

SUBMISSION FROM ABO WIND

We have pleasure in responding to the call for written evidence to the Scottish Parliament's Economy, Energy and Tourism Committee regarding Security of Supply. We are grateful for your agreement to extend the deadline for our response to 15th May 2015.

ABO Wind is one of Europe's most experienced wind energy developers. ABO Wind now has interests in the United Kingdom, Ireland, Germany, France, Spain, Finland and Argentina. ABO Wind has successfully been developing, constructing, operating and maintaining wind farms for almost two decades and to date has connected 500 wind turbines generating more than 1,000MW.

Our team has expertise covering all phases of wind farm development, from site selection and land acquisition to assessing the specific wind yield for a project, technical wind farm design, planning and environmental impact assessment, bank financing, wind farm construction and operational maintenance.

We have been operating in the UK since 2006 and have two offices, located in Livingston and Inverness. ABO Wind UK's first operational wind farm is a three turbine development at Lairg, Sutherland which has been operational since January 2012. This is located on the common grazings of the Lairg Estate and includes a sizable crofting involvement in the project. Over the next 3-5 years we plan to invest around £390 million in onshore wind energy projects in Scotland.

We have structured our evidence around the headings set out in the Call for Written Evidence.

1. Supply

ABO Wind supports the Scottish Government's targets for 100% of electricity demand by 2020 to be met by renewables and the ambition for a largely decarbonised electricity system by 2030. We hope to make a meaningful contribution towards these goals through the projects and investments we are currently making across Scotland.

We note from the quarterly Energy Statistics for Scotland that the rate of deployment of renewables has been in decline since Q1 2013, despite the growth in the scale of renewable projects consented and awaiting construction (8.3GW at December 2015, based on the March 2015 statistics). Around half of this capacity 'awaiting construction' is from consented offshore wind energy projects for which there are significant cost-reduction and engineering challenges that require to be addressed before deployment. These factors strongly suggest there are serious underlying impediments to the deployment of all types of new renewable generation capacity. Given that Audit Scotland (Renewable Energy, Auditor General for Scotland, September 2013) identified that to meet the 2020 target, the rate of deployment over the period 2015-2020 would need to be double the actual rates achieved from 2008 to 2013, it seems unlikely that the 2020 target can be achieved unless these impediments (including those we identify below) are urgently addressed.

This situation also suggests that the current tools in place to bridge the move from fossil fuels to renewables are inadequate.

The experience of ABO Wind suggests that the following factors are significantly affecting renewables deployment and, therefore, risking continued renewables investment:

- **Grid capacity constraints.** For example, in Highland our operational wind farm is constrained by one-third of its capacity, awaiting grid upgrading. In Perth and Kinross one of our wind farm projects' 2017 grid connection date has been extended to 2021 due to wider network upgrading, and in Argyll and Bute one of our wind farm projects has been given a grid connection date of 2022, even if we were to progress this as a community-scale single turbine project. An interesting comparison can also be drawn with the German energy market. Whereas, in Scotland country Scottish Power and SSE, both wholesalers and suppliers of energy, are also the arbiters of grid connectivity, in Germany this duality of roles was ended in the last decade, driven by the potential conflict of interest and dislocation with the market.
- **Radar constraints.** Civil and defence radar operators are acting unreasonably in their engagement with onshore wind energy in general and with developers themselves. While we accept that aviation safety is paramount, it is clear that the situation in the UK differs markedly from that in other countries where there is a greater willingness (often led and implemented by government) to deploy operational and technical mitigation to radar systems to enable wind energy development to proceed. For example, MoD has declined to accept any operational or technical mitigation to the deployed Watchman Air Traffic Control radars for new wind farm development, despite that it already successfully employs operational mitigation. Further, it did not include any wind farm detection specification in its recently let Watchman replacement contract (Project Aquila). We are currently trying to engage with Glasgow Airport to remove an objection from them to one of our wind farms in planning. Despite that our project lies in the accepted Kincardine radar mitigation area serving the operational Black Law Wind Farm, and that NATS is satisfied that this Kincardine radar patch will address their concerns on Glasgow Airport radar, Glasgow Airport has formally (and incorrectly) advised the planning authority that "there are currently no technical mitigation solutions that can be applied to this proposal" and continues to avoid meaningful engagement with ABO Wind.
- **Contracts for Difference.** The ending of the current ROC arrangements and their replacement with CfD has had a profound effect on investment in the onshore wind sector. While the level of bidding to the first CfD round earlier this year and the strike price arising from the auction appear to be encouraging, the situation masks fundamental concerns with the new funding mechanism. The scale of over-subscription, which we regret is not being publically disclosed but understand from DECC to be (at the strike price) four-times the funding available, is manifest of a wholly-inadequate level of funding that will inevitably hold back the deployment of consented renewable projects, rendering otherwise deliverable schemes commercially unviable due to the lack of a CfD allocation. The annual auction, still not confirmed to take place again, creates huge investment uncertainty on the back of what is typically a lengthy process requiring significant capital outlay to gain planning consent and a grid connection offer even before qualifying to bid for CfD. The lack of an on-going support mechanism post-2020, with no CfD allocations and no clarity over what, if anything, will replace it, only serves to heighten the uncertainty. This begs the question as to how can we ensure, with this current mechanism, that renewable energy remains an important contributor to security of

supply in the energy mix, alongside fossil fuels and nuclear energy. Substantial reform to the CfD mechanism, particularly the capacity market allocation, is urgently required to sustain current investment in onshore wind energy and renewables generally, let alone encourage future investment.

2. Demand

ABO Wind submits no evidence on this area.

3. Transmission Network

Years of under-planning and under-investment in grid upgrading and expansion have created a grid network that is a significant constraint to achieving both the Scottish Government's targets for 100% of electricity demand by 2020 to be met by renewables and ambition for a largely decarbonised electricity system by 2030. The progress of grid upgrading and expansion is wholly inadequate. The process by which companies such as ABO Wind apply for and are allocated a grid connection, and the timing (and reasons for that timing) of that grid connection and attendant charges, is lengthy, complex, opaque and expensive. This is not in the public interest. Accelerated grid upgrading and expansion should be a national priority to ensure that Scotland and the UK can decarbonise electricity supply while at the same time allowing remote/island communities to benefit from security of supply and secure the economic benefits arising from the installation of renewable energy projects.

4. Electricity Market

ABO Wind submits no evidence on this area.

5. Other Matters

As the Call for Written Evidence rightly notes, a combination of organisations have responsibility in the area concerning security of supply. This has arisen incrementally over time and a more radical, strategic approach is now urgently needed to address the 'system disconnect' that is now apparent in the area of electricity generation, distribution/transmission and demand management. Securing a robust, cost-effective low-carbon future electricity system must become an urgent national priority. ABO Wind is keen to play a part in this.

We would be pleased to provide evidence to the committee if called upon.