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To Connections Reform Team,

Connections Reform Consultation

Muirhall Energy Limited (Muirhall) is an independent developer of renewable energy projects based in rural South Lanarkshire. We have developed an industry-leading successful planning consent rate of >95% and organically have developed a pipeline of 2.2 GW of renewable energy projects and 1 GW of Battery Energy Storage Systems. We are proud of our award-winning “community first” engagement approach, our innovative approaches to technical issues and our commitment to the development of our team.

It is accepted by both the energy sector and National Grid ESO that the current connections process has not managed to keep pace with the rapid changes to the energy sector, especially since the declaration of a climate emergency by the UK and Scottish Governments in 2019. The current process will not enable the connection of the necessary volume of renewable generation, and other associated technologies, quickly or efficiently enough to secure best value for consumers or meet legally binding net-zero targets.

The National Grid ESO have reported a fivefold increase of new connection applications between 2019 and 2023, evidencing the accelerated growth of the energy sector that even exceeds that of the '[Future Energy Scenarios](#)'. To meet the net-zero targets of both the Scottish and UK Governments, the energy sector will need to connect more new capacity to the grid, at a pace that the current system is not designed to withstand.

Muirhall welcomes this consultation on the connections reform process, and the opportunity to provide our response. The requirement for a reformed connections process that facilitates fast, coordinated, and efficient connections to the electricity transmission system is absolutely essential to allow the development of renewable energy infrastructure at the pace required to meet our net-zero ambitions.

While we have answered each consultation question in detail in Appendix 1, we would like to highlight the below points:

- The speed at which energy projects can connect to the electricity network is currently one of the biggest barriers to net-zero. Therefore, this reform should ensure that the additional time required to design reinforcements at the application stage does not lead to an overall delay in connection dates. This scenario may occur due to parties dropping out of the batch throughout the connection process (50% attrition forecasted), which may lead to a significant redesign and time delay.
- There is a risk that Queue Management will disadvantage projects such as nuclear energy, onshore and offshore wind which typically have longer consenting times than energy storage and solar power stations. Although Muirhall are supportive of Queue

Management, this reform should enable a diverse acceleration of technologies across the network, without prejudicing other longer lead consenting projects.

- The benefits of this reform and queue management cannot be fully realised if the TO is able to repeatedly delay connection dates. The incentives and penalties for the TOs and NGENSO to meet a connection date are not sufficient, therefore both need to be reviewed and improved. To coincide with the additional control NGENSO/TOs will receive from this reform, there should also be increased responsibility for those parties to deliver to the contracted connection dates.

Muirhall would be keen to engage further with this crucial work and would be happy to discuss our response in more detail.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Amy Keast', with a long horizontal line extending to the right.

Amy Keast
Communications Manager

Appendix 1: Responses to Consultation Questions

- 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 option or key variations that we should have also considered?**

In principle, Muirhall agree with the positions of the foundational design options, however, Muirhall cannot support the conclusions made of key variations 1 and 3.

In Variation 1, NGESO states 'the issues in the current process were not necessarily due to which entity a developer applies to but due to broader challenges that exist in the process'. It is the view of Muirhall that this does not achieve the overarching goal of the reform to deliver projects earlier. Instead, we suggest a stronger focus on reducing administrative processes and increasing efficiency by contracting directly with the TO. This could result in earlier connection offers being provided and allow for additional resource be made available to the TOs to improve their interoperability. The current process also allows companies like NGT to be distant from the customers who are contracted through NGESO, which reduces communication and accountability.

For Variation 3, NGESO states 'we think that this is appropriate as we do not believe contestability, by itself, would address the main underlying issues with the current connections process such as allocating capacity to projects likely to progress, or ensuring efficient, coordinated overall network design'. Muirhall reinforce the idea that all aspects of the connections process should be reviewed and improved in this important reform, and all potential network issues should be addressed, rather than dismissed.

Increasing the scope of customer delivered work increases competition and presents opportunity for developers to accelerate connection dates, which may be delayed by TO resourcing issues. Furthermore, there should not be any detrimental impact on the TO if developers are able to build connection assets. These solutions would require the TO to be adequately resourced to allow for compliance reviews.

This connections reform is planned for completion in October 2025, but will likely take at least 3 years to implement. With the quantity of renewable capacity required to meet government net-zero targets, it is therefore imperative that this reform is fully considered and fit-for-purpose, at the earliest opportunity.

