From: Rebecca Bamlett
Marine Scotland Licensing Operations Team
10 October 2022

#### Cabinet Secretary for Net Zero, Energy and Transport

APPLICATION UNDER SECTION 36C OF THE ELECTRICITY ACT 1989 TO VARY THE CONSENTS GRANTED UNDER SECTION 36 OF THE ELECTRICITY ACT 1989 TO CONSTRUCT AND OPERATE THE SEAGREEN ALPHA AND SEAGREEN BRAVO OFFSHORE WIND FARMS

#### PRIORITY AND PURPOSE

- 1. Immediate priority. Seagreen requires a decision on the application to give the Project Board confidence to proceed in placing key supply chain contracts (late placement of which could result in a significant delay to Phase 1A of the project).
- 2. To seek your approval to vary the section 36 ("s.36") consents granted on 10 October 2014 to construct and operate the Seagreen Alpha and Seagreen Bravo Offshore Wind Farms ("the Development").

#### **RECOMMENDATION**

3. Recommends that you: agree to vary Annex 1 and the conditions (to reflect a phased build out) of the s.36 consents for the Development, in accordance with s.36C of the Electricity Act 1989 and the Electricity Generating Stations (Application for Variation of Consent) (Scotland) Regulations 2013 ("the Variation Regulations").

#### **CONTEXT AND ISSUES**

- 4. Consents for the Development were granted on 10 October 2014 (and subsequently varied on 28 August 2018) under s.36 of the Electricity Act 1989 ("the Existing Consents"). An application was made by Seagreen Wind Energy Limited ("the Company") on 19 April 2022 to vary the Existing Consents as follows ("the Variation Application"):
  - Vary Annex 1 to increase the size of 36 (of a total of 150) of the consented but not constructed Wind Turbine Generators ("WTG") with a variation in parameters to increase (a) the maximum rotor diameter from 167 metres ("m") to 242m, (b) the maximum blade chord width from 5.4m to 7.6m, (c) the maximum tip height from 209.7m to 285m, (d) the minimum tip height (air gap) from 29.8m to 34m and (e) the maximum hub height from 126.2m to 165m; and
  - Vary the conditions of the Existing Consents in relation to the post consent plans to reflect a phased build out.
- 5. In addition to the Variation Application the Company also requested to vary its marine licence for offshore transmission works to increase the weight of the steel seabed deposits associated with the Offshore Substation Platforms ("OSPs") from

- 13,000 tonnes to 22,560 tonnes. Marine licences and marine licence variations are not routinely sent to Ministers for a determination and, as such, this will be considered separately by officials under the Marine and Coastal Access Act 2009 ("MCAA 2009").
- 6. Prior to receiving the Variation Application, the Scottish Ministers adopted a screening opinion on 13 April 2022 under the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 and the Marine Works (Environmental Impact Assessment) Regulations 2007 ("the EIA Regulations"), which concluded that the Variation Application does not require environmental impact assessment ("EIA") (as defined in the EIA Regulations).
- 7. Alongside the Variation Application the Company provided an environmental appraisal report, summarising the technical assessments undertaken in respect of the proposed variations which support its reasoning that the variation sought is beneficial.
- 8. The Company also carried out additional collision risk modelling ("CRM") to assess the collision mortality impacts of the proposed increase in WTG parameters on ornithology receptors. The CRM concluded a significant reduction in predicted collision mortalities for gannet and kittiwake when comparing between the Existing Consents and the Variation Application. The updated modelling also shows a reduction in predicted collision mortalities for herring gull for all but one modelling scenario where one additional herring gull mortality was predicted.

#### **OPTIONS CONSIDERED AND ADVICE**

- 9. Under s.36C(4) of the Electricity Act 1989, the Scottish Ministers will exercise judgement as to whether any variation sought is appropriate, having regard (in particular) to:
  - (a) the applicant's reasons for seeking the variation;
  - (b) the variations proposed;
  - (c) any objections made to the proposed variations, the views of consultees and the outcome of any public inquiry.
- 10. The Variation Application seeks to increase the parameters of 36 of the WTGs.
- 11. The Company states the following rationale for the proposed variations:
  - "The proposed changes are required to maximise supply chain opportunities and the production of renewable energy, and to ensure the most optimal technology solution can be deployed at the site, both from an environmental impact and cost of technology perspective."
- 12. The variations proposed in the Variation Application do not fundamentally alter the character or scale of the Development, and there will be no changes to the boundary of the Development.

- 13. Officials consider that you can be satisfied that, in this circumstance, the changes proposed are reasonable to be authorised by means of the variation procedure in line with the Scottish Government Applications for Variation of Section 36 Consents Guidance published in May 2019.
- 14. Consideration of any representations made concerning the proposed variations and recommendation not to cause a public inquiry are outlined in the following paragraphs.

#### **ASSESSMENT OF OPTIONS**

- 15. Twenty representations concerning the Variation Application were received during the consultation period. No formal objections were raised; however the Royal Society for the Protection of Birds ("RSPB") Scotland raised concerns which are summarised below. A full summary of the consultation responses and how they have been addressed is detailed in Annex A.
- 16. RSPB Scotland noted that the annual mortality estimates for seabirds remained a substantial number and raised concerns on the impact of the overall populations. RSPB Scotland also highlighted that the Company is not building to the worst-case scenario in the Existing Consents and therefore when comparing the parameters of the WTGs currently under construction, as approved under the Development Specification and Layout Plan, with those in the Variation Application, the proposed variations result in a slightly higher estimate collision risk mortality for gannet, kittiwake and herring gull.
- 17. Officials have considered the points raised by RSPB Scotland, alongside the representation from NatureScot (the relevant statutory nature conversation body) and advice from specialist advisors in Marine Scotland Science. Officials have concluded that there would be no material change to the predicted ornithological impacts of the Development resulting from the proposed variations within the Variation Application compared with the parameters of the Existing Consents. Officials have also considered the benefits outlined by the Company of the significant additional renewable energy generation of 324 megawatts that can be achieved from the Variation Application, with no material change to the predicted impacts.
- 18. Before determining a variation application, per the Electricity Act 1989 and the Variation Regulations, Scottish Ministers may cause a public inquiry to be held if it is deemed appropriate to do so., Having considered the representations received and all other material considerations, officials recommend that it is appropriate not to cause a public local inquiry.

#### **BUTE HOUSE AGREEMENT IMPLICATIONS**

19. Approval of the Variation Application is related to the commitment in the Bute House Agreement to manage the potential impacts on marine biodiversity alongside the growth of the marine renewables and offshore wind sectors in a proportionate manner.

#### FINANCIAL AND LEGAL CONSIDERATIONS

- 20. The Variation Application was made in accordance with the Electricity Act 1989 and the Variation Regulations. The legislative requirements of the Variation Regulations regarding publication, notification and consultation of section 36 variation applications have been met. A validation of the appropriate assessment undertaken in respect of the Existing Consents per the Conservation of Offshore Marine Habitats and Species Regulations 2017 has been undertaken which can be found at Annex D. Further information on the legislative requirements and how these have been satisfied can be found in Annex A and Annex B.
- 21. This submission has been informed by appropriate advice from Scottish Government Legal Directorate. The legislative action falls within the competence of the Scottish Government and is a legally appropriate course of action to take.

#### **SENSITIVITIES**

22. RSPB Scotland objected to the original decision to grant the section 36 consents for the Development as it considered that the impact on seabirds from the Development in isolation and in-combination would constitute adverse effects on integrity of nearby protected sites. RSPB Scotland subsequently brought judicial review proceedings against Scottish Ministers, challenging the decision made on this Development (and two others - Inch Cape and Neart na Gaoithe). Although RSPB Scotland was initially successful in its challenge, the Inner House later found in favour of the Scottish Ministers' decision to award the section 36 consents for the Development.

#### **QUALITY ASSURANCE**

23. This submission has been approved by Mike Palmer, Deputy Director for Marine Planning and Policy.

#### **CONCLUSION AND NEXT STEPS**

- 24. Should the Cabinet Secretary choose to approve the Variation Application, a draft decision notice is attached at Annex C which Marine Scotland Licensing Operations Team ("MS-LOT") will finalise and issue to the Company on the Cabinet Secretary's behalf.
- 25. MS-LOT will exercise discretion, on behalf of Scottish Ministers, under section 72(3)(d) of the MCAA 2009 to vary the generating station marine licence attached to the Development to ensure consistency between the section 36 consent and the marine licence for the Development. MS-LOT will also consider the request by the Company to increase the weight of the steel seabed deposits associated with the OSPs within the transmission works marine licence under section 72(3)(d) of the MCAA 2009.
- 26. In order for the determination process to be fully open and transparent, MS-LOT recommends that this submission is published on <u>Marine Scotland Information</u> <u>website</u>, alongside the Existing Consents and the Variation Application documentation.

#### **Rebecca Bamlett**

Marine Scotland Licensing Operations Team

Copy List:	For action		For information	
		Portfolio interest	Constituency interest	General awareness
Cabinet Secretary for Net Zero, Energy and Transport	х			
Cabinet Secretary for Rural Affairs and Islands		Х		
Minister for Environment, Biodiversity and Land Reform		Х		

DG Economy DG Net Zero Director of Marine Scotland Mike Palmer, Deputy Director Marine Scotland David Pratt. Marine Scotland Zoe Crutchfield, Marine Scotland Gayle Holland, Marine Scotland Amy Alexander, Marine Scotland Rebecca Bamlett, Marine Scotland Kate Taylor, Marine Scotland Mark Christie, Marine Scotland Paul Smith, Marine Scotland Jared Wilson, Marine Scotland Allan Gibb, Marine Scotland Kersti Berge, Energy Directorate Andrew Hogg, Energy Directorate David Stevenson, Energy Directorate David Moffat, Legal Directorate Joanna Dingwall, Legal Directorate Alison Presly, Legal Directorate Joan McHutchison, Legal Directorate Fiona McClean, Legal Directorate John McFarlane, Special Advisor Communications – Net Zero and Rural Affairs Gillian Provan - Communications

#### **LIST OF ANNEXES**

ANNEX A	Background and Consultation	6
ANNEX B	Legislative Requirements	14
ANNEX C	Draft Decision Notice	17
ANNEX D	Validation of Appropriate Assessment	164

# 1. ANNEX A Background and Consultation

# 1.1 Background Information

- 1.1.1 On 10 October 2014, the Scottish Ministers granted consents under section 36 ("s.36") of the Electricity Act 1989 ("the Electricity Act") for the construction and operation of the offshore generating stations known as the Seagreen Alpha and Seagreen Bravo offshore wind farms ("the Development") located approximately 27 kilometres ("km") off the coast of Angus ("the Existing Consents"). In August 2018, the Existing Consents were subsequently varied to remove the overall maximum installed generating capacity of 1,1050 megawatts for the Development in order to allow the installation of higher rated wind turbine generators
- 1.1.2 On 19 April 2022, the Scottish Ministers received an application from Seagreen Wind Energy Limited ("the Company"), under section 36C(1) of the Electricity Act in accordance with the Electricity Generating Stations (Applications for Variation of Consent) (Scotland) Regulations 2013 ("the Variation Regulations"), to vary its Existing Consents ("the Variation Application"). The Variation Application seeks to increase the parameters of the consented but not constructed 36 wind turbine generators ("WTGs") and make changes to the conditions to reflect a phased build out.
- 1.1.3 The Company stated that the proposed increase in size of the 36 consented but not constructed WTGs would enable the Company to maximise supply chain opportunities, as well as maximise the production of renewable energy to assist in meeting the government targets.
- 1.1.4 Furthermore, the Company stated that the proposed changes would ensure the most optimal technology solution can be deployed at the site from both an environmental impact and cost of technology perspective.

# 1.2 **Application Documentation**

- 1.2.1 The Company submitted the following Variation Application documentation, which was issued for consultation on 23 May 2022:
  - An application to vary the Existing Consents; and
  - An Environmental Appraisal report, inclusive of a Collision Risk Modelling ("CRM") Report.
- 1.2.2 Full details of the consultation undertaken as part of the process are set out below.

#### 1.3 Application publication, notification and consultation

- 1.3.1 In accordance with Regulation 4 of the Variation Regulations, the Company:
  - Placed the Variation Application documentation on the <u>application</u> website alongside a link to the Existing Consents;

- Served copies of the Variation Application to the Angus Council, Dundee City Council, East Lothian Council, Fife Council and the Scottish Borders Council; and
- Placed public notices relating to the Variation Application in the East Lothian Courier, Edinburgh Gazette, Scotsman, Fishing News and Lloyds List for two weeks.
- 1.3.2 Marine Scotland Licensing Operations Team ("MS-LOT") consulted a wide range of interested parties on the Variation Application including relevant local authorities (in this case Angus Council, Dundee City Council, East Lothian Council, Fife Council and the Scottish Borders Council), NatureScot, Scottish Environment Protection Agency ("SEPA"), and the Historic Environment Scotland ("HES"), and placed the Variation Application documentation on the Marine Scotland Information website alongside the Existing Consents.

#### 1.4 Summary of consultation process

- 1.4.1 Several consultees had no comments to make, or did not provide a response to the consultation. In the case of no response, MS-LOT notified the relevant consultees that a "nil response" would be assumed.
- 1.4.2 Consultees and local authorities did not raise any formal objections, however, comments were submitted. Summaries of the comments received from the consultees are presented in section 1.5. Section 1.7 lists all consultees who did not respond to the consultation.
- 1.4.3 No representations were received from members of the public in relation to the Variation Application.
- 1.4.4 Copies of the full consultation responses received have been made available on the Seagreen page of the Marine Scotland Information website.

#### 1.5 **Summary of consultation responses**

1.5.1 No objections to the Variation Application were raised by any consultees.

# 1.5.2 Angus Council

Angus Council commented that the Variation Application did not raise any new or significant issues in terms of material considerations relevant to Angus and so did not object to the Variation Application.

# 1.5.3 British Telecommunication's ("BT's") Radio Network Protection

BT's Radio Network Protection stated that, as the original site boundary remains unchanged, the Variation Application should not cause interference to BT's current and planned radio network.

# 1.5.4 Civil Aviation Authority

The Civil Aviation Authority noted that the issue of radar mitigation is covered in the Environmental Appraisal report and therefore had no further comments to make on the Variation Application.

#### 1.5.5 Dundee City Council

Dundee City Council stated that due to the distance of the Development from Dundee, with the grid connection to East Lothian, there would be no significant environmental or visual impact on Dundee beyond those identified with the previously consented project. As such, Dundee City Council had no objection to the Variation Application.

# 1.5.6 <u>East Lothian Council ("ELC")</u>

In its representation, ELC considered the potential visual or seascape effects resulting from the Variation Application and noted that due to the increase in hub height of the WTGs, more aviation lights could be visible at night and may impact views around North Berwick. ELC noted that the theoretical visibility of from North Berwick Law outlined in the Environmental Appraisal report indicated that there may be lighting visible from places where the consented lighting would not have been seen; however, as no zone of theoretical visibility ("ZTV") mapping comparing the existing and consented scheme had been submitted, it was not possible to identify where these areas are.

ELC did not object to the Variation Application as it considered that the benefits of producing electricity at this site outweigh the detriment, which is expected to be minor, to the visual amenity of East Lothian and its seascape. ELC requested that conditions are incorporated to ensure that any aviation lighting of the WTGs is kept to the minimum required, and that lighting be switched off or removed if it is no longer needed.

The Company acknowledged ELC's position as regards lighting, which it noted would only be visible from heights equivalent to North Berwick Law which are very few and much further away from the Development. The Company further noted that given the location of the Development (and any associated lighting) which would sit behind the consented Neart na Gaoithe Offshore Wind Farm, as acknowledged by ELC, it does not propose to provide further ZTV mapping, which it considers would be disproportionate. The Company also highlighted that the current lighting scheme proposed in the Lighting and Marking Plan ("LMP") is considered to be suitable for the 36 varied WTGs.

Officials can confirm that this Variation Application does not constitute an increase in significant adverse effects on the environment, including landscape and visual impacts. Any updates or amendments made to the approved LMP must be submitted, in writing, by the Company to the Scottish

Ministers for their written approval. The LMP must be provided to the planning authorities for information. The aviation lighting requirements are set in accordance with the current CAA and MOD aviation lighting policy and guidance that is in place as at the date of the Scottish Ministers' approval of the LMP, or any such other documents that may supersede said guidance prior to the approval of the LMP. Officials are therefore content that there is no requirement for further conditions to control aviation lighting of the Development.

# 1.5.7 Fife Council

Fife Council did not raise any objection to the Variation Application.

# 1.5.8 Historic Environment Scotland ("HES")

HES confirmed that the Variation Application would not give rise to significant impacts on historic environment interests further to those already identified in the Environmental Statement (2012) prepared in support of the Existing Consents.

# 1.5.9 Maritime and Coastguard Agency ("MCA")

The MCA had no objection to the Variation Application.

# 1.5.10 Ministry of Defence ("MOD")

The MOD had no objection to the Variation Application provided conditions 19 to 24 stipulated on the Existing Consents are replicated on any future consent issued. Amendments have been made to these conditions such that these will apply to the Variation Application.

#### 1.5.11 NATS Safeguarding

NATS Safeguarding had no objection to the Variation Application.

#### 1.5.12 <u>NatureScot</u>

NatureScot noted that it was content that there would be no material change to predicted ornithology or seascape/landscape impacts. NatureScot were consulted on the appropriate assessment validation and agreed with the conclusions reached.

#### 1.5.13 Northern Lighthouse Board ("NLB")

The NLB had no objection to the Variation Application, however noted that in the event that a fundamental design change for the transition piece of the WTG structure should occur for the 36 WTGs, an assessment should be made to ensure they remain compliant with Navigational Lighting and Marking requirements, as prescribed within the LMP under the Existing Consents. The NLB further advised that any alterations to the positioning of

navigational lighting and marking on the transition piece should be discussed with the NLB as soon as possible. Any updates or amendments made to the approved LMP must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

# 1.5.14 Royal Society for the Protection of Birds ("RSPB") Scotland

RSPB Scotland raised concerns on the impact of the Development, both in terms of the Existing Consents and the Variation Application, on the overall populations of northern gannet, black-legged kittiwake and European herring gull in the Firth of Forth and Tay region. RSPB Scotland highlighted that the Firth of Forth and Tay region is currently experiencing an outbreak of avian flu which has had severe consequences to seabirds, especially the Bass Rock gannet population, which heightens its concerns.

RSPB Scotland agreed with the Company that the Variation Application would result in a lower estimated annual mortality for northern gannet, black-legged kittiwake and European herring gull when compared with the Existing Consents. However, RSPB Scotland also highlighted that the Company is not building to the worst-case scenario in the Existing Consents and therefore when comparing the parameters of the WTGs currently under construction, as approved under the Development Specification and Layout Plan ("DSLP"), with those in the Variation Application, the proposed variations result in a slightly higher estimate collision risk mortality for northern gannet, black-legged kittiwake and European Herring gull.

The Company subsequently clarified that under condition 12 of the Existing Consents the DSLP can be updated or amended if the detailed design changes, providing it is subject to a consultation process and remains within the consented parameters. The Company further noted that ultimately the benefits of a significant additional contribution to meeting net zero targets could be achieved through the variation in parameters of the 36 WTGs and ultimately the proposed scheme under the Variation Application taken together with the 114 WTGs previously consented under the Existing Consents would generate more renewable energy with overall less ornithological impact.

Officials confirm that the Scottish Ministers may approve proposed updates or amendments made to the DSLP by the Company that are within the consented Development parameters. Officials have considered the points raised by RSPB Scotland, alongside the representation from NatureScot (the relevant statutory nature conversation body) and advice from specialist advisors in Marine Scotland Science, and conclude that there would be no material change to the predicted ornithological impacts of the Development resulting from the proposed variations within the Variation Application. Officials have also considered the benefits outlined by the Company of the significant additional renewable energy generation that can be achieved from the Variation Application with no material change to the predicted impacts.

#### 1.5.15 Royal Yachting Association ("RYA")

The RYA had no comments to make on the Variation Application.

#### 1.5.16 Scottish Borders Council

The Scottish Borders Council had no objection to the Variation Application.

# 1.5.17 Scottish Environment Protection Agency ("SEPA")

SEPA had no comments to make on the Variation Application.

#### 1.5.18 Scottish Fishermen's Federation ("SFF")

SFF submitted a 'nil response'.

# 1.5.19 Scottish Water

Scottish Water had no objection to the Variation Application.

# 1.5.20 <u>Transport Scotland</u>

Transport Scotland confirmed that its previous response issued on 30 April 2020 on the Traffic and Transportation Plan ("TPP") remains valid and no further traffic assessment is required. The Company has subsequently confirmed that the TPP is not affected by the variation and remains in place and valid.

# 1.5.21 <u>UK Chamber of Shipping</u>

The UK Chamber of Shipping requested further information on any change in spacing and placement of the 36 WTGs to be varied. The Company has subsequently confirmed that the layout will remain unchanged and the UK Chamber of Shipping has noted this response.

#### 1.6 Advice from third parties

MS-LOT sought advice from Marine Scotland Science.

