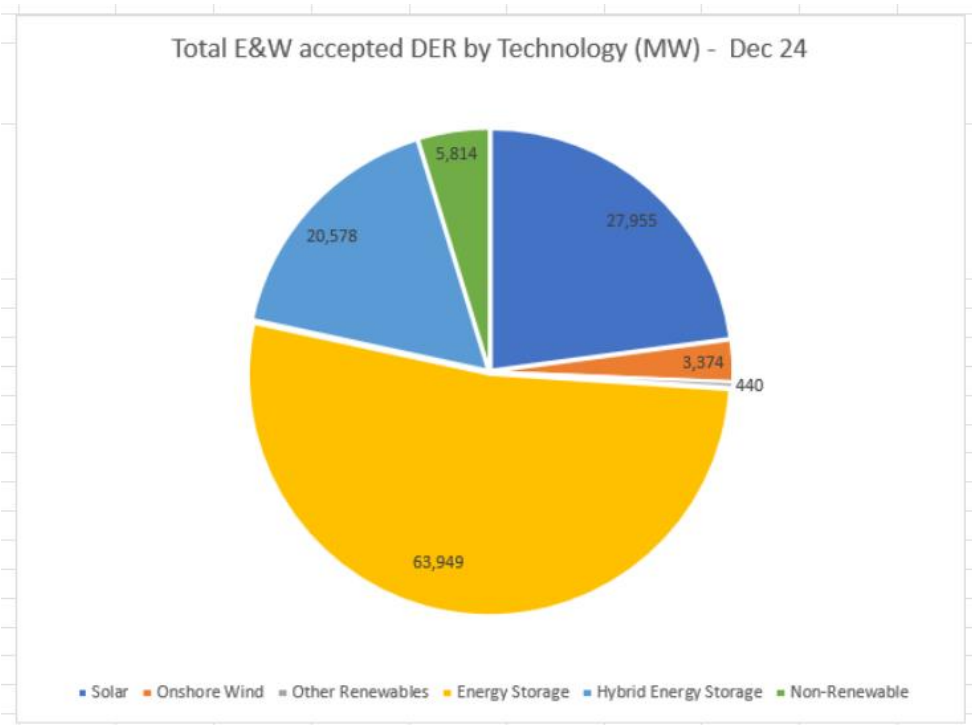
Positive action required which means that impacted project are no longer considered “in scope existing agreements” for the purpose of Gate 2 window. Implementation should still be before window opening, and legal text will be based off CMP435 decision

Action 7/17 Capacity Definition

Following feedback from workgroup we have updated the legal text to include a reference to Registered Capacity as defined in the Distribution Code

(f) In England and Wales, it is acknowledged that (unless notified otherwise by The Company and on basis this should be the exception rather than the norm) only an Embedded Small Power Station which [has a Registered Capacity (as defined in the Distribution Code) of][is] 5MW or above is a Relevant Embedded Power Station requiring the submission of an Evaluation of Transmission Impact to The Company in accordance with Paragraph 5.1(a) above."

Action 13 – clarity on data



| Appendix G Data | All not yet connected DER between 1MW and < 10MW | How many MWs? |
|-----------------|--|---------------|
| NGED | 199 | 850 |
| UKPN | 183 | 745 |
| SPM | 31 | 12 |
| ENWL | 79 | 291.5 |
| NPG | 83 | 303 |
| SSEN | 72 | 330 |
| Total | 572 | 2,531.5 |

