



MINISTRY OF DEFENCE

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Ref. D/DE/JWOC

01 July 2009

Dear Lesley,

### Introduction

I refer to the MOD's objection to the above development and to the Public Inquiry which took place in Duns in February of last year.

I also refer to Mr Steele's letter of 6 October 2008. In his letter, Mr Steele invited the MOD to supply further information (which was not considered within the Public Inquiry) which may now be available with regard to possible mitigation of the impact of the Fallago Rig wind farm development on the Brizlee Wood radar.

### Withdrawal of objection

At the time of the Public Inquiry, the MOD's position was that no suitable mitigation had been identified. The MOD therefore invited Scottish Ministers to refuse consent.

I can confirm that in light of developments following the Public Inquiry, the MOD is now able to withdraw its objection to the Fallago Rig windfarm provided that any section 36 consent is made subject to an appropriate aviation condition and the applicants enter into a legal agreement with the MOD in relation to an agreed Radar Mitigation Scheme.

I have set out in part 1 of the schedule to this letter the terms of the condition which would meet the MOD's concerns. The MOD has engaged in detailed discussions with the developer and I can confirm that the proposed condition is acceptable to both parties.



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You will note that the suspensive condition requires the developer to enter into a Radar Mitigation Scheme with the MOD. The Radar Mitigation will set out in detail the measures which the developer will take to mitigate the impact of the Fallago Rig wind farm development on the Brizlee Wood Radar.

The MOD and the developer have entered into fairly detailed Heads of Agreement, a copy of which I enclose, regarding the developer's proposed mitigation.

Given the importance of the Radar Mitigation Scheme, the MOD would request that as a condition of the withdrawal of its objection, any section 36 consent provides that that consent may not be assigned without the prior written authorisation of the Scottish Ministers. I have proposed a condition, which is also set out in part 1 of the schedule to this letter, regarding assignation. You will note that in respect of the aviation condition, the draft condition requires Scottish Ministers to consult with the MOD before authorising assignation.

### The MOD's position

Since the Public Inquiry, significant advances have been made in relation to the mitigation of the impacts of windfarms on Air Defence Radar, and the development of technical solutions to reduce the effects of wind turbines.

The MOD has, through these technical advances, been able to make significant progress with developers when attempting to resolve conflict between windfarm developments and Air Defence Radar. There are now a number of examples whereby it has been possible to demonstrate that the effects of wind turbines on Air Defence radar performance could be reduced by technical modifications to radar equipment.

In parallel with this radar development work, other mitigation options have also been explored successfully. Again, significant advances have been made over the course of the past year.

As a result of this work, the MOD is confident that mitigation can be provided in appropriate cases through the integration of extra feeds from Air Traffic Control radars. Proposals have now been made to undertake a detailed study of how the Command and Control System could be enhanced to take extra feed from Air Traffic Control radars. A second study has also been proposed to scope the work needed to modify and extract data from Air Traffic Control radars and feed it to the Command and Control System. The outcome of these parallel studies will inform both the MOD and developers of the measures needed to complete the integration work and therefore achieve the required mitigation.

At the time of the Public Inquiry, the full integration of Air Traffic Control radars was not considered feasible due to the limitations of the Command and Control System and the differences in radar output format.

Since the conclusion of the Public Inquiry, and in light of the advances to which I have referred, the MOD has been able to evolve its approach to wind energy developments. The MOD has now entered into a Memorandum of Understanding with the windfarm industry and the Department for Energy and Climate Change.

Through these advances, MOD Air Defence specialists have established a process whereby they can work with industry, when possible, to allow wind turbine developments to proceed. This approach has led to the MOD developing aviation conditions for a number of windfarms, based on clearly defined volumes of airspace within which the MOD can accept some degradation to radar performance. The term 'Aviation Specification' is used to refer to this volume of airspace. Outside this volume, radar coverage will be assured by mitigation provided by the developer. The MOD's

requirements are fixed with reference to operational considerations and to the availability of mitigation.