# 1.6.1 Marine Scotland Science ("MSS")

MSS acknowledged that the results of the CRM Option 2 indicated that for all but one scenario presented, the Variation Application will have lower collision risk than the Existing Consents. The one exception was for European herring gull, however the results indicated that only one additional European herring gull was predicted to be taken, when compared with the Existing Consents. Therefore, MSS advised that the increased collision risk estimate for the species is acceptable at this level, and agreed with NatureScot that there would be no material change to predicted ornithological impacts from the proposed Variation Application.

# 1.7 Nil responses

1.7.1 The following consultees did not respond to the consultation and therefore nil responses have been assumed:

Bristows Helicopters Limited	Red Rock Power Limited
Bond Air Services	Scottish Canoe Association
CHC Helicopter	Scottish Surfing Federation
Forth Ports	Scottish Wildlife Trust
Heathrow Airport Holdings Limited	Sport Scotland
Joint Radio Company	Surfers Against Sewage
Marine Safety Forum	The Crown Estate Scotland
National Trust for Scotland	Transport Scotland
Oil & Gas UK	Scottish Canoe Association
VisitScotland	Arbroath Community Council
West Barns Community Council	Letham & District Community Council
Whale & Dolphin Conservation Society	Tealing Community Council
Monifeith Community Council	Fintry Community Council
Carnoustie Community Council	Monikie and Newbigging Community Council
Murroes & Wellbank Community Council	Broughty Ferry Community Council
Boarhills & Dunino Community Council	Montrose Port Authority
Cameron Community Council	Scallop Association
Carnoustie Golf Links Management Committee	Strathkinness Community Council
Colinsburgh & Kinconquhar Community Council	Cockenzie & Port Seton Community Council
Dundee Sub Aqua Club	Dunbar Community Council
Largo Area Community Council	East Lammermuir Community Council

# ANNEX A Background and Consultation

Gullane Community Council	Musselburgh & Inveresk Community Council
Longniddry Community Council	Prestonpans Community Council
Tranent and Elphinstone Community Council	Fisheries Management Scotland
West Barns Community Council	Atlantic Salmon Trust
Red Rock Power Limited	Communities Inshore Fishing Alliance
Neart na Gaoithe Offshore Wind Ltd	Marine Scotland Aberdeen Fishery Office
Scottish Fisherman's Organisation	Marine Scotland Anstruther Fishery Office
Fishermen's Mutual Association (Pittenweem)	Marine Scotland Eyemouth Fishery Office
Forth District Salmon Fishery Board ("DSFB")	North East Regional Inshore Fishery Groups
Esk DSFB	Salmon Net Fishing Association of Scotland
Tay DFSB	Scottish Creel fishermen association
The Fish Producers' Organisation	Regional Inshore Fishery Group Consultees
The Fisheries Liaison with Offshore Wind and Wet Renewables Group	North Sea Fishermen's Organisation
North Sea Advisory Council	Salmon & Recreational Fisheries, Marine and Fisheries Directorate, Marine Scotland
Pelagic Advisory Council	Orkney Sustainable Fisheries
Long Distance Advisory Council	Shetland Shellfish Management Organisation

# 2. ANNEX B Legislative Requirements

# 2.1 Electricity Act Consenting and Variations

- 2.1.1 Persons holding a section 36C ("s.36C") of the Electricity Act 1989 ("the Electricity Act") may apply to the appropriate authority (in Scotland this is the Scotlish Ministers) for a variation of their s.36 consent.
- 2.1.2 The application procedure for varying a s.36 consent is set out in the Electricity Generating Stations (Applications for Variation of Consent) (Scotland) Regulations 2013 ("the Variation Regulations").
- 2.1.3 The variation process is designed to apply to projects that have been consented under s.36, concerning the construction, extension or operation of electricity generating stations. This process is applied when the holder of a s.36 consent wishes to change any other aspects of their s.36 consent. The Scottish Government Applications for Variation of Section 36 Consents Guidance (published in May 2019) ("the Variation Guidance") considers that the process is not intended as a way of authorising any change in a developer's plans that would result in a generating station that would be fundamentally different in terms of character, scale or environmental impact from what is authorised by the existing consent.
- 2.1.4 Under section 36C(4) of the Electricity Act, the Scottish Ministers may make variations to consents as appear to them to be appropriate, having regard in particular to the company's reasons for seeking the variation, the variation proposed, the views of consultees, any objections made to the proposed variation and the outcome of any public inquiry.
- 2.1.5 Seagreen Wind Energy Limited ("the Company") in its application to vary the section 36 consents for the construction and operation the Seagreen Alpha and Seagreen Bravo Offshore Wind Farms ("the Variation Application") state that the rationale behind the proposed amendments is to maximise supply chain opportunities and the production of renewable energy and to ensure the most optimal technology solution can be deployed at the site both from an environmental impact and cost of technology perspective.
- 2.1.6 The variations proposed in the Variation Application do not fundamentally alter the character or scale of the Seagreen Alpha and Seagreen Bravo Offshore Wind Farms ("the Development") and there will be no changes to the Development boundary. Officials consider that you can be satisfied that, in this circumstance, the changes proposed are reasonable to be authorised by means of the variation procedure in line with the Variation Guidance
- 2.1.7 Officials advise that the views of consultees have been considered further detail of which can be found in Annex A. No objections were made to the Variation Application and no public inquiry has been held.

# 2.2 Environmental Impact Assessment

- 2.2.1 The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 ("the 2017 EW Regulations") provide that environmental impact assessment ("EIA") is required in relation to variation applications where the proposed changes are likely to have significant effects on the environment.
- 2.2.2 Prior to receiving the Variation Application, the Scottish Ministers adopted a screening opinion on 13 April 2022 under the 2017 EW Regulations and the Marine Works (Environmental Impact Assessment) Regulations 2007 (together "the EIA Regulations"), which concluded that the Variation Application did not require environmental impact assessment ("EIA") (as defined in the EIA Regulations).

# 2.3 Appropriate Assessment

- 2.3.1 Regulation 28(1) of the Conservation of Offshore Marine Habitats and Species Regulations 2017 ("the Habitats Regulations") requires that before deciding to undertake, or give any consent, permission or other authorisation for a relevant plan or project, a competent authority must make an appropriate assessment of the implications of the plan or project for the site in view of that site's conservation objectives.
- 2.3.2 A "relevant plan or project" is a plan or project which-
  - (a) is to be carried out on or in any part of the waters or on or in any part of the seabed or subsoil comprising the offshore marine area, or on or in relation to an offshore marine installation;
  - (b) is likely to have a significant effect on a European offshore marine site or a European site (either alone or in combination with other plans or projects); and
  - (c) is not directly connected with or necessary to the management of the site.
- 2.3.3 An appropriate assessment under the Habitats Regulations was completed in 2014 in respect of the applications for the Existing Consents ("the 2014 AA"). Officials have reviewed and undertaken a validation exercise on the AA and are content that no consultation responses, advice, external reports or representations have been received which would invalidate the conclusions or alter the outcome of the 2014 AA in respect of the Development. NatureScot were consulted on the AA validation and agreed with the conclusions reached. The AA validation can be found at Annex D.

# 2.4 Marine Licence Variation

- 2.4.1 Section 72(3)(d) of the Marine and Coastal Access Act 2009 ("MCAA 2009") provides that a licensing authority may by notice vary, suspend or revoke a licence granted by it if it appears to the authority that the licence ought to be varied, suspended or revoked for any reason that appears to the authority to be relevant.
- 2.4.2 If the Variation Application is granted, Marine Scotland Licensing Operations Team ("MS-LOT"), on behalf of Scottish Ministers, will exercise

# ANNEX B Legislative Requirements

discretion under section 72(3)(d) of the MCAA 2009 to vary the generating station marine licences attached to the Development to ensure consistency between the section 36 consent and the marine licence for the Development. MS-LOT will also consider the request by the Company to increase the weight of the steel seabed deposits associated with the OSPs within the transmission works marine licence under section 72(3)(d) of the MCAA 2009.

# 2.5 **Summary and conclusions**

2.5.1 MS-LOT considers that the legislative requirements set out above have been complied with throughout the process of determining the Variation Application.

# **ANNEX C** Draft Decision Notice and Proposed Variation

MS.MarineRenewables@gov.scot



Mr Chris Houston Seagreen Wind Energy Limited No.1 Forbury Place 43 Forbury Road Reading RG1 3JH

Our Reference: XXXX

XX MONTH XXXX

Dear Mr Houston,

APPLICATION UNDER SECTION 36C OF THE ELECTRICITY ACT 1989 TO VARY THE CONSENT GRANTED UNDER SECTION 36 OF THE ELECTRICITY ACT 1989 ON 10 OCTOBER 2014 TO CONSTRUCT AND OPERATE THE SEAGREEN ALPHA AND SEAGREEN BRAVO OFFSHORE WIND FARMS ELECTRICITY GENERATING STATION, LOCATED APPROXIMATELY 27 KILOMETRES ("KM") OFF THE ANGUS COASTLINE.

I refer to the application to vary the consents for the Seagreen Alpha and Seagreen Bravo Offshore Wind Farms ("the Development"). This Application ("the Variation Application") was made by Seagreen Wind Energy Limited ("the Company") on 19 April 2022 for:

a) a variation under section 36C of the Electricity Act 1989 ("the Electricity Act") to the consents granted under section 36 ("s.36") of the Electricity Act on 10 October 2014 (as subsequently varied on 28 August 2018) ("the Existing Consents") for the construction and operation of the Development, located approximately 27km off the Angus coastline.

This letter contains the Scottish Ministers' decision to vary the Existing Consents.

- 1. Nature of the Variation Sought
- 1.1 The Variation Application seeks to vary the Existing Consents granted on the 10 October 2014 to allow the following:
  - Vary Annex 1 to increase the size of 36 of the consented but not constructed Wind Turbine Generators ("WTG") with a variation in

- parameters to increase (a) the maximum rotor diameter from 167 metres ("m") to 242m, (b) the maximum blade chord width from 5.4m to 7.6m, (c) the maximum tip height from 209.7m to 285m, (d) the minimum tip height (air gap) from 29.8m to 34m and (e) the maximum hub height from 126.2m to 165m; and
- Vary the conditions of the Existing Consents in relation to the post consent plans to reflect a phased build out.
- 1.2 In addition to the Variation Application, a request was made to vary the marine licence for offshore transmission works to increase the weight of the steel seabed deposits associated with the Offshore Substation Platforms ("OSPs") from 13,000 tonnes to 22,560 tonnes. This has been considered separately under the Marine and Coastal Access Act 2009.

# 2. Environmental Impacts

- 2.1 The Scottish Ministers are satisfied that the Variation Application will not have significant effects on the environment.
- 2.2 The Scottish Ministers have considered the following:
  - Regulation 28 of the Conservation of Offshore Marine Habitats and Species Regulations 2017 ("the 2017 Offshore Habitats Regulations");
  - the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 ("the 2017 EW Regulations"); and
  - the Marine Works (Environmental Impact Assessment) Regulations 2007 ("the 2007 MW Regulations").
- 2.3 The Scottish Ministers do not consider that the proposed changes within the Variation Application will alter the conclusions of the Environmental Impact Assessment Report and the Habitats Regulation Appraisal supporting the application for s.36 consent in October 2012 ("the Original Application").
- 2.4 In accordance with the 2017 EW Regulations and the 2007 MW Regulations, the Scottish Ministers did not deem it necessary for a new Environmental Impact Assessment report to be submitted in support of the Variation Application.
- 2.5 An appropriate assessment under the Habitats Regulations was completed in 2014 in respect of the application for the Existing Consents ("the 2014 AA"). The Scottish Ministers have reviewed the 2014 AA and having considered the updated environmental information, are content that the conclusions remain valid in respect of the Variation Application. Since the 2014 AA was completed, the Outer Firth of Forth and St Andrews Bay Complex Special Protection Area has been designated. The Scottish Ministers therefore completed an assessment for this site and concluded that there would be no adverse effect on the integrity of the site from the Development alone or in-combination with other plans and projects.

# 3. Consultation

- 3.1 Regulation 4 of the Electricity Generating Stations (Applications for Variation of Consent) (Scotland) Regulations 2013 ("the Variation Regulations") provides that an applicant must publish a variation application relating to an offshore generating station on a website, serve a copy of the variation application on the planning authority, and also advertise by public notices in specified publications.
- 3.2 In line with Regulation 4 the Company published the Variation Application documentation on its website and served notice of the Variation Application to the planning authorities consulted on the Original Application. Public notices were placed in the in the East Lothian Courier, Edinburgh Gazette, the Scotsman, Fishing News and Lloyds List for two weeks. The same planning authorities were served copies of the Variation Application as those who were served copies of the Original Application, in this case Angus Council, Dundee City Council, East Lothian Council, Fife Council and the Scottish Borders Council.
- 3.3 Marine Scotland Licensing Operations Team ("MS-LOT"), on behalf of the Scottish Ministers, consulted a wide range of relevant organisations on the Variation Application including: Angus Council, Dundee City Council, East Lothian Council, Fife Council and the Scottish Borders Council, NatureScot, Scottish Environment Protection Agency, the Maritime and Coastguard Agency ("MCA"), Historic Environment Scotland ("HES") and the Northern Lighthouse Board ("NLB"). Scottish Ministers also placed the Variation Application documentation on the Marine Scotland Information website alongside the Existing Consents.
- 3.4 A number of organisations did not provide a response. In the case of no response, MS-LOT notified the relevant consultees that a "nil response" would be assumed.
- 3.5 No objections to the Variation Application were raised by any consultees, however the RSPB did raise concerns in relation to seabird collision risk.
- 3.6 The following consultees raised no objections to the Variation Application.
- 3.7 **Angus Council** commented that the Variation Application does not raise any new or significant issues in terms of material considerations relevant to Angus and so did not object to the Variation Application.
- 3.8 **British Telecommunication's ("BT's") Radio Network Protection** stated that, as the original site boundary remains unchanged, the Variation Application should not cause interference to BT's current and planned radio network.
- 3.9 **The Civil Aviation Authority ("CAA")** noted that the issue of radar mitigation is covered in the Environmental Appraisal report and therefore had no further comments to make on the Variation Application.
- 3.10 **Dundee City Council** stated that due to the distance of the Development from Dundee, with the grid connection to East Lothian, there will be no significant

- environmental or visual impact on Dundee beyond those identified with the previously consented project. As such, Dundee City Council had no objection to the Variation Application.
- 3.11 **East Lothian Council ("ELC")** considered the potential visual or seascape effects resulting from the Variation Application and noted that due to the increase in hub height of the WTGs, more aviation lights could be visible at night and may impact views around North Berwick. ELC noted that the theoretical visibility of from North Berwick Law outlined in the Environmental Appraisal report indicated that there may be lighting visible from places where the consented lighting would not have been seen; however, as no zone of theoretical visibility ("ZTV") mapping comparing the existing and consented scheme had been submitted, it was not possible to identify where these areas are.
- 3.12 ELC did not object to the Variation Application as it considered that the benefits of producing electricity at this site outweigh the detriment, which is expected to be minor, to the visual amenity of East Lothian and its seascape. ELC requested that conditions are incorporated to ensure that any aviation lighting of the WTGs is kept to the minimum required, and that lighting be switched off or removed if it is no longer needed.
- 3.13 The Company acknowledged ELC's position as regards lighting, which it noted would only be visible from heights equivalent to North Berwick Law which are very few and much further away from the Development. The Company further noted that given the location of the Development (and any associated lighting) which would sit behind the consented Neart na Gaoithe Offshore Wind Farm, as acknowledged by ELC, it does not propose to provide further ZTV mapping, which it considers would be disproportionate. The Company also highlighted that the current lighting scheme proposed in the Lighting and Marking Plan ("LMP") is considered to be suitable for the 36 varied WTGs.
- 3.14 The Scottish Ministers can confirm that this Variation Application does not constitute an increase in significant adverse effects on the environment, including landscape and visual impacts. Any updates or amendments made to the approved LMP must be submitted, in writing, by the Company to the Scottish Ministers for their written approval. The LMP must be provided to the planning authorities for information. The aviation lighting requirements are set in accordance with the current CAA and Ministry of Defence ("MOD") aviation lighting policy and guidance that is in place as at the date of the Scottish Ministers' approval of the LMP, or any such other documents that may supersede said guidance prior to the approval of the LMP. Officials are therefore content that there is no requirement for further conditions to control aviation lighting of the Development.
- 3.15 **Fife Council** did not raise any objection to the Variation Application.
- 3.16 **HES** confirmed that the Variation Application will not give rise to significant impacts on historic environment interests further to those already identified in

- the Environmental Statement (2012) prepared in support of the Existing Consents.
- 3.17 The **MCA** had no objection to the Variation Application.
- 3.18 The **MOD** had no objection to the Variation Application provided conditions 19 to 24 stipulated on the Existing Consents are replicated on any future consent issued. Amendments have been made to these conditions such that these will apply to the Variation Application.
- 3.19 **NATS Safeguarding** had no objection to the Variation Application.
- 3.20 **NatureScot** noted that it was content that there would be no material change to predicted ornithology or seascape/landscape impacts. NatureScot were also consulted on the appropriate assessment validation and agreed with the conclusions reached.
- 3.21 The **NLB** had no objection to the Variation Application, however noted that in the event that a fundamental design change for the transition piece of the WTG structure should occur for the 36 WTGs, an assessment should be made to ensure they remain compliant with Navigational Lighting and Marking requirements, as prescribed within the LMP under the Existing Consents. The NLB further advised that any alterations to the positioning of navigational lighting and marking on the transition piece should be discussed with the NLB as soon as possible. Any updates or amendments made to the approved LMP must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.
- 3.22 Royal Society for the Protection of Birds ("RSPB") Scotland raised concerns on the impact of the Development, both in terms of the Existing Consents and the Variation Application, on the overall populations of northern gannet, black-legged kittiwake and European herring gull in the Firth of Forth and Tay region. RSPB Scotland highlighted that the Firth of Forth and Tay region is currently experiencing an outbreak of avian flu which has had severe consequences to seabirds, especially the Bass Rock gannet population, which heightens its concerns.
- 3.23 RSPB Scotland agreed with the Company that the Variation Application would result in a lower estimated annual mortality for northern gannet, black-legged kittiwake and European herring gull when compared with the Existing Consents. However, RSPB Scotland also highlighted that the Company is not building to the worst-case scenario in the Existing Consents and therefore when comparing the parameters of the WTGs currently under construction, as approved under the Development Specification and Layout Plan ("DSLP"), with those in the Variation Application, the proposed variations result in a slightly higher estimate collision risk mortality for northern gannet, black-legged kittiwake and European Herring gull.
- 3.24 The Company subsequently clarified that under condition 12 of the Existing Consents the DSLP can be updated or amended if the detailed design changes,

providing it is subject to a consultation process and remains within the consented parameters. The Company further noted that ultimately the benefits of a significant additional contribution to meeting net zero targets could be achieved through the variation in parameters of the 36 WTGs and ultimately the proposed scheme under the Variation Application taken together with the 114 WTGs previously consented under the Existing Consents would generate more renewable energy with overall less ornithological impact.

- 3.25 Officials confirm that the Scottish Ministers may approve proposed updates or amendments made to the DSLP by the Company that are within the consented Development parameters. Officials have considered the points raised by RSPB Scotland, alongside the representation from NatureScot (the relevant statutory nature conversation body) and advice from specialist advisors in Marine Scotland Science, and conclude that there would be no material change to the predicted ornithological impacts of the Development resulting from the proposed variations within the Variation Application. Officials have also considered the benefits outlined by the Company of the significant additional renewable energy generation that can be achieved from the Variation Application with no material change to the predicted impacts.
- 3.26 The **Royal Yachting Society** had no comments to make on the Variation Application.
- 3.27 **Scottish Borders Council** had no objection to the Variation Application.
- 3.28 The **Scottish Environment Protection Agency** had no comments to make on the Variation Application.
- 3.29 The Scottish Fishermen's Federation submitted a 'nil response'.
- 3.30 **Scottish Water** had no objection to the Variation Application.
- 3.31 **Transport Scotland** confirmed that its previous response issued on 30 April 2020 on the Traffic and Transportation Plan ("TPP") remains valid and no further traffic assessment is required. The Company has subsequently confirmed that the TPP is not affected by the variation and remains in place and valid.
- 3.32 The **UK Chamber of Shipping** requested further information on any change in spacing and placement of the 36 WTGs to be varied. The Company has subsequently confirmed that the layout will remain unchanged and the UK Chamber of Shipping has noted this response.

#### 4. Public Representations

- 4.1 No representations were received from members of the public in relation to the Variation Application.
- 5. Advice from Third Parties

5.1 Marine Scotland Science ("MSS") acknowledged that the results of the CRM Option 2 indicated that for all but one scenario presented, the Variation Application will have lower collision risk than the Existing Consents. The one exception was for European herring gull, however the results indicated that only one additional European herring gull was predicted to be taken, when compared with the original project. Therefore, MSS advised that the increased collision risk estimate for the species is acceptable at this level, and therefore agreed with NatureScot that there would be no material change to predicted ornithological impacts from the proposed Variation Application

#### 6. The Scottish Ministers' Determination

- 6.1 The Scottish Ministers have considered the Variation Application documentation, all responses from consultees and advice from MSS. Having granted consent (the Existing Consents) for the Development on 10 October 2014 (as subsequently varied on 28 August 2018) and provided their reasons for doing so in the decision letter associated with that consent, and being satisfied that the changes proposed in the Variation Application do not fundamentally alter the character or scale of the Development, the Scottish Ministers are content to vary the Existing Consents.
- 6.2 The Scottish Ministers consider that the proposed variation is both reasonable and enforceable.
- 6.3 Accordingly, the Scottish Ministers hereby vary the Existing Consents as set out in the table below.

