Centrica plc
Regulatory Affairs
Millstream
Maidenhead Road
Windsor
Berkshire
SL4 5GD
www.centrica.com

James Norman
National Grid ESO
Faraday House
Gallows Hill
Warwick
CV34 6DA

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Sent by email to: box.connectionsreform@nationalgrideso.com

Dear James

Connections Reform Consultation

Thank you for the opportunity to respond to National Grid ESO's June 2023 consultation on Connections Reform.

We are supportive of the ESO working towards reform of the connections process and for this to include improving arrangements at the transmission-distribution interface. Alongside the ESO and policymakers, we believe rapid reform is needed to shorten connection times by addressing the failings of the current queueing system and ensuring that projects that are readier to connect are not held back by others. Application requirements should be appropriately tightened to improve the quality of applications, and therefore projects entering the queue.

We respond to the individual consultation questions below.

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 that with the ESO's decision to include the status quo plus (enhancement of the current process) and gated processes in the Target Model Options.

As an investor in small-medium low carbon generation, we have concerns on how "Variation 4 – Application Windows" would negatively impact the development path and increase risks for these projects. We expand on these concerns in Qs 11-18.

We support the ESO discounting capacity auctions at this stage (Variation 5, the separation of connection and capacity). We believe auctions could have unintended consequences if they favour larger companies who could predatorily outbid smaller players. The existence of many smaller renewable developers in the renewables sector is beneficial in seeding the sector with a range of projects for further development. We would not want this lost.

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 the position taken by the ESO, as stated in our response to Q1.

Centrica considered whether auctions could play a role in addressing the market failures associated with the current regime. We decided that auctions would not be a good option because of the risk that very large organisations could outbid the smaller market participants who currently play a valuable role in bringing new projects forward.

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?

Yes, we agree that the options presented by the ESO in this consultation could work with a variety of market designs.

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. TMA A to C should be happening already. The ESO should consider starting work to implement these in full as soon as possible as a 'no regrets' decision.

TMA A covers access to key capacity data and visualization of enabling works and the transmission queue for connections. The ESO must find a way of making this information available to embedded generation (EG) projects, so that developers looking to connect to the distribution network can understand how they could be affected by transmission works before applying to the DNO. EG projects with a transmission impact must also have access to the same level of information as their transmission-connecting counterparts. The ESO must level the playing field for access to this data. Equality of data access is needed at all stages – i.e., both the pre-application and application stages, as well as once offers have been accepted and projects are in the queue.

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?

Yes, we believe this would help deter spurious speculative applications.

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.

Yes. The TMA A key data – i.e., capacity data and visualization of enabling works and the transmission queue – must also be made available to projects connecting at distribution level that could have a transmission impact. One of the main frustrations faced by embedded generation (EG) is lack of access to this data. The fact that the contract is between the DNO and the ESO must not be used to frustrate access to this information for EG.

The ESO proposal for Reserved Developer Capacity does not remove the need to make this information available to embedded generation.

Key Target Model Add-ons

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

We believe that the requirements to apply need to be tightened and that introducing a requirement to evidence land rights via a LOA is an essential part of this.

The requirements to apply could be tightened further to ensure only credible projects enter the process. This could be done whilst retaining proportionality. Drawing on the offshore licencing regime managed by the North Sea Transition Authority (NSTA), we think that requirements to apply could be further tightened to ensure only genuine, feasible projects enter the queue. This could be done by requiring applicants to outline plans for project financing and provide appropriate evidence on their technical and financial capacity to progress the project.

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?

Yes, provided stakeholders are provided with regular updates.

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

We agree that projects that are readier to connect (TMA F3) can be accelerated under a reformed connections process. There may need to be additional and alternative points at which readiness can be judged rather than submission of planning. We cover our concerns with using planning submission for Gate 2 later on.

We think it makes sense for the connections process to be future proofed so that priority projects, either designated by Government (TMA F1) or demonstrating significant societal benefit (TMA F2), could be accelerated. There would need to be more discussion with stakeholders on how this would work, how priority projects would be determined and any negative consequences for non-priority projects.

We agree with the ESO's decision not to recommend a price-based mechanism such as auctions (TMA F4). We share the ESO's view that this could favour the largest developers.