- 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?**

Muirhall agree with the initial view that the current issues with the connections process should be addressed on an enduring basis through other, less radical, and lower risk means than the introduction of capacity auctions. It is essential that decisive action is taken urgently to address the current connection queue and remove connections as a significant barrier to net-zero ambitions. Such action could include better and more active queue management and greater transparency of information for developers.

Capacity auctions would likely allow large scale developers to dominate the market, whilst developers of small and medium scale wind farms would be unable to compete. This would result in an overly polarised market and would reduce the onshore wind sector's capacity for flexibility and innovation in working towards UKG's net-zero targets.

Such action would require extensive analysis and widespread engagement by all stakeholders, which has not been achieved as part of this connections reform consultation.

- 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?**

Muirhall strongly supports the continuation of the market-based approach as standard with occasional needs-based development to encourage generation located near high-risk network regions.

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

Muirhall agree with the initial recommendations as proposed.

- 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?**

Muirhall cannot advise on the recommendation to introduce a nominal Pre-Application Stage fee due to a lack of information provided regarding the quality of the Pre-Application. If the Key Data mirrors the Pre-Application information, and is kept fully up-to-date, then there should be no requirement for a Pre-Application meeting. Muirhall believes the meeting should not be a mandatory stage of the process, and that the Key Data should be made fully available at no additional charge.

Pre-Application meetings should be granted at the request of the applicant and should act as an opportunity to clarify and consolidate understanding of the information provided. These voluntary meetings should then carry a charge. However, if the Key Data cannot meet the standard of providing all necessary information, then meetings should be granted free of charge as a mandatory stage of the application process.

A 'reasonable time period' in which to submit an application will need to be specifically quantified. However, Muirhall's proposal Pre-Application meetings should not be required if the Key Data meets a sufficient standard, therefore any request for Pre-Application meeting should be paid in full if those standards are adhered to.

- 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.**

Muirhall agree that the TMA A Key Data is an integral part of future pre-app meetings although this depends on the amount of information provided within the Key Data. Muirhall agree with the Key Data list which has been suggested, however also wish to include:

- Areas of network interest to the TO, to help advise applications to alleviate network issues or black start capability.
- Queue positions of projects connected and contracted.
- Design options for submissions (i.e., viable substations for connecting in a particular area).

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

Muirhall agree with the initial requirement to apply, however would like to add that a red line boundary of the site is included.

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?***

It is the view of Muirhall that TMA E does not need to wait until the impacts of the 5-Point Plan are known.

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

Muirhall supports in principle the 'priority' project recommendation however, the connections reform consultation does not provide enough information on what criteria will allow a development to qualify as a 'priority project' and are therefore unable to comment until full consideration has been given. It should be made clear that any such process does not prioritise or favour the connection of any particular technology. Muirhall suggest that Ofgem run a similar process to the LOTI Needs Case to determine what would qualify as a priority project.

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

Muirhall agree that Queue Management should be applied as part of the connection reform. However, there is a significant risk that QM will disadvantage projects such as nuclear energy, onshore and offshore wind which typically have longer consenting times than energy storage and solar power stations. Therefore, QM should allow for a diverse acceleration of technologies across the network, without prejudicing other longer lead consenting projects.

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

N/A

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?***

Muirhall are content with the TMO procedure, however, have concerns regarding the use of consent for acceleration. Under the current reform, seems highly unlikely that wind/nuclear etc will connect on accelerated profiles. Also, just because a project is consented does not mean it will be built, therefore Queue Management milestones must be applied to ensure that

consented projects are being delivered. Further investigation and detail is required to consider the various scenarios under which a project with a consent may not progress their connection.

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

Muirhall agree provisionally that TMO4 should be the preferred TMO.

The proposed process introduces a condensed connection offer system for NGENSO and TOs. It is vital that NGENSO are sufficiently prepared and properly resourced to avoid a build-up of applications which could overwhelm the new batched design process.

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

N/A

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

As noted above, Muirhall agree that TMO4 is most likely to facilitate appropriate network design principles but requires clear relationships and interaction between the connections process and the planning regime.

Muirhall would like more information to be provided on the flexibility of design and how the design can evolve to meet future reinforcement needs, detail on how this can be achieved is not apparent through this consultation. It's Muirhall's understanding that NGENSO and TOs will design a batched offer based off a 50% attrition rate from connection offers to completion. Therefore, the final design is expected to enable 50% of the connection offers to connect to the network. However, a standard 50% attrition rate across the industry and UK is not appropriate, as each developer and region will have its own build out rate. The design reform should allow flexibility so that connections are not delayed by redesigns if the attrition rate is different from what is anticipated. This may be achieved by progressing with various solutions simultaneously similar to the Skye Reinforcement Needs Case assessment by SSENT. Additionally, a shift to anticipatory investment which does not require immediate reinforcements would be preferred.

