



## About us

Solar Energy UK represents more than 350 members in the UK solar and energy storage industry, including solar installers, manufacturers, distributors, developers, investors, technical, legal and professional advisors. Our goal is to enable the deployment of 40GW of solar energy capacity by 2030.

## Respondent details

Respondent Name: Kara Davies

Email Address: [kdavies@solarenergyuk.org](mailto: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

## Solar Energy UK responses

### Introduction

We welcome the opportunity to respond to the ESO's consultation on future reform to the connections process. The current connections process is proving to be an overwhelming issue for the solar industry and is hindering our ability to deliver clean and affordable energy to consumers and businesses.

The grid challenge is also impeding the Government's own ambition of delivering 70GW of solar by 2030, and the UK's ability to meet its Net Zero targets. It should be stated that, whilst connections management and energy market reform are important, they are unlikely to stimulate the significant upgrades to the grid that are required to allow generators to meet the net zero targets. In our response we have, highlighted the key challenges that arise from the ESO connection reform proposals and potential solutions. As always, Solar Energy UK would like to state its willingness to follow up with the ESO directly.

### 3. Foundational Design Options

***1. Do you generally agree with our overall initial positions on each of the foundational design options and key variations? Are there any foundational design options or key variations that we should have also considered?***

For the UK Government to reach its net zero target it is vital that the reformed connection process encourages and does not hinder the development of solar projects. It's imperative that any reform avoids change to developer risk. The incoming reforms must not lead to increases in project costs.

Whilst Solar Energy UK is supportive of implementing a more rigorous management of the connection process, our concern with the gated process is that it will leave long periods of 'limbo' in between gates and add additional layers of complexity for developers. As currently drafted, the proposals allow for dynamic queue management only when all developers within a connection window batch keep their long stop date for connection. We are concerned that this inflexible approach to the queue could lead to unnecessary delays and non-cost-reflective connection charges. The process should not penalise large projects where reasons

for delays may be reasonable and legitimate. In the same vein, there are existing circumstances where shovel-ready projects may be ready to initiate sooner than others ahead of them in the queue. However, they may find themselves delayed or paying for network upgrades because of projects approved ahead of them that are not shovel-ready.

In terms of what is missing from the design options, as it stands there is no mention of a plan to set out what needs to be built, where and when. Strategic planning and increased coordination are needed if we are to reach our climate targets. One area that would benefit from further clarity is how each of the options integrates with distribution applications and the SoW/PP process. Whilst we would oppose increased central planning of grid networks in terms of bringing forward new projects, it should be recognised that this can't be entirely avoided and the government is already heavily involved in this area – e.g. backing certain technologies such as Offshore wind and nuclear (large and small) which has, and will continue to have, a significant impact on the shape of future networks and available capacity.

Critically, the design options themselves fail to address the existing queue issues, TM01 to TM04 show an updated process that would, in theory, avoid this issue in future but it doesn't address the existing backlog. If the CMP376 CUSC Mod isn't approved all of these approaches are somewhat moot as the queue will exist as it is currently, and any reform will be of little use. The ESO must fully consider the existing CMP Mod in all of these flexible design options.

***2. Do you agree with our initial view that the current issues with the connections process could potentially be addressed on an enduring basis through other, less radical, and lower risk means than the introduction of capacity auctions?***

We strongly agree. As previously stated, it's imperative that any reform avoids any change to developer risk, our ability to reach net zero is dependent on keeping project costs down. For example, auctions for grid capacity are an example of a change to the connections process that could potentially lead to higher costs thereby potentially affecting progress to net zero.

***3. Do you agree with our initial view that the reformed connections process should facilitate and enable efficient connection under either a market-based (i.e. locational signals) or 'centralised' deployment approach (or an approach somewhere between the two), but not mandate which approach to follow?***

We don't believe the reformed connections process as outlined will inevitably facilitate and enable efficient connections. No process in itself is going to deliver the net zero transition at the pace required. It needs firm leadership from government and clear and speedy regulatory interventions to correct any market failures. It also has to be managed effectively and be adaptable and flexible enough to react to changes in the market, either market-based or technologically driven.

**4. Pre-Application Stage**

**4. Do you agree with our initial recommendation that TMA A to TMA C should all be progressed, irrespective of the preferred TMO?**

Yes, we agree. A competent pre-application phase is essential to effectively manage the connections queue. However, it is important that pre application window overlaps with the primary application so that we avoid a scenario where a scheme is ready to apply, but cannot due to a lack of pre-application. The incoming reform must reduce any unnecessary delays and ultimately speed up the connections process.