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

Reactive Queue Management (RQM) - We hope that Ofgem will approve CMP376 promptly and make it applicable to existing projects in the queue, otherwise it will have limited impact.

Reactive Queue Management + (RQM+) - The ESO should carry out further work on the definition of a 'priority project' and discuss this with stakeholders.

Proactive Queue Management (PQM) – One variant not discussed is where the accelerated project can help create additional capacity, for example if it is storage facility.

The ESO has not addressed the situation under RQM or RQM+ where capacity is made available, but that does not consist of sufficient capacity to accommodate the next project in the queue, but one or more smaller projects could be accommodated.

Target Model Options

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

We think that additional variants of the four TMOs should be considered – such as having more than two gates, plus considering if a quarterly or biannual window could give the ESO the benefits of batching whilst mitigating the window's negative impacts on project timelines and investment decisions.

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?

We have concerns about the annual application window and Gate 2 – as follows:

- An **annual application window** may work for large offshore wind but is not suited to smaller low-carbon projects that can be developed more quickly. We would prefer that it is removed. Annual windows are too slow, and projects will face very significant delays if they miss the window. If this is not possible to remove the windows completely, then quarterly, or biannual windows would be more appropriate.
- We are concerned that **'Submit Consent' for Gate 2** causes issues for projects because it is not in line with planning timelines. We think creating additional gates (i.e., more than two in total) and changing the 'Submit Consent' requirement could be used to create a more dynamic 'funnel' for promotion based on project readiness to connect.

13. Are there any important TMOs we have missed?

A missed TMO would be to create or update the financial disincentives for projects to:

a) remain in the queue without progressing to connection and
b) after connection, release capacity that they are no longer using.

Developers could be asked to put up a proportionate financial bond or other financial guarantee that would be lost if they do not progress. This could be done via a review of the User Commitment.

The consultation considers something similar in "**TMA R – Management of underused capacity**". We believe a solution could be developed that would be proportionate for smaller projects. For connected projects, as the ESO recognises in the section on TMA R, any mechanism would need to target genuine hoarding and not penalise projects which are intermittently used for genuine reasons.

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?

Issues with submit consent

The problem with 'Submit Consent' for as a gate is that it is not in line with the planning process. This creates additional risks and costs for the developer and could have unintended consequences such as creating additional work

Under the planning regime the developer has three years from the time of approval to utilise a project's planning permission by beginning construction. Even if an earlier connection date is offered, there is still the risk that it will not be early enough, and the planning permission expires.

Developers of renewable projects tend to go for full planning because renewable projects are normally sold on with full planning in place. Although outline planning could give developers slightly more time, it comes with the same risks.

The developer would have to fund the planning application (easily £0.5m to £1m) with no certainty that NG ESO will offer an earlier connection date. If Submit Consent is used for Gate 2, NG ESO is asking developers to gamble that money on the chance that they could receive an earlier date. There could also be unintended consequences with the same project going for planning permission more than once due to expiration. This would place undue stress on the planning system. These projects can be complex in planning terms and require significant Local Authority and/or national resources to review and permit. Additionally specific studies such as ecology would need to be redone as they are only current for a relatively short period.

What milestones could be used instead

We support the use of gates if the correct milestones are used. More than two gates could be used to create a funnel that better identify projects that are readier to connect. Milestones that could be used include:

- **Agreement of Heads of Terms** with the landowner, as an additional later milestone on top of the Letter of Authority provided with the application, to show that the project has completed negotiations and secured the land. Unlike Submit Consent uncertainties about the connection date can be handled within the legal agreement, for example any payments can be index-linked, and timescales can be flexed. Agreeing Heads of Terms is equivalent to milestone M3 in CMP376.
- A **financial health** check for the project demonstrating that the developers have access to funds or a letter from the parent company's CEO confirming intent to fund the project will be funded. We suggest this would be something lighter and earlier than Milestone M7 'Project Commitment' under the Queue Management modification CM376.
- **Securing Planning Consent** could be used as an additional Gate 3. Securing consent is milestone M2 in CMP376.

Recommended TMO

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

We think that the benefits that the ESO sees in the TMO4 application window are not outweighed by the disbenefits that it creates for developers, which could slow down investment in low-carbon generation.

The application window will create an unnatural dam in the system. If the window is January-March, meaning projects can't apply April-December, this will slow down the development renewable projects essential to net zero. The only sector this may work for is offshore wind, which has longer timescales.