As you will see from the proposed aviation condition, the proposed mitigation for the Fallago Rig windfarm involves the setting of an Aviation Specification. The developer has agreed that it will be responsible for the cost of mitigating radar performance outside this volume. This will be achieved in the first instance by the full integration of the Leuchars Watchman radar into the Air Defence System.

The Aviation Specification has been fixed with reference to the MOD's operational requirements. The justification for the specific requirements contained within the condition, and which relate to issues of national security, cannot be gone into in any detail. In terms of the Heads of Agreement, the developer has agreed to these operational requirements being imposed through a condition.

The MOD anticipates that the integration of the Leuchars Watchman radar will in fact allow the Aviation Specification to be met. As will be seen, again, from the proposed condition, the detailed Radar Mitigation Scheme must be agreed before any turbine is erected on site. The Radar Mitigation Scheme will allow the turbines to become operational once the Air Traffic Control radar at Leuchars has been fully integrated.

The Radar Mitigation Scheme will set out in detail:

- (i) The steps required to integrate the RAF Air Traffic Control Radar at RAF Leuchars into the United Kingdom Air Surveillance and Control System. The integration will be completed before any of the turbines become operational.
- (ii) The developer's undertaking to promote a further scheme of mitigation, to enable the Aviation Specification to be met in respect of the operation of any turbine in the Development, should the Aviation Specification not have been met through the integration. The Radar Mitigation Scheme will not detail the nature of the further scheme of mitigation, but will state that that further scheme of mitigation, if required, will be for the purpose of enabling by appropriate measures the Aviation Specification to be satisfied.
- (iii) A payment which the developer will be obliged to make to the MOD and the circumstances in which that payment will require to be made. This payment will be made in the event that the developer's further scheme of mitigation does not satisfy the Aviation Specification, and will be put towards the MOD's own radar mitigation scheme.
- (iv) The bond or other security which is to be put in place by the developer in favour of the MOD in connection with its financial obligations in terms of the Radar Mitigation Scheme.

The Radar Mitigation Scheme will provide that the development may only be operated in accordance with the terms of that scheme.

As I have noted, in the event that the integration of Air Traffic Control radar at Leuchars does not satisfy the Aviation Specification, the Radar Mitigation Scheme will require the developer to promote a further mitigation scheme. This is a default provision, to ensure that a full scheme of mitigation will be delivered but I would confirm that the MOD is satisfied that the integration of the Air Traffic Control radar at Leuchars is likely to be sufficient to allow the development to become operational.

The assessment of the impact of the development on the Brizlee Wood radar following integration is an operational matter for the MOD and raises issues of a sensitive nature which I cannot go into in this letter.

As I am sure you will appreciate, every development has to be considered on its merits. As regards Fallago Rig, the MOD is confident that the mitigation which has been identified will both be technically feasible and deliverable within the life of the consent.

#### Further conditions

I have set out in part 2 of the schedule to this letter the further aviation-related conditions which the MOD would invite Scottish Ministers to attach to the section 36 consent and deemed planning permission, respectively. The developer proposed certain conditions at the close of the Public Inquiry, and the MOD engaged in correspondence (through its solicitors) with the Directorate for Planning and Environmental Appeals in this regard.

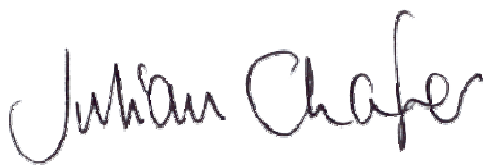
These conditions have been the subject of further discussion between the MOD and the developer following the Public Inquiry. The conditions set out in part 2 of the schedule to this letter are now agreed between the MOD and the developer.

#### Conclusion

The MOD is prepared to withdraw its objection on the basis set out in this letter. On consent and deemed planning permission being granted, I anticipate that work will begin on agreeing the detail of the Radar Mitigation Scheme, which will involve the commissioning of a technical feasibility study into the integration of the Air Traffic Control radar at Leuchars into the Air Defence system.

