

[REDACTED]
Marine Licensing Operations Team
Marine Scotland
375 Victoria Road
Aberdeen
AB11 9DB

20 December 2018

Dear [REDACTED]

FORTHWIND SECTION 36C VARIATION APPLICATION

As you are aware, Forthwind Ltd. ("Forthwind") was granted consent on 21 December 2016 under Section 36 (S36) of the Electricity Act 1989 for the construction and operation of the Forthwind Project off the coast of Methil, Fife. The Forthwind Section 36 grants consent, as described in Annex 1, for a permitted generating capacity not exceeding 18 MW. The section 36 consent also provides a direction under section 57(2) of the Town and Country Planning (Scotland) Act 1997 (as amended) that planning permission for the ancillary onshore development (the substation) is deemed to be granted.

Since the consent award, Forthwind have re-evaluated the consented project envelope and have identified the need, due to recent and forecasted improvements in the wind turbine technology, to vary the maximum generation capacity limit from 18MW to 29.9MW. Therefore, in compliance with the requirements of:

- Electricity Generating Stations (Applications for Variation of Consent) (Scotland) Regulations 2013 (the "Variation Regulations");
- The Electricity Works (Environmental Impact Assessment) (Scotland) Amendment Regulations 2017 (the "EIA Regulations"); and
- Scottish government guidance on applying for a S36 Consent Variation (Scottish Government 2015),

Forthwind request that Marine Scotland accept this letter as a variation application to amend the S36 consent to accommodate the increase in generation capacity.

This application is for the increase in generation capacity limit only and will not change any other parameter in the consented project envelope of the S36 consent. This will not change any of the inputs to the existing environmental assessment (including the HRA addendum) and therefore the assessments already undertaken will not be affected by this application.

Background

As described above, the Forthwind S36 consent authorises Forthwind (Company Number SC470580) to construct and operate an offshore generations station approximately 1.5km offshore from Methil, Fife. The consented development has a total seabed footprint of 1.214 km² (121 ha) and comprises of the following:

- 2 two-bladed wind turbine electricity generating stations with a lattice structure and sub-structure. Each wind turbine generator (WTG) will comprise of:

- a) A maximum blade tip height of 198.5 metres (measured from LAT);
- b) b) a maximum rotor diameter of 155 metres;
- c) c) a maximum hub height of 121 metres (measured from LAT);
- Each WTG will have 3 pin pile foundation per WTG;
- Grid infrastructure including the construction of two subsea cables which will connect the demonstration turbines to the shore;
- Onshore elements, comprising underground cabling and turbine transformers, comprising medium and low voltage container units to be located within the Fife Energy Park.

As per the existing consent, the turbines are located at the following co-ordinates with a 100m micro-siting from these centre points:

No.	Parameter	Turbine 1	Turbine 2
1	National Grid reference (NGR) at centre point	336964, 696677	337812, 697333
2	Latitude / Longitude (WGS84) at centre point	56°09'30.90"N 003°00'59.22"W	56°09'52.52"N 003°00'10.63"W

The water depth at these locations is between 10 to 20m with the electricity export cables leading from each separate turbine to MHWS.

Variation Application Details

Since the original Forthwind consent application in July 2015 offshore wind technology has witnessed significant advances; when it was considered that a wind turbine capacity between 6 to 9 MW was at the cutting edge of technology demonstration. However, by 2017 through incremental efficiencies in technology design the average capacity of new offshore wind turbines installed was 5.9MW (a 23% increase on 2016) and now turbine technologies providing 10 MW are commercially available on the market. By 2024, the trade body WindEurope anticipate turbines with capacities of up to 15MW should be available¹. In order to be competitive within this market, the demonstration turbines at Methil need to have achieved certification and testing in the Forthwind demonstration project at a rating that is commercially competitive (i.e. circa 13 to 15MW) before this 2024 date.

Although not specified in the Section 36 consent, it is considered that the consent was awarded for two turbines with an individual rated capacity of up to 9 MW (as specified in table 3-1 – Project Envelope Parameters, Page 3-6 of the Forthwind Environment Statement); meaning that the total consented capacity of the proposed development is 18MW. To allow incorporation of new technology efficiencies into the development, Forthwind are now seeking an increase in consented capacity from 18 to 29.9MW.

The specified 2B Energy technology has undergone significant design development to meet the current and future competitive environment and it is now anticipated that the project demonstration

¹ Pilita Clark "Bigger, higher and floating – advances that make wind a better power source", Financial Times, 08 January 2018

turbines will have a higher rated capacity than those previously assessed without changing the physical dimensions or operational parameters.

Environmental Impact Assessment (EIA) and Habitats Regulations Appraisal Considerations

The original Forthwind Demonstration project S36 consent application included supporting documents which assessed the environmental impacts of the development in compliance with the Electricity Act 1989, the Electricity Works (Environmental Impact Assessment)(Scotland) Regulations 2000, the Marine (Scotland) Act 2010, the Marine Works (Environmental Impact Assessment) Regulations 2007 and the Town and Country Planning (Scotland) Act 1997. These documents were:

- The Forthwind Offshore Wind Demonstration Project Environment Statement (ES), July 2015.
- The Forthwind Offshore Wind Demonstration Project Habitats Regulations Appraisal (HRA) Addendum, Ornithology, April 2016.

