

National Grid ESO's Consultation on Connections Reform

The Association for Renewable Energy & Clean Technology (REA) is pleased to submit this response to the above consultation. The REA represents a wide variety of organisations, including generators, project developers, fuel and power suppliers, investors, equipment producers and service providers. Members range in size from major multinationals to sole traders. There are over 500 corporate members of the REA, making it the largest renewable energy trade association in the UK.

The REA regularly hears from its members about the delays caused by grid capacity constraints, where such delays are incompatible with meeting the Government's aim of a decarbonised power grid by 2035. We welcome the action plans recently published by National Grid ESO and the ENA to immediately address grid connection delays in the short term, and we are encouraged that National Grid ESO are consulting on connections reform to address the design of the longer-term connection processes.

The REA broadly agrees with the approach taken with these strategic priorities, and our members look forward to feeding into these proposals as they develop. We would like to highlight the below points.

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?

The REA generally agrees with the initial position on each of the foundational design options and key variations. We welcome the National Grid ESO pursuing options which build upon the status quo through the introduction of a gated process and one that would work for both a central planning process and a market-led approach.

However, members have reiterated the need to ensure any introduction of a gated approach, with application windows, needs to be carefully designed to recognise the lead times of different technologies and time frames required for planning permission submission. For example, there is a concern that a potential annual window for applications introduces a fixed time which could make projects fail depending on how applications in those gates are treated. There is concern that windows could be too short for some projects managing planning application submissions. Development of a gated and window approach should acknowledge varying lead times for different technologies, or size of project.



Therefore, it is important as a foundational design option, that connection application processes are suitable to support all low carbon projects and does not disadvantage any one type of development due to any timescales built into the process. We recognise this is further considered in relation to the separate TMOs.

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 agree with discounting the use of auctions. Members have raised concern that such approach could favour larger players who may have an advantage within auctions. Auctions are also unlikely to work with a more central planning process or provide the mix of low carbon generation and clean technologies that will be required to meet our net zero targets.

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

The REA supports this view given other Government workstreams that are currently underway. To avoid reforming the connections process again and introducing unnecessary uncertainty, this initial reform should enable and facilitate future frameworks for deployment, whether those frameworks are market based or centrally determined. This is especially true given future developments with both the Review of Electricity Market Arrangements (REMA), and the establishment of the Future System Operator, both of which are likely to have a bearing on how the market operates and how centralised any strategic planning maybe.

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

The REA supports the initial recommendations under TMA A to TMA C and would encourage National Grid ESO to progress these recommendations as soon as possible. We believe all these options are applicable no matter the TMO chosen.

In the case of TMA A, we also note that such information should be available to those applying at distribution level. See question 6.



We, however, note some concerns around TMA B's application checklist, which would preclude any access to further NG ESO advice before the checklist is complete. We understand that such a checklist would assist the National Grid ESO assess the seriousness of the application. However, a checklist alone would not necessarily assist those who have not applied before and are unsure about the process. Although a paid feasibility study can assist with the checklist, there should still be a suitable level of support given, even just as detailed guidance, to ensure applicants can get to a level where the checklist is complete and able to demonstrate their ability to put in a connections request.

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?

The REA supports introducing a pre-application stage fee to discourage speculative applications. However, the reasonable time for a discounted fee will need to acknowledge differing lead times and timescales between technologies and the size of the project.

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

The REA agrees with the importance of this key data and suggest that such information should be available as a matter of urgency no matter the TMO decided, or the time taken to implement a new process.

We would also suggest that those connecting at the distribution level should also be able to have easy access to this transmission level information, especially where there is a clear distribution and transmission interface within an application. This transparency would allow those connecting at the distribution level to better understand how the project will be impacted by connections at the transmission level. It would be easier for National Grid ESO to make this data public in an easily accessible and consistent format rather than the data to be transferred through the DNOs for distribution connection applications.

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

The REA does not intend to answer this question.

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?

The initial recommendations about TMA E sound sensible at this stage. However, future definition and consultation with industry will be necessary when business models are developed further.

We agree that it is right to wait until the impact of the 5-Point Plan is known, but we would like to stress that the 5-Point Plan must be delivered urgently. There is still a lack of transparency on how some aspects of the 5-Point Plan will be delivered, and we encourage National Grid ESO to provide regular updates during the implementation process. This need for transparency also applies to the ENA's Action Plan at the distribution level.

