



Consultation Response

**TMO4+ Package of
Reforms**

March 2025

About us

Since 1978, Solar Energy UK has worked to promote the benefits of solar energy and to make its adoption easy and profitable for domestic and commercial users. A not-for-profit association, we are funded entirely by our membership, which includes installers, manufacturers, distributors, large-scale developers, investors, and law firms.

Our mission is to empower the UK solar transformation. We are catalysing our members to pave the way for 70GW of solar energy capacity by 2035. We represent solar heat, solar power and energy storage, with a proven track record of securing breakthroughs for all three.

Respondent details

- ♦ **Respondent Name:** Kara Davies
 - ♦ **Email Address:** kdavies@solarenergyuk.org
 - ♦ **Contact Address:** The Conduit, 6 Langley Street, London, WC2H 9JA
 - ♦ **Organisation Name:** Solar Energy UK
 - ♦ **Would you like this response to remain confidential:** No
 - ♦ **Submission date:** 14/03/2025
-

Introduction

We support the overall aims of TMO4+ but strongly oppose rigid capacity caps and inflexible planning, which risk undermining solar and storage development. Current proposals contradict Ofgem's objectives of accelerating clean energy deployment and maintaining investor confidence. Feedback from our members highlights growing concerns that these reforms are making the market more disorderly and damaging investment certainty.

NESO's plan to impose a strict 2035 solar capacity limit by May 2025 and to rescind pre-2031 connection agreements require urgent intervention by Ofgem. Without greater flexibility, investor confidence will continue to erode, leading to a near-term investment hiatus and longer-term project delays. NESO's approach does not sufficiently account for construction lead times, project attrition, and market dynamics.

We call on Ofgem to mandate ongoing reassessment of capacity figures, ensure Gate 2 connection offers account for attrition rates by ensuring that Gate 2 connection offers are granted to a broader pool of projects, and introduce structured reviews every six months to track the progress of projects with connections granted for 2030 and 2035. Transparency in NESO's zonal capacity adjustments is also essential to provide investors with forward visibility. Additionally, the implementation of the End-to-End Connections Review and Solar Taskforce recommendations alongside TMO4+ is critical to ensuring a stable and adaptable transition to clean energy.

Ofgem must act now to restore investor confidence and ensure that grid connection reforms support, rather than hinder, the UK's decarbonisation objectives.

Consultation Questions

Package of Reforms

1. Do you consider that the TMO4+ reforms as a whole advance the objectives that we identify? Do you support the TMO4+ package of reforms as a whole? *Please feel free to cross-refer to answers provided in response to questions on individual elements of the reforms, as set out below.*

We support the overall aims of the TMO4+ but strongly oppose rigid capacity caps and inflexible planning that, if implemented as currently proposed, could undermine solar and storage development.

We note that Ofgem's objectives include rapid progress towards Clean Energy and the maintenance of investor confidence. It is clear from the feedback we have received from member that current plans would work against those objectives and therefore need to be improved.

Implicit in the consultation documents is a desire to have an orderly market for new generation and storage projects while keeping the dynamism of a competitive market. The reform proposals, and their implementation to date, have made it a more disorderly market and have badly damaged investor confidence in UK energy. That will become worse if changes are not made – risking the timely achievement of clean power objectives.

NESO's plan to impose hard 2035 solar capacity limits by May 2025 and to rescind connection agreements for many viable pre-2031 connections represent a critical juncture where Ofgem must intervene.

Without action to improve investor confidence in the process, the solar industry faces a looming investment hiatus during the next two to three years and post-2030, rendering connection offers for 2026-2028 and 2031-2033 ineffective. In developing this flawed approach to rigid capacity caps, NESO has fails to consider lead times for construction, project attrition, the competitive dynamics of CfD auctions, and potential delays or cost overruns in other energy technologies. Ofgem must ensure NESO incorporates greater flexibility into its planning to prevent unnecessary constraints on solar and storage deployment.

We have received clear feedback from our members that investor confidence has been severely damaged by the NESO proposals, and needed investments will be delayed unless greater clarity is provided.

We suggest it would be preferable to take a little more time to finalise the proposals if that allows more projects to progress as reforms are implemented over the next 12-24 months.

