Department for Energy Security & Net Zero

Rt Hon Andrew Bowie MP
Minister for Nuclear and Networks

Department for Energy Security & Net Zero
1 Victoria Street
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www.gov.uk

Our ref:
Your ref:

21st November 2023

The Net Zero, Energy and Transport Committee
The Scottish Parliament
Edinburgh
EH99 1SP

Through the Convener, Edward Mountain MSP

Dear Edward,

I write to thank you and the other members of the Net Zero, Energy and Transport Committee for publishing the report from your inquiry, 'Scotland's electricity infrastructure: inhibitor or enabler of our energy ambitions?'

I am sorry that the UK Government response to the relevant conclusions and recommendations, which we had prepared, was delayed in reaching you. I am happy to enclose it now. This response reflects the UK Government's commitment to the design and delivery of policies for modernising the grid, creating the required infrastructure, promoting inter-governmental co-operation, and engaging the public and communities on local electricity infrastructure.

It was my pleasure to come up to Edinburgh to participate in the evidence session held by the Committee on 27 April 2023. The Department for Energy Security and Net Zero remains open to engaging the devolved administrations and all relevant stakeholders on delivering energy security in the United Kingdom and meeting the UK's net zero objectives.

Thank you again for the Committee's work and its report.

Yours aye,

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UK Government Response to the Report of The Net Zero, Energy and Transport Committee of The Scottish Parliament

1. The Net Zero, Energy and Transport Committee of The Scottish Parliament has published a report of its inquiry into 'Scotland's electricity infrastructure: inhibitor or enabler of our energy ambitions?'
2. Minister Bowie appeared before the Committee in April 2023, at an evidence session focused on the intersection of devolved and reserved responsibilities in relation to the future of electricity infrastructure in Scotland. This explored the extent to which Scottish Government and UK Government ambitions in this area are complementary or in tension, and intergovernmental working relations at this intersection.
3. The Committee has reached some conclusions and recommendations to which the UK Government needs to respond. Paragraphs with recommendations are quoted, with the recommendation itself in bold and the UK Government's response underneath.

Modernising the Grid

Recommendation 1

An expanded National Grid is a direct and inevitable consequence of decarbonising our energy supply to achieve net zero: it is a public good. The approach of seeking to match Grid capacity to current usage is now outdated as policy, and should be replaced by the principle of prudential investment in Grid capacity in anticipation of future need, and in order to meet the 2045 net zero target. The Committee calls for this changed approach to be signalled clearly and strongly by governments and Ofgem. Amongst other things, this would also increase long-term public and investor confidence in our renewables industry.

4. The UK Government recognises the crucial role electricity networks play in enabling net zero, energy security and the wealth of associated economic opportunities.
5. As set out in the Electricity Networks Strategic Framework, it is anticipated that between £100 billion and £240 billion of investment will be required in the electricity network to enable the energy transition. This includes £40-60bn for the onshore transmission network and £60-180bn of load-related investment for the distribution network.
6. To ensure that the networks are an enabler, rather than a barrier to the energy system transformation, network infrastructure needs to be built and available ahead of need. The UK Government and Ofgem are committed to creating policy

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and regulatory frameworks to support the anticipatory investment required for this and to increase the pace of infrastructure delivery.