As set out in the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (as amended in December 2017 by the Electricity Works (Environmental Impact Assessment) (Scotland) (Amendment) Regulations 2017), in the case of variation applications, these will only constitute EIA development requiring EIA where the proposed variation is a schedule 1 development or is a schedule 2 development likely to have significant effects on the environment.

This Variation application, if granted, would not change any of the consented physical or operational parameters of the consent. This is because the original ES and HRA addendum are all based on the physical and operational parameters of the turbines (and associated infrastructure), not on turbine capacity, therefore the change in turbine capacity will not result in any likely significant effects. As there are no likely significant effects resultant from the variation, it is not an EIA development in terms of the 2017 EIA regulations. In addition, as there will be no likely significant effects from the proposed changes, including on any European offshore marine site or European protected sites, an updated habitats regulation appraisal (HRA) is not required.

Section 36 Variations Sought

The following variations to the Section 36 consent are sought:

Under **“THE APPLICATION”** heading of the Section 36 consent, the following variation is sought:

“I refer to the applications at i and iii above made by the Company, submitted on the 6th July 2015, for consent under section 36 (“s.36”) of the Electricity Act for the construction and operation of the Development in the Firth of Forth (“the Application”) with a maximum generation capacity of ~~18~~ 29.9 Megawatts (“MW”) and for a direction under section 57(2) of the 1997 Act that planning permission for the ancillary onshore development be deemed to be granted.”

In **“THE SCOTTISH MINISTERS’ DETERMINATION”** section of the Section 36 consent, the following variation to the first paragraph is sought:

“Subject to the conditions set out in Annex 2 (with the exception of Part 2 of that Annex) to this Decision, the Scottish Ministers GRANT CONSENT under section 36 of the Electricity Act 1989 (as amended) for the construction and operation of the Development, with a permitted capacity of up to ~~18~~ 29.9 MW (as described in Annex 1).”

In **“ANNEX 1”** to the Forthwind S36 consent, the following variation to the Project Description is sought:

- Amend the first paragraph in Annex 1 as follows: *“The Development, located as shown in Figures 1, 2 & 3 below, shall have a permitted generating capacity not exceeding ~~18~~ 29.9 MW and shall comprise two wind-powered lattice structure electricity generation stations off the coast of Methil, Fife, including:”*

In “ANNEX 3” to the Forthwind S36 consent, the following variation to the Definition and Glossary of Terms is sought:

- Amend the definition of “the Application” in Annex 3 as follows: *““the Application” means the Application letters and Environmental Statement submitted to the Scottish Ministers, by the Company on 6 July 2015 and the HRA Addendum submitted to the Scottish Ministers by the Company on 30 March 2016 for consent under section 36 of the Electricity Act for the construction and operation of the Forthwind Offshore Wind Demonstration Project, approximately 1.5 km off the coast of Methil, Firth of Forth, ~~with a maximum generating capacity of up to 18 MW;~~ and the section 36 Consent Variation submitted to the Scottish Ministers by the Company under section 36C of the Electricity Act on 20 December 2018.”*

No variation to the Forthwind Section 36 conditions, or section 57 direction, is being sought within this application.

Marine Licence

If the Variation application is granted, it is understood that the Scottish Ministers will exercise their discretion to vary the marine licence under section 72(3) of the Marine and Coastal Access Act 2009 and section 30(3) of the Marine (Scotland) Act 2010 to ensure that the marine licence and S36 consent (as varied) are aligned. The conclusions on the impacts of the changes set out above apply equally to the S36 consent and Marine Licence.