A necessary reform is the continuous reassessment of Clean Power (CP) capacity figures. The industry was denied the opportunity to comment on the 2035 capacity caps, as NESO failed to include them in its initial advice. While the Strategic Spatial Energy Plan (SSEP) is expected to replace these figures, its publication is delayed until Q4 2026—leaving a dangerous gap in clarity that has already hindered investment and project development. To address this, Ofgem must implement a structured, ongoing review process that incorporates industry feedback and allows for necessary adjustments to capacity figures.

Additionally, to account for project attrition and development risk, Ofgem must ensure that Gate 2 connection offers are granted to a broader pool of projects than the strict minimum needed for 2030 and 2035 targets. Attrition rates should be applied dynamically based on a project's development stage—factoring in whether they have secured CfD or CM contracts, obtained planning approval, or reached other key milestones. This would ensure that enough projects progress to meet clean power capacity targets reliably.

It is welcome that NESO has said adjustments will be made to zonal capacities. However, if this becomes a black box exercise, it will not provide the forward visibility required for continued investment to take place. We call below for additional protections and guidelines to give greater transparency.

Regular reviews—ideally every six months—must be conducted to track the progress of projects with connections granted for 2030 and 2035. This would allow course corrections where necessary, whether by accelerating projects originally slated for 2031–2035 or through the regular Gate 2 process. Without these reviews, projects assigned later connection dates (e.g., 2034) would have no incentive to continue development, stalling pre-planning and planning expenditures. By instituting structured and frequent reassessments, Ofgem can prevent shortfalls from emerging too late to be corrected. Early identification of gaps would enable replacement projects to secure accelerated connections and begin lengthy procurement processes (which often take 2–4 years).

Finally, it is critical that Ofgem progresses with the recommendations from the End-to-End Connections Review and the Solar Taskforce alongside the TMO4+ reforms. These measures are essential to ensuring a robust, adaptable, and investment-friendly clean energy transition. Ofgem must take urgent steps to provide the industry with the flexibility and certainty it needs to meet long-term decarbonisation goals effectively.

Minded-to Decisions – Code Modifications

CMP434

2. Do you agree with our minded-to position to approve WACM7 of CMP434? Please provide the reasons for your answer.

Support is contingent on clear, high-quality data that is easily interpretable and delivered in a timely manner. It must also align with broader reform timescales to ensure effective integration and decision-making.

3. Do you expect the Pause for market self-regulation and information published in the Gate 2 Register would lead to a different approach taken by projects?

No comment

4. Do you have any further remarks, comments or concerns with our minded-to position that you would like us to take into account?

Our initial concerns regarding project designation remain. The potential for arbitrary government interventions under the Designation process is deeply concerning, as it could unfairly disadvantage legitimate developers. The proposal's alignment with DNO processes requires reassessment, as the current approach appears contradictory and inefficient.

While NESO asserts that project designation is intended as a "last resort," the proposal does not clearly reflect this intention. The stated criteria for prioritisation lack precise definitions, creating uncertainty. For example, prioritising "new technologies" is overly broad, raising concerns among developers already in the queue. A well-progressed, viable project nearing Gate 2 could be displaced by an undefined "new" technology—without clear criteria, the risk of subjective decision-making is high. It would be counterproductive and costly to prioritise unproven technologies over established, low-cost and reliable options like solar.

Similarly, the prioritisation of "projects with long lead times that may be needed" is too vague, further undermining confidence in a fair and transparent process. Without clearer guidelines, well-developed and viable projects risk being deprioritised in favour of less-defined alternatives.

We also urge Ofgem to require NESO to clarify how freed-up capacity will be reallocated. There is a significant concern that Designated Projects could secure

capacity before it is made available to the wider queue or allocation process, creating an unfair advantage. Ensuring transparency in this process is critical to maintaining industry confidence and investment certainty.

CMP 435

5. Do you agree with our minded-to position to approve WACM1 of CMP435? Please provide the reasons for your answer.

Please see response to question 2

6. Do you expect the Pause for market self-regulation and information published in the EA Register would lead to a different approach taken by projects? Please provide the reasons for your answer.

No comment

7. Do you have any further remarks, comments or concerns with our minded-to position that you would like us to take into account? Please provide the reasons for your answer.

Ensuring that viable, advanced projects are not obstructed by these reforms is critical to achieving Clean Power 2030 targets.

We firmly believe that any sufficiently advanced project should be exempt from Gate 2 requirements. NESO must expand its list of protected solar projects to include those with a connection date up to 2030 and that can clearly evidence progression towards meeting their connection date. Protections should not be limited to those projects that have submitted or achieved planning by the Gate 2 to Whole Queue date; projects that have submitted planning applications, and those with a clear route to market, such as a PPA. Similar protections but with a nearer-term cutoff date should apply to storage projects.