7. We have already taken action to improve strategic planning and speed up consenting and regulatory approvals for networks. Ofgem has accelerated nearly £20bn of strategic transmission investment through its Accelerating Strategic Transmission Investment decision last December. For the local distribution networks, the current price control (2023-2028) enables more than £22 billion of initial investment.
8. Looking ahead, Ofgem is reviewing the wider regulatory framework to ensure it allows strategic investment and flexibility needed for the energy transition as part of the Future Systems and Network Regulation Review (FSNR). The UK Government's support for enabling anticipatory investment through regulation of the electricity networks is reflected in the draft Strategy and Policy Statement for energy policy, a statutory document designed to guide Ofgem in the exercise of its duties, which was consulted on over the summer.
9. We are also moving to a strategically planned approach to network infrastructure build. The Holistic Network Design, published in July 2022 by the Electricity System Operator (ESO), recommended how to connect the 23GW of energy generated by the 18 windfarms in scope to where it is needed, helping to support the delivery of 50GW by 2030. Once established, the Future Systems Operator will build on the work of the ESO and develop the Centralised Strategic Network Plan, covering the whole electricity network. And, in his September 2023 speech on net zero, the Prime Minister announced that the UK Government will bring forward comprehensive new reforms to energy infrastructure, including publishing the first ever Spatial Energy Plan, which will cover the energy system more widely and will inform strategic planning for the electricity network.

Recommendation 2

For the same reasons, a clear statement of intent about, and plan of action for, speeding up Grid connection is also needed from governments. It is unacceptable that developers are being asked to wait upwards of a decade for a connection. It is also completely at odds with ambitions to grow a world-leading renewables sector.

10. Years of world-leading green investment has meant network operators have experienced record demand for connections to the electricity network, and the UK/ has increased the amount connected to our grid more than sixfold, connecting the second highest amount of renewable electricity in Europe since 2010 according to IRENA statistics.
11. But we want to go further and faster so we are taking steps to rapidly bring even more online by accelerating plans to reform the connection process and reduce connection timescales. The UK Government is working with Ofgem and network companies to release network capacity and improve the connections process. Actions already underway by network companies are expected to see a

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reduction in transmission connection timescales of 2-10 years, for the majority of existing projects. Building on this, the UK Government will jointly publish a Connections Action Plan with Ofgem soon setting out further actions by the UK Government, Ofgem and network companies to accelerate network connections.

Recommendation 3

We call on the Scottish Government to work with the UK and Welsh Governments, Ofgem and National Grid ESO to:

- **enshrine and publicly promote Grid expansion in anticipation of need as a joint long-term, strategic goal of GB energy policy, setting out how this is to be achieved, and**
- **promote a plan of action (including investment and legal change where needed) to bring down average waiting times for Grid connection.**

12. Work is already underway across the UK Government to improve strategic planning of network infrastructure as described above. However, we recognise that more needs to be done.

13. In July 2022 the UK Government appointed Nick Winser CBE to the role of Electricity Networks Commissioner. The Commissioner's Report was published on 4 August 2023, setting out how the end-to-end timeline for building new electricity transmission network infrastructure could be halved from around 12 to 14 years currently to around seven years. The UK Government has committed to publishing an Action Plan this year and is working with the devolved administrations in response to the Commissioner's recommendations.

14. As well as action to accelerate infrastructure build, bringing down waiting time for grid connections requires reform to the current connections process, and the UK Government is committed to exploring all options to do this.

15. The UK Government is working with Ofgem and network companies to release network capacity and improve the connections process. The delivery of the actions is already underway by network companies who are expected to see a reduction in transmission connection timescales of 2-10 years, for the majority of existing projects. Building on this, the UK Government will jointly publish a Connections Action Plan with Ofgem soon setting out further actions by the Government, Ofgem and network companies to accelerate network connections.

Recommendation 4

The Committee is also specifically concerned by evidence of a "first come first served" approach to Grid connections that can mean delayed or speculative projects in the line for a connection act as a block on others, and that it is smaller or less established players in the renewables sector that

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disproportionately suffer because of this. We agree with views that a more proactive regulatory approach to queue management is needed. We ask the Scottish Government whether it accepts this evidence and, if so, what action it can take, including by way of making representations to the UK Government or Ofgem, to address this. We direct the above conclusions and recommendations to the UK Government and to Ofgem for comment.

16. Under the current connection process, where there is insufficient network capacity available in an area, projects are queued based on when they applied to connect. This can cause connection delays when projects at the front of the queue are not progressing.