I confirm that the developer has seen a draft of this letter before I have sent it to you.

Yours sincerely

A handwritten signature in black ink that reads "Julian Chafer". The signature is written in a cursive, slightly slanted style.

Julian Chafer FRICS  
Principal Safeguarding Officer

## SCHEDULE

### Part 1

#### Aviation condition

1. Any consent which is granted under section 36 of the Electricity Act 1989 for the Fallago Rig windfarm Development shall be made subject to the following condition, with which North British Windpower Limited (“the Company”) will comply:-

“No turbine shall be erected on site unless and until the Scottish Ministers have approved in writing a Radar Mitigation Scheme proposed by the Company and agreed by the MOD.

No turbine shall become operational unless and until all measures required by that time in terms of the Radar Mitigation Scheme to implement the Radar Mitigation Scheme have been carried out and approved by the Scottish Ministers in consultation with the MOD, and the Company shall thereafter comply with all other obligations contained within the approved Radar Mitigation Scheme.

For the purposes of this condition “Radar Mitigation Scheme” means a scheme designed to mitigate the impact of the Development upon the Brizlee Wood Air Defence Radar installation and the air surveillance operations of the MOD. The Radar Mitigation Scheme involves the implementation of appropriate measures, including the integration into the United Kingdom Air Surveillance and Control System of the RAF Air Traffic Control radar at RAF Leuchars to ensure that the Aviation Specification is met. The Radar Mitigation Scheme will also provide for the steps to be taken by the Company in the event that the Aviation Specification is not met. The Radar Mitigation Scheme is more fully described in clause 3 of the Heads of Agreement between the MOD and the Company.

For the purposes of this condition (and unless otherwise agreed between the Company and the MOD and approved by the Scottish Ministers) “Aviation Specification” means that outside the Volume, the operation of a turbine (either by itself or in combination with any other turbine) shall not at any time cause or contribute to the Probability of Detection being less than 80%.

The “Volume” means a volume bounded by:

- a horizontal plane at ground level at the lowest point of elevation in the Development;
- a horizontal plane 2,500 feet above ground level at the turbine location which is the highest Above Ordnance Datum in the Development; and
- a vertical elevation formed by the agglomeration of 1 km radius circles around each turbine.

“Probability of Detection” means the probability of detecting a 1m<sup>2</sup> Swerling Case 1 target as measured in accordance with the MOD’s standard operating procedures for the calibration and checking of MOD air defence radars. For the avoidance of doubt, within the Volume, a Probability of Detection greater than 0% is not required.”

2. The section 36 consent will provide that the Company shall not be permitted to assign the section 36 consent without the prior written authorisation of the Scottish Ministers. The Scottish Ministers may grant consent (with or without conditions) or refuse such authorisation as they may, in their own discretion, see fit. The consent shall not be capable of being assigned, alienated or transferred otherwise than in accordance with the foregoing procedure. In respect of the aviation condition, Scottish Ministers shall consult with the MOD before issuing such written authorisation.

## Part 2

### Section 36 conditions

It is proposed that the aviation condition referred to in the foregoing letter will apply instead of the suggested section 36 conditions 3 and 4 (which were not accepted by the MOD).

As regards section 36 conditions 1 and 2, the following are proposed:

1. At least 14 days in advance of the proposed date of commencement of construction the developer shall provide the Ministry of Defence with the following detailed information:-

- (i) the proposed date of commencement of construction;
- (ii) the proposed date of completion of construction;
- (iii) the proposed maximum extension height of any construction equipment;

and no work shall commence on site until the Ministry of Defence has confirmed to the Planning Authority that the said information has been provided. Subsequent to the provision of the said information, the developer shall give the MOD notice as soon as reasonably practicable if the proposed date of commencement of construction is to change. The developer shall provide written confirmation to the Ministry of Defence of the actual dates on which construction is commenced and completed and of the actual maximum extension height of any construction equipment on site.