We have questions on the functioning and/or impact of an annual application window in the following circumstances:

- What happens if you want to make changes to the technology of configuration of the project after submitting the application? Would you need to wait for the next application window and re-apply?
- How the TMO4 schedule would fit with other market timings, such as for the Capacity Market.
- How TMO4 timings impact project types, where certain project development activities must take part during set times of the year. For example, solar farms are best built during the summer months.

The application window creates further risks for embedded generation (EG), including decarbonisation schemes for the industrial, manufacturing, and public sectors. In most cases EG projects will be dependent on the DNO applying on their behalf during the application window. DNOs currently have a very poor reputation for submitting timely Project Progression requests to NG ESO under the existing Statement of Works/Appendix G arrangements.

- Without Reserved Developer Capacity (RDC) in place, the EG project will need to apply to the DNO in advance of the application window. This adds further time to the process for EG compared to transmission-connected generation. EG then must depend on the DNO making an accurate application.
- If the RDC process is used, then the EG project is still dependent on the DNO securing sufficient capacity during the application window. DNOs are not currently set up to forecast these needs. If the DNO runs out of RDC headroom for a region shortly after April, then there is a risk that whole regions of the country could be switched-off from decarbonising until the next annual application window has concluded. In practice this could mean that a manufacturing facility wanting to install 2MW of solar PV must stall decarbonisation for 18+ months.

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

The assessment appears skewed towards improvements from the ESO's point of view and likely under-represents the impact on market participants and consumers.

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

We understand the reasoning behind the ESO's explanation of the stated benefits, but we think that there is a risk of confirmation bias. This risks creating a solution that is biased

towards outcomes that benefit very large renewable assets, as it draws on the Holistic Network Design (HND) process. The proposed annual cycle does not work for smaller, nimbler low-carbon assets.

There is a risk that the ESO, TOs and DNOs could struggle to resource an annual process with defined cut-off dates that will create peaks in workload.

The ESO notes expected concerns from project developers on the significant additional time that it will take to obtain a connection offer under TMO4. However, the ESO fails to recognise the further delays developers could face if they miss the application deadline, or have their application sent back on a technicality.

The ESO presents TMO4 as the only model under which it says it would seek to improve the current process under which DNOs apply to the ESO for capacity. This is disappointing and feels like embedded generation stakeholders are being presented with a 'Hobson's choice.'

RDC may appear to work on paper but comes with many potential issues for developers and consumers, which we cover in Qs 20-21. RDC is further complicated by the ESO's proposal that it will be technology specific (Footnote 53).

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?

We think that a better option would be TMO2, with a different Gate 2 and additional gates which could be based on Securing Land Rights, Project Commitment/Financing and Secured Planning Permission.

We've detailed our concerns about application windows slowing down net zero project developments. However, quarterly, or biannual windows would be an improvement on the annual window proposed in TMO4.

Key Customer and Technology Type Adjustments

T/D Interface

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

Yes – subject to our overall concerns on the application windows.

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?

Whilst the RDC mechanism appears to present a 'magic' solution for relevant small and medium embedded generators (EGs), we have concerns about:

- The lack of underlying detail
- The risk of NG ESO pushing responsibility for delivering a solution to the transmission-distribution interface into a separate process where delivery timelines could significantly lag the main reforms
- The risk that DNOs get their RDC forecasts wrong, meaning that DNOs could
    - **under-request RDC**, harming EG projects by freezing renewable connections across regions of GB

- **over-request RDC**, with potential disbenefits to consumers and other projects
- request the correct aggregate level of RDC, but **get the technology split wrong**, given that Footnote 53 indicates that RDC will be technology specific.

DNOs currently have a poor reputation for submitting timely Project Progression requests to NG ESO under the current arrangements. If RDC is adopted, there will need to be appropriate mechanisms in place to ensure that DNOs accurately forecast RDC needs. This includes ensuring that DNOs don't under-request capacity, as well as disincentivising DNOs from putting in excessive RDC requests. DNOs will need to improve their forecasting capability and integrate mechanisms for EG developers to feed into these ahead of the application window.

Footnote 53 contains key information about the NG ESO's RDC proposals that should have been included in the main text and case studies, because it places limitations on RDC. According to Footnote 53, RDC will be technology specific i.e., reserved specifically for battery storage or for solar and is not interchangeable. This creates further risks that the DNO fails to forecast the correct RDC requirements.