17. The Prime Minister announced that we will end this first-come-first-served approach to grid connections by raising the bar to enter the queue and make sure those ready first, will connect first. We want to move to a process where projects which can connect faster are able to do so, without being hindered by delayed or speculative projects.

18. Ofgem are currently reviewing a code modification that proposes to insert queue management milestones into construction agreements and grant the ESO with a right to terminate projects that fail to progress against their set milestones. Termination would consequently see these projects removed from the queue, which could enable other projects to connect quicker. It is also anticipated that the code modification, if approved, could lead to fewer speculative applications, as a by-product of the introduction of milestones and termination provisions.

19. The UK Government will provide further details on these reforms in the forthcoming joint UK Government and Ofgem Connections Action Plan. This will build upon actions already underway by network companies.

Intergovernmental Co-operation and Differences

Recommendation 5

The Committee recognises that reform of transmission charging raises complex issues and must fit into a whole-system consideration of how Grid maintenance and expansion is financed. However, a long-term strategic switch to offshore and onshore wind, green hydrogen and other forms of renewable energy changes Great Britain's energy generation map and raises questions as to whether charging for transmission based on relative remoteness is consistent with net zero goals. We note that Ofgem appear to have an open mind on revisiting the principles currently underlying the charging regime. It is now past time for this issue to be resolved, and for a clear view on the overall direction of travel on transmission charging to be set out. We request an update on proposed reforms from Ofgem and from the UK Government.

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20. The UK Government fully supports the work being led by Ofgem and National Grid Electricity System Operator (ESO) to consider the future design and role of electricity transmission charges. Ofgem has noted that reforms to the existing transmission charging methodology are needed relatively urgently, as unpredictability in transmission charges has been identified by stakeholders as a barrier to low carbon investments. To this end, Ofgem established a transmission charging task force[1], which is focussing on potential changes to improve the stability and predictability of the existing framework. Ofgem has noted that the task force is targeting implementation of change between 2025 and 2026.

21. In addition, Ofgem is considering more fundamental reform to the purpose and role of transmission charges, in parallel with the UK Government's Review of Electricity Market Arrangements (REMA). As part of its consideration, Ofgem published an open letter on strategic transmission charging reform on 11th September 2023, with stakeholder views invited by 15th November 2023.[2]

22. For the UK Government's part, the draft Strategy and Policy Statement (SPS) for energy policy[3] sets out the principles that Ofgem should balance when approving the design of electricity network charges, including cost-reflectivity, enabling net zero and tariff predictability. The UK Government is also working closely with Ofgem to consider the interaction between strategic transmission charging reform and REMA, including how best to improve the locational signals for investment and operational decisions.

Recommendation 6

The Committee notes views that pumped storage hydro should become a more significant component of Scotland's, and Great Britain's, future energy mix, as a means of increasing baseload and storage capacity within a decarbonised system. The Committee is not satisfied that the UK Government has made clear during this inquiry whether it is minded to intervene to provide assurance to potential private investors looking to invest in pumped hydro projects, such as at Coire Glas. We invite it to provide this clarity in its response to this report.

23. The UK Government recognises that a variety of storage technologies will be needed to help balance the system, including technologies that can deploy at different scales and provide output for different durations.

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[1] https://www.chargingfutures.com/task-forces/task-forces/transmission-network-use-of-systems-charges-task-force/resources/

[2] https://www.ofgem.gov.uk/publications/open-letter-strategic-transmission-charging-reform

[3] https://www.gov.uk/government/consultations/strategy-and-policy-statement-for-energy-policy-in-great-britain

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24. Large-scale long-duration electricity storage technologies, such as pumped hydro storage, are enablers to a secure, cost effective, and low carbon energy system. In Powering Up Britain, we committed to putting in place an appropriate policy framework by 2024 to enable investment in such technologies, with the goal of deploying sufficient storage capacity to balance the overall system. We anticipate further consultation with stakeholders on an appropriate policy approach later this year.