A clear outline of how applicant's views would contribute to the design of their connection would also be of interest. As although this approach may be helpful for developers with sole use assets, it may become challenging to account for all parties views for shared assets as each developer may have different interests.

How DNOs fit into this process is also a concern for Muirhall which requires further investigation. Additionally, the timescales to complete connection process with a Distribution offer is an issue. Under current processes it can take over 18months to get a Distribution offer with a Transmission impact assessment. Through this reform there is likely to be a window for applications and increased time for early project design. This could result in an increase in the time required to complete the connection offer process when applying for a Distribution connection once reform has been implemented.

A critical concern for this reform is that NGENSO ensure that additional time to design reinforcement does not lead to overall delay in connection dates due to parties dropping out of the batch. Otherwise, there is no value in increasing the early design period.

Also highlighted in the response to Q15, adequate resourcing for NGENSO is crucial to the success of TMO4 due to the administrative burden, and addition of a potential bottleneck application window. This new application window will only work if the design and offer process is completed prior to the next batch window being reached the following year, otherwise there is the potential to 'snowball' if timelines are missed.

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?

N/A

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

N/A

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?

N/A

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):

- a. **DNOs should be able to request RDC via application windows to allow them to continue to make offers to EG inter-window; and**
- b. **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)?**

Muirhall have concerns with the proposed process to have DNOs apply to the ESO on behalf of developers. DNOs currently struggle to submit applications within 6 months of the clock start from when they are able to submit to NGENSO. If the DNO misses a submission window, then the result could severely negatively impact the project. Further analysis is required to determine an appropriate solution, however the preference would be for developers to be able to apply directly to NGENSO to assess the transmission impact.

Offers should not need to be firm at Gate 1.

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?

N/A

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

N/A

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

N/A

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

N/A

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?

Muirhall agree with the views expressed regarding network competition in the context of connections reform, including that TMO4 is the option most aligned with network competition. We believe network competition should be allowed as early as possible. This consultation would benefit from further clarifying how competition will be included in the process.

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?

TMA I: Muirhall would recommend introducing a minimum level of competency required to complete an application. ESO should develop clear criteria through which an application will be rejected.

TMA J: Muirhall strongly support increasing ties between the TO and Developer post contact submission. We don't believe options should be provided to the developer on how to connect in the connection offer, however the TO should be required to engage with the developer at a set point once they have had enough time to consider various options. These options should be discussed, and solution agreed together.

TMA K: Connection alternatives which allow for accelerated connection date should be discussed in TMA J. However, products of interest to NGENSO such as Black Start and frequency response.

TMA M: Muirhall do not agree with the proposal to maintain the status quo. We recommend the introduction of a required check from NGENSO/TO Project Managers to see if a contract must be updated annually, thus reducing opportunities for significant errors in the future.

TMA Q: Is one of the most significant changes that should be applied as part of this reform. Muirhall have experienced connection date delays from TOs with almost every connection offer we have received. The benefits of this reform and queue management cannot be fully realised if the TO is able to continue to delay connection dates. The incentives and penalties for the TOs and NGENSO to meet a connection date are not sufficient, therefore both need to be increased to a point where connection dates will not be missed without agreement with the developer. This reform and queue management will increase the control NGENSO/TOs have over developers and their connection offers. It will enable NGENSO/TOs to control the queue and the connection dates each developer will be offered. To coincide with this increased control, NGENSO/TOs should also have increased responsibility to deliver to the timelines being offered.

TMA R: Muirhall agrees there should be a new mechanism to monitor how much capacity is actually used by projects once they have connected and reclaim any capacity that is not used.

TMA S: Muirhall are supportive of a 'Fast-track dispute process'.

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

The aim of this reform is to enable connections to accelerate their connection date to meet net UK and Scottish Government net zero targets. Therefore, the reform should be prioritised to ensure the timeline is delivered at the earliest opportunity. 'Quick wins' that can be introduced at an earlier stage are encouraged, however a clear programme should be shared with industry so that all parties are aware of what 'Quick wins' can be achieved and their implications on contracts.

The consultation Summary notes, 'If we were to follow standard practices for changing industry codes and licences, the 'go live' for these reforms would be mid to late 2025', standard timelines and practices should not be the expectation for implementation of this reform. Extraordinary measures must be taken to deliver a reform that will match the ambitions of developers.

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?

To get the optimal outcome from reform all parties and contracts should transition to the outcome of the reform at the earliest opportunity.

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?

N/A