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)?

21a – As mentioned in our response to Q20, we think that this process works on paper, but has potential failures linked to its dependence on the DNO correctly forecasting the capacity needed. This is made more difficult by the need to forecast volumes by capacity type. DNOs do not have a good reputation for making timely applications to the ESO for Project Progression under the current system.

21b – We don't disagree with EG projects providing equivalent evidence at the TMO Gates to benefit from advancement. The process for doing this should be transparent and trackable. By this we mean that EG projects should benefit from the same visibility of the status of their requests as transmission projects. The current processes associated with Project Progression are opaque and this needs to be addressed urgently, e.g., so that EG developers can track their projects via the ESO Connections Portal. We know that the contract for GSP capacity is between NG ESO and the DNO – but it should be possible for those parties to agree a standard solution under which key information and status tracking is made available to the relevant EG.

Directly Connected Demand

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?

There are arguments for it being treated the same.

Offshore

23. Do you agree that TMO1 to TMO3 would require a separate offshore process, and that this would result in material disbenefits?
24. Do you agree that TMO4 is the most aligned to the direction of travel for offshore projects? If not, why?
25. Other than the Letter of Authority differences are there any other TMAs which have specific offshore considerations?

We have not answered Q23-25 separately. We believe that TMO4 may be more suited for large offshore projects than it is for small to medium onshore projects. TMO4 appears to draw on NG ESO's experience with the Holistic Network Design (HND) process and ASTI, whose aims were to accelerate transmission connections for offshore wind. Whilst we are supportive of the benefits that HND and ASTI are bringing in accelerating those connections, it is vital that enduring connections reforms work for all technologies, including addressing the blockers to connecting smaller projects.

Network Competition

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 believe network competition can still be implemented under the other TMOs.

The TMO4 option seems to work best for NG ESO for several reasons, but the case is not so clear for developers, British businesses, or consumers.

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?

TMA R Management of underused capacity – we are in principle in favour of a Use-It-Or-Lose-It (UIOLI) mechanism and stronger but proportionate financial disincentives against projects remaining in the queue without progressing to connection. Further consideration should be given to developing TMA R.

Detailed Design, Implementation and Transitional Arrangements

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

There are some clear quick wins that could be implemented rapidly. These include the TMAs relating to pre-application and the requirement to provide an LOA with the application.

Design and implementation of improvements to the transmission-distribution interface must not be left out of the Minimum Viable Product (MVP). Solutions for to improve connection times for small and medium relevant Embedded Generation projects must not be "shunted-off" into the slow lane.

We are keen for a robust solution (including for T-D) to be implemented as soon as possible. Go-live in mid to late 2025 could be overly ambitious if following standard practices for changing industry codes and licences, so we agree that the ESO, other networks, Ofgem and DESNZ should explore options to accelerate the implementation timeline

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?

Ofgem needs to make CMP376 applicable to existing contracts, otherwise as the ESO highlights on p103, it will take many years before CMP376 has any impact on the queue.

We support the short-term initiatives in the ESO 5-Point Plan and the ENA's 3-Step Plan. ESO and ENA/DNO engagement with stakeholders on these has been erratic – ranging from excellent to misleading. Stakeholders need greater transparency and more detail around how these will be implemented.

Careful thought must be given to how the newly reformed process is implemented. Should there be a move to annual windows, there is a risk that the ESO could face a tsunami of applications from projects trying to get in before the cut-off date for the new process. This could negatively impact multiple stakeholders, including for EG relying on the Project Progression process.

Projects may rush applications before the cut-off, meaning they are not of sufficient maturity, so an unintended consequence could be an increase in invalid applications. The same phenomenon could occur on an ongoing basis if annual windows are implemented, as projects seek to avoid waiting for the window to reopen 9 months later.

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?

Outside of this process, Government should continue to look at reforms to the planning process, supporting supply chain improvements and directing Ofgem to ensure networks are maximising their opportunities to secure additional well-justified funding to support network reinforcement.

I hope you find this response useful. If you would like to discuss anything in further detail, please contact me at helen.stack@centrica.com.

Yours sincerely

Helen Stack
Centrica Regulatory Affairs, UK & Ireland