9. Do you agree with our initial recommendation with regard to TMA F (criteria for accelerating 'priority' projects)?

Yes, the REA broadly support the NG ESO's conclusion regarding the criteria for accelerating priority projects. We also support avoiding using an auction mechanism to allow parties to pay for a quicker connection as this is unlikely to be compatible with more centralised planning of future grid design.

10. Do you agree with our initial recommendation with regard to TMA G (queue management)?

The initial recommendations with regard to TMA G sound sensible at this stage. However, future definition and consultation with industry will be necessary when business models are developed further.

It is important that any milestones or thresholds within the queue management system are related to real projects and realistic timelines. Previously, the milestones in place have not been realistic for how projects develop. While we commend the National Grid ESO and ENA at the distribution level in recognising when thresholds have not been met by projects due to circumstances outside of their control, the necessity for this flexibility suggests that the thresholds were not realistic in the first place. We encourage further consultation with industry to ensure the design of the queue management process is appropriate.

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

Yes, we appreciate the range of TMOs presented and support the fact that National Grid ESO has used the existing status quo as the starting point.



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?

TMO4 could be improved by introducing more dynamic windows, or multiple gates, that are flexible enough to cover the range of different technologies build times and project sizes. There is concern that the introduction of the annual application window could see projects timed out and lose their position if unable to submit planning permission on time as required by gate two. Further information is needed, and reassurance provided, that once within a window an applicant's effective queue positions, relative to later windows, remains assured even if it takes them longer to get to gate two. We are very aware of the differing timescales of different types of projects, including trading contracts, and delays in planning permission processes, as such it is essential that the connection process does not disadvantage any one type of project.

With this in mind, we also think that it is worth considering if TMO 4 could see two application windows a year. Doing so would allow a more regular schedule for applicants to apply for and help promote the delivery of projects with shorter lead times. We also suspect that this will help with the interaction between transmission and distribution applications.

13. Are there any important TMOs we have missed?

REA are not intending to answer this question.

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?

There is concern around the requirement to submit consent and what happens in each TMO at gate 2 if there are delays in submitting planning applications. This is an area typically out of the developers control with different planning processes taking different time scales. It is important applicants are not timed out of the queue and remain considered as having passed gate 1, no matter how long 'submit consent' takes.

This is particularly true where planning permission has a time constrained validity within the planning process. Under the current planning regime, developers must begin construction within three years from the time of approval. If National Grid ESO ask developers to use 'Submit Consent' at Gate 2 and a connection date, which is aligned with the planning process, is not offered, the developer could miss the window for beginning construction. The financial risk of not guaranteeing a connection date that is aligned with the planning



process could deter developers from funding the planning application in the first place. This could result in the same project having to apply more then once for the same planning permission, at significant cost and placing additional stress on planning authorities.

Examples of how this will work for each TMO needs to be made clear, with explanation of how projects will be assessed at gate 2 if they are unable to submit consent within a specific window. More dynamic gates within the TMOs may also help this situation.

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

We recognise why National Grid ESO prefer this option, and recognise its advantages, but are concerned that it may place increased risk on developers while benefiting the ESO. This really depends on how projects that pass gate 1 within the window are then treated if it takes them time to reach gate 2. We recognise that the ESO attempts to solve this issue on page 75 of the consultation by addressing gate windows, but further clarity, with worked through examples, is still needed to ensure that applications have a clear understanding of how applicants queue positions will work at gate 2. Specifically, it is important that they remain ahead of projects in later application windows to avoid good progressing projects effectively being timed out.

It must also be made clear what this will mean for distribution connected projects reliant on a DNO applications for transmission connection. There is concern that TMO4 could disadvantage smaller projects if they are left without the ability to get to gate 2 and lose both their positions in the DNO and ESO queue. This needs to recognise that planning permissions can time out within three years, which put the costs of planning permission on the developer. Industry concern also remain around DNOs being able to effectively forecast the capacity that they need, and pass on applications and updates to the TO, in a timely manner, to inform the ESO that projects have reached gate 2.

Similarly, there is a concern that one annual window could have an adverse effect on smaller projects. However, we do recognise the benefit to the ESO in being able to see all applications at once within a window and that this could equally benefit storage technologies. To both realise this benefit, but not see long delays in applications, we would encourage the ESO to explore whether two windows a year, every six months, would be possible at gate 1.