Annex	Variation
	for:
	DESCRIPTION OF THE DEVELOPMENT
	The Development, located as shown on Figure 1 below, shall comprise a wind-powered electricity generating station in the FFZ, including:
	<b>1.</b> not more than 75 three-bladed horizontal axis wind turbine generators each with:
	a) a maximum blade tip height of 209.7 metres (measured from LAT);
	b) a rotor diameter of between 122 and 167 metres; c) a hub height of between 87.1 and 126.2 metres (measured from LAT);
	d) a minimum blade tip clearance of between 29.8 and 42.7 metres (measured from LAT);
	e) blade width of up to 5.4 metres; and f) a minimum spacing of 1,000 metres;
In Annex 1 of	<b>2.</b> all foundations, substructures, fixtures, fittings, fixings, and protections;
the Seagreen Alpha Offshore	3. inter array cabling and cables up to and onto the offshore
Wind Farm s.36 Consent	<b>4.</b> transition pieces including access ladders / fences and landing platforms, and, except to the extent modified by the foregoing, all as specified in the Application and by the conditions imposed by the Scottish Ministers. References to "the Development" in this consent shall be construed accordingly.
	Substitute:
	The Development, located as shown on Figure 1 below, shall comprise a wind-powered electricity generating station in the FFZ, including:
	1. not more than 75 three-bladed horizontal axis wind turbine generators of which (a) not more than 57 wind turbine generators shall be constructed in Phase 1; and (b) not more than 18 wind turbine generators shall be constructed in Phase 1A.
	In respect of Phase 1, each wind turbine generator shall comprise:
	a) a maximum blade tip height of 209.7 metres (measured from LAT);
	b) a rotor diameter of between 122 and 167 metres; c) a hub height of between 87.1 and 126.2 metres (measured from LAT);

- d) a minimum blade tip clearance of between 29.8 and 42.7 metres (measured from LAT);
- e) blade width of up to 5.4 metres; and
- f) a minimum spacing of 1,000 metres;

In respect of Phase 1A, each wind turbine generator shall comprise:

- a) a maximum blade tip height of 285 metres (measured from LAT);
- b) a maximum rotor diameter of 242 metres;
- c) a hub height of between 118 and 165 metres (measured from LAT);
- d) a minimum blade tip clearance of between 34 and 45 metres (measured from LAT);
- e) blade width of up to 7.6 metres; and
- f) a minimum spacing of 1,000 metres;
- **2.** all foundations, substructures, fixtures, fittings, fixings, and protections;
- **3.** inter array cabling and cables up to and onto the offshore substation platforms; and
- **4**. transition pieces including access ladders / fences and landing platforms, and, except to the extent modified by the foregoing, all as specified in the Application, the 2022 Variation Application, and by the conditions imposed by the Scottish Ministers. References to "the Development" in this consent shall be construed accordingly.

for:

#### **CONDITIONS OF THE SECTION 36 CONSENT**

The consent granted in accordance with section 36 of the Electricity Act 1989 is subject to the following conditions:

In Annex 2 of the Seagreen Alpha Offshore Wind Farm s.36 Consent

The consent is for a period from the date this consent is 1. granted until the date occurring 25 years after the Final Commissioning of the Development. Written confirmation of the date of the Final Commissioning of the Development must be provided by the Company to the Scottish Ministers, the Planning Authority, the JNCC and SNH no later than one calendar month after the Final Commissioning of the Development. Where the Scottish Ministers deem the Development to be complete on a date prior to the date when all wind turbine generators forming the Development have supplied electricity on a commercial basis to the National Grid, then, the Scottish Ministers will provide written confirmation of the date of the Final Commissioning of the Development to the Company, the Planning Authority, the JNCC and SNH no later than one calendar month after the date on which the Scottish Ministers deem the Development to be complete.

#### **Reason:** To define the duration of the consent.

2. The Commencement of the Development must be a date no later than 5 years from the date the consent is granted, or such later date from the date of the granting of this consent as the Scottish Ministers may hereafter direct in writing.

Reason: To ensure the Commencement of the Development is undertaken within a reasonable timescale after consent is granted.

3. Where the Secretary of State has, following consultation with the Scottish Ministers, given notice requiring the Company to submit to the Secretary of State a Decommissioning Programme, pursuant to section 105(2) and (5) of the Energy Act 2004, then construction may not begin on the site of the Development until after the Company has submitted to the Secretary of State a Decommissioning Programme in compliance with that notice.

Reason: To ensure that a decommissioning programme is submitted to the Secretary of State where the Secretary of State has, following consultation with the Scottish Ministers, so required before any construction commences.

4. The Company is not permitted to assign this consent without the prior written authorisation of the Scottish Ministers. The Scottish Ministers may grant (with or without conditions) or refuse such authorisation as they, at their own discretion, see fit. The consent is not capable of being assigned, alienated or transferred otherwise than in accordance with the foregoing procedure.

Reason: To safeguard the obligations of the consent if assigned to another company.

5. In the event that for a continuous period of 12 months or more any WTG installed and commissioned and forming part of the Development fails to produce electricity on a commercial basis to the National Grid then, unless otherwise agreed in writing by the Scottish Ministers and after consultation with the Company and any advisors as required at the discretion of the Scottish Ministers, any such WTG may be deemed by the Scottish Ministers to cease to be required. If so deemed, the WTG must be decommissioned and the area of the Site containing that WTG must be reinstated by the Company in accordance with the procedures laid out within the Company's Decommissioning Programme, within the period

of 24 months from the date of the deeming decision by the Scottish Ministers.

Reason: To ensure that any redundant WTGs and associated ancillary equipment is removed from the Site in the interests of safety, amenity and environmental protection.

6. If any serious health and safety incident occurs on the Site requiring the Company to report it to the Health and Safety Executive, then the Company must also notify the Scottish Ministers of the incident within 24 hours of the Company becoming aware of an incident occurring.

Reason: To inform the Scottish Ministers of any serious health and safety incident occurring on the Site.

7. The Development must be constructed and operated in accordance with the terms of the Application and related documents, including the accompanying ES, the SEIS and Annex 1 of this letter, except in so far as amended by the terms of this section 36 consent.

Reason: To ensure that the Development is carried out in accordance with the Application documentation.

8. As far as reasonably practicable, the Company must, on being given reasonable notice by the Scottish Ministers (of at least 72 hours), provide transportation to and from the Site for any persons authorised by the Scottish Ministers to inspect the Site.

Reason: To ensure access to the Site for the purpose of inspection.

9. The Company must, no later than 6 months prior to the Commencement of the Development, submit a Construction Programme ("CoP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH, SEPA, MCA, NLB, RSPB Scotland, the Planning Authority and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The Development must, at all times, be constructed in accordance with the approved CoP (as updated and amended from time to time by the Company). Any updates or amendments made to the CoP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

The CoP must set out:

- a. The proposed date for Commencement of Development;
- b. The proposed timings for mobilisation of plant and delivery of materials, including details of onshore laydown areas;
- c. The proposed timings and sequencing of construction work for all elements of the Development infrastructure;
- d. Contingency planning for poor weather or other unforeseen delays; and
- e. The scheduled date for Final Commissioning of the Development.

# Reason: To confirm the timing and programming of construction.

The Company must, no later than 6 months prior to the 10. Commencement of the Development submit a Construction Method Statement ("CMS"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH, SEPA, MCA, NLB, RSPB Scotland, the Planning Authority and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The CMS must set out the construction procedures and good working practices for installing the Development. The CMS must also include details of the roles and responsibilities, chain of command and contact details of company personnel, any contractors or sub-contractors involved during the construction of the Development. The CMS must be in accordance with the construction methods assessed in the Application and must include details of how the construction related mitigation steps proposed in the ES and in the SEIS are to be delivered. The Development must, at all times, be constructed in accordance with the approved CMS (as updated and amended from time to time by the Company). Any updates or amendments made to the CMS by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

The CMS must, so far as is reasonably practicable, be consistent with the Design Statement ("DS"), the Environmental Management Plan ("EMP"), the Vessel Management Plan ("VMP"), the Navigational Safety Plan ("NSP"), the Piling Strategy ("PS"), the Cable Plan ("CaP") and the Lighting and Marking Plan ("LMP").

Reason: To ensure the appropriate construction management of the Development, taking into account mitigation measures to protect the environment and other users of the marine area.

11. In the event that pile foundations are to be used, the Company must, no later than 6 months prior to the Commencement of the Development, submit a Piling Strategy ("PS"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH and any such other advisors as may be required at the discretion of the Scottish Ministers. The Development must, at all times, be constructed in accordance with the approved PS (as updated and amended from time to time by the Company). Any updates or amendments made to the PS by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

#### The PS must include:

- a. Full details of the proposed method and anticipated duration of pile-driving at all locations;
- Details of soft-start piling procedures and anticipated maximum piling energy required at each pile location; and
- c. Details of any mitigation and monitoring to be employed during pile-driving, as agreed the Scottish Ministers.

The PS must be in accordance with the Application and must reflect any surveys carried out after submission of the Application. The PS must demonstrate how the exposure to and/or the effects of underwater noise have been mitigated in respect of the following species: bottlenose dolphin; harbour seal; grey seal; Atlantic salmon; cod; and herring.

The PS must, so far as is reasonably practicable, be consistent with the EMP, the Project Environmental Monitoring Programme ("PEMP") and the CMS.

# Reason: To mitigate the underwater noise impacts arising from piling activity.

The Company must, no later than 6 months prior to the 12. Commencement of the Development, submit Development Specification and Layout Plan ("DSLP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the MCA, NLB, CoS, the JNCC, SNH, SFF, CAA and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The Development must, at all times, be constructed in accordance with the approved DSLP (as updated and amended from time to time by the Company). Any updates or amendments made to the DSLP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

The DSLP must include, but not be limited to the following:

- a. A plan showing the proposed location of each individual WTG (subject to any required micro-siting), including information on WTG spacing, WTG identification / numbering, location of the substation platforms, seabed conditions, bathymetry, confirmed foundation type for each WTG and any key constraints recorded on the Site;
- A list of latitude and longitude co-ordinates accurate to three decimal places of minutes of arc for each WTG. This should also be provided as a Geographic Information System ("GIS") shape file using WGS84 format;
- c. A table or diagram of each WTG dimensions including - height to blade tip (measured above Lowest Astronomical Tide ("LAT")) to the highest point, height to hub (measured above LAT to the centreline of the generator shaft), rotor diameter and maximum rotation speed;
- d. The generating capacity of each WTG used on the Site (Annex 1, Inset B of Figure 1) and a confirmed generating capacity for the Site overall;
- e. The finishes for each WTG (see condition 19 on WTG lighting and marking); and
- f. The length and proposed arrangements on the seabed of all inter-array cables.

# Reason: To confirm the final Development specification and layout.

13. The Company must, prior to the Commencement of the Development, submit a Design Statement ("DS"), in writing, to the Scottish Ministers that includes representative wind farm visualisations from key viewpoints as agreed with the Scottish Ministers, based upon the final DSLP as approved by the Scottish Ministers (as updated and amended from time to time by the Company). The DS must be provided, for information only, to the Planning Authorities, and the JNCC, SNH and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The DS must be prepared and signed off by at least one qualified landscape architect, instructed by the Company prior to submission to the Scottish Ministers. The Development must, at all times, be constructed in accordance with the

approved DS (as updated and amended from time to time by the Company).

Reason: To inform interested parties of the final wind farm scheme proposed to be built.

The Company must, no later than 6 months prior to the 14. Commencement of the Development, submit Environmental Management Plan ("EMP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH, SEPA, RSPB Scotland, WDC, ASFB and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The Development must, at all times, be constructed and operated in accordance with the approved EMP (as updated and amended from time to time by the Company). Any updates or amendments made to the EMP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

The EMP must provide the over-arching framework for onsite environmental management during the phases of development as follows:

- a. all construction as required to be undertaken before the Final Commissioning of the Development; and
- b. the operational lifespan of the Development from the Final Commissioning of the Development until the cessation of electricity generation (Environmental management during decommissioning is addressed by the Decommissioning Programme provided for by condition 3).

The EMP must be in accordance with the ES and SEIS as it relates to environmental management measures. The EMP must set out the roles, responsibilities and chain of command for the Company personnel, any contractors or sub-contractors in respect of environmental management for the protection of environmental interests during the construction and operation of the Development. It must address, but not be limited to, the following over-arching requirements for environmental management during construction:

a. Mitigation measures to prevent significant adverse impacts to environmental interests, as identified in the ES and pre-consent and pre-construction surveys, and include the relevant parts of the CMS (refer to condition 10);

- b. Pollution prevention measures and contingency plans;
- c. Management measures to prevent the introduction of invasive non-native marine species;
- d. Measures to minimise, recycle, reuse and dispose of waste streams; and
- e. The reporting mechanisms that will be used to provide the Scottish Ministers and relevant stakeholders (including, but not limited to, the JNCC, SNH, SEPA, RSPB Scotland, MCA and NLB) with regular updates on construction activity, including any environmental issues that have been encountered and how these have been addressed.

The Company must, no later than 3 months prior to the Final Commissioning of the Development, submit an updated EMP, in writing, to cover the operation and maintenance activities for the Development to the Scottish Ministers for their written approval. Such approval may be given only following consultation with the JNCC, SNH, SEPA, RSPB Scotland and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The EMP must be regularly reviewed by the Company and the Forth and Tay Regional Advisory Group ("FTRAG") (referred to in condition 27) over the lifespan of the Development, and be kept up to date (in relation to the likes of construction methods and operations of the Development in terms of up to date working practices) by the Company in consultation with the FTRAG.

The EMP must be informed, so far as is reasonably practicable, by the baseline surveys undertaken as part of the Application and the PEMP.

**Reason:** To mitigate the impacts on the environmental interests during construction and operation.

The Company must, no later than 6 months prior to the Commencement of the Development, submit a Vessel Management Plan ("VMP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH, WDC and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The Development must, at all times, be constructed and operated in accordance with the approved VMP (as updated and amended from time to time by the Company). Any updates or amendments made to the VMP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

The VMP must include, but not be limited to, the following details:

- a. The number, types and specification of vessels required;
  - b. Working practices to minimise the use of ducted propellers;
  - How vessel management will be coordinated, particularly during construction but also during operation; and
  - d. Location of working port(s), how often vessels will be required to transit between port(s) and the Site and indicative vessel transit corridors proposed to be used during construction and operation of the Development.

The confirmed individual vessel details must be notified to the Scottish Ministers in writing no later than 14 days prior to the Commencement of the Development, and thereafter, any changes to the details supplied must be notified to the Scottish Ministers, as soon as practicable, prior to any such change being implemented in the construction or operation of the Development.

The VMP must, so far as is reasonably practicable, be consistent with the CMS, the EMP, the PEMP, the NSP, and the LMP.

# Reason: To mitigate disturbance or impact to marine mammals and birds.

16. The Company must, no later than 3 months prior to the Commissioning of the first WTG, submit an Operation and Maintenance Programme ("OMP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH, SEPA, MCA, NLB, RSPB Scotland, the Planning Authority and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The OMP must set out the procedures and good working practices for operations and the maintenance of the WTG's, substructures, and inter-array cable network of the Development. Environmental sensitivities which may affect the timing of the operation and maintenance activities must be considered in the OMP.

Operation and maintenance of the Development must, at all times, proceed in accordance with the approved OMP (as updated and amended from time to time by the Company).

Any updates or amendments made to the OMP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

The OMP must, so far as is reasonably practicable, be consistent with the EMP, the PEMP, the VMP, the NSP, the CaP and the LMP.

Reason: To safeguard environmental interests during operation of the offshore generating station.

- 17. The Company must, no later than 6 months prior to the Commencement of the Development, submit a Navigational Safety Plan ("NSP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with MCA, NLB and any other navigational advisors or organisations as may be required at the discretion of the Scottish Ministers. The NSP must include, but not be limited to, the following issues:
  - a. Navigational safety measures;
  - b. Construction exclusion zones;
  - c. Notice(s) to Mariners and Radio Navigation Warnings;
  - d. Anchoring areas;
  - e. Temporary construction lighting and marking;
  - f. Emergency response and coordination arrangements for the construction, operation and decommissioning phases of the Development; and
  - g. Buoyage.

The Company must confirm within the NSP that they have taken into account and adequately addressed all of the recommendations of the MCA in the current Marine Guidance Note 371, and its annexes that may be appropriate to the Development, or any other relevant document which may supersede said guidance prior to approval of the NSP. The Development must, at all times, be constructed and operated in accordance with the approved NSP (as updated and amended from time to time by the Company). Any updates or amendments made to the NSP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

Reason: To mitigate the navigational risk to other legitimate users of the sea.

18. The Company must, no later than 6 months prior to the Commencement of the Development, submit a Cable Plan

("CaP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH, MCA, SFF and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The CaP must be in accordance with the ES. The Development must, at all times, be constructed and operated in accordance with the approved CaP (as updated and amended from time to time by the Company). Any updates or amendments made to the CaP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

# The CaP must include the following:

- a. Details of the location and cable laying techniques for the inter array cables;
- b. The results of survey work (including geophysical, geotechnical and benthic surveys) which will help inform cable routing;
- c. Technical specification of inter array cables, including a desk based assessment of attenuation of electromagnetic field strengths and shielding;
- d. A burial risk assessment to ascertain burial depths and where necessary alternative protection measures:
- e. Methodologies for surveys (e.g. over trawl) of the inter array cables through the operational life of the wind farm where mechanical protection of cables laid on the sea bed is deployed; and
- f. Methodologies for inter array cable inspection with measures to address and report to the Scottish Ministers any exposure of inter array cables.

Reason: To ensure all environmental and navigational issues are considered for the location and construction of the inter array cables.

19. The Company must, no later than 6 months prior to the Commencement of the Development, submit a Lighting and Marking Plan ("LMP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with MCA, NLB, CAA, MOD and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The LMP must provide that the Development be lit and marked in accordance with the current CAA and MOD aviation lighting policy and guidance that is in place as at the date of the Scottish Ministers approval of the LMP, or any such other documents that may

supersede said guidance prior to the approval of the LMP. The LMP must also detail the navigational lighting requirements detailed in IALA Recommendation O-139 or any other documents that may supersede said guidance prior to approval of the LMP.

The Company must provide the LMP, for information only, to the Planning Authorities, the JNCC, SNH and any other bodies as may be required at the discretion of the Scottish Ministers. The Development must, at all times, be constructed and operated in accordance with the approved LMP (as updated and amended from time to time by the Company). Any updates or amendments made to the LMP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

Reason: To ensure safe marking and lighting of the offshore generating station.

20. The Company must, prior to the erection of any WTGs on the Site, submit an Air Traffic Control Radar Mitigation Scheme ("ATC Scheme"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the MOD.

The ATC Scheme is a scheme designed to mitigate the impact of the Development upon the operation of the Primary Surveillance Radar at RAF Leuchars ("the Radar") and the air traffic control operations of the MOD which is reliant upon the Radar. The ATC Scheme shall set out the appropriate measures to be implemented to mitigate the impact of the Development on the Radar and shall be in place for the operational life of the Development provided the Radar remains in operation.

No turbines shall become operational unless and until all those measures required by the approved ATC Scheme to be implemented prior to the operation of the turbines have been implemented and the Scottish Ministers have confirmed this in writing. The Development shall thereafter be operated fully in accordance with the approved ATC Scheme.

Reason: To mitigate the adverse impacts of the Development on the air traffic control radar at RAF Leuchars and the operations of the MOD.

21. The Company must ensure that no part of any turbine shall be erected above sea level within radar line of sight of the

air defence radar at Remote Radar Head (RRH) Buchan unless and until an Air Defence Radar Mitigation Scheme ("the ADRM scheme") has been submitted to and approved in writing by the Scottish Ministers in consultation with the MOD.

For the purposes of this condition, the ADRM Scheme means a detailed scheme to mitigate the adverse impacts of the Development on the air defence radar at RRH Buchan and the air surveillance and control operations of the MOD. The scheme will set out the appropriate measures to be implemented to that end.

No turbines shall become operational until:

- a. the mitigation measures which the approved ADRM Scheme requires to be implemented prior to the operation of the turbines have been implemented;
   and
- b. any performance criteria specified in the approved ADRM Scheme and which the approved ADRM Scheme requires to have been satisfied prior to the operation of the turbines have been satisfied.

The Company shall thereafter comply with all other obligations contained within the approved ADRM Scheme for the duration of the operation of the Development.

Reason: To mitigate the adverse impact of the Development on air defence radar at Remote Radar Head (RRH) Buchan.

22. The Company must ensure that no part of any turbine shall be erected above sea level within radar line of sight of the air defence radar at Remote Radar Head ("RRH") Brizlee Wood unless and until an Air Defence Radar Mitigation Scheme ("the ADRM scheme") has been submitted to and approved in writing by the Scottish Ministers in consultation with the MOD.

