Please Find Below Wokingham Borough Council's (WBC) response to the Connections Reform Consultation Questions

#### **Chapter 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?

The initial positions on each of the foundational design options and key variations are sensible, in the context of a new generating or energy storage system connected directly to the UK transmission system.

Visibility of the DNO/DSO connections stream can only be beneficial for understanding of project opportunities and queue. As such WBC consider that the foundational design option with Central planning is key, as the impact for connections is far broader than for transmission connected projects only. In the context of WBC, proposing to connect a 20MVA solar farm at 33kV, the connection offer from SSE had to be accepted in advance, with a notable deposit, though conditional on the capability of the NGC transmission network in terms of reverse power flow and fault levels from SSE to NGC. There was no visibility of the dynamic activity up stream which is fundamentally necessary for decision making. Connecting at any voltage level is ultimately dependant on the approval of NGC, and the Central Planning Design option is the option that seems to give the greatest potential for involvement from the smaller yet significantly more numerous schemes at Distribution voltages. The lack of visibility is currently a major issue, and if SSE were given a defined capacity budget then decision making would be more expedient.

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?

WBC do agree with this view, as capacity auctions favour economies of scope and scale. Capacity auctions are not therefore considered the optimal way to evolve and develop a modern grid network for a balanced equitable solution for all stakeholders.

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?

A review of the NGC ESO TEC register clearly demonstrates the pitfalls of the market based approach, which is dominated by well-funded and resourced developers with the resources to submit a significant volume of applications that are arguably blind to the strategic development needs of the transmission and distribution network and associated low carbon technology. Without some form of connections "Ombudsmen" mechanism the market may develop in a manner that is the most lucrative for developers, and not necessarily the optimal way in order to meet the core challenges of the energy trilemma; namely decarbonising energy, ensuring the security and reliability of energy supplies, and affordability. WBC consider that a more centralised deployment is necessary to accommodate a longer term balanced adoption.

#### **Chapter 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?

TMA A "Capacity information at the most granular level possible with a view on future capacity" is fundamentally important, and this information should also be available for DNO/DSO connected projects where the NGC grid capacity will have an impact.

The other longer term suggestions in TMA-A are all considered highly beneficial.

- · Detailed asset level data
- A full connectivity model to allow an understanding of which assets impact connections, potentially including Transmission and Distribution interactions;
- Ability to visualise the nearest applicant and connection date.

TMA B "Getting the best out of Pre-Application Meetings", is considered highly important. Currently, there is a lack of ability to discuss projects in advance. Improved Pre-Application could result in significant savings in resource for all parties involved.

TMA C: Appropriate use of optioneering route

We consider that a properly resourced optioneering route could have significant benefit, especially for decision making on marginal projects. A formal feasibility study is often the best way to determine viability at an early stage; so information regarding the complexity of connection and/or other identified constraints could prove significantly beneficial in helping make early decisions on projects.

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?

WBC fully support this recommendation, as the elimination of speculative, less conceived applications can only improve efficiency, and will lower the volume of speculative enquiries. The benefit of the Pre-Application Stage will however only be as good as it is managed and resourced. Resourcing the pre-application stage will be essential so that the outputs are meaningful and stakeholders can rely on them to thereafter inform decision making. Moreover, WBC would rather pay an appropriate fee for something that genuinely adds value, than a 'nominal' fee for a service that offers little benefit.

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.

WBC agree that the availability of TMAA 'Key Data' is vitally important.

WBC suggest that projected scheme capacity factor, role and technology should be available; as well possibly as information around the willingness of projects to be introduced to autonomous developers to explore synergies. The renewables sector (wind/PV/BESS) is fast moving with new products emerging at a significant rate. Of particular note is the emerging aspect of DC coupling and bidirectional, and as an

example if there are 3 autonomous projects, PV/Wind/BESS each with a separate application, modern inverter technology may be able to homogenise the projects at a DC level, minimising the AC connection impact. If economies of connection scope could be facilitated, the capacity factors and efficiencies could improve, therefore optimising export and minimising fault contributions.

### 5. Key Target Model Add-ons

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

WBC agree with the initial recommendation with regard to TMA D (requirements to apply). We would also suggest that a pre-screening review by the local planning authority is mandated. WBC acknowledge full planning is a major process but consider pre-screening for the size of projects to be appropriate.

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?

WBC agree that there are some important aspects within the 5-point plan that should be agreed. The TEC amnesty is known to be having some success, and in particular the treatment of storage, currently considered as generation, is a major issue where refinement is required.

In particular WBC consider that a way to optimise the accommodation of BESS and generating technologies is fundamentally important for the future. This may result in some reasonable operational sacrifices, but both are important because the NGC network is of strategic importance to every electricity generator and consumer in England and Wales.

It will be rare for PV to be generating in scheduled NGC ESO demand reduction periods when some BESS is likely to be discharging.