**5. Do you agree with our initial recommendation on the introduction of a nominal Pre-Application Stage fee, discounted from the application fee for customers which go on to submit an application within a reasonable time period?**

We are not opposed to the imposition of reasonable fees for the pre-application meeting, but these must be proportionate and tied to the service level commitments and data access. We agree that some form of reasonable barrier to entry like this is a must to ensure that ESO and NGET time is utilised by those looking to develop. However, the ESO should provide assurances that the pre-application fee, if taken to application, would be discounted from the application fee.

**6. Do you agree with the importance of the TMA A ‘Key Data’? Please provide suggestions for any other key data that you suggest we consider publishing at Pre-Application Stage**

We agree with the importance of the TMA A Key Data. We would like to see more publicly available information on the projects already in the various queues, including capacity secured and technology type.

**5. Key Target Model Add-ons**

**7. Do you agree with our initial recommendation with regard to TMA D (requirements to apply)?**

We agree with the recommendation to apply TMAs D1-D4, which require a Letter of Authority as an early-stage land agreement and a corresponding check for duplicates.

**8. Do you agree with our initial recommendation with regard to TMA E (determination of enabling works), including that it is right to wait until the impact of the 5-Point Plan is known before forming a view on whether further changes to TMA E are required?**

We agree with this recommendation.

**9. Do you agree with our initial recommendation with regard to TMA F (criteria for accelerating ‘priority’ projects)? and 10. Do you agree with our initial recommendation with regard to TMA G (queue management)?**

No comment.

**6. Target Model Options**

**11. Do you agree these four TMOs present a reasonable range of options to consider for a reformed connections process?**

We agree that the four TMOs represent a reasonable range of options for consideration.

**12. Do you think any of the four TMOs could be materially improved e.g. by adding, removing or changing a specific aspect of the TMO? If so, what and why?**

No comment.

**13. Are there any important TMOs we have missed?**

No comment.

**14. Do you think ‘Submit Consent’ is too early for Gate 2 in TMO2 to TMO4? If so, what milestone should be used instead and why?**

We don't agree with planning submission being a Gate 2 requirement. Without a firm offer, there is too much risk in submitting a planning application for a major project. The timescales outlined in the consultation are also particularly concerning. From our understanding the timescale seems to be within the timescale of an Offer (circa 90 days). If so, this is almost impossible to achieve for Developers in the current development process. Without a viable grid connection, the planning application could be incorrect in terms of design, substation location etc. To put an application together of this detail in that timescale is just not viable.

We would suggest submission of a screening opinion for an LPA project could be an alternative requirement to submission of a full planning application at Gate 2, as this is the point at which the project becomes public.

Alternatively, the ESO should re-think its position on including a gate for planning approval within a TMO, and change Gate 2 to 'planning approval', rather than 'planning submission'. This is because simply having a land option and a planning application will not be sufficient to judge which projects can progress ahead in the queue. A large majority of projects will easily meet both criteria. While the additional gate may mean that certain projects will be delayed initially, the delay would indicate clearly to Government that the problem lies with the planning system and not with the grid connection process. This would further encourage Government to assess and accelerate planning decisions. The additional planning approval gate would also negate the need for restrictive application windows.

Lastly, we suggest, rather than referring to 'Planning Consent Submitted' or 'Submit Consent', we recommend changing this to 'Submit Application for Planning Consent' or 'Submit Planning Application' – as the consent itself will only be granted as the outcome of the application process.

## **7. Recommended TMO**

### **15. Do you agree that TMO4 should be the preferred TMO?**

We don't think there is enough clarity on the process to support this TMO over the other TMOs at this stage. In particular, it is not clear how capacity will be allocated to developers during the application window, either in terms of technology or scale.

It is also not clear how this would impact projects in the distribution queue. If the process is in anyway similar to the current batched SoW/PP process for distribution projects, we would not support it. This has led to an opaque and seemingly arbitrary process for allocating capacity and one which has no clear opportunity for challenge and negotiation.

### **16. Do you agree with our design criteria assessment of the four TMOs? If not, what would you change any why?**

The design criteria miss a significant consideration which is that of the effect on the stakeholder side of connections. While investment certainty in parallel adds more certainty to the Connection Offer there should ideally be consideration as to how viable these proposals are to the existing and future development possess.

In addition, we would like to see more emphasis on how the chosen TMO synchronises with the allocation of distribution capacity.

### **17. What are your views on the stated benefits and key challenges in relation to TMO4?**

In its current state TMO4 will not solve the issue that this consultation is seeking to address, it does little to ease the current constraints. Rather, it will simply group grid applications into categories without enabling projects that are most advanced to progress first.