Summary

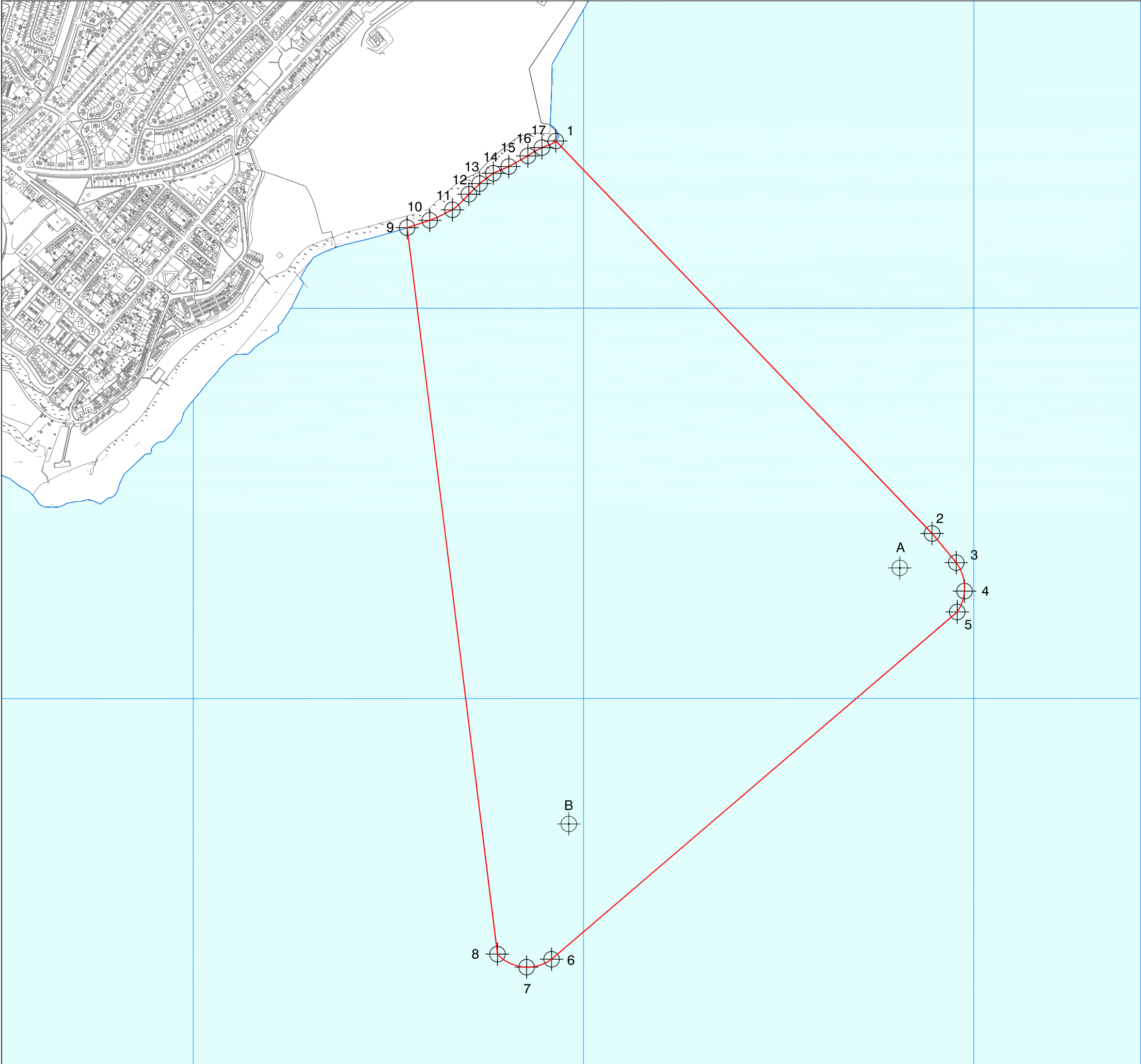
I trust that the information within this letter is sufficient to be considered as a variation application. On confirmation, receipt and acceptance by Marine Scotland, notice of this application will be placed in the Fife Courier for two consecutive weeks, The Herald Newspaper, Lloyds List, the Fishing News and the Edinburgh Gazette for a one-week period.

A copy of the variation application will be available at www.cierco.uk and at the public library in Methil, Wellesley Road, Leven, KY8 3PA. If you require any clarification on the above or require additional information, please do not hesitate to contact me.

Yours sincerely,



, Forthwind Ltd.



Offshore Coordinates				
	Easting	Northing	Decimal Degrees	
Point 1	336930	698426	56°10.4574'	-3°1.0448'
Point 2	337895	697421	56°9.9233'	-3°0.0983'
Point 3	337957	697346	56°9.8834'	-3°0.0373'
Point 4	337978	697274	56°9.8425'	-3°0.0170'
Point 5	337959	697220	56°9.8155'	-3°0.0336'
Point 6	336920	696330	56°9.3276'	-3°1.0255'
Point 7	336856	696310	56°9.3163'	-3°1.0870'
Point 8	336781	696344	56°9.3335'	-3°1.1590'
Point 9	336550	698205	56°10.3347'	-3°1.4097'
Point 10	336608	698223	56°10.3454'	-3°1.3539'
Point 11	336666	698250	56°10.3604'	-3°1.2983'
Point 12	336708	698290	56°10.3823'	-3°1.2573'
Point 13	336736	698318	56°10.3976'	-3°1.2307'
Point 14	336771	698344	56°10.4119'	-3°1.1972'
Point 15	336810	698361	56°10.4214'	-3°1.1598'
Point 16	336859	698388	56°10.4363'	-3°1.1128'
Point 17	336895	698410	56°10.4485'	-3°1.0783'
Turbine Coordinates				
	Easting	Northing	Decimal Degrees	
Turbine A	337812	697333	56°9.8753'	-3°0.1772'
Turbine B	336964	696677	56°9.5150'	-3°0.9870'

Key

Project Boundary

North Point

↑

Drawn
BA

Checked by
NK

Date
20.09.16

Scale
1:5,000

Original Size
A1

Project
**ForthWinds
Demonstration Project**

Client
ForthWind

Offshore Project Boundary
Coordinates

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Quality Assurance
UKAS 900
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Drawing No.
8731/104

Revision

Drawing Name and Location