2. At least 14 days in advance of the proposed date of erection of the first turbine on site the developer shall provide the Ministry of Defence with the following detailed information:-

- (i) the proposed position of each turbine in latitude and longitude (in degrees, minutes and seconds);
- (ii) the proposed height above ground level of each turbine (to blade tip, in metres);
- (iii) the proposed lighting of turbines if appropriate

and no turbine shall be erected on site until the Ministry of Defence has confirmed to the Planning Authority that the said information has been provided.

As soon as reasonably practicable following completion of construction of all the turbines on the site, the developer shall provide written confirmation to the Ministry of Defence of the following:-

- (i) the actual position of each turbine in latitude and longitude (in degrees, minutes and seconds);
- (ii) the actual height above ground level of each turbine (to blade tip, in metres);
- (iii) the lighting of turbines if appropriate.

### Planning conditions

As regards suggested planning condition numbered 4, the Company and the MOD agree that the following condition should be attached to the deemed planning permission instead of the condition previously intimated to the DPEA:

“Following the formation of the access road and completion of the ground investigation studies, details of the precise micro-siting of each turbine and of all ancillary equipment and

buildings shall be submitted for the approval of the Planning Authority prior to the erection or installation of the aforementioned turbines, equipment, and buildings.

The micro-siting shall be no more than 50 metres in any direction from the position of each turbine as it is shown on plan reference 13286-078a.wor contained within the Supplementary Environmental Information, unless agreed with the Planning Authority in consultation with the Ministry of Defence.

The micro-siting shall maintain a 20 metre buffer zone to water courses as shown on plan reference 13286-079a.wor, unless agreed with the Planning Authority in consultation with SEPA and SNH.”

As regards planning conditions 19 and 20, the following are proposed:

19	<p>At least 14 days in advance of the proposed date of commencement of construction the developer shall provide the Ministry of Defence with the following detailed information:-</p> <ul style="list-style-type: none"> <li>(i) the proposed date of commencement of construction;</li> <li>(ii) the proposed date of completion of construction;</li> <li>(iii) the proposed maximum extension height of any construction equipment;</li> </ul> <p>and no work shall commence on site until the Ministry of Defence has confirmed to the Planning Authority that the said information has been provided. Subsequent to the provision of the said information, the developer shall give the Ministry of Defence notice as soon as reasonably practicable if the proposed date of commencement of construction is to change. The developer shall provide written confirmation to the Ministry of Defence of the actual dates on which construction is commenced and completed and of the actual maximum extension height of any construction equipment on site.</p> <p>Reason: To ensure that the Ministry of Defence is informed of activities that may potentially affect its interests in respect of overflight of the site.</p>
20	<p>At least 14 days in advance of the proposed date of erection of the first turbine on site the developer shall provide the Ministry of Defence with the following detailed information:</p> <ul style="list-style-type: none"> <li>(i) the proposed position of each turbine in latitude and longitude (in degrees, minutes and seconds);</li> <li>(ii) the proposed height above ground level of each turbine (to blade tip, in metres);</li> <li>(iii) the proposed lighting of turbines if appropriate</li> </ul> <p>and no turbine shall be erected on site until the Ministry of Defence has confirmed to the Planning Authority that the said information has been provided.</p> <p>As soon as reasonably practicable following completion of construction of all the turbines on the site, the developer shall provide written confirmation to the Ministry of Defence of the following:-</p> <ul style="list-style-type: none"> <li>(i) the actual position of each turbine in latitude and longitude (in degrees, minutes and seconds);</li> <li>(ii) the actual height above ground level of each turbine (to blade tip, in metres);</li> <li>(iii) the lighting of turbines if appropriate.</li> </ul> <p>Reason: To ensure that the Ministry of Defence is informed of activities that may potentially affect its interests in respect of overflight of the site.</p>