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

WBC consider.

- Strategic new technology and/or projects that are genuinely within the national interest should be accelerated.
- A demonstration of a successful planning consent should be in the accelerated process.
- Projects with a price-based mechanism to allow parties to pay for a quicker connection should be accelerated.
- 10. Do you agree with our initial recommendation with regard to TMAG (queue management)?

WBC agree Queue management is an area where fundamental change from Ofgem is required and modification to CMP376 is needed. Stronger powers are required to terminate disingenuous connection consents, as currently it is not an easy process.

#### 6. Target Model Options

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

All 4 TMO's will require some alteration to existing codes and licences, but this is accepted as necessary as the historical methodology has been shown to be unworkable.

WBC support all the TMO's but have preference for the TMO's where shovel ready projects are supported. Where planning consent is gained, priority should be awarded.

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?

WBC believe that 4 TMOs are a manageable range of options with TMO4 being potentially the most complex. More than 4 could become challenging to appraise objectively.

13. Are there any important TMOs we have missed?

Hybrid DC coupled solutions that provide the opportunity to improve capacity factor and grid utilisation over singular technology connections should be considered to be advantageous. As such these projects could be given consideration.

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?

WBC believe that Submit Consent is a fundamental key requirement and is not too early for Gate 2 in TMO2 to 4.

#### 7. Recommended TMO

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

Yes

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

WBC agree with the design criteria in table 7.1. It is noted that TM03 and 04 score poorly on "Can be implemented in a timely and efficient manner", but it is assumed a large proportion of this is due to the added complexity and initial timescales to set up the new processes. As it is accepted that the current methodology is no longer effective, getting to TMO4 as fast as possible seems the most sensible option.

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

WBC agree that TMO 4 is the most appropriate, best value, and long term advantageous methodology for all stakeholders, and fully agree with the statement "One of our key objectives of the reformed connections process is to create a more coordinated and efficient electricity transmission system and network design. More efficient network design (together with additional measures to allocate capacity more efficiently to projects that are ready to proceed) will deliver better value. This will not just be better value for consumers, but will also ultimately connect projects more quickly, through a more efficient process. But an important pre-requisite of producing efficient and robust coordinated connection designs is to be able to study connections applications in batches and within a reasonable timescale. We believe that TMO4 unlocks these benefits significantly more efficiently than other options considered, for the reasons set out below."

The key challenges for TMO4 is that it is the most complex and difficult to implement in comparison to the other TMOs.

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?

WBC believe TMO4 with a target 50% project attrition rate is an ideal objective.

### 8. Key Customer and Technology Type Adjustments

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

Yes, as stated in the consultation "However, in respect of TMO4, the early application window would mean that new or additional demand requirements would need to be considered within the co-ordinated network design process, alongside other projects within that application window". If the realistic assumption is made that addition of BESS at all voltage levels will be a major feature of a modern grid, and BESS power flow at distribution level will add both notable demand and NGC interface export quantum, then demand requires consideration.

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?

Currently a DNO accepted connection offer is the marker for a forthcoming project. Far more focus with weightings and customer feedback on the pre-acceptance project pipeline is probably required with close attention to aspects like planning consents and any signal that adds clarity to a potential project.

- 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)?

Much of the current frustration when applying to DNOs is the project progression and statement of works process which is outdated and leaves distribution customer applicants in the dark. If TM04 is taken forward, there is a welcome acknowledged need to replace the existing 'Statement of Works' and 'Project Progression' processes.

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?

Yes

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

No comment

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

No comment

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

No comment

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

Yes

### 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?

WBC agree with the recommendations; in particular the ability for ESO to reject applications if considered inappropriate. The flexibility on charging, may help against applicants targeting volume with no specific relevant locational interest, which has been detrimental to local stakeholders who are geographically constrained.

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

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

Yes

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 transitional program in figure 10.1 seems a reasonable programme for a major review and implementation. The current system is outdated and is not working. Consequently the faster the transition to a new methodology can be implemented the better.

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?

- There is currently a major shift from historic fossil fuel based generation to renewable, supported by an exponential increase in battery energy storage adoption at both utility and smaller scale. Projected demand increases from adoption of EV's and heat pumps incentives to lower electricity comer demand, in areas not currently being addressed, can only help address the cost impact, as an increased in megawatts (energy efficiency) is the best way to minimise the requirement, quantum and scope of network upgrades.
- Schemes like the NGC ESO Demand flexibility Service can play a major role in raising awareness in energy savings and changing behavioural patterns on energy usage.
- The Govt/Ofgem could consider lower planning restrictions to onshore wind turbines in England via the introduction of greater local planning autonomy. The generation profile of wind is opposite to that of solar PV and will facilitate network embedded generation, which in principal can share capacity and increase grid capacity factors. This will lead to lower network upgrade requirements.