ESO Connections Reform Consultation

Response from Bluefield Partners LLP JULY 2023

Introduction to Bluefield Group

- Bluefield Partners LLP ("Bluefield") is a London based investment adviser to the Bluefield Solar Income Fund (BSIF), one of the largest operators of UK solar and onshore wind assets in the UK.

- BSIF has attracted over $1 billion into its solar investment strategies since 2011 and invested in a diverse portfolio of solar PV assets across the UK since 2013.

- There are over 120 assets under operation, typically large agriculturally situated solar farms, with a small number (by energy capacity) of industrial and commercial sites. In July 2020, the Company's shareholders voted to broaden the investment mandate into complementary renewable technologies, such as onshore wind, hydro and storage.

- Bluefield is seeking to deliver on the Government's target of £100 billion of private sector investment in the UK by 2030.

- Bluefield has nearly a gigawatt of solar and battery storage projects currently in the distribution connection queue, a number of which already have planning permission, but have limited visibility of connection dates.

SUMMARY

- Bluefield endorses ESO's recognition of the need to speed up transmission connections to help meet the UK's ambitious net zero targets, secure affordability for consumers, and maintain a secure energy supply.

- In particular, we welcome the wider industry engagement to help refine and reform the current connections process which is evidently unable to meet current network demands.

- Indeed, Bluefield concurs with ESO's analysis of the current challenges facing energy system transformation, not least the long connection times that are leaving many projects that are otherwise considered "ready to build" now facing connection dates of 2028 and beyond.

- We hope that engagement with the industry will continue and that this results in tangible improvements being identified and delivered in a timely manner.

CURRENT CONTEXT

- The current challenges faced by National Grid and the Distribution Network Operators (DNOs) are enormous and, until recently, there is limited evidence that the Government has recognised these challenges and provided the policy and financial support necessary to address them.

- The difficulty of connecting new projects to both the transmission and distribution networks is now the major barrier to expanding solar generation and battery storage at all levels from rooftop to utility-scale.

- At the same time, a significant shortage of personnel at National Grid and the DNOs, together with a lack of enforcement action by Ofgem, has resulted in increasingly poor levels of service for those wishing to connect.

- This is impacting projects at all stages of development, including those projects that are already in construction.

- Many projects that are otherwise considered 'ready to build' are now facing connection dates of 2028 and beyond. Newer utility-scale projects are unlikely to be able to connect for at least 10 years.

- It is, therefore, difficult to see how the Government's decarbonisation targets can be met at current buildout rates.

- Tinkering around the edges of connection management policy and committing to long term energy market reform, whilst welcome, is unlikely to stimulate the significant upgrades to the grid that are required to allow generators to meet the net zero targets.

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?

We agree with the overall initial positions on the foundational design options and key variations. 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 cannot be entirely avoided and that the Government is already heavily involved in this area – e.g. through 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.

As mentioned in the narrative, avoiding adding new risk to developers must be a key principle that should be considered during the long implementation phase. Avoiding a policy change 'cliff edge' and resultant surge in applications prior to the change should be a priority.

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 this proposition. The auction process is likely to add significant complexity and uncertainty to the development process. This would, therefore, push up the cost of capital.

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 do not 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 must also 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. This process is essential in informing the development and investment decisions that are required to deliver net zero. In addition, we would like to see clear service level commitments from the ESO, including setting the regularity of information updates, the nature of the information provided and providing maximum timescales for pre-application meetings to take place. The capability of the ESO attendees at the meeting to provide relevant and appropriate advice should also be referenced.

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 entirely to the imposition of reasonable fees for the pre-application meeting, but these must be proportionate and tied to the service level commitments noted above.

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. There is no justification for larger projects connecting at transmission level needing less proof of project viability than projects connecting at distribution level. This has led to the current blocking of significant capacity by dormant projects.

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

We agree with the initial recommendation with regard to TMA F, including that TMA F4 is not currently taken forward.