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



Yes, the REA broadly agree with the design criteria considered. However, note that consultation takes a fairly qualitative approach to scoring. It would be helpful to see what modelling has been done to consider the TMO scores to provide confidence in the presented table.

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

We understand the benefits indicated by TMO4 and support this analysis, however stress that further confidence is required in regard to how the following challenges are addressed by TMO4's design:

- How DNO applications are treated within the window, and specifically at gate 2, to ensure the process does not disadvantage smaller projects. This includes understanding the process for DNOs to promptly pass on information that the DG project has qualified to pass gate 2 and ensure that these projects are able to proceed.
- How the windows for applications can be made more regular, to avoid applicants waiting 12 months to pass gate 1. For example, by having six monthly windows or more dynamic gates.
- What specifically happens at gate 2 if an applicant is slow in being able to submit planning consent.
- What happens at gate 2 if an applicant submits planning permission but is not allocated a sufficiently earlier date meaning that the planning permission times-out.
- How quickly the new process can be implemented without further delays or pauses to dealing with existing applications in the queue.

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?

To avoid the potential delays presented by the annual window for gate 1 in TMO 4, we think it is still worth developing options around TMO 3, which does still provide advantage to the ESO in being able to see a window for applications at gate 2. It will be worth continuing to explore both options and model their impacts as further design choices are made.

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

Members have raised significant concern around DNO's ability to accurately assess demand to effectively forecast an application for ESO's TMO process. It is essential that before progressing the chosen TMO, that the DNO and ESO



process is appropriately modelled, and confidence is provided that DNOs will have the ability to apply for the level of connection required to meet their queue needs.

We also challenge the assumption that 12 months window for DNO related projects is sensible. Given the smaller size of such projects, which typically look to be turned around within a three-year period, a 12-month delay before even being able to apply for connection could create a significant barrier to deployment and will need to be appropriately mitigated by DNOs for seeing their capacity needs and applying appropriately.

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?

Some form of reconciliation of forecasts vs real applications could be built into the process, some months on from original application. This would allow a level of over forecasting, with the expectation that it can be later refined as DNO applications are received and actual levels of capacity requirements are refined.

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)?

The REA supports these measures in principle. However, there are some concerns that we would like to highlight. It is not clear how the DNOs will know how much capacity to apply for in the window, which is further complicated by National Grid ESO proposing that this capacity is applied by technology type rather than forecasting total need only, and what the funding arrangements are going to be for these measures. The DNOs track record on their ability to predict capacity requirements is poor, raising concern that the proposed approach may not work unless confidence can be provided to developers that there will be capacity for them to connect within a window.

We suspect a solution could be the introduction of an additional DNO step before the gate 1 TMO 4 window, where distributed projects apply for the DNO within their own application window. However, this step could itself introduce longer timeframes before application, especially if gate 1 in the ESO process is



only every 12 months. Projects on assets, such as factories and distribution centres, seek a turnaround time of roughly three years, and creating a longer than 12 month waiting period to confirm the application will be a significant challenge.

There is a need to address these concerns first before the TMOs are progressed, and further clarity is needed on how these aspects will be designed.

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?

The REA believe this to be a sensible proposal.

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

The REA does not intend to respond to this question.

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

The REA does not intend to respond to this question.

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

The REA is not intending to respond to this question.

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?

We recognise the benefit that TMO4 provides in considering network competition, however, believe similar benefits might also be achieved by TMO 3, so should still be considered.

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?

The REA broadly agree with the initial recommendations in relation to each of the TMAs within the chapter.

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



The REA agrees but would like to reiterate that the implementation period and transmission arrangement needs to be prioritised and transparent about progress, especially on the 5-Point Plan.

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?

The REA supports a clear transition arrangement for whichever TMO is taken forward. Industry requires proper transparency and clarity on how the process will work.

We believe a pause in dealing with applications should be avoided in the implementation of the new process. Existing applications should continue along the existing process as the new system is put in place. Previous adjustments to the connection process and grid operations have all been done without pausing applications. If there is to be a pause between systems, then the pause should be kept as limited as possible and only impact the receipt of new applications, not delay applications already in the queue.

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 REA does not intend to respond to this question.

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