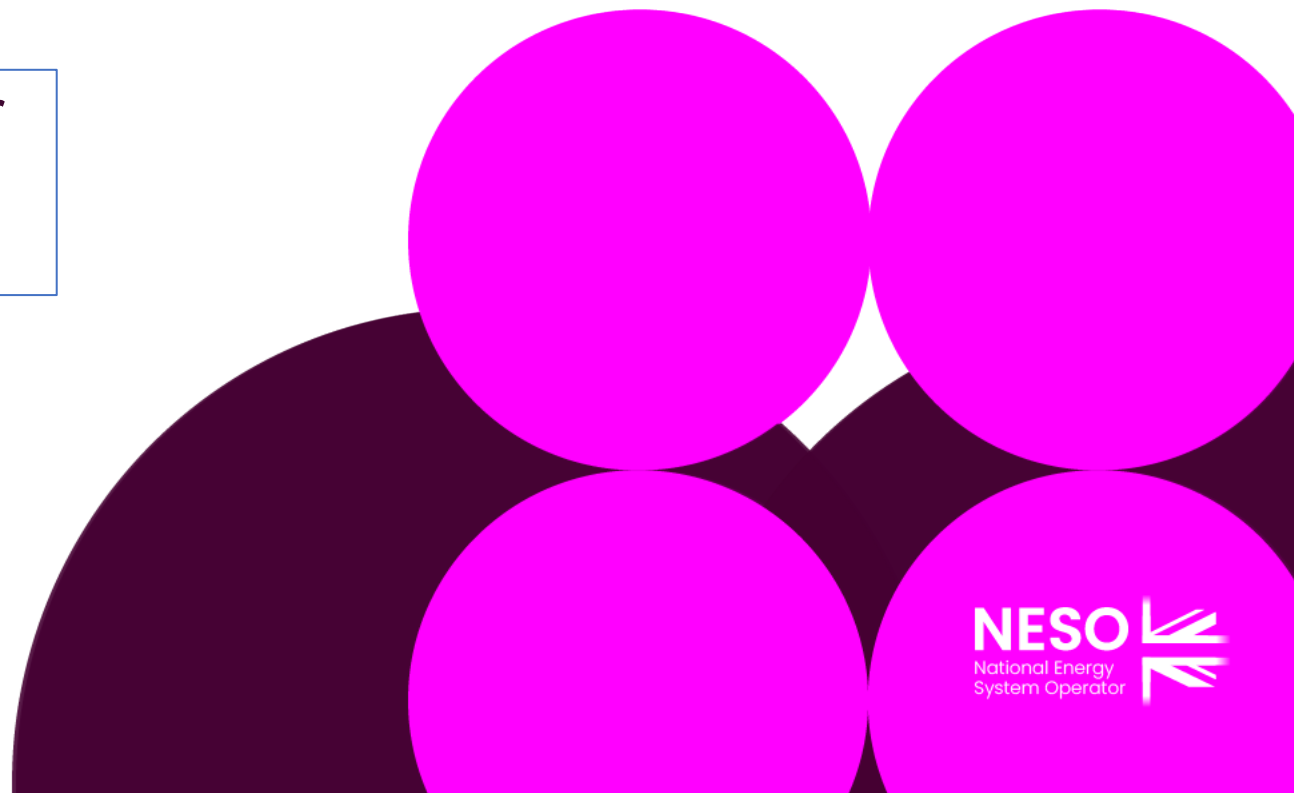
| Table 35b: All not yet connected DER from 1MW > X > 5MW | | |
|---|---|---------------|
| Appendix G Data | All not yet connected DER between 1MW and < 5MW | How many MWs? |
| NGED | 103 | 232.3 |
| UKPN | 114 | 265.7 |
| SPM | 2 | 6 |
| ENWL | 67 | 120 |
| NPG | 67 | 136.4 |
| SSEN | 37 | 92.1 |
| Total | 390 | 852.5 |

- Clarity requested on what this slide was depicting
- Source, section 3.3 of the Position Paper on TIA thresholds
 - It was depicting the total accepted DER by technology split (MW) in E&W as of July 2024.
 - Comparing the pie chart against the above tables (which were omitted from WG1 slides), it was demonstrating that DER projects that are 1 – 9.9MW and 1-4.9MW make up a circa 2.5% and 0.7% share of the overall distribution connections queue.

- The paper presented that <10MW and <5MW customers are more likely to connect at much lower voltages (33kW and below), their overall impact on the transmission system is negligible and an exception could be made to remove them from the TIA process.
- Conclusion of report is that NGET and NESO support the proposal to amend the lower TIA threshold to 5MW at this stage for the TIA process