Regulatory changes must not hinder the delivery of projects that have already demonstrated a firm commitment to construction. Instead, connection reforms should prioritise accelerating later-stage projects, particularly in the solar sector, to meet growing demand.

A major concern is the potential for significant delays as DNOs work through reordering their queues before issuing new connection offers. This could further push back progress toward Clean Power 2030 targets, further reducing investor confidence and trust in this process.

We propose that projects which achieve 'ready to build' status during the months after the close of the Gate 2 to Whole Queue window should retain their current connection dates to enable them to continue to progress.

If that is not done, unintended consequences will include significant delays to connections over the 2026–2028 period. Further consequences could include CfD-backed projects with a 2027 connection dates failing to meet government contracted deadlines due to unnecessary delays, or that projects do not enter the CfD auctions to avoid potential non-compliance issues.

Additionally, as previously mentioned, there are serious concerns regarding the current allocation between transmission and distribution capacity. Many industry members fear these allocations are not aligned with actual project readiness. We strongly urge Ofgem to remain flexible and to continuously monitor how these allocations are being utilised—not just between transmission and distribution, but also on a regional level—to ensure the most efficient deployment of clean energy capacity.

CM095

8. Do you agree with our minded-to position to approve the Original Proposal? Please provide the reasons for your answer.

No comment

9. Do you have any further remarks, comments or concerns with our minded-to position? Please provide the reasons for your answer.

No comment

Minded-to Decisions – Connections Methodologies

10. Do you have any further remarks, comments or concerns with our minded-to position?

Please consider in your response our assessment against the proposed objectives for each Methodology as consulted on as part of the licence changes.

If you do not agree, please share your views on (a) the objectives you think the Methodology does not meet and (b) the changes you think are needed to better

facilitate the proposed objectives.

Our concerns around the T/D interface remain one of the most critical areas of concern. Whilst we appreciate that this is currently under review by the networks, we need clarity as soon as possible, given NESO's reliance on a significant portion of capacity being delivered by the DNOs. Addressing the T/D is also a core ask of the Solar Taskforce . The DNO and TO boundary issue has not been adequately addressed. NESO seems to assume that once capacity is allocated to the DNOs, they will manage the progression of sites. This oversimplifies a complex situation. There are significant concerns about the DNO/TO interface, which remains unclear. Clear guidance on DNO/TO boundaries is essential, as it is also unclear how capacity will be allocated between transmission and distribution customers. We also advocate for flexibility between these allocations and continuously monitoring to ensure that both networks are delivering to their full potential to deliver to the CP30 targets.

As previously stated NESO's pathways predict that 75% of solar projects will connect at the distribution level. To achieve net-zero, we need a DNO process that facilitates efficient and timely connections while avoiding punitive measures. The existing process is plagued by inefficiencies. After a DNO application is submitted, it can take months for NESO to assess its technical competence. This delay often allows transmission projects to secure connections ahead of distribution projects, even when the latter have been in the queue longer. Furthermore, stalled DNO sites with little chance of progressing can block more viable projects within the same network from advancing to Gate 2.

To address this, the new process must ensure that both DNO and transmission projects receive connection offers simultaneously, with NESO providing clarity on the cost of any reinforcement needed for connection in a given location. However, our understanding is that DNOs, ENA, and NESO are not planning to consult on their proposed implementation and instead intend to simply communicate the outcome. Given the complexity of the issues, we believe a short consultation period (as little as two weeks) is essential. Additionally, developers are currently excluded from the NESO/ENA/DNO "Implementation Hubs," where these critical decisions are being made. It is crucial that NESO and/or ENA consult with DNO networks and allow developer input to ensure a fair and transparent process. Moreover, there is a risk that stalled DNO sites, unlikely to progress, will remain ahead of viable projects within the same network that could commit to Gate 2. As a result, these viable projects may receive accelerated transmission dates but remain stuck behind earlier, stagnant DNO connections. We are particularly concerned about the reference in the CNDM to

the "date project progression was countersigned by NESO," as this process can often take considerable time. This disjointed process undermines the reforms and the goal of maximising deliverability.

Impact Assessment

11. Do you agree that we have, to a reasonable extent, identified and understood the potential impacts of TMO4+, including in particular the impacts on size and makeup of the queue and network build and connection dates? Please provide the reasons for your answer.