For the purposes of this condition, the ADRM Scheme means a detailed scheme to mitigate the adverse impacts of the Development on the air defence radar at RRH Brizlee Wood and the air surveillance and control operations of the MOD. The scheme will set out the appropriate measures to be implemented to that end.

No turbines shall become operational until:

- a. the mitigation measures which the approved ADRM Scheme requires to be implemented prior to the operation of the turbines have been implemented; and
- b. any performance criteria specified in the approved ADRM Scheme and which the approved ADRM Scheme requires to have been satisfied prior to the operation of the turbines have been satisfied.

The Company shall thereafter comply with all other obligations contained within the approved ADRM Scheme for the duration of the operation of the Development.

Reason: To mitigate the adverse impact of the development on air defence radar at Remote Radar Head (RRH) Brizlee Wood.

The Company must ensure that no turbine shall be erected until a Primary Radar Mitigation Scheme ("PRMS") agreed with the Operator has been submitted to and approved in writing by the Scottish Ministers in order to mitigate the impact of the Development on the Primary Radar Installation at Perwinnes and associated air traffic management operations.

No blades shall be fitted to any turbine unless and until the approved Primary Radar Mitigation Scheme has been implemented and the development shall thereafter be operated fully in accordance with such approved Scheme.

Reason: To mitigate the adverse impact of the development on air traffic operations.

24. The Company must, prior to the Commencement of the Development, and following confirmation of the approved DSLP by the Scottish Ministers (refer to condition 12), provide the positions and maximum heights of the WTGs and construction equipment over 150 m (measured above LAT) and any Offshore Sub-Station Platforms to the United Kingdom Hydrographic Office ("UKHO") for aviation and nautical charting purposes. The Company must, within 1 month of the Final Commissioning of the Development, provide co-ordinates accurate to three decimal places of minutes of arc for each WTG position and maximum heights of the WTGs to the UKHO for aviation and nautical charting purposes.

### Reason: For aviation and navigational safety.

25. The Company must, at least 6 months prior to the Commencement of the Development submit

a Traffic and Transportation Plan ("TTP") in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with Transport Scotland and any such other advisors as may be required at the discretion of the Scottish Ministers. The TTP must set out a mitigation strategy for the impact of road based traffic and transportation associated with the construction of the Development. The Development must be constructed and operated in accordance with the approved TTP (as updated and amended from time to time, following written approval from the Scottish Ministers).

# **Reason**: To maintain the free flow and safety of the Trunk Road network.

26. The Company must, no later than 6 months prior to the Commencement of the Development, submit a Project Environmental Monitoring Programme ("PEMP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH, RSPB Scotland, WDC, ASFB and any other ecological advisors or organisations as required at the discretion of the Scottish Ministers. The PEMP must be in accordance with the Application as it relates to environmental monitoring.

The PEMP must set out measures by which the Company must monitor the environmental impacts of the Development. Monitoring is required throughout the lifespan of the Development where this is deemed necessary by the Scottish Ministers. Lifespan in this context includes pre-construction, construction, operational and decommissioning phases.

Monitoring must be done in such a way so as to ensure that the data which is collected allows useful and valid comparisons between different phases of the Development. Monitoring may also serve the purpose of verifying key predictions in the Application. In the event that further potential adverse environmental effects are identified, for which no predictions were made in the Application, the Scottish Ministers may require the Company to undertake additional monitoring.

The Scottish Ministers may agree that monitoring may be reduced or ceased before the end of the lifespan of the Development.

The PEMP must cover, but not be limited to the following matters:

- a. Pre-construction, construction (if considered appropriate by the Scottish Ministers) and post-construction monitoring surveys for:
  - 1. Birds:
  - 2. Sandeels;
  - 3. Marine fish;
  - 4. Diadromous fish;
  - 5. Benthic communities; and
  - 6. Seabed scour and local sediment deposition.
- b. The participation by the Company in surveys to be carried out in relation to marine mammals as set out in the Marine Mammal Monitoring Programme ("MMMP"); and
- c. The participation by the Company in a National Strategic Bird Monitoring Framework ("NSBMF") and surveys to be carried out in relation to regional and / or strategic bird monitoring including but not necessarily limited to:
  - 1. the avoidance behaviour of breeding seabirds around turbines;
  - 2. flight height distributions of seabirds at wind farm sites;
  - 3. displacement of kittiwake, puffin and other auks from wind farm sites; and
  - 4. effects on survival and productivity at relevant breeding colonies

All initial methodologies for the above monitoring must be approved, in writing, by the Scottish Ministers and, where appropriate, in consultation with the Forth and Tay Regional Advisory Group ("FTRAG") referred to in condition 27 of this consent. Any pre-consent surveys carried out by the Company to address any of the above species may be used in part to discharge this condition subject to the written approval by the Scottish Ministers.

The PEMP is a live document and must be regularly reviewed by the Scottish Ministers, at timescales to be determined by the Scottish Ministers, in consultation with the FTRAG to identify the appropriateness of on-going monitoring. Following such reviews, the Scottish Ministers may, in consultation with the FTRAG, require the Company to amend the PEMP and submit such an amended PEMP,

in writing, to the Scottish Ministers, for their written approval. Such approval may only be granted following consultation with FTRAG and any other ecological, or such other advisors as may be required at the discretion of the Scottish Ministers. The PEMP, as amended from time to time, must be fully implemented by the Company at all times.

The Company must submit written reports and associated raw data of such monitoring surveys to the Scottish Ministers at timescales to be determined by the Scottish Ministers in consultation with the FTRAG. Subject to any legal restrictions regarding the treatment of the information, the results are to be made publicly available by the Scottish Ministers, or by such other party appointed at their discretion.

### **Reason:** To ensure that appropriate and effective monitoring of the impacts of the Development is undertaken.

27. The Company must participate in any Forth and Tay Regional Advisory Group ("FTRAG") established by the Scottish Ministers for the purpose of advising the Scottish Ministers on research, monitoring and mitigation programmes for, but not limited to, ornithology, diadromous fish, marine mammals and commercial fish. Should a Scottish Strategic Marine Environment Group ("SSMEG") be established (refer to condition 28), the responsibilities and obligations being delivered by the FTRAG will be subsumed by the SSMEG at a timescale to be determined by the Scottish Ministers.

# Reason: To ensure effective environmental monitoring and mitigation is undertaken at a regional scale.

28. The Company must participate in any Scottish Strategic Marine Environment Group ("SSMEG") established by the Scottish Ministers for the purposes of advising the Scottish Ministers on research, monitoring and mitigation programmes for, but not limited to, ornithology, diadromous fish, marine mammals and commercial fish.

# Reason: To ensure effective environmental monitoring and mitigation is undertaken at a National scale.

29. Prior to the Commencement of the Development, the Company must at its own expense, and with the approval of the Scottish Ministers in consultation with the JNCC and SNH, appoint an Ecological Clerk of Works ("ECoW"). The ECoW must be appointed in time to review and approve the final draft version of the first plan or programme submitted

under this consent to the Scottish Ministers for approval, until the Final Commissioning of the Development. The responsibilities of the ECoW must include, but not be limited to:

- a. Quality assurance of final draft version of all plans and programmes required under this consent;
- b. Provide advice to the Company on compliance with consent conditions, including the conditions relating to the CMS, the EMP, the PEMP, the PS (if required), the CaP and the VMP;
- c. Monitor compliance with the CMS, the EMP, the PEMP, the PS (if required), the CaP and the VMP;
- d. Provide reports on point c) above to the Scottish Ministers at timescales to be determined by the Scottish Ministers; and
- e. Inducting site personnel on site / works environmental policy and procedures.

### Reason: To ensure that appropriate and effective monitoring of the impacts of the Development is undertaken.

30. The Company must, to the satisfaction of the Scottish Ministers, participate in the monitoring requirements as laid out in the 'National Research and Monitoring Strategy for Diadromous Fish' so far as they apply at a local level. The extent and nature of the Company's participation is to be agreed by the Scottish Ministers in consultation with the FTRAG.

# **Reason:** To ensure effective monitoring of the effects on migratory fish at a local level

The Company must, no later than 6 months prior to the Commencement of the Development, submit a Commercial Fisheries Mitigation Strategy ("CFMS"), in writing, to the Scottish Ministers for their written approval. The Company must remain a member of the Forth and Tay Offshore Wind Developers Group-Commercial Fisheries Working Group or any successor group formed to facilitate commercial fisheries dialogue in the Forth and Tay regions.

The Company must include in the CFMS a mitigation strategy for each commercial fishery that Ministers are reasonably satisfied would be adversely affected by the Development. The CFMS must, in particular, include mitigation measures for lobster stock enhancement if the Scottish Ministers are satisfied that such mitigation measures are reasonably necessary. The Company must implement all mitigation measures committed to be carried

out by the Company within the terms of the CFMS. The Company must require all of its contractors, and subcontractors, to co-operate with the fishing industry to ensure the effective implementation of the CFMS.

### Reason: To mitigate the impact on commercial fishermen.

Prior to the Commencement of the Development, a 32. Fisheries Liaison Officer ("FLO"), approved in writing by Scottish Ministers, in consultation with the FTOWDG-CFWG, must be appointed by the Company for the period from Commencement of the Development until the Final Commissioning of the Development. The Company must notify the Scottish Ministers of the identity and credentials of the FLO before Commencement of the Development by including such details in the EMP (referred to in condition 14). The FLO must establish and maintain effective communications between the Company, any contractors or sub-contractors, fishermen and other users of the sea during the construction of the Development, and ensure compliance with best practice guidelines whilst doing so.

The responsibilities of the FLO must include, but not be limited to:

- Establishing and maintaining effective communications between the Company, any contractors or sub-contractors, fishermen and other users of the sea concerning the overall project and any amendments to the CMS and site environmental procedures;
- b. Provision of information relating to the safe operation of fishing activity on the site of the Development; and
- c. Ensuring that information is made available and circulated in a timely manner to minimise interference with fishing operations and other users of the sea.

### Reason: To mitigate the impact on commercial fishermen.

The Company must, no later than 6 months prior to the Commencement of the Development, submit a Marine Archaeology Reporting Protocol which sets out what the Company must do on discovering any marine archaeology during the construction, operation, maintenance and monitoring of the Development, in writing, to the Scottish Ministers for their written approval. Such approval may be given only following consultation by the Scottish Ministers with any such advisors as may be required at the discretion

of the Scottish Ministers. The Reporting Protocol must be implemented in full, at all times, by the Company.

Reason: To ensure any discovery of archaeological interest is properly and correctly reported.

#### Substitute:

The consent granted in accordance with section 36 of the Electricity Act 1989 is subject to the following conditions:

The consent is for a period from the date this consent is 1. granted until the date occurring 25 years after the Final Commissioning of the Development. Written confirmation of the date of the Final Commissioning of the Development must be provided by the Company to the Scottish Ministers, the Planning Authority, the JNCC and SNH no later than one calendar month after the Final Commissioning of the Development. Where the Scottish Ministers deem the Development to be complete on a date prior to the date when all wind turbine generators forming the Development have supplied electricity on a commercial basis to the National Grid then, the Scottish Ministers will provide written confirmation of the date of the Final Commissioning of the Development to the Company, the Planning Authority, the JNCC and SNH no later than one calendar month after the date on which the Scottish Ministers deem the Development to be complete.

#### Reason: To define the duration of the consent.

2. The Commencement of the Development must be a date no later than 5 years from the date the consent is granted, or such later date from the date of the granting of this consent as the Scottish Ministers may hereafter direct in writing. The Commencement of Phase 1A of the Development must be a date no later than 3 years from the Commissioning of the First WTG, or such later date from the date of the Commissioning of the First WTG as the Scottish Ministers may hereafter direct in writing.

# Reason: To ensure the Commencement of the Development is undertaken within a reasonable timescale after consent is granted.

3. Where the Secretary of State has, following consultation with the Scottish Ministers, given notice requiring the Company to submit to the Secretary of State a Decommissioning Programme, pursuant to section 105(2) and (5) of the Energy Act 2004, then construction may not begin on the site of the Development until after the Company has submitted to the Secretary of State a Decommissioning Programme in compliance with that notice. The Decommissioning

Programme must be approved, in writing, by Scottish Ministers prior to Commencement of Phase 1A of the Development.

Reason: To ensure that a decommissioning programme is submitted to the Secretary of State where the Secretary of State has, following consultation with the Scottish Ministers, so required before any construction commences.

4. The Company is not permitted to assign this consent without the prior written authorisation of the Scottish Ministers. The Scottish Ministers may grant (with or without conditions) or refuse such authorisation as they, at their own discretion, see fit. The consent is not capable of being assigned, alienated or transferred otherwise than in accordance with the foregoing procedure.

Reason: To safeguard the obligations of the consent if assigned to another company.

5. In the event that for a continuous period of 12 months or more any WTG installed and commissioned and forming part of the Development fails to produce electricity on a commercial basis to the National Grid then, unless otherwise agreed in writing by the Scottish Ministers and after consultation with the Company and any advisors as required at the discretion of the Scottish Ministers, any such WTG may be deemed by the Scottish Ministers to cease to be required. If so deemed, the WTG must be decommissioned and the area of the Site containing that WTG must be reinstated by the Company in accordance with the procedures laid out within the Company's Decommissioning Programme, within the period of 24 months from the date of the deeming decision by the Scottish Ministers.

Reason: To ensure that any redundant WTGs and associated ancillary equipment is removed from the Site in the interests of safety, amenity and environmental protection.

6. If any serious health and safety incident occurs on the Site requiring the Company to report it to the Health and Safety Executive, then the Company must also notify the Scottish Ministers of the incident within 24 hours of the Company becoming aware of an incident occurring.

Reason: To inform the Scottish Ministers of any serious health and safety incident occurring on the Site.

7. The Development must be constructed and operated in accordance with the terms of the Application and related

documents, including the accompanying ES, the SEIS, the 2022 Variation Application, and Annex 1 of this letter, except in so far as amended by the terms of this section 36 consent.

Reason: To ensure that the Development is carried out in accordance with the Application documentation.

8. As far as reasonably practicable, the Company must, on being given reasonable notice by the Scottish Ministers (of at least 72 hours), provide transportation to and from the Site for any persons authorised by the Scottish Ministers to inspect the Site.

Reason: To ensure access to the Site for the purpose of inspection.

9. The Company must, no later than 6 months prior to the Commencement of the Development, submit a Construction Programme ("CoP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH, SEPA, MCA, NLB, RSPB Scotland, the Planning Authority and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The Development must, at all times, be constructed in accordance with the approved CoP (as updated and amended from time to time by the Company). Any updates or amendments made to the CoP (for the relevant Phase of the Development) by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

The CoP must set out:

- a. The proposed date for Commencement of Development;
- b. The proposed timings for mobilisation of plant and delivery of materials, including details of onshore laydown areas:
- c. The proposed timings and sequencing of construction work for all elements of the Development infrastructure;
- d. Contingency planning for poor weather or other unforeseen delays; and
- e. The scheduled date for Final Commissioning of the Development.

To be read alongside Condition 34.

Reason: To confirm the timing and programming of construction.

The Company must, no later than 6 months prior to the 10. Commencement of the Development submit a Construction Method Statement ("CMS"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH, SEPA, MCA, NLB, RSPB Scotland, the Planning Authority and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The CMS must set out the construction procedures and good working practices for installing the Development. The CMS must also include details of the roles and responsibilities, chain of command and contact details of company personnel, any contractors or sub-contractors involved during the construction of the Development. The CMS must be in accordance with the construction methods assessed in the Application and must include details of how the construction related mitigation steps proposed in the ES and in the SEIS are to be delivered. The Development must, at all times, be constructed in accordance with the approved CMS (as updated and amended from time to time by the Company). Any updates or amendments made to the CMS by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

The CMS must, so far as is reasonably practicable, be consistent with the Design Statement ("DS"), the Environmental Management Plan ("EMP"), the Vessel Management Plan ("VMP"), the Navigational Safety Plan ("NSP"), the Piling Strategy ("PS"), the Cable Plan ("CaP") and the Lighting and Marking Plan ("LMP").

To be read alongside Condition 34.

**Reason:** To ensure the appropriate construction management of the Development, taking into account mitigation measures to protect the environment and other users of the marine area.

11. In the event that pile foundations are to be used, the Company must, no later than 6 months prior to the Commencement of the Development submit a Piling Strategy ("PS"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH and any such other advisors as may be required at the discretion of the Scottish Ministers. The Development must, at all times, be constructed in accordance with the approved PS (as updated and amended from time to time by the Company). Any updates or amendments made to the

PS by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

The PS must include:

- a. Full details of the proposed method and anticipated duration of pile-driving at all locations;
- Details of soft-start piling procedures and anticipated maximum piling energy required at each pile location;
   and
- c. Details of any mitigation and monitoring to be employed during pile-driving, as agreed the Scottish Ministers.

The PS must be in accordance with the Application and must reflect any surveys carried out after submission of the Application. The PS must demonstrate how the exposure to and/or the effects of underwater noise have been mitigated in respect of the following species: bottlenose dolphin; harbour seal; grey seal; Atlantic salmon; cod; and herring.

The PS must, so far as is reasonably practicable, be consistent with the EMP, the Project Environmental Monitoring Programme ("PEMP") and the CMS.

To be read alongside Condition 34.

# Reason: To mitigate the underwater noise impacts arising from piling activity.

12. The Company must, no later than 6 months prior to the Commencement of the Development submit a Development Specification and Layout Plan ("DSLP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the MCA, NLB, CoS, the JNCC, SNH, SFF, CAA and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The Development must, at all times, be constructed in accordance with the approved DSLP (as updated and amended from time to time by the Company). Any updates or amendments made to the DSLP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

The DSLP must include, but not be limited to the following:

a. A plan showing the proposed location of each individual WTG (subject to any required micro-siting),

- including information on WTG spacing, WTG identification / numbering, location of the substation platforms, seabed conditions, bathymetry, confirmed foundation type for each WTG and any key constraints recorded on the Site;
- A list of latitude and longitude co-ordinates accurate to three decimal places of minutes of arc for each WTG. This should also be provided as a Geographic Information System ("GIS") shape file using WGS84 format;
- c. A table or diagram of each WTG dimensions including height to blade tip (measured above Lowest Astronomical Tide ("LAT")) to the highest point, height to hub (measured above LAT to the centreline of the generator shaft), rotor diameter and maximum rotation speed;
- d. The generating capacity of each WTG used on the Site (Annex 1, Inset A of Figure 1) and a confirmed generating capacity for the Site overall;
- e. The finishes for each WTG (see condition 19 on WTG lighting and marking); and
- f. The length and proposed arrangements on the seabed of all inter-array cables.

To be read alongside Condition 34.

# Reason: To confirm the final Development specification and layout.

The Company must, prior to the Commencement of the 13. Development submit a Design Statement ("DS") in writing, to the Scottish Ministers that includes representative wind farm visualisations from key viewpoints as agreed with the Scottish Ministers, based upon the final DSLP as approved by the Scottish Ministers (as updated and amended from time to time by the Company). The DS must be provided, for information only, to the Planning Authorities, and the JNCC, SNH and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The DS must be prepared and signed off by at least one qualified landscape architect, instructed by the Company prior to submission to the Scottish Ministers. The Development must, at all times, be constructed in accordance with the approved DS (as updated and amended from time to time by the Company).

To be read alongside Condition 34.

Reason: To inform interested parties of the final wind farm scheme proposed to be built.

The Company must, no later than 6 months prior to the 14. Development, Commencement of the Environmental Management Plan ("EMP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH, SEPA, RSPB Scotland, WDC, ASFB and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The Development must, at all times, be constructed and operated in accordance with the approved EMP (as updated and amended from time to time by the Company). Any updates or amendments made to the EMP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

The EMP must provide the over-arching framework for onsite environmental management during the phases of development as follows:

- a. all construction as required to be undertaken before the Final Commissioning of the Development; and
- b. the operational lifespan of the Development from the Final Commissioning of the Development until the cessation of electricity generation (Environmental management during decommissioning is addressed by the Decommissioning Programme provided for by condition 3).

The EMP must be in accordance with the ES and SEIS as it relates to environmental management measures. The EMP must set out the roles, responsibilities and chain of command for the Company personnel, any contractors or sub-contractors in respect of environmental management for the protection of environmental interests during the construction and operation of the Development. It must address, but not be limited to, the following over-arching requirements for environmental management during construction:

- Mitigation measures to prevent significant adverse impacts to environmental interests, as identified in the ES and pre-consent and pre-construction surveys, and include the relevant parts of the CMS (refer to condition 10);
- b. Pollution prevention measures and contingency plans;
- Management measures to prevent the introduction of invasive non-native marine species;

- d. Measures to minimise, recycle, reuse and dispose of waste streams; and
- e. The reporting mechanisms that will be used to provide the Scottish Ministers and relevant stakeholders (including, but not limited to, the JNCC, SNH, SEPA, RSPB Scotland, MCA and NLB) with regular updates on construction activity, including any environmental issues that have been encountered and how these have been addressed.

The Company must, no later than 3 months prior to the Final Commissioning of the Development, submit an updated EMP, in writing, to cover the operation and maintenance activities for the Development to the Scottish Ministers for their written approval. Such approval may be given only following consultation with the JNCC, SNH, SEPA, RSPB Scotland and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The EMP must be regularly reviewed by the Company and the Forth and Tay Regional Advisory Group ("FTRAG") (referred to in condition 27) over the lifespan of the Development, and be kept up to date (in relation to the likes of construction methods and operations of the Development in terms of up to date working practices) by the Company in consultation with the FTRAG.

The EMP must be informed, so far as is reasonably practicable, by the baseline surveys undertaken as part of the Application and the PEMP.

To be read alongside Condition 34.

Reason: To mitigate the impacts on the environmental interests during construction and operation.

The Company must, no later than 6 months prior to the Commencement of the Development submit a Vessel Management Plan ("VMP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH, WDC and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The Development must, at all times, be constructed and operated in accordance with the approved VMP (as updated and amended from time to time by the Company). Any updates or amendments made to the VMP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

The VMP must include, but not be limited to, the following details:

- a. The number, types and specification of vessels required;
- b. Working practices to minimise the use of ducted propellers;
- How vessel management will be coordinated, particularly during construction but also during operation; and
- d. Location of working port(s), how often vessels will be required to transit between port(s) and the Site and indicative vessel transit corridors proposed to be used during construction and operation of the Development.

The confirmed individual vessel details must be notified to the Scottish Ministers in writing no later than 14 days prior to the Commencement of the Development and thereafter, any changes to the details supplied must be notified to the Scottish Ministers, as soon as practicable, prior to any such change being implemented in the construction or operation of the Development.

The VMP must, so far as is reasonably practicable, be consistent with the CMS, the EMP, the PEMP, the NSP, and the LMP.

To be read alongside Condition 34.

# Reason: To mitigate disturbance or impact to marine mammals and birds.

16. The Company must, no later than 3 months prior to the Commissioning of the first WTG, submit an Operation and Maintenance Programme ("OMP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH, SEPA, MCA, NLB, RSPB Scotland, the Planning Authority and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The OMP must set out the procedures and good working practices for operations and the maintenance of the WTG's, substructures, and inter-array cable network of the Development. Environmental sensitivities which may affect the timing of the operation and maintenance activities must be considered in the OMP.

Operation and maintenance of the Development must, at all times, proceed in accordance with the approved OMP (as

updated and amended from time to time by the Company). Any updates or amendments made to the OMP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

The OMP must, so far as is reasonably practicable, be consistent with the EMP, the PEMP, the VMP, the NSP, the CaP and the LMP.

To be read alongside Condition 34.

**Reason:** To safeguard environmental interests during operation of the offshore generating station.

- 17. The Company must, no later than 6 months prior to the Commencement of the Development submit a Navigational Safety Plan ("NSP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with MCA, NLB and any other navigational advisors or organisations as may be required at the discretion of the Scottish Ministers. The NSP must include, but not be limited to, the following issues:
  - a. Navigational safety measures;
  - b. Construction exclusion zones:
  - c. Notice(s) to Mariners and Radio Navigation Warnings;
  - d. Anchoring areas:
  - e. Temporary construction lighting and marking;
  - f. Emergency response and coordination arrangements for the construction, operation and decommissioning phases of the Development; and
  - g. Buoyage.

The Company must confirm within the NSP that they have taken into account and adequately addressed all of the recommendations of the MCA in the current Marine Guidance Note 371, and its annexes that may be appropriate to the Development, or any other relevant document which may supersede said guidance prior to approval of the NSP. The Development must, at all times, be constructed and operated in accordance with the approved NSP (as updated and amended from time to time by the Company). Any updates or amendments made to the NSP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

To be read alongside Condition 34.

Reason: To mitigate the navigational risk to other legitimate users of the sea.

18. The Company must, no later than 6 months prior to the Commencement of the Development submit a Cable Plan ("CaP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH, MCA, SFF and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The CaP must be in accordance with the ES. The Development must, at all times, be constructed and operated in accordance with the approved CaP (as updated and amended from time to time by the Company). Any updates or amendments made to the CaP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

The CaP must include the following:

- a. Details of the location and cable laying techniques for the inter array cables;
- b. The results of survey work (including geophysical, geotechnical and benthic surveys) which will help inform cable routing;
- c. Technical specification of inter array cables, including a desk based assessment of attenuation of electromagnetic field strengths and shielding;
- d. A burial risk assessment to ascertain burial depths and where necessary alternative protection measures:
- e. Methodologies for surveys (e.g. over trawl) of the inter array cables through the operational life of the wind farm where mechanical protection of cables laid on the sea bed is deployed; and
- f. Methodologies for inter array cable inspection with measures to address and report to the Scottish Ministers any exposure of inter array cables.

To be read alongside Condition 34.

Reason: To ensure all environmental and navigational issues are considered for the location and construction of the inter array cables.

19. The Company must, no later than 6 months prior to the Commencement of the Development submit a Lighting and Marking Plan ("LMP"), in writing, to the Scottish Ministers for

their written approval. Such approval may only be granted following consultation by the Scottish Ministers with MCA, NLB, CAA, MOD and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The LMP must provide that the Development be lit and marked in accordance with the current CAA and MOD aviation lighting policy and guidance that is in place as at the date of the Scottish Ministers approval of the LMP, or any such other documents that may supersede said guidance prior to the approval of the LMP. The LMP must also detail the navigational lighting requirements detailed in IALA Recommendation O-139 or any other documents that may supersede said guidance prior to approval of the LMP.

The Company must provide the LMP, for information only, to the Planning Authorities, the JNCC, SNH and any other bodies as may be required at the discretion of the Scottish Ministers. The Development must, at all times, be constructed and operated in accordance with the approved LMP (as updated and amended from time to time by the Company). Any updates or amendments made to the LMP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

To be read alongside Condition 34.

Reason: To ensure safe marking and lighting of the offshore generating station.

20. The Company must, prior to the erection of any WTGs of any Phase on the Site, submit an Air Traffic Control Radar Mitigation Scheme ("ATC Scheme"), in writing, to the Scottish Ministers for their written approval for that Phase. Such approval may only be granted following consultation by the Scottish Ministers with the MOD.

The ATC Scheme is a scheme designed to mitigate the impact of the Development upon the operation of the Primary Surveillance Radar at RAF Leuchars ("the Radar") and the air traffic control operations of the MOD which is reliant upon the Radar. The ATC Scheme for each Phase shall set out the appropriate measures to be implemented to mitigate the impact of that Phase of the Development on the Radar and shall be in place for the operational life of the Development provided the Radar remains in operation.

No turbines shall become operational for any Phase unless and until all those measures required by the approved ATC Scheme for that Phase to be implemented prior to the operation of the turbines have been implemented and the Scottish Ministers have confirmed this in writing. Each Phase of the Development shall thereafter be operated fully in accordance with the approved ATC Scheme for that Phase.

Reason: To mitigate the adverse impacts of the Development on the air traffic control radar at RAF Leuchars and the operations of the MOD.

21. The Company must ensure that no part of any turbine for any Phase shall be erected above sea level within radar line of sight of the air defence radar at Remote Radar Head (RRH) Buchan unless and until an Air Defence Radar Mitigation Scheme ("the ADRM scheme") for that Phase has been submitted to and approved in writing by the Scottish Ministers in consultation with the MOD.

For the purposes of this condition, the ADRM Scheme means a detailed scheme to mitigate the adverse impacts of the Development on the air defence radar at RRH Buchan and the air surveillance and control operations of the MOD. The scheme will set out the appropriate measures to be implemented to that end.

No turbines forming part of a Phase shall become operational until:

- a. the mitigation measures which the approved ADRM Scheme for that Phase requires to be implemented prior to the operation of the turbines have been implemented; and
- b. any performance criteria specified in the approved ADRM Scheme for that Phase and which the approved ADRM Scheme for that Phase requires to have been satisfied prior to the operation of the turbines have been satisfied.

The Company shall thereafter comply with all other obligations contained within the approved ADRM Scheme for any Phase for the duration of the operation of that Phase of the Development.

Reason: To mitigate the adverse impact of the Development on air defence radar at Remote Radar Head (RRH) Buchan.

22. The Company must ensure that no part of any turbine for any Phase shall be erected above sea level within radar line of sight of the air defence radar at Remote Radar Head

("RRH") Brizlee Wood unless and until an Air Defence Radar Mitigation Scheme ("the ADRM scheme") for that Phase has been submitted to and approved in writing by the Scottish Ministers in consultation with the MOD.

For the purposes of this condition, the ADRM Scheme for each Phase means a detailed scheme to mitigate the adverse impacts of that Phase of the Development on the air defence radar at RRH Brizlee Wood and the air surveillance and control operations of the MOD. The scheme will set out the appropriate measures to be implemented to that end.

No turbines for any Phase shall become operational until:

- a. the mitigation measures which the approved ADRM Scheme for that Phase requires to be implemented prior to the operation of the turbines have been implemented; and
- b. any performance criteria specified in the approved ADRM Scheme for that Phase and which the approved ADRM Scheme for that Phase requires to have been satisfied prior to the operation of the turbines have been satisfied.

The Company shall thereafter comply with all other obligations contained within the approved ADRM Scheme for the duration of the operation of each Phase of the Development.

Reason: To mitigate the adverse impact of the development on air defence radar at Remote Radar Head (RRH) Brizlee Wood.

23. The Company must ensure that no turbine forming part of a Phase shall be erected until a Primary Radar Mitigation Scheme ("PRMS") for that Phase agreed with the Operator has been submitted to and approved in writing by the Scottish Ministers in order to mitigate the impact of that Phase of the Development on the Primary Radar Installation at Perwinnes and associated air traffic management operations.

No blades shall be fitted to any turbine forming part of a Phase unless and until the approved Primary Radar Mitigation Scheme for that Phase has been implemented and the development shall thereafter be operated fully in accordance with such approved Scheme for that Phase.

**Reason:** To mitigate the adverse impact of the development on air

#### traffic operations.

24. The Company must, prior to the Commencement of each Phase of the Development and following confirmation of the approved DSLP for that Phase by the Scottish Ministers (refer to condition 12), provide the positions and maximum heights of the WTGs and construction equipment over 150 m (measured above LAT) and any Offshore Sub-Station Platforms for that Phase of the Development to the United Kingdom Hydrographic Office ("UKHO") for aviation and nautical charting purposes. The Company must, within 1 month of the Final Commissioning of each Phase of the Development provide co-ordinates accurate to three decimal places of minutes of arc for each WTG position and maximum heights of the WTGs for that Phase to the UKHO for aviation and nautical charting purposes.

### Reason: For aviation and navigational safety.

25. The Company must, at least 6 months prior to the Commencement of the Development, submit a Traffic and Transportation Plan ("TTP") in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with Transport Scotland and any such other advisors as may be required at the discretion of the Scottish Ministers. The TTP must set out a mitigation strategy for the impact of road based traffic and transportation associated with the construction of the Development. The Development must be constructed and operated in accordance with the approved TTP (as updated and amended from time to time, following written approval from the Scottish Ministers).

To be read alongside Condition 34.

# **Reason**: To maintain the free flow and safety of the Trunk Road network.

26. The Company must, no later than 6 months prior to the Commencement of the Development submit a Project Environmental Monitoring Programme ("PEMP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH, RSPB Scotland, WDC, ASFB and any other ecological advisors or organisations as required at the discretion of the Scottish Ministers. The PEMP must be in accordance with the Application as it relates to environmental monitoring.

The PEMP must set out measures by which the Company must monitor the environmental impacts of the

Development. Monitoring is required throughout the lifespan of the Development where this is deemed necessary by the Scottish Ministers. Lifespan in this context includes pre-construction, construction, operational and decommissioning phases.

Monitoring must be done in such a way so as to ensure that the data which is collected allows useful and valid comparisons between different phases of the Development. Monitoring may also serve the purpose of verifying key predictions in the Application. In the event that further potential adverse environmental effects are identified, for which no predictions were made in the Application, the Scottish Ministers may require the Company to undertake additional monitoring.

The Scottish Ministers may agree that monitoring may be reduced or ceased before the end of the lifespan of the Development.

The PEMP must cover, but not be limited to the following matters:

- a. Pre-construction, construction (if considered appropriate by the Scottish Ministers) and post-construction monitoring surveys for:
  - 1. Birds;
  - 2. Sandeels;
  - 3. Marine fish:
  - 4. Diadromous fish;
  - 5. Benthic communities; and
  - 6. Seabed scour and local sediment deposition.
- b. The participation by the Company in surveys to be carried out in relation to marine mammals as set out in the Marine Mammal Monitoring Programme ("MMMP"); and
- c. The participation by the Company in a National Strategic Bird Monitoring Framework ("NSBMF") and surveys to be carried out in relation to regional and / or strategic bird monitoring including but not necessarily limited to:
  - 1. the avoidance behaviour of breeding seabirds around turbines;
  - 2. flight height distributions of seabirds at wind farm sites:

- 3. displacement of kittiwake, puffin and other auks from wind farm sites; and
- 4. effects on survival and productivity at relevant breeding colonies

All initial methodologies for the above monitoring must be approved, in writing, by the Scottish Ministers and, where appropriate, in consultation with the Forth and Tay Regional Advisory Group ("FTRAG") referred to in condition 27 of this consent. Any pre-consent surveys carried out by the Company to address any of the above species may be used in part to discharge this condition subject to the written approval by the Scottish Ministers.

The PEMP is a live document and must be regularly reviewed by the Scottish Ministers, at timescales to be determined by the Scottish Ministers, in consultation with the FTRAG to identify the appropriateness of on-going monitoring. Following such reviews, the Scottish Ministers may, in consultation with the FTRAG, require the Company to amend the PEMP and submit such an amended PEMP, in writing, to the Scottish Ministers, for their written approval. Such approval may only be granted following consultation with FTRAG and any other ecological, or such other advisors as may be required at the discretion of the Scottish Ministers. The PEMP, as amended from time to time, must be fully implemented by the Company at all times.

The Company must submit written reports and associated raw data of such monitoring surveys to the Scottish Ministers at timescales to be determined by the Scottish Ministers in consultation with the FTRAG. Subject to any legal restrictions regarding the treatment of the information, the results are to be made publicly available by the Scottish Ministers, or by such other party appointed at their discretion.

To be read alongside Condition 34.

Reason: To ensure that appropriate and effective monitoring of the impacts of the Development is undertaken.

27. The Company must participate in any Forth and Tay Regional Advisory Group ("FTRAG") established by the Scottish Ministers for the purpose of advising the Scottish Ministers on research, monitoring and mitigation programmes for, but not limited to, ornithology, diadromous fish, marine mammals and commercial fish. Should a Scottish Strategic Marine Environment Group ("SSMEG") be established (refer to condition 28), the responsibilities and

obligations being delivered by the FTRAG will be subsumed by the SSMEG at a timescale to be determined by the Scottish Ministers.

**Reason:** To ensure effective environmental monitoring and mitigation is undertaken at a regional scale.

The Company must participate in any Scottish Strategic Marine Environment Group ("SSMEG") established by the Scottish Ministers for the purposes of advising the Scottish Ministers on research, monitoring and mitigation programmes for, but not limited to, ornithology, diadromous fish, marine mammals and commercial fish.

Reason: To ensure effective environmental monitoring and mitigation is undertaken at a National scale.

- 29. Prior to the Commencement of the Development, the Company must at its own expense, and with the approval of the Scottish Ministers in consultation with the JNCC and SNH, appoint an Ecological Clerk of Works ("ECoW"). The ECoW must be appointed in time to review and approve the final draft version of the first plan or programme submitted under this consent to the Scottish Ministers for approval, until the Final Commissioning of the Development. The responsibilities of the ECoW must include, but not be limited to:
  - a. Quality assurance of final draft version of all plans and programmes required under this consent:
  - b. Provide advice to the Company on compliance with consent conditions, including the conditions relating to the CMS, the EMP, the PEMP, the PS (if required), the CaP and the VMP;
  - c. Monitor compliance with the CMS, the EMP, the PEMP, the PS (if required), the CaP and the VMP;
  - d. Provide reports on point c) above to the Scottish Ministers at timescales to be determined by the Scottish Ministers; and
  - e. Inducting site personnel on site / works environmental policy and procedures.

To be read alongside Condition 34.

Reason: To ensure that appropriate and effective monitoring of the impacts of the Development is undertaken.

30. The Company must, to the satisfaction of the Scottish Ministers, participate in the monitoring requirements as laid out in the 'National Research and Monitoring Strategy for

Diadromous Fish' so far as they apply at a local level. The extent and nature of the Company's participation is to be agreed by the Scottish Ministers in consultation with the FTRAG.

### **Reason:** To ensure effective monitoring of the effects on migratory fish at a local level.

The Company must, no later than 6 months prior to the Commencement of the Development, submit a Commercial Fisheries Mitigation Strategy ("CFMS"), in writing, to the Scottish Ministers for their written approval. The Company must remain a member of the Forth and Tay Offshore Wind Developers Group-Commercial Fisheries Working Group or any successor group formed to facilitate commercial fisheries dialogue in the Forth and Tay regions.

The Company must include in the CFMS a mitigation strategy for each commercial fishery that Ministers are reasonably satisfied would be adversely affected by the Development. The CFMS must, in particular, include mitigation measures for lobster stock enhancement if the Scottish Ministers are satisfied that such mitigation measures are reasonably necessary. The Company must implement all mitigation measures committed to be carried out by the Company within the terms of the CFMS. The Company must require all of its contractors, and subcontractors, to co-operate with the fishing industry to ensure the effective implementation of the CFMS.

To be read alongside Condition 34.

#### Reason: To mitigate the impact on commercial fishermen.

Prior to the Commencement of the Development a Fisheries Liaison Officer ("FLO"), approved in writing by Scottish Ministers, in consultation with the FTOWDG-CFWG, must be appointed by the Company for the period from Commencement of the Development until the Final Commissioning of the Development. The Company must notify the Scottish Ministers of the identity and credentials of the FLO before Commencement of the Development by including such details in the EMP (referred to in condition 14). The FLO must establish and maintain effective communications between the Company, any contractors or sub-contractors, fishermen and other users of the sea during the construction of the Development, and ensure compliance with best practice guidelines whilst doing so.

The responsibilities of the FLO must include, but not be

#### limited to:

- a. Establishing and maintaining effective communications between the Company, any contractors or sub-contractors, fishermen and other users of the sea concerning the overall project and any amendments to the CMS and site environmental procedures;
- b. Provision of information relating to the safe operation of fishing activity on the site of the Development; and
- c. Ensuring that information is made available and circulated in a timely manner to minimise interference with fishing operations and other users of the sea.

To be read alongside Condition 34.

#### Reason: To mitigate the impact on commercial fishermen.

33. The Company must, no later than 6 months prior to the Commencement of the Development submit a Marine Archaeology Reporting Protocol which sets out what the Company must do on discovering any marine archaeology during the construction, operation, maintenance and monitoring of the Development, in writing, to the Scottish Ministers for their written approval. Such approval may be given only following consultation by the Scottish Ministers with any such advisors as may be required at the discretion of the Scottish Ministers. The Reporting Protocol must be implemented in full, at all times, by the Company.

To be read alongside Condition 34.

# Reason: To ensure any discovery of archaeological interest is properly and correctly reported.

- 34. In respect of the Company carrying out the Development in Phases:
  - (a) any notification to or approval from the Scottish Ministers in respect of conditions 9, 10, 11, 12, 13, 14, 15, 17, 18, 19, 25, 26, 29, 31, 32 and 33 which would otherwise be required prior to Commencement of the Development shall instead be required prior to Commencement of each Phase of the Development. The Commencement of Phase 1A of the Development must not commence until such approval has been granted by Scottish Ministers;
  - (b) any approval from the Scottish Ministers in respect of condition 14 which would otherwise be required prior to Final Commissioning of the Development shall instead be

required prior to the Final Commissioning of each Phase of the Development; and

(c) any approval from the Scottish Ministers in respect of condition 16 which would otherwise be required prior to the Commissioning of the first WTG of the Development shall instead be required prior to Commissioning of the First WTG of each Phase of the Development.

The Company must submit plans required by conditions 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 25, 26, 31 and 33 for approval in respect of Phase 1A as updates to those plans submitted in respect of Phase 1. These updated plans must incorporate the requirements of each respective post-consent plan condition in relation to Phase 1A of the Development.

Reason: To ensure that the obligations for each Phase of the Development are discharged appropriately.

#### Insert:

"the 2022 Variation Application" includes the application letter and environmental appraisal report submitted to the Scottish Ministers by Seagreen Wind Energy Limited on 19 April 2022.

"Phase 1" has the meaning given in Annex 1 of this consent

"Phase 1A" has the meaning given in Annex 1 of this consent

"Phase" means either Phase 1 or Phase 1A of the Development, all as defined in Annex 1 of this consent.

### In Annex 3 of the Seagreen Alpha Offshore Wind Farm s.36 Consent

"Commencement of Phase 1A of the Development" means the date on which Construction of Phase 1A begins on the site of the Development in accordance with this consent.

"Commencement of each Phase of the Development" means (i) the date on which Construction of Phase 1 begins on the site of the Development in accordance with this consent and (ii) the date on which Construction of Phase 1A begins on the site of the Development in accordance with this consent.

"Final Commissioning of each Phase of the Development" means (i) the date on which all wind turbine generators forming Phase 1 of the Development have supplied electricity on a commercial basis to the National Grid, or such earlier date as the Scottish Ministers deem the Phase 1 to be complete, and (ii) the date on which all wind turbine generators forming Phase 1A of the Development have supplied electricity on a commercial basis to the National

Grid, or such earlier date as the Scottish Ministers deem the Phase 1A to be complete.

"Commissioning of the First WTG of each Phase of the Development" means (i) the date on which the first wind turbine generator forming Phase 1 of the Development has supplied electricity on a commercial basis to the National Grid, and (ii) the date on which the first wind turbine generator forming Phase 1A of the Development has supplied electricity on a commercial basis to the National Grid.

#### for:

#### DESCRIPTION OF THE DEVELOPMENT

The Development, located as shown on Figure 1 below, shall comprise a wind-powered electricity generating station in the FFZ, including:

- 1. not more than 75 three-bladed horizontal axis wind turbine generators each with:
- a) a maximum blade tip height of 209.7 metres (measured from LAT);
- b) a rotor diameter of between 122 and 167 metres;
- c) a hub height of between 87.1 and 126.2 metres (measured from LAT);
- d) a minimum blade tip clearance of between 29.8 and 42.7 metres (measured from LAT);
- e) blade width of up to 5.4 metres; and
- f) a minimum spacing of 1,000 metres; 2. all foundations, substructures, fixtures, fixtings, fixings, and protections; 3. inter array cabling and cables up to and onto the offshore substation platforms; and
- 4. transition pieces including access ladders / fences and landing platforms, and, except to the extent modified by the foregoing, all as specified in the Application and by the conditions imposed by the Scottish Ministers. References to "the Development" in this consent shall be construed accordingly.

### **Substitute:**

The Development, located as shown on Figure 1 below, shall comprise a wind-powered electricity generating station in the FFZ, including:

1. not more than 75 three-bladed horizontal axis wind turbine generators of which (a) not more than 57 wind turbine generators shall be constructed in Phase 1; and (b) not more than 18 wind turbine generators shall be constructed in Phase 1A.

In respect of Phase 1, each wind turbine generator shall comprise:

In Annex 1 of the Seagreen Bravo Offshore Wind Farm s.36 Consent

- a) a maximum blade tip height of 209.7 metres (measured from LAT);
- b) a rotor diameter of between 122 and 167 metres;
- c) a hub height of between 87.1 and 126.2 metres (measured from LAT);
- d) a minimum blade tip clearance of between 29.8 and 42.7 metres (measured from LAT);
- e) blade width of up to 5.4 metres; and
- f) a minimum spacing of 1,000 metres;

In respect of Phase 1A, each wind turbine generator shall comprise:

- a) a maximum blade tip height of 285 metres (measured from LAT);
- b) a maximum rotor diameter of 242 metres;
- c) a hub height of between 118 and 165 metres (measured from LAT);
- d) a minimum blade tip clearance of between 34 and 45 metres (measured from LAT);
- e) blade width of up to 7.6 metres; and
- f) a minimum spacing of 1,000 metres;
- **2.** all foundations, substructures, fixtures, fittings, fixings, and protections;
- **3.** inter array cabling and cables up to and onto the offshore substation platforms; and
- **4**. transition pieces including access ladders / fences and landing platforms, and, except to the extent modified by the foregoing, all as specified in the Application, the 2022 Variation Application, and by the conditions imposed by the Scottish Ministers. References to "the Development" in this consent shall be construed accordingly.

for:

#### **CONDITIONS OF THE SECTION 36 CONSENT**

The consent granted in accordance with section 36 of the Electricity Act 1989 is subject to the following conditions:

In Annex 2 of the Seagreen Bravo Offshore Wind Farm s.36 Consent

1. The consent is for a period from the date this consent is granted until the date occurring 25 years after the Final Commissioning of the Development. Written confirmation of the date of the Final Commissioning of the Development must be provided by the Company to the Scottish Ministers, the Planning Authority, the JNCC and SNH no later than one calendar month after the Final Commissioning of the Development. Where the Scottish Ministers deem the Development to be complete on a date prior to the date when all wind turbine generators forming the Development have supplied electricity on a commercial basis to the National

Grid, then, the Scottish Ministers will provide written confirmation of the date of the Final Commissioning of the Development to the Company, the Planning Authority, the JNCC and SNH no later than one calendar month after the date on which the Scottish Ministers deem the Development to be complete.

### Reason: To define the duration of the consent.

2. The Commencement of the Development must be a date no later than 5 years from the date the consent is granted, or such later date from the date of the granting of this consent as the Scottish Ministers may hereafter direct in writing.

Reason: To ensure the Commencement of the Development is undertaken within a reasonable timescale after consent is granted.

3. Where the Secretary of State has, following consultation with the Scottish Ministers, given notice requiring the Company to submit to the Secretary of State a Decommissioning Programme, pursuant to section 105(2) and (5) of the Energy Act 2004, then construction may not begin on the site of the Development until after the Company has submitted to the Secretary of State a Decommissioning Programme in compliance with that notice.

Reason: To ensure that a decommissioning programme is submitted to the Secretary of State where the Secretary of State has, following consultation with the Scottish Ministers, so required before any construction commences.

4. The Company is not permitted to assign this consent without the prior written authorisation of the Scottish Ministers. The Scottish Ministers may grant (with or without conditions) or refuse such authorisation as they, at their own discretion, see fit. The consent is not capable of being assigned, alienated or transferred otherwise than in accordance with the foregoing procedure.

Reason: To safeguard the obligations of the consent if assigned to another company.

5. In the event that for a continuous period of 12 months or more any WTG installed and commissioned and forming part of the Development fails to produce electricity on a commercial basis to the National Grid then, unless otherwise agreed in writing by the Scottish Ministers and after consultation with the Company and any advisors as required at the discretion of the Scottish Ministers, any such WTG may be deemed by the Scottish Ministers to cease to be required. If so deemed, the WTG must be decommissioned and the area of the Site

containing that WTG must be reinstated by the Company in accordance with the procedures laid out within the Company's Decommissioning Programme, within the period of 24 months from the date of the deeming decision by the Scottish Ministers.

Reason: To ensure that any redundant WTGs and associated ancillary equipment is removed from the Site in the interests of safety, amenity and environmental protection.

6. If any serious health and safety incident occurs on the Site requiring the Company to report it to the Health and Safety Executive, then the Company must also notify the Scottish Ministers of the incident within 24 hours of the Company becoming aware of an incident occurring.

Reason: To inform the Scottish Ministers of any serious health and safety incident occurring on the Site.

7. The Development must be constructed and operated in accordance with the terms of the Application and related documents, including the accompanying ES, the SEIS and Annex 1 of this letter, except in so far as amended by the terms of this section 36 consent.

Reason: To ensure that the Development is carried out in accordance with the Application documentation.

8. As far as reasonably practicable, the Company must, on being given reasonable notice by the Scottish Ministers (of at least 72 hours), provide transportation to and from the Site for any persons authorised by the Scottish Ministers to inspect the Site.

Reason: To ensure access to the Site for the purpose of inspection.

9. The Company must, no later than 6 months prior to the Commencement of the Development, submit a Construction Programme ("CoP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH, SEPA, MCA, NLB, RSPB Scotland, the Planning Authority and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The Development must, at all times, be constructed in accordance with the approved CoP (as updated and amended from time to time by the Company). Any updates or amendments made to the CoP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

#### The CoP must set out:

- a. The proposed date for Commencement of Development;
- b. The proposed timings for mobilisation of plant and delivery of materials, including details of onshore laydown areas:
- c. The proposed timings and sequencing of construction work for all elements of the Development infrastructure;
- d. Contingency planning for poor weather or other unforeseen delays; and
- e. The scheduled date for Final Commissioning of the Development.

### Reason: To confirm the timing and programming of construction.

The Company must, no later than 6 months prior to the Commencement of the Development submit a Construction Method Statement ("CMS"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH, SEPA, MCA, NLB, RSPB Scotland, the Planning Authority and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The CMS must set out the construction procedures and good working practices for installing the Development. The CMS must also include details of the roles and responsibilities, chain of command and contact details of company personnel, any contractors or sub-contractors involved during the construction of the Development. The CMS must be in accordance with the construction methods assessed in the Application and must include details of how the construction related mitigation steps proposed in the ES and in the SEIS are to be delivered. The Development must, at all times, be constructed in accordance with the approved CMS (as updated and amended from time to time by the Company). Any updates or amendments made to the CMS by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

The CMS must, so far as is reasonably practicable, be consistent with the Design Statement ("DS"), the Environmental Management Plan ("EMP"), the Vessel Management Plan ("VMP"), the Navigational Safety Plan ("NSP"), the Piling Strategy ("PS"), the Cable Plan ("CaP") and the Lighting and Marking Plan ("LMP").

Reason: To ensure the appropriate construction management of the Development, taking into account mitigation measures to protect the environment and other users of the marine area.

11. In the event that pile foundations are to be used, the Company must, no later than 6 months prior to the Commencement of the Development, submit a Piling Strategy ("PS"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH and any such other advisors as may be required at the discretion of the Scottish Ministers. The Development must, at all times, be constructed in accordance with the approved PS (as updated and amended from time to time by the Company). Any updates or amendments made to the PS by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

#### The PS must include:

- a. Full details of the proposed method and anticipated duration of pile-driving at all locations;
- Details of soft-start piling procedures and anticipated maximum piling energy required at each pile location; and
- c. Details of any mitigation and monitoring to be employed during pile-driving, as agreed the Scottish Ministers.

The PS must be in accordance with the Application and must reflect any surveys carried out after submission of the Application. The PS must demonstrate how the exposure to and/or the effects of underwater noise have been mitigated in respect of the following species: bottlenose dolphin; harbour seal; grey seal; Atlantic salmon; cod; and herring.

The PS must, so far as is reasonably practicable, be consistent with the EMP, the Project Environmental Monitoring Programme ("PEMP") and the CMS.

### Reason: To mitigate the underwater noise impacts arising from piling activity.

12. The Company must, no later than 6 months prior to the Commencement of the Development, submit a Development Specification and Layout Plan ("DSLP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the MCA, NLB, CoS, the JNCC, SNH, SFF, CAA and any such other advisors or

organisations as may be required at the discretion of the Scottish Ministers. The Development must, at all times, be constructed in accordance with the approved DSLP (as updated and amended from time to time by the Company). Any updates or amendments made to the DSLP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

The DSLP must include, but not be limited to the following:

- a. A plan showing the proposed location of each individual WTG (subject to any required micro-siting), including information on WTG spacing, WTG identification / numbering, location of the substation platforms, seabed conditions, bathymetry, confirmed foundation type for each WTG and any key constraints recorded on the Site;
- A list of latitude and longitude co-ordinates accurate to three decimal places of minutes of arc for each WTG. This should also be provided as a Geographic Information System ("GIS") shape file using WGS84 format;
- c. A table or diagram of each WTG dimensions including height to blade tip (measured above Lowest Astronomical Tide ("LAT")) to the highest point, height to hub (measured above LAT to the centreline of the generator shaft), rotor diameter and maximum rotation speed;
- d. The generating capacity of each WTG used on the Site (Annex 1, Inset B of Figure 1) and a confirmed generating capacity for the Site overall;
- e. The finishes for each WTG (see condition 19 on WTG lighting and marking); and
- f. The length and proposed arrangements on the seabed of all inter-array cables.

Reason: To confirm the final Development specification and layout.

13. The Company must, prior to the Commencement of the Development, submit a Design Statement ("DS"), in writing, to the Scottish Ministers that includes representative wind farm visualisations from key viewpoints as agreed with the Scottish Ministers, based upon the final DSLP as approved by the Scottish Ministers (as updated and amended from time to time by the Company). The DS must be provided, for information only, to the Planning Authorities, and the JNCC, SNH and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The DS must be prepared and signed off by at least one qualified

landscape architect, instructed by the Company prior to submission to the Scottish Ministers. The Development must, at all times, be constructed in accordance with the approved DS (as updated and amended from time to time by the Company).

Reason: To inform interested parties of the final wind farm scheme proposed to be built.

The Company must, no later than 6 months prior to the 14. Commencement of the Development, submit Environmental Management Plan ("EMP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH, SEPA, RSPB Scotland, WDC, ASFB and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The Development must, at all times, be constructed and operated in accordance with the approved EMP (as updated and amended from time to time by the Company). Any updates or amendments made to the EMP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

The EMP must provide the over-arching framework for onsite environmental management during the phases of development as follows:

- a. all construction as required to be undertaken before the Final Commissioning of the Development;
   and
- b. the operational lifespan of the Development from the Final Commissioning of the Development until the cessation of electricity generation (Environmental management during decommissioning is addressed by the Decommissioning Programme provided for by condition 3).

The EMP must be in accordance with the ES and SEIS as it relates to environmental management measures. The EMP must set out the roles, responsibilities and chain of command for the Company personnel, any contractors or sub-contractors in respect of environmental management for the protection of environmental interests during the construction and operation of the Development. It must address, but not be limited to, the following over-arching requirements for environmental management during construction:

- Mitigation measures to prevent significant adverse impacts to environmental interests, as identified in the ES and pre-consent and pre-construction surveys, and include the relevant parts of the CMS (refer to condition 10);
- b. Pollution prevention measures and contingency plans;
- c. Management measures to prevent the introduction of invasive non-native marine species;
- d. Measures to minimise, recycle, reuse and dispose of waste streams; and
- e. The reporting mechanisms that will be used to provide the Scottish Ministers and relevant stakeholders (including, but not limited to, the JNCC, SNH, SEPA, RSPB Scotland, MCA and NLB) with regular updates on construction activity, including any environmental issues that have been encountered and how these have been addressed.

The Company must, no later than 3 months prior to the Final Commissioning of the Development, submit an updated EMP, in writing, to cover the operation and maintenance activities for the Development to the Scottish Ministers for their written approval. Such approval may be given only following consultation with the JNCC, SNH, SEPA, RSPB Scotland and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The EMP must be regularly reviewed by the Company and the Forth and Tay Regional Advisory Group ("FTRAG") (referred to in condition 27) over the lifespan of the Development, and be kept up to date (in relation to the likes of construction methods and operations of the Development in terms of up to date working practices) by the Company in consultation with the FTRAG.

The EMP must be informed, so far as is reasonably practicable, by the baseline surveys undertaken as part of the Application and the PEMP.

Reason: To mitigate the impacts on the environmental interests during construction and operation.

15. The Company must, no later than 6 months prior to the Commencement of the Development, submit a Vessel Management Plan ("VMP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH, WDC and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The Development must, at all times, be

constructed and operated in accordance with the approved VMP (as updated and amended from time to time by the Company). Any updates or amendments made to the VMP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

The VMP must include, but not be limited to, the following details:

- a. The number, types and specification of vessels required;
- b. Working practices to minimise the use of ducted propellers;
- How vessel management will be coordinated, particularly during construction but also during operation; and
- d. Location of working port(s), how often vessels will be required to transit between port(s) and the Site and indicative vessel transit corridors proposed to be used during construction and operation of the Development.

The confirmed individual vessel details must be notified to the Scottish Ministers in writing no later than 14 days prior to the Commencement of the Development, and thereafter, any changes to the details supplied must be notified to the Scottish Ministers, as soon as practicable, prior to any such change being implemented in the construction or operation of the Development.

The VMP must, so far as is reasonably practicable, be consistent with the CMS, the EMP, the PEMP, the NSP, and the LMP.

# **Reason:** To mitigate disturbance or impact to marine mammals and birds.

16. The Company must, no later than 3 months prior to the Commissioning of the first WTG, submit an Operation and Maintenance Programme ("OMP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH, SEPA, MCA, NLB, RSPB Scotland, the Planning Authority and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The OMP must set out the procedures and good working practices for operations and the maintenance of the WTG's, substructures, and inter-array cable network of the Development. Environmental

sensitivities which may affect the timing of the operation and maintenance activities must be considered in the OMP.

Operation and maintenance of the Development must, at all times, proceed in accordance with the approved OMP (as updated and amended from time to time by the Company). Any updates or amendments made to the OMP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

The OMP must, so far as is reasonably practicable, be consistent with the EMP, the PEMP, the VMP, the NSP, the CaP and the LMP.

Reason: To safeguard environmental interests during operation of the offshore generating station.

- 17. The Company must, no later than 6 months prior to the Commencement of the Development, submit a Navigational Safety Plan ("NSP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with MCA, NLB and any other navigational advisors or organisations as may be required at the discretion of the Scottish Ministers. The NSP must include, but not be limited to, the following issues:
  - a. Navigational safety measures;
  - b. Construction exclusion zones;
  - c. Notice(s) to Mariners and Radio Navigation Warnings;
  - d. Anchoring areas;
  - e. Temporary construction lighting and marking;
  - f. Emergency response and coordination arrangements for the construction, operation and decommissioning phases of the Development; and
  - g. Buoyage.

The Company must confirm within the NSP that they have taken into account and adequately addressed all of the recommendations of the MCA in the current Marine Guidance Note 371, and its annexes that may be appropriate to the Development, or any other relevant document which may supersede said guidance prior to approval of the NSP. The Development must, at all times, be constructed and operated in accordance with the approved NSP (as updated and amended from time to time by the Company). Any updates or amendments made to the NSP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

# Reason: To mitigate the navigational risk to other legitimate users of the sea.

18. The Company must, no later than 6 months prior to the Commencement of the Development, submit a Cable Plan ("CaP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH, MCA, SFF and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The CaP must be in accordance with the ES. The Development must, at all times, be constructed and operated in accordance with the approved CaP (as updated and amended from time to time by the Company). Any updates or amendments made to the CaP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

### The CaP must include the following:

- a. Details of the location and cable laying techniques for the inter array cables;
- b. The results of survey work (including geophysical, geotechnical and benthic surveys) which will help inform cable routing;
- c. Technical specification of inter array cables, including a desk based assessment of attenuation of electromagnetic field strengths and shielding;
- d. A burial risk assessment to ascertain burial depths and where necessary alternative protection measures:
- e. Methodologies for surveys (e.g. over trawl) of the inter array cables through the operational life of the wind farm where mechanical protection of cables laid on the sea bed is deployed; and
- f. Methodologies for inter array cable inspection with measures to address and report to the Scottish Ministers any exposure of inter array cables.

Reason: To ensure all environmental and navigational issues are considered for the location and construction of the inter array cables.

19. The Company must, no later than 6 months prior to the Commencement of the Development, submit a Lighting and Marking Plan ("LMP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with MCA, NLB, CAA, MOD and any such other advisors or

organisations as may be required at the discretion of the Scottish Ministers. The LMP must provide that the Development be lit and marked in accordance with the current CAA and MOD aviation lighting policy and guidance that is in place as at the date of the Scottish Ministers approval of the LMP, or any such other documents that may supersede said guidance prior to the approval of the LMP. The LMP must also detail the navigational lighting requirements detailed in IALA Recommendation O-139 or any other documents that may supersede said guidance prior to approval of the LMP.

The Company must provide the LMP, for information only, to the Planning Authorities, the JNCC, SNH and any other bodies as may be required at the discretion of the Scottish Ministers. The Development must, at all times, be constructed and operated in accordance with the approved LMP (as updated and amended from time to time by the Company). Any updates or amendments made to the LMP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

# Reason: To ensure safe marking and lighting of the offshore generating station.

20. The Company must, prior to the erection of any WTGs on the Site, submit an Air Traffic Control Radar Mitigation Scheme ("ATC Scheme"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the MOD.

The ATC Scheme is a scheme designed to mitigate the impact of the Development upon the operation of the Primary Surveillance Radar at RAF Leuchars ("the Radar") and the air traffic control operations of the MOD which is reliant upon the Radar. The ATC Scheme shall set out the appropriate measures to be implemented to mitigate the impact of the Development on the Radar and shall be in place for the operational life of the Development provided the Radar remains in operation.

No turbines shall become operational unless and until all those measures required by the approved ATC Scheme to be implemented prior to the operation of the turbines have been implemented and the Scottish Ministers have confirmed this in writing. The Development shall thereafter be operated fully in accordance with the approved ATC Scheme.

Reason: To mitigate the adverse impacts of the Development on the air traffic control radar at RAF Leuchars and the operations of the MOD.

21. The Company must ensure that no part of any turbine shall be erected above sea level within radar line of sight of the air defence radar at Remote Radar Head (RRH) Buchan unless and until an Air Defence Radar Mitigation Scheme ("the ADRM scheme") has been submitted to and approved in writing by the Scottish Ministers in consultation with the MOD.

For the purposes of this condition, the ADRM Scheme means a detailed scheme to mitigate the adverse impacts of the Development on the air defence radar at RRH Buchan and the air surveillance and control operations of the MOD. The scheme will set out the appropriate measures to be implemented to that end.

No turbines shall become operational until:

- a. the mitigation measures which the approved ADRM Scheme requires to be implemented prior to the operation of the turbines have been implemented;
   and
- b. any performance criteria specified in the approved ADRM Scheme and which the approved ADRM Scheme requires to have been satisfied prior to the operation of the turbines have been satisfied.

The Company shall thereafter comply with all other obligations contained within the approved ADRM Scheme for the duration of the operation of the Development.

Reason: To mitigate the adverse impact of the Development on air defence radar at Remote Radar Head (RRH) Buchan.

22. The Company must ensure that no part of any turbine shall be erected above sea level within radar line of sight of the air defence radar at Remote Radar Head ("RRH") Brizlee Wood unless and until an Air Defence Radar Mitigation Scheme ("the ADRM scheme") has been submitted to and approved in writing by the Scottish Ministers in consultation with the MOD.

For the purposes of this condition, the ADRM Scheme means a detailed scheme to mitigate the adverse impacts of the Development on the air defence radar at RRH Brizlee Wood and the air surveillance and control operations of the MOD. The scheme will set out the appropriate measures to be implemented to that end.

No turbines shall become operational until:

- a. the mitigation measures which the approved ADRM Scheme requires to be implemented prior to the operation of the turbines have been implemented;
   and
- b. any performance criteria specified in the approved ADRM Scheme and which the approved ADRM Scheme requires to have been satisfied prior to the operation of the turbines have been satisfied.

The Company shall thereafter comply with all other obligations contained within the approved ADRM Scheme for the duration of the operation of the Development.

Reason: To mitigate the adverse impact of the development on air defence radar at Remote Radar Head (RRH) Brizlee Wood.

23. The Company must ensure that no turbine shall be erected until a Primary Radar Mitigation Scheme ("PRMS") agreed with the Operator has been submitted to and approved in writing by the Scottish Ministers in order to mitigate the impact of the Development on the Primary Radar Installation at Perwinnes and associated air traffic management operations.

No blades shall be fitted to any turbine unless and until the approved Primary Radar Mitigation Scheme has been implemented and the development shall thereafter be operated fully in accordance with such approved Scheme.

Reason: To mitigate the adverse impact of the development on air traffic operations.

24. The Company must, prior to the Commencement of the Development, and following confirmation of the approved DSLP by the Scottish Ministers (refer to condition 12), provide the positions and maximum heights of the WTGs and construction equipment over 150 m (measured above LAT) and any Offshore Sub-Station Platforms to the United Kingdom Hydrographic Office ("UKHO") for aviation and nautical charting purposes. The Company must, within 1 month of the Final Commissioning of the Development, provide co-ordinates accurate to three decimal places of minutes of arc for each WTG position and maximum heights

of the WTGs to the UKHO for aviation and nautical charting purposes.

### **Reason:** For aviation and navigational safety.

The Company must, at least 6 months prior to the 25. Development submit Commencement of the a Traffic and Transportation Plan ("TTP") in writing, to Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with Transport Scotland such other advisors as may be required at the discretion of the Scottish Ministers. The TTP must set out a mitigation strategy for the impact of road based traffic and transportation associated with the construction of the Development. The Development must be constructed and operated in accordance with the approved TTP (as updated and amended from time to time, following written approval from the Scottish Ministers).

# Reason: To maintain the free flow and safety of the Trunk Road network.

26. The Company must, no later than 6 months prior to the Commencement of the Development, submit a Project Environmental Monitoring Programme ("PEMP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH, RSPB Scotland, WDC, ASFB and any other ecological advisors or organisations as required at the discretion of the Scottish Ministers. The PEMP must be in accordance with the Application as it relates to environmental monitoring.

The PEMP must set out measures by which the Company must monitor the environmental impacts of the Development. Monitoring is required throughout the lifespan of the Development where this is deemed necessary by the Scottish Ministers. Lifespan in this context includes pre-construction, construction, operational and decommissioning phases.

Monitoring must be done in such a way so as to ensure that the data which is collected allows useful and valid comparisons between different phases of the Development. Monitoring may also serve the purpose of verifying key predictions in the Application. In the event that further potential adverse environmental effects are identified, for which no predictions were made in the Application, the Scottish Ministers may require the Company to undertake additional monitoring.

The Scottish Ministers may agree that monitoring may be reduced or ceased before the end of the lifespan of the Development.

The PEMP must cover, but not be limited to the following matters:

- a. Pre-construction, construction (if considered appropriate by the Scottish Ministers) and post-construction monitoring surveys for:
  - 1. Birds;
  - 2. Sandeels;
  - 3. Marine fish;
  - 4. Diadromous fish;
  - 5. Benthic communities; and
  - 6. Seabed scour and local sediment deposition.
- b. The participation by the Company in surveys to be carried out in relation to marine mammals as set out in the Marine Mammal Monitoring Programme ("MMMP"); and
- c. The participation by the Company in a National Strategic Bird Monitoring Framework ("NSBMF") and surveys to be carried out in relation to regional and / or strategic bird monitoring including but not necessarily limited to:
  - 1. the avoidance behaviour of breeding seabirds around turbines;
  - 2. flight height distributions of seabirds at wind farm sites;
  - 3. displacement of kittiwake, puffin and other auks from wind farm sites; and
  - 4. effects on survival and productivity at relevant breeding colonies

All initial methodologies for the above monitoring must be approved, in writing, by the Scottish Ministers and, where appropriate, in consultation with the Forth and Tay Regional Advisory Group ("FTRAG") referred to in condition 27 of this consent. Any pre-consent surveys carried out by the Company to address any of the above species may be used in part to discharge this condition subject to the written approval by the Scottish Ministers.

The PEMP is a live document and must be regularly reviewed by the Scottish Ministers, at timescales to be determined by the Scottish Ministers, in consultation with the FTRAG to identify the appropriateness of on-going monitoring. Following such reviews, the Scottish Ministers may, in consultation with the FTRAG, require the Company to amend the PEMP and submit such an amended PEMP, in writing, to the Scottish Ministers, for their written approval. Such approval may only be granted following consultation with FTRAG and any other ecological, or such other advisors as may be required at the discretion of the Scottish Ministers. The PEMP, as amended from time to time, must be fully implemented by the Company at all times.

The Company must submit written reports and associated raw data of such monitoring surveys to the Scottish Ministers at timescales to be determined by the Scottish Ministers in consultation with the FTRAG. Subject to any legal restrictions regarding the treatment of the information, the results are to be made publicly available by the Scottish Ministers, or by such other party appointed at their discretion.

Reason: To ensure that appropriate and effective monitoring of the impacts of the Development is undertaken.

27. The Company must participate in any Forth and Tay Regional Advisory Group ("FTRAG") established by the Scottish Ministers for the purpose of advising the Scottish Ministers on research, monitoring and mitigation programmes for, but not limited to, ornithology, diadromous fish, marine mammals and commercial fish. Should a Scottish Strategic Marine Environment Group ("SSMEG") be established (refer to condition 28), the responsibilities and obligations being delivered by the FTRAG will be subsumed by the SSMEG at a timescale to be determined by the Scottish Ministers.

**Reason:** To ensure effective environmental monitoring and mitigation is undertaken at a regional scale.

28. The Company must participate in any Scottish Strategic Marine Environment Group ("SSMEG") established by the Scottish Ministers for the purposes of advising the Scottish Ministers on research, monitoring and mitigation programmes for, but not limited to, ornithology, diadromous fish, marine mammals and commercial fish.

# Reason: To ensure effective environmental monitoring and mitigation is undertaken at a National scale.

- 29. Prior to the Commencement of the Development, the Company must at its own expense, and with the approval of the Scottish Ministers in consultation with the JNCC and SNH, appoint an Ecological Clerk of Works ("ECoW"). The ECoW must be appointed in time to review and approve the final draft version of the first plan or programme submitted under this consent to the Scottish Ministers for approval, until the Final Commissioning of the Development. The responsibilities of the ECoW must include, but not be limited to:
  - a. Quality assurance of final draft version of all plans and programmes required under this consent;
  - Provide advice to the Company on compliance with consent conditions, including the conditions relating to the CMS, the EMP, the PEMP, the PS (if required), the CaP and the VMP;
  - c. Monitor compliance with the CMS, the EMP, the PEMP, the PS (if required), the CaP and the VMP;
  - d. Provide reports on point c) above to the Scottish Ministers at timescales to be determined by the Scottish Ministers; and
  - e. Inducting site personnel on site / works environmental policy and procedures.

# Reason: To ensure that appropriate and effective monitoring of the impacts of the Development is undertaken.

30. The Company must, to the satisfaction of the Scottish Ministers, participate in the monitoring requirements as laid out in the 'National Research and Monitoring Strategy for Diadromous Fish' so far as they apply at a local level. The extent and nature of the Company's participation is to be agreed by the Scottish Ministers in consultation with the FTRAG.

# **Reason:** To ensure effective monitoring of the effects on migratory fish at a local level

The Company must, no later than 6 months prior to the Commencement of the Development, submit a Commercial Fisheries Mitigation Strategy ("CFMS"), in writing, to the Scottish Ministers for their written approval. The Company must remain a member of the Forth and Tay Offshore Wind Developers Group-Commercial Fisheries Working Group or any successor group formed to facilitate commercial

fisheries dialogue in the Forth and Tay regions.

The Company must include in the CFMS a mitigation strategy for each commercial fishery that Ministers are reasonably satisfied would be adversely affected by the Development. The CFMS must, in particular, include mitigation measures for lobster stock enhancement if the Scottish Ministers are satisfied that such mitigation measures are reasonably necessary. The Company must implement all mitigation measures committed to be carried out by the Company within the terms of the CFMS. The Company must require all of its contractors, and subcontractors, to co-operate with the fishing industry to ensure the effective implementation of the CFMS.

### Reason: To mitigate the impact on commercial fishermen.

32. Prior to the Commencement of the Development, a Fisheries Liaison Officer ("FLO"), approved in writing by Scottish Ministers, in consultation with the FTOWDG-CFWG, must be appointed by the Company for the period from Commencement of the Development until the Final Commissioning of the Development. The Company must notify the Scottish Ministers of the identity and credentials of the FLO before Commencement of the Development by including such details in the EMP (referred to in condition 14). The FLO must establish and maintain effective communications between the Company, any contractors or sub-contractors, fishermen and other users of the sea during the construction of the Development, and ensure compliance with best practice guidelines whilst doing so.

The responsibilities of the FLO must include, but not be limited to:

- a. Establishing and maintaining effective communications between the Company, any contractors or sub-contractors, fishermen and other users of the sea concerning the overall project and any amendments to the CMS and site environmental procedures;
- b. Provision of information relating to the safe operation of fishing activity on the site of the Development; and
- c. Ensuring that information is made available and circulated in a timely manner to minimise interference with fishing operations and other users of the sea.

Reason: To mitigate the impact on commercial fishermen.

The Company must, no later than 6 months prior to the Commencement of the Development, submit a Marine Archaeology Reporting Protocol which sets out what the Company must do on discovering any marine archaeology during the construction, operation, maintenance and monitoring of the Development, in writing, to the Scottish Ministers for their written approval. Such approval may be given only following consultation by the Scottish Ministers with any such advisors as may be required at the discretion of the Scottish Ministers. The Reporting Protocol must be implemented in full, at all times, by the Company.

Reason: To ensure any discovery of archaeological interest is properly and correctly reported.

### Substitute:

The consent granted in accordance with section 36 of the Electricity Act 1989 is subject to the following conditions:

The consent is for a period from the date this consent is 1. granted until the date occurring 25 years after the Final Commissioning of the Development. Written confirmation of the date of the Final Commissioning of the Development must be provided by the Company to the Scottish Ministers, the Planning Authority, the JNCC and SNH no later than one calendar month after the Final Commissioning of the Development. Where the Scottish Ministers deem the Development to be complete on a date prior to the date when all wind turbine generators forming the Development have supplied electricity on a commercial basis to the National Grid, then, the Scottish Ministers will provide written confirmation of the date of the Final Commissioning of the Development to the Company, the Planning Authority, the JNCC and SNH no later than one calendar month after the date on which the Scottish Ministers deem the Development to be complete.

Reason: To define the duration of the consent.

2. The Commencement of the Development must be a date no later than 5 years from the date the consent is granted, or such later date from the date of the granting of this consent as the Scottish Ministers may hereafter direct in writing. The Commencement of Phase 1A of the Development must be a date no later than 3 years from the Commissioning of the First WTG, or such later date from the date of the Commissioning of the First WTG as the Scottish Ministers may hereafter direct in writing.

**Reason:** To ensure the Commencement of the Development is undertaken within a reasonable timescale after consent is granted.

3. Where the Secretary of State has, following consultation with the Scottish Ministers, given notice requiring the Company to submit to the Secretary of State a Decommissioning Programme, pursuant to section 105(2) and (5) of the Energy Act 2004, then construction may not begin on the site of the Development until after the Company has submitted to the Secretary of State a Decommissioning Programme in compliance with that notice. The Decommissioning Programme must be approved, in writing, by Scottish Ministers prior to Commencement of Phase 1A of the Development.

Reason: To ensure that a decommissioning programme is submitted to the Secretary of State where the Secretary of State has, following consultation with the Scottish Ministers, so required before any construction commences.

4. The Company is not permitted to assign this consent without the prior written authorisation of the Scottish Ministers. The Scottish Ministers may grant (with or without conditions) or refuse such authorisation as they, at their own discretion, see fit. The consent is not capable of being assigned, alienated or transferred otherwise than in accordance with the foregoing procedure.

Reason: To safeguard the obligations of the consent if assigned to another company.

5. In the event that for a continuous period of 12 months or more any WTG installed and commissioned and forming part of the Development fails to produce electricity on a commercial basis to the National Grid then, unless otherwise agreed in writing by the Scottish Ministers and after consultation with the Company and any advisors as required at the discretion of the Scottish Ministers, any such WTG may be deemed by the Scottish Ministers to cease to be required. If so deemed, the WTG must be decommissioned and the area of the Site containing that WTG must be reinstated by the Company in accordance with the procedures laid out within the Company's Decommissioning Programme, within the period of 24 months from the date of the deeming decision by the Scottish Ministers.

Reason: To ensure that any redundant WTGs and associated ancillary equipment is removed from the Site in the interests of safety, amenity and environmental protection.

6. If any serious health and safety incident occurs on the Site requiring the Company to report it to the Health and Safety Executive, then the Company must also notify the Scottish Ministers of the incident within 24 hours of the Company becoming aware of an incident occurring.

Reason: To inform the Scottish Ministers of any serious health and safety incident occurring on the Site.

7. The Development must be constructed and operated in accordance with the terms of the Application and related documents, including the accompanying ES, the SEIS, the 2022 Variation Application, and Annex 1 of this letter, except in so far as amended by the terms of this section 36 consent.

Reason: To ensure that the Development is carried out in accordance with the Application documentation.

8. As far as reasonably practicable, the Company must, on being given reasonable notice by the Scottish Ministers (of at least 72 hours), provide transportation to and from the Site for any persons authorised by the Scottish Ministers to inspect the Site.

Reason: To ensure access to the Site for the purpose of inspection.

9. The Company must, no later than 6 months prior to the Commencement of the Development submit a Construction Programme ("CoP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH, SEPA, MCA, NLB, RSPB Scotland, the Planning Authority and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The Development must, at all times, be constructed in accordance with the approved CoP (as updated and amended from time to time by the Company). Any updates or amendments made to the CoP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

The CoP must set out:

- a. The proposed date for Commencement of Development;
- The proposed timings for mobilisation of plant and delivery of materials, including details of onshore laydown areas;

- c. The proposed timings and sequencing of construction work for all elements of the Development infrastructure;
- d. Contingency planning for poor weather or other unforeseen delays; and
- e. The scheduled date for Final Commissioning of the Development.

To be read alongside Condition 34.

### **Reason:** To confirm the timing and programming of construction.

The Company must, no later than 6 months prior to the 10. Commencement of the Development submit a Construction Method Statement ("CMS"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH, SEPA, MCA, NLB, RSPB Scotland, the Planning Authority and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The CMS must set out the construction procedures and good working practices for installing the Development. The CMS must also include details of the roles and responsibilities, chain of command and contact details of company personnel, any contractors or sub-contractors involved during the construction of the Development. The CMS must be in accordance with the construction methods assessed in the Application and must include details of how the construction related mitigation steps proposed in the ES and in the SEIS are to be delivered. The Development must, at all times, be constructed in accordance with the approved CMS (as updated and amended from time to time by the Company). Any updates or amendments made to the CMS by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

The CMS must, so far as is reasonably practicable, be consistent with the Design Statement ("DS"), the Environmental Management Plan ("EMP"), the Vessel Management Plan ("VMP"), the Navigational Safety Plan ("NSP"), the Piling Strategy ("PS"), the Cable Plan ("CaP") and the Lighting and Marking Plan ("LMP").

To be read alongside Condition 34.

Reason: To ensure the appropriate construction management of the Development, taking into account mitigation measures to protect the environment and other users of the marine area.

11. In the event that pile foundations are to be used, the Company must, no later than 6 months prior to the Commencement of the Development, submit a Piling Strategy ("PS"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH and any such other advisors as may be required at the discretion of the Scottish Ministers. The Development must, at all times, be constructed in accordance with the approved PS (as updated and amended from time to time by the Company). Any updates or amendments made to the PS by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

### The PS must include:

- a. Full details of the proposed method and anticipated duration of pile-driving at all locations;
- Details of soft-start piling procedures and anticipated maximum piling energy required at each pile location;
   and
- c. Details of any mitigation and monitoring to be employed during pile-driving, as agreed the Scottish Ministers.

The PS must be in accordance with the Application and must reflect any surveys carried out after submission of the Application. The PS must demonstrate how the exposure to and/or the effects of underwater noise have been mitigated in respect of the following species: bottlenose dolphin; harbour seal; grey seal; Atlantic salmon; cod; and herring.

The PS must, so far as is reasonably practicable, be consistent with the EMP, the Project Environmental Monitoring Programme ("PEMP") and the CMS.

To be read alongside Condition 34.

# Reason: To mitigate the underwater noise impacts arising from piling activity.

12. The Company must, no later than 6 months prior to the Commencement of the Development, submit a Development Specification and Layout Plan ("DSLP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the MCA, NLB, CoS, the JNCC, SNH, SFF, CAA and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The Development must, at all times, be

constructed in accordance with the approved DSLP (as updated and amended from time to time by the Company). Any updates or amendments made to the DSLP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

The DSLP must include, but not be limited to the following:

- a. A plan showing the proposed location of each individual WTG (subject to any required micro-siting), including information on WTG spacing, WTG identification / numbering, location of the substation platforms, seabed conditions, bathymetry, confirmed foundation type for each WTG and any key constraints recorded on the Site:
- A list of latitude and longitude co-ordinates accurate to three decimal places of minutes of arc for each WTG. This should also be provided as a Geographic Information System ("GIS") shape file using WGS84 format;
- c. A table or diagram of each WTG dimensions including height to blade tip (measured above Lowest Astronomical Tide ("LAT")) to the highest point, height to hub (measured above LAT to the centreline of the generator shaft), rotor diameter and maximum rotation speed;
- d. The generating capacity of each WTG used on the Site (Annex 1, Inset B of Figure 1) and a confirmed generating capacity for the Site overall;
- e. The finishes for each WTG (see condition 19 on WTG lighting and marking); and
- f. The length and proposed arrangements on the seabed of all inter-array cables.

To be read alongside Condition 34.

# Reason: To confirm the final Development specification and layout.

13. The Company must, prior to the Commencement of the Development, submit a Design Statement ("DS") in writing, to the Scottish Ministers that includes representative wind farm visualisations from key viewpoints as agreed with the Scottish Ministers, based upon the final DSLP as approved by the Scottish Ministers (as updated and amended from time to time by the Company). The DS must be provided, for information only, to the Planning Authorities, and the JNCC, SNH and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The DS must be prepared and signed off by at least one qualified

landscape architect, instructed by the Company prior to submission to the Scottish Ministers. The Development must, at all times, be constructed in accordance with the approved DS (as updated and amended from time to time by the Company).

To be read alongside Condition 34.

Reason: To inform interested parties of the final wind farm scheme proposed to be built.

The Company must, no later than 6 months prior to the 14. Commencement of the Development, submit Environmental Management Plan ("EMP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH, SEPA, RSPB Scotland, WDC, ASFB and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The Development must, at all times, be constructed and operated in accordance with the approved EMP (as updated and amended from time to time by the Company). Any updates or amendments made to the EMP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

The EMP must provide the over-arching framework for onsite environmental management during the phases of development as follows:

- a. all construction as required to be undertaken before the Final Commissioning of the Development; and
- b. the operational lifespan of the Development from the Final Commissioning of the Development until the cessation of electricity generation (Environmental management during decommissioning is addressed by the Decommissioning Programme provided for by condition 3).

The EMP must be in accordance with the ES and SEIS as it relates to environmental management measures. The EMP must set out the roles, responsibilities and chain of command for the Company personnel, any contractors or sub-contractors in respect of environmental management for the protection of environmental interests during the construction and operation of the Development. It must address, but not be limited to, the following over-arching requirements for environmental management during construction:

- Mitigation measures to prevent significant adverse impacts to environmental interests, as identified in the ES and pre-consent and pre-construction surveys, and include the relevant parts of the CMS (refer to condition 10);
- b. Pollution prevention measures and contingency plans;
- c. Management measures to prevent the introduction of invasive non-native marine species;
- d. Measures to minimise, recycle, reuse and dispose of waste streams; and
- e. The reporting mechanisms that will be used to provide the Scottish Ministers and relevant stakeholders (including, but not limited to, the JNCC, SNH, SEPA, RSPB Scotland, MCA and NLB) with regular updates on construction activity, including any environmental issues that have been encountered and how these have been addressed.

The Company must, no later than 3 months prior to the Final Commissioning of the Development, submit an updated EMP, in writing, to cover the operation and maintenance activities for to the Scottish Ministers for their written approval. Such approval may be given only following consultation with the JNCC, SNH, SEPA, RSPB Scotland and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The EMP must be regularly reviewed by the Company and the Forth and Tay Regional Advisory Group ("FTRAG") (referred to in condition 27) over the lifespan of the Development, and be kept up to date (in relation to the likes of construction methods and operations of the Development in terms of up to date working practices) by the Company in consultation with the FTRAG.

The EMP must be informed, so far as is reasonably practicable, by the baseline surveys undertaken as part of the Application and the PEMP.

To be read alongside Condition 34.

**Reason:** To mitigate the impacts on the environmental interests during construction and operation.

The Company must, no later than 6 months prior to the Commencement of the Development, submit a Vessel Management Plan ("VMP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH, WDC and any such other advisors or

organisations as may be required at the discretion of the Scottish Ministers. The Development must, at all times, be constructed and operated in accordance with the approved VMP (as updated and amended from time to time by the Company). Any updates or amendments made to the VMP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

The VMP must include, but not be limited to, the following details:

- a. The number, types and specification of vessels required;
- b. Working practices to minimise the use of ducted propellers;
- How vessel management will be coordinated, particularly during construction but also during operation; and
- d. Location of working port(s), how often vessels will be required to transit between port(s) and the Site and indicative vessel transit corridors proposed to be used during construction and operation of the Development.

The confirmed individual vessel details must be notified to the Scottish Ministers in writing no later than 14 days prior to the Commencement of the Development, and thereafter, any changes to the details supplied must be notified to the Scottish Ministers, as soon as practicable, prior to any such change being implemented in the construction or operation of the Development.

The VMP must, so far as is reasonably practicable, be consistent with the CMS, the EMP, the PEMP, the NSP, and the LMP.

To be read alongside Condition 34.

# Reason: To mitigate disturbance or impact to marine mammals and birds.

16. The Company must, no later than 3 months prior to the Commissioning of the first WTG, submit an Operation and Maintenance Programme ("OMP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH, SEPA, MCA, NLB, RSPB Scotland, the Planning Authority and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The OMP must set out the procedures

and good working practices for operations and the maintenance of the WTG's, substructures, and inter-array cable network of the Development. Environmental sensitivities which may affect the timing of the operation and maintenance activities must be considered in the OMP.

Operation and maintenance of the Development must, at all times, proceed in accordance with the approved OMP (as updated and amended from time to time by the Company). Any updates or amendments made to the OMP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

The OMP must, so far as is reasonably practicable, be consistent with the EMP, the PEMP, the VMP, the NSP, the CaP and the LMP.

To be read alongside Condition 34.

# **Reason:** To safeguard environmental interests during operation of the offshore generating station.

- 17. The Company must, no later than 6 months prior to the Commencement of the Development, submit a Navigational Safety Plan ("NSP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with MCA, NLB and any other navigational advisors or organisations as may be required at the discretion of the Scottish Ministers. The NSP must include, but not be limited to, the following issues:
  - a. Navigational safety measures;
  - b. Construction exclusion zones;
  - c. Notice(s) to Mariners and Radio Navigation Warnings;
  - d. Anchoring areas:
  - e. Temporary construction lighting and marking;
  - f. Emergency response and coordination arrangements for the construction, operation and decommissioning phases of the Development; and
  - g. Buoyage.

The Company must confirm within the NSP that they have taken into account and adequately addressed all of the recommendations of the MCA in the current Marine Guidance Note 371, and its annexes that may be appropriate to the Development, or any other relevant document which may supersede said guidance prior to approval of the NSP. The Development must, at all times,

be constructed and operated in accordance with the approved NSP (as updated and amended from time to time by the Company). Any updates or amendments made to the NSP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

To be read alongside Condition 34.

## Reason: To mitigate the navigational risk to other legitimate users of the sea.

18. The Company must, no later than 6 months prior to the Commencement of the Development, submit a Cable Plan ("CaP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH, MCA, SFF and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The CaP must be in accordance with the ES. The Development must, at all times, be constructed and operated in accordance with the approved CaP (as updated and amended from time to time by the Company). Any updates or amendments made to the CaP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

## The CaP must include the following:

- a. Details of the location and cable laying techniques for the inter array cables;
- The results of survey work (including geophysical, geotechnical and benthic surveys) which will help inform cable routing:
- Technical specification of inter array cables, including a desk based assessment of attenuation of electromagnetic field strengths and shielding;
- d. A burial risk assessment to ascertain burial depths and where necessary alternative protection measures:
- e. Methodologies for surveys (e.g. over trawl) of the inter array cables through the operational life of the wind farm where mechanical protection of cables laid on the sea bed is deployed; and
- f. Methodologies for inter array cable inspection with measures to address and report to the Scottish Ministers any exposure of inter array cables.

To be read alongside Condition 34.

Reason: To ensure all environmental and navigational issues are considered for the location and construction of the inter array cables.

19. The Company must, no later than 6 months prior to the Commencement of the Development, submit a Lighting and Marking Plan ("LMP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with MCA, NLB, CAA, MOD and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The LMP must provide that the Development be lit and marked in accordance with the current CAA and MOD aviation lighting policy and guidance that is in place as at the date of the Scottish Ministers approval of the LMP, or any such other documents that may supersede said guidance prior to the approval of the LMP. The LMP must also detail the navigational lighting requirements detailed in IALA Recommendation O-139 or any other documents that may supersede said guidance prior to approval of the LMP.

The Company must provide the LMP, for information only, to the Planning Authorities, the JNCC, SNH and any other bodies as may be required at the discretion of the Scottish Ministers. The Development must, at all times, be constructed and operated in accordance with the approved LMP (as updated and amended from time to time by the Company). Any updates or amendments made to the LMP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

To be read alongside Condition 34.

Reason: To ensure safe marking and lighting of the offshore generating station.

20. The Company must, prior to the erection of any WTGs of any Phase on the Site, submit an Air Traffic Control Radar Mitigation Scheme ("ATC Scheme"), in writing, to the Scottish Ministers for their written approval for that Phase. Such approval may only be granted following consultation by the Scottish Ministers with the MOD.

The ATC Scheme is a scheme designed to mitigate the impact of the Development upon the operation of the Primary Surveillance Radar at RAF Leuchars ("the Radar") and the air traffic control operations of the MOD which is reliant upon the Radar. The ATC Scheme for each Phase shall set out the appropriate measures to be implemented to

mitigate the impact of that Phase of the Development on the Radar and shall be in place for the operational life of the Development provided the Radar remains in operation.

No turbines shall become operational for any Phase unless and until all those measures required by the approved ATC Scheme for that Phase to be implemented prior to the operation of the turbines have been implemented and the Scottish Ministers have confirmed this in writing. Each Phase of the Development shall thereafter be operated fully in accordance with the approved ATC Scheme for that Phase.

Reason: To mitigate the adverse impacts of the Development on the air traffic control radar at RAF Leuchars and the operations of the MOD.

21. The Company must ensure that no part of any turbine for any Phase shall be erected above sea level within radar line of sight of the air defence radar at Remote Radar Head (RRH) Buchan unless and until an Air Defence Radar Mitigation Scheme ("the ADRM scheme") for that Phase has been submitted to and approved in writing by the Scottish Ministers in consultation with the MOD.

For the purposes of this condition, the ADRM Scheme means a detailed scheme to mitigate the adverse impacts of the Development on the air defence radar at RRH Buchan and the air surveillance and control operations of the MOD. The scheme will set out the appropriate measures to be implemented to that end.

No turbines forming part of a Phase shall become operational until:

- a. the mitigation measures which the approved ADRM Scheme for that Phase requires to be implemented prior to the operation of the turbines have been implemented; and
- b. any performance criteria specified in the approved ADRM Scheme for that Phase and which the approved ADRM Scheme for that Phase requires to have been satisfied prior to the operation of the turbines have been satisfied.

The Company shall thereafter comply with all other obligations contained within the approved ADRM Scheme for any Phase for the duration of the operation of that Phase of the Development.

Reason: To mitigate the adverse impact of the Development on air defence radar at Remote Radar Head (RRH) Buchan.

22. The Company must ensure that no part of any turbine for any Phase shall be erected above sea level within radar line of sight of the air defence radar at Remote Radar Head ("RRH") Brizlee Wood unless and until an Air Defence Radar Mitigation Scheme ("the ADRM scheme") for that Phase has been submitted to and approved in writing by the Scottish Ministers in consultation with the MOD.

For the purposes of this condition, the ADRM Scheme for each Phase means a detailed scheme to mitigate the adverse impacts of that Phase of the Development on the air defence radar at RRH Brizlee Wood and the air surveillance and control operations of the MOD. The scheme will set out the appropriate measures to be implemented to that end.

No turbines for any Phase shall become operational until:

- a. the mitigation measures which the approved ADRM Scheme for that Phase requires to be implemented prior to the operation of the turbines have been implemented; and
- b. any performance criteria specified in the approved ADRM Scheme for that Phase and which the approved ADRM Scheme requires to have been satisfied prior to the operation of the turbines have been satisfied.

The Company shall thereafter comply with all other obligations contained within the approved ADRM Scheme for the duration of the operation of each Phase of the Development.

Reason: To mitigate the adverse impact of the development on air defence radar at Remote Radar Head (RRH) Brizlee Wood.

23. The Company must ensure that no turbine forming part of a Phase shall be erected until a Primary Radar Mitigation Scheme ("PRMS") for that Phase agreed with the Operator has been submitted to and approved in writing by the Scottish Ministers in order to mitigate the impact of the that Phase of Development on the Primary Radar Installation at Perwinnes and associated air traffic management operations.

No blades shall be fitted to any turbine forming part of a Phase unless and until the approved Primary Radar Mitigation Scheme for that Phase has been implemented and the development shall thereafter be operated fully in accordance with such approved Scheme for that Phase.

# Reason: To mitigate the adverse impact of the development on air traffic operations.

24. The Company must, prior to the Commencement of each Phase of the Development following confirmation of the approved DSLP for that Phase by the Scottish Ministers (refer to condition 12), provide the positions and maximum heights of the WTGs and construction equipment over 150 m (measured above LAT) and any Offshore Sub-Station Platforms for that Phase of the Development to the United Kingdom Hydrographic Office ("UKHO") for aviation and nautical charting purposes. The Company must, within 1 month of the Final Commissioning of each Phase of the Development provide co-ordinates accurate to three decimal places of minutes of arc for each WTG position and maximum heights of the WTGs for that Phase to the UKHO for aviation and nautical charting purposes.

### Reason: For aviation and navigational safety.

The Company must, at least 6 months prior to the Commencement of the Development, submit a Traffic and Transportation Plan ("TTP") in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with Transport Scotland and any such other advisors as may be required at the discretion of the Scottish Ministers. The TTP must set out a mitigation strategy for the impact of road based traffic and transportation associated with the construction of the Development. The Development must be constructed and operated in accordance with the approved TTP (as updated and amended from time to time, following written approval from the Scottish Ministers).

To be read alongside Condition 34.

# **Reason**: To maintain the free flow and safety of the Trunk Road network.

The Company must, no later than 6 months prior to the Commencement of the Development, submit a Project Environmental Monitoring Programme ("PEMP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the

Scottish Ministers with the JNCC, SNH, RSPB Scotland, WDC, ASFB and any other ecological advisors or organisations as required at the discretion of the Scottish Ministers. The PEMP must be in accordance with the Application as it relates to environmental monitoring.

The PEMP must set out measures by which the Company must monitor the environmental impacts of the Development. Monitoring is required throughout the lifespan of the Development where this is deemed necessary by the Scottish Ministers. Lifespan in this context includes pre-construction, construction, operational and decommissioning phases.

Monitoring must be done in such a way so as to ensure that the data which is collected allows useful and valid comparisons between different phases of the Development. Monitoring may also serve the purpose of verifying key predictions in the Application. In the event that further potential adverse environmental effects are identified, for which no predictions were made in the Application, the Scottish Ministers may require the Company to undertake additional monitoring.

The Scottish Ministers may agree that monitoring may be reduced or ceased before the end of the lifespan of the Development.

The PEMP must cover, but not be limited to the following matters:

- a. Pre-construction, construction (if considered appropriate by the Scottish Ministers) and post-construction monitoring surveys for:
  - 1. Birds;
  - 2. Sandeels:
  - 3. Marine fish;
  - 4. Diadromous fish;
  - 5. Benthic communities: and
  - 6. Seabed scour and local sediment deposition.
- b. The participation by the Company in surveys to be carried out in relation to marine mammals as set out in the Marine Mammal Monitoring Programme ("MMMP"); and
- c. The participation by the Company in a National Strategic Bird Monitoring Framework ("NSBMF") and surveys to be carried out in relation to regional and /

or strategic bird monitoring including but not necessarily limited to:

- 1. the avoidance behaviour of breeding seabirds around turbines;
- 2. flight height distributions of seabirds at wind farm sites:
- 3. displacement of kittiwake, puffin and other auks from wind farm sites; and
- 4. effects on survival and productivity at relevant breeding colonies

All initial methodologies for the above monitoring must be approved, in writing, by the Scottish Ministers and, where appropriate, in consultation with the Forth and Tay Regional Advisory Group ("FTRAG") referred to in condition 27 of this consent. Any pre-consent surveys carried out by the Company to address any of the above species may be used in part to discharge this condition subject to the written approval by the Scottish Ministers.

The PEMP is a live document and must be regularly reviewed by the Scottish Ministers, at timescales to be determined by the Scottish Ministers, in consultation with the FTRAG to identify the appropriateness of on-going monitoring. Following such reviews, the Scottish Ministers may, in consultation with the FTRAG, require the Company to amend the PEMP and submit such an amended PEMP, in writing, to the Scottish Ministers, for their written approval. Such approval may only be granted following consultation with FTRAG and any other ecological, or such other advisors as may be required at the discretion of the Scottish Ministers. The PEMP, as amended from time to time, must be fully implemented by the Company at all times.

The Company must submit written reports and associated raw data of such monitoring surveys to the Scottish Ministers at timescales to be determined by the Scottish Ministers in consultation with the FTRAG. Subject to any legal restrictions regarding the treatment of the information, the results are to be made publicly available by the Scottish Ministers, or by such other party appointed at their discretion.

To be read alongside Condition 34.

Reason: To ensure that appropriate and effective monitoring of the impacts of the Development is undertaken.

27. The Company must participate in any Forth and Tay Regional Advisory Group ("FTRAG") established by the Scottish Ministers for the purpose of advising the Scottish Ministers on research, monitoring and mitigation programmes for, but not limited to, ornithology, diadromous fish, marine mammals and commercial fish. Should a Scottish Strategic Marine Environment Group ("SSMEG") be established (refer to condition 28), the responsibilities and obligations being delivered by the FTRAG will be subsumed by the SSMEG at a timescale to be determined by the Scottish Ministers.

Reason: To ensure effective environmental monitoring and mitigation is undertaken at a regional scale.

28. The Company must participate in any Scottish Strategic Marine Environment Group ("SSMEG") established by the Scottish Ministers for the purposes of advising the Scottish Ministers on research, monitoring and mitigation programmes for, but not limited to, ornithology, diadromous fish, marine mammals and commercial fish.

Reason: To ensure effective environmental monitoring and mitigation is undertaken at a National scale.

- 29. Prior to the Commencement of the Development, the Company must at its own expense, and with the approval of the Scottish Ministers in consultation with the JNCC and SNH, appoint an Ecological Clerk of Works ("ECoW"). The ECoW must be appointed in time to review and approve the final draft version of the first plan or programme submitted under this consent to the Scottish Ministers for approval, until the Final Commissioning of the Development. The responsibilities of the ECoW must include, but not be limited to:
  - a. Quality assurance of final draft version of all plans and programmes required under this consent;
  - b. Provide advice to the Company on compliance with consent conditions, including the conditions relating to the CMS, the EMP, the PEMP, the PS (if required), the CaP and the VMP;
  - c. Monitor compliance with the CMS, the EMP, the PEMP, the PS (if required), the CaP and the VMP;
  - d. Provide reports on point c) above to the Scottish Ministers at timescales to be determined by the Scottish Ministers; and
  - e. Inducting site personnel on site / works environmental policy and procedures.

To be read alongside Condition 34.

# Reason: To ensure that appropriate and effective monitoring of the impacts of the Development is undertaken.

30. The Company must, to the satisfaction of the Scottish Ministers, participate in the monitoring requirements as laid out in the 'National Research and Monitoring Strategy for Diadromous Fish' so far as they apply at a local level. The extent and nature of the Company's participation is to be agreed by the Scottish Ministers in consultation with the FTRAG.

# **Reason:** To ensure effective monitoring of the effects on migratory fish at a local level

The Company must, no later than 6 months prior to the Commencement of the Development, submit a Commercial Fisheries Mitigation Strategy ("CFMS"), in writing, to the Scottish Ministers for their written approval. The Company must remain a member of the Forth and Tay Offshore Wind Developers Group-Commercial Fisheries Working Group or any successor group formed to facilitate commercial fisheries dialogue in the Forth and Tay regions.

The Company must include in the CFMS a mitigation strategy for each commercial fishery that Ministers are reasonably satisfied would be adversely affected by the Development. The CFMS must, in particular, include mitigation measures for lobster stock enhancement if the Scottish Ministers are satisfied that such mitigation measures are reasonably necessary. The Company must implement all mitigation measures committed to be carried out by the Company within the terms of the CFMS. The Company must require all of its contractors, and subcontractors, to co-operate with the fishing industry to ensure the effective implementation of the CFMS.

To be read alongside Condition 34.

### Reason: To mitigate the impact on commercial fishermen.

32. Prior to the Commencement of the Development, a Fisheries Liaison Officer ("FLO"), approved in writing by Scottish Ministers, in consultation with the FTOWDG-CFWG, must be appointed by the Company for the period from Commencement of the Development until the Final Commissioning of the Development. The Company must notify the Scottish Ministers of the identity and credentials of the FLO before Commencement of the Development by

including such details in the EMP (referred to in condition 14). The FLO must establish and maintain effective communications between the Company, any contractors or sub-contractors, fishermen and other users of the sea during the construction of the Development, and ensure compliance with best practice guidelines whilst doing so.

The responsibilities of the FLO must include, but not be limited to:

- a. Establishing and maintaining effective communications between the Company, any contractors or sub-contractors, fishermen and other users of the sea concerning the overall project and any amendments to the CMS and site environmental procedures;
- b. Provision of information relating to the safe operation of fishing activity on the site of the Development; and
- c. Ensuring that information is made available and circulated in a timely manner to minimise interference with fishing operations and other users of the sea.

To be read alongside Condition 34.

### Reason: To mitigate the impact on commercial fishermen.

The Company must, no later than 6 months prior to the Commencement of the Development, submit a Marine Archaeology Reporting Protocol which sets out what the Company must do on discovering any marine archaeology during the construction, operation, maintenance and monitoring of the Development, in writing, to the Scottish Ministers for their written approval. Such approval may be given only following consultation by the Scottish Ministers with any such advisors as may be required at the discretion of the Scottish Ministers. The Reporting Protocol must be implemented in full, at all times, by the Company.

To be read alongside Condition 34.

# Reason: To ensure any discovery of archaeological interest is properly and correctly reported.

- In respect of the Company carrying out the Development in Phases:
  - (a) any notification to or approval from the Scottish Ministers in respect of conditions 9, 10, 11, 12, 13, 14, 15, 17, 18, 19, 25, 26, 29, 31, 32 and 33 which would otherwise be required prior to Commencement of the Development shall instead

be required prior to Commencement of each Phase of the Development. The Commencement of Phase 1A of the Development must not commence until such approval has been granted by Scottish Ministers;

- (b) any approval from the Scottish Ministers in respect of condition 14 which would otherwise be required prior to Final Commissioning of the Development shall instead be required prior to the Final Commissioning of each Phase of the Development; and
- (c) any approval from the Scottish Ministers in respect of condition 16 which would otherwise be required prior to the Commissioning of the first WTG of the Development shall instead be required prior to Commissioning of the First WTG of each Phase of the Development.

The Company must submit plans required by conditions 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 25, 26, 31 and 33 for approval in respect of Phase 1A as updates to those plans submitted in respect of Phase 1. These updated plans must incorporate the requirements of each respective post-consent plan condition in relation to Phase 1A of the Development.

Reason: To ensure that the obligations for each phase of the Development are discharged appropriately.

#### Insert:

"the 2022 Variation Application" includes the variation application letter and environmental appraisal report submitted to the Scottish Ministers by Seagreen Wind Energy Limited on 19 April 2022.

"Phase 1" has the meaning given in Annex 1 of this consent

In Annex 3 of the Seagreen Bravo Offshore Wind Farm s.36 Consent "Phase 1A" has the meaning given in Annex 1 of this consent

"Phase" means either Phase 1 or Phase 1A of the Development, all as defined in Annex 1 of this consent.

"Commencement of Phase 1A of the Development" means the date on which Construction of