We agree with most of the recommendations on TMA G, but we are not wholly convinced that the reasons for rejecting PQM are entirely consistent with achieving net zero targets. In particular, it mentions the concern expressed that 'projects with inherently quicker delivery timetables (would) be perpetually advanced ahead of projects with inherently longer delivery timetables'. Surely, we need to deliver net zero in the fastest, most cost-effective way possible. The ability to connect these projects should not be decided on the basis of some arbitrary imposition of a fairness criterion.

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?

N/A

13. Are there any important TMOs we have missed?

N/A

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 do not 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. We would suggest submission of a screening opinion for an LPA project could be an alternative Gate 2 requirement as this is the point at which the project becomes public.

7. Recommended TMO

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

We do not 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?

This seems largely reasonable, but 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?

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?

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 do not 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. The inability over many years to solve the queue management challenges between transmission and distribution does not bode well.

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?

We are not clear on why DNOs request more RDC than is necessary. We have not seen any evidence to support this. We have evidence, however, to show that projects connecting at the transmission level are jumping the distribution queues due to slow SoW/PP submissions and processing.

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 should not 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 are not involved in offshore projects.

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

We are not involved in offshore projects.

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

We are not involved in offshore projects.

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 do not have a position on this.

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?

We agree broadly with these recommendations.

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 withing 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.

Without this clarity there is little chance that we will meet net zero targets or the Government's target for growth in solar energy.

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 ESOs 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?

Reforms are needed at both transmission and distribution stages to meet net zero pathways for a secure, resilient low carbon system, through improved connection processes and planning assumptions and approaches.

The solar industry has been calling for a consistent approach to queue management across transmission and distribution for many years. Despite inputs to many ENA and other industry fora, very little has changed in the last 10 years.

At a distribution level, there are already significant hurdles for bringing forward viable projects. Letters of authority are required from landowners, deposits need to be paid, planning and other milestones are set and need to be achieved.

The same rigour needs to be applied at transmission level, both for new projects as proposed, as well as for existing projects. The latter will be the quickest way to start unblocking capacity by projects that are either very long term or may not be built at all.

Projects sitting in the transmission queue should not be able to change technology type. As with distribution, such projects should be required to re-apply and join the back of the queue.

National Grid and DNO connection queues need to be coordinated such that transmission connections are not permitted to jump ahead of existing distribution connections.

Projects which are genuinely ready to build should be moved up the connection queue subject to achieving enforceable milestones. The position in the LiFO stack should also be re-assessed and a revised curtailment analysis produced.

Bluefield welcomes the current work on remodelling the impact of battery storage on transmission and distribution systems and hopes this will result in a quick ramp up of connected capacity.

When capacity is released at transmission level, following the tech amnesty and enforcement of milestones, this should not automatically be reallocated to other transmission projects. Many of the projects in the distribution queue have been waiting for a considerable period because of congestion in the transmission queue and therefore there should be a fairer way of reallocating that capacity.

The ENA guidelines for DNOs on submission of Statement of Works / Project Progression applications need to be enforced so that these are submitted as and when connection offers are accepted, rather than being delayed to suit their and ESO's internal processes.

Projects are also impacted by increasing lead times for key components such as high voltage transformers, some of which are on 18 months back order. With uncertainty over connection dates, the risk of ordering long lead time items increases.

Communication between DNOs and National Grid are far too adversarial, with generators rarely permitted to engage in discussions between all three parties even though, as the letter highlights, many of the constraints are at a transmission level.

Once a project has joined a connections queue, communications between generators and DNOs and ESO are often poor. Repeated emails and phone calls are often ignored, even for projects which are in construction. A lack of resources is no excuse for such poor service, particularly given the large sums of money that generators are required to pay for connections.

Where poor levels of service are apparent, there needs to be a transparent and effective mechanism for customers to hold the companies to account. Making an official complaint usually becomes a further excuse for DNOs and ESO to further delay connection planning. It is also not clear what action, if any, Ofgem would take if a complaint gets to that stage.

It is evident that there is a significant shortage of staff at all levels of transmission and distribution operators. This is a longer-term challenge, but, at the very least, there should be a major training and recruitment drive to address supply chain and skills constraints.

ENDS