NESO argues that raising the caps to account for attrition would trigger additional network reinforcements. However, a core element of ESO's 5-point plan was to apply attrition assumptions when modelling the network, allowing more projects to enter the queue without triggering reinforcement. We support this approach, including for Gate 2 projects, as it would be a pragmatic step to enable an uplift for attrition without causing unnecessary reinforcements. NESO has yet to explain why this approach has been excluded from the CNDM. In the absence of a clear rationale, we believe Ofgem should push NESO to incorporate attrition assumptions in the final CNDM.

12. Do you agree that we have, to a reasonable extent, captured and understood the potential impacts of TMO4+ on different user types, including generation, storage and demand customers across transmission and distribution, as well as consumers, NESO and network companies? Please provide the reasons for your answer.

There are several critical areas of concern that need to be addressed. These should be clearly communicated to NESO and DNOs, with a focus on the key aspects they need to monitor and evaluate. Regarding the DNO timeline, it remains unclear whether they will be able to meet their delivery commitments.

Transmission and distribution allocations must be moderated by giving greater protections to existing projects, then assessed and monitored with flexibility to ensure they can adapt to changing needs.

There is a significant disparity between the distribution and transmission targets, as well as in how their respective queues are managed. NESO operates under the assumption that when a project falls away, another will take its place but, as project pipelines are already being put on ice, it is clear that investors require the assurance of a clear and predictable process. As referenced above the allocation caps should

be raised now to account for attrition, as this approach provides inherent flexibility. Attempting to add projects later would be ineffective, as the pipeline of replacement projects will have already slowed or ceased.

Additionally, the process of reallocation seems to be a black box, lacking transparency, which raises concerns among developers and stakeholders.

There also appears to be a lack of clarity regarding the rationale behind the exclusion of transmission-connected solar projects. It is crucial for NESO to be transparent about the reasons for this stance.

Regional capacities, while outlined, hold little meaning due to their potential for change, which adds uncertainty to planning and investment decisions.

By providing certainty for projects that become ready to connect over the next few months, breathing space can be secured for the DNOs to work carefully through their prioritisation for the years ahead and get their house in order.

13. If you are a developer who has one or more connection agreements that may be affected by TMO4+, do you have feedback on how your contract may be affected and what impact this would have on your business?

Please provide as much detail as possible (including confidentially if desired), including as to the likelihood of being affected (positively or adversely); the reasons for this (e.g. opportunities for acceleration, failure to meet Gate 2 Criteria); and the extent of any likely or potential financial or other impact.

It's important to highlight the impact on well-developed projects, particularly at the transmission level. For example, the total capacity of announced transmission-connected solar projects, around 25 GW, already exceeds the 2035 cap of 17 GW. These publicly available projects are well-advanced and could be delivered by around 2030. As a result, the proposed reforms risk jeopardising many gigawatts of viable solar projects that are ready to contribute to the energy transition.

14. Do you agree that we have, to a reasonable extent, identified and understood all the potential costs of implementing TMO4+? Please provide the reasons for your answer.

The following costs have not been considered:

- Increasing CfD and CM prices due to reduced competition.

-
- Discouraging the development of projects that will eventually be needed, which would further undermine competition and slow future deployment rates.

15. Have we, as accurately as possible, identified and understood all the potential benefits of implementing TMO4+? Please provide the reasons for your answer.

No comment

16. Are there any unintended consequences of TMO4+ that we have not identified? Please provide the reasons for your answer.

- Potential unintended consequences include:
 - Limiting the future flexibility of the Secretary of State (SoS):
 - The SoS may be forced to approve poor-quality projects to meet targets, undermining public confidence in the power sector.
 - The SoS may have to award CfDs to the more expensive projects, due to a lack of CfD entrants, driving up energy bills, or risk missing targets.
 - If certain technologies, such as floating offshore wind, prove more costly than expected, the lack of headroom to substitute with other technologies will leave the SoS with no option but to grant expensive CfD contracts, again raising bills or failing to meet targets.
 - Implications for the planning system:
 - It is unclear whether a DCO examination could proceed if a project under examination loses its grid offer.
 - Underestimating solar's potential:
 - As noted in paragraph 12 on page 5, the target of 70 GW by 2035 is equivalent (on a per capita basis) to the Netherlands' current installed capacity of 1.5 GW per million people.
 - Solar capacity is consistently underestimated, as shown by the well-known IEA charts.
-