We agree that there is a need for better 'whole network' analysis and planning and that this may be one of the advantages of TMO4. We are concerned, however, at how the decisions will be made to allocate capacity and how transparent these will be. For example, if the government continues to promote modular nuclear reactors, how will their merits be compared to co-located solar and BESS projects and capacity therefore allocated? Clearly solar and BESS can move forward more quickly but will this be the key determinant? Additionally, we believe that it is problematic to only have one window per year.

Another concern as noted above is how this new connection process would integrate with the current distribution connection process.

**18. Do you think that there is a better TMO than TMO4? Whether that be TMO1 to TMO3, as presented, a materially different option, or a refined version of one of the four TMOs we have presented?**

It is difficult to make a definitive choice until some of the uncertainties noted above are clarified.

**8. Key Customer and Technology Type Adjustments**

**19. Do you agree with our views on DNO Demand in respect of the TMOs**

We don't have a clear view on this but support much improved communications and relationships between DNOs and ESO. This is currently too adversarial and not conducive to joint problem solving.

**20. Do you have any views on the appropriate mechanism to incentivise accurate forecasting of requirements and avoid more RDC than is necessary being requested by DNOs?**

No comment.

**21. Do you agree with our views on the process under which DNOs apply to the ESO on behalf of relevant small and medium EG that impact on or use the transmission system, including that (under TMO4): i) DNOs should be able to request RDC via application windows to allow them to continue to make offers to EG interwindow; and ii) resulting offers should be for firm access until relevant EG has reached Gate 2 (at which point they can request advancement and an earlier non-firm connection date)?**

We support the ability of DNOs to request RDC throughout the year as and when applications are submitted at distribution level. These are smaller projects (including small rooftop projects) and shouldn't be subjected to the same delays for connection.

**22. Do you agree that directly connected demand should be included within TMO4 and that the benefits and challenges are broadly similar as for directly connected generation?**

We agree with this premise.

**23. Do you agree that TMO1 to TMO3 would require a separate offshore process, and that this would result in material disbenefits?**

We want to ensure that, in whatever process is taken forward, solar and other renewable technologies are not de-prioritised against offshore wind. Both offshore wind and solar have targets of 50GW installed capacity by 2030. With solar having a further target of 70GW by 2035, and it is essential that all this capacity is connected by this date.

**24. Do you agree that TMO4 is the most aligned to the direction of travel for offshore projects? If not, why?**

No comment.

**25. Other than the Letter of Authority differences are there any other TMAs which have specific offshore considerations?**

No comment.

**26. Do you agree with our views on network competition in the context of connections reform, including that TMO4 is the option which is most aligned with network competition as it includes the most design time at an early stage in the end-to-end process?**

No comment.

**9. Supplementary Target Model Add-ons**

**27. Do you agree with our initial recommendation related to each of the TMAs within this chapter? If so, why? If not, what would you change and why?**

No comment.

**10. Detailed Design, Implementation and Transitional Arrangements**

**28. Do you agree with our current views in respect of the implementation period?**

The implementation timelines are of grave concern. As it stands, the transmission connection queue is currently over 300GW, the incoming queue management strategies (*CMP376 CUSC Modification awaiting Ofgem decision*) will be central to minimising the current queue and laying the foundation for a new process. However, as it states within this consultation document, it may take 5 years or more to implement the new queue management milestones under CMP376 into existing connections contracts. It is concerning that there is no indicative timeline for when we will begin to see reductions in the queue. It is likely to be later than the timeline for implementing this new process i.e., mid-2025 completion.

It will take very careful planning and management of resource and code modification processes to both manage the existing 300GW queue and introduce the new process. As we state in response to Q1 and Q30, a reformed system should incorporate a plan that sets out what needs to be built, where, and when. This plan should be the priority activity and be allocated the appropriate resource.

**29. Do you agree with our current views in respect of transitional arrangements? What are your views on how and when we should transition to TMO4?**

It is important that the ESO clarifies how they intend to apply any reform retrospectively to projects with existing connection agreements. It is vital that the ESO reduces the uncertainty in the implementation period for projects in the existing queue. It would be important to

address and resolve any retrospective application of reform at the code modification stage of the proposal.

**30. What further action could Government and/or Ofgem take to support connections reform and reduce connection timescales, including in areas outside of connections process reform?**

The proposals in this consultation are useful and will make a positive difference. However, these proposals for connection reform in themselves are not sufficient to meet the challenge of decarbonising our electricity network by 2035. An urgent review of strategic planning for electricity network infrastructure is required, resulting in the delivery of significant forward investment ahead of need. This should now be the priority activity and be allocated the appropriate resource.