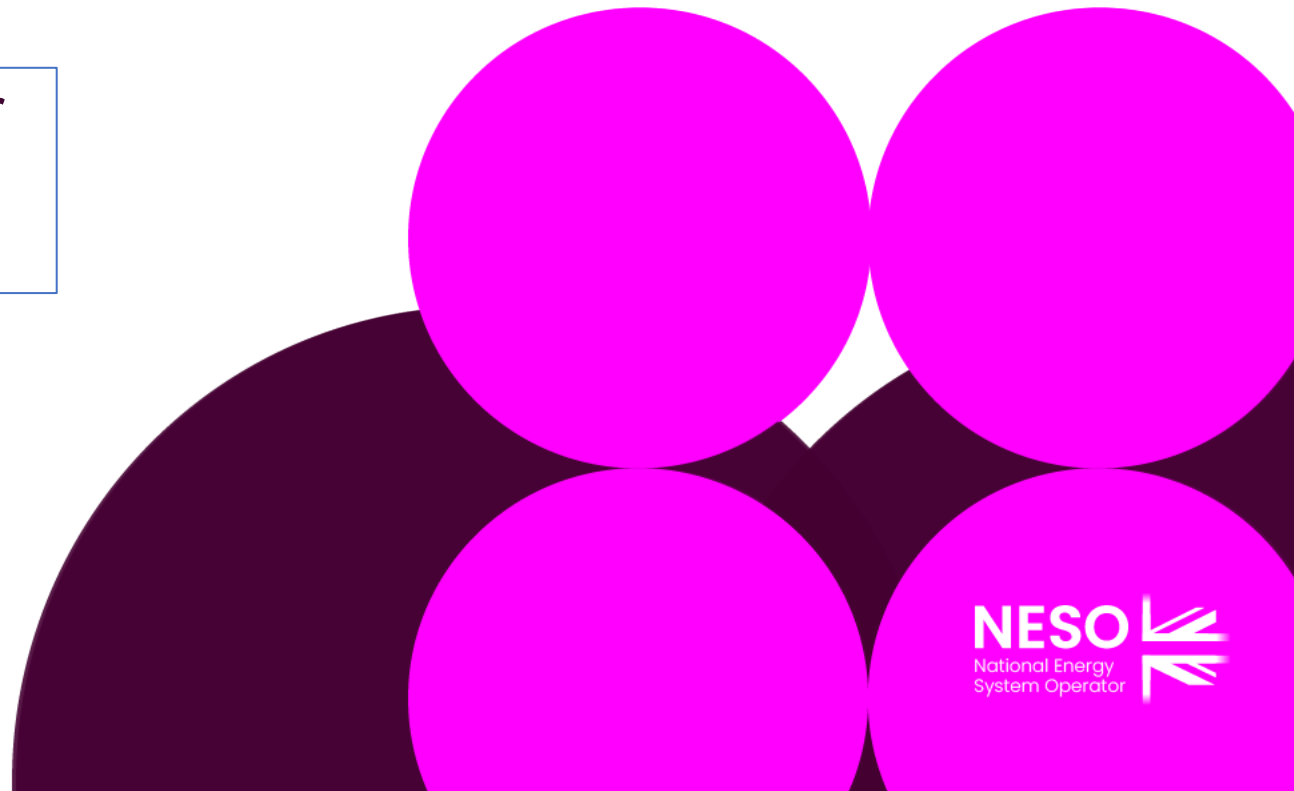
Workgroup Consultation Update

Milly Lewis – NESO Code Administrator



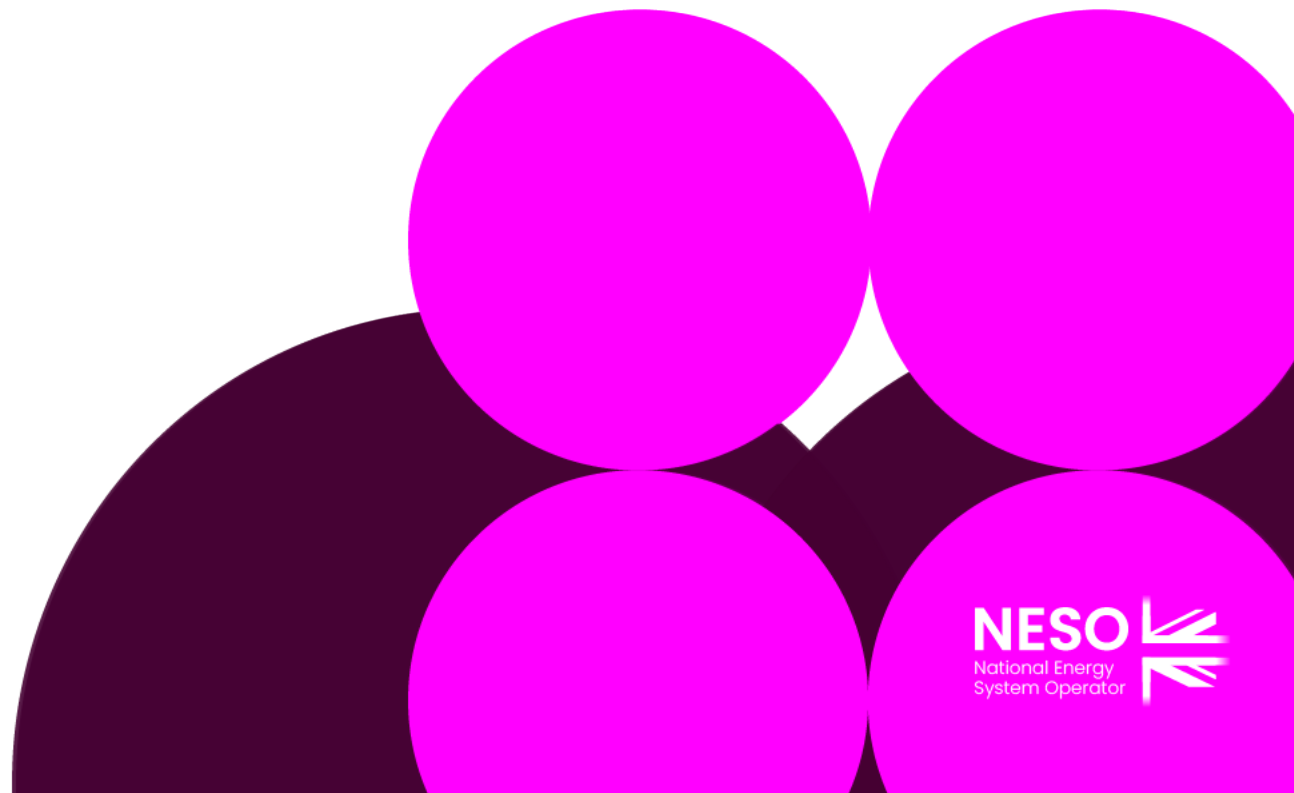
Any Other Business

Milly Lewis – NESO Code Administrator



Next Steps

Milly Lewis – NESO Code Administrator



Timeline for CMP446 on 31 January 2025

| Workgroups | | High Level Objectives |
|--|-------------------------|---|
| CMP446 Workgroup Meeting 1 | 24/01/2025 | Full solution and ToR assessment |
| CMP446 Workgroup Meeting 2 | 30/01/2025 | Any Alternative requests suggestion/ Review of Workgroup Consultation |
| CMP446 Workgroup Meeting 3 | 03/02/2025 | Review of Workgroup Consultation / Contingency |
| CMP446 Workgroup Consultation | 07/02/2025 - 13/02/2025 | |
| CMP446 Workgroup Meeting 4 | 19/02/2025 | Workgroup Consultation feedback and any Alternative votes |
| CMP446 Workgroup Meeting 5 | 24/02/2025 | Finalise legal text and ToR Confirmation, Workgroup Vote |
| CMP446 Workgroup Meeting 6 | 26/02/2025 | ToR confirmation and Workgroup Vote/ Contingency |
| CMP446 Workgroup Report to Panel | 05/03/2025 | |
| CMP446 Panel for ToR sign off | 10/03/2025 | |
| Post Workgroups | | |
| CMP446 Code Administrator Consultation | 10/03/2025 - 17/03/2025 | |
| CMP446 Draft Final Modification Report to Panel | 24/03/2025 | |
| CMP446 Panel Recommendation Vote | 28/03/2025 | |
| CMP446 Final Modification Report to Panel to check Votes | 28/03/2025 | |
| CMP446 Final Modification to Ofgem | 28/03/2025 | |
| CMP446 Decision Date | 29/04/2025 | |
| CMP446 Implementation Date | 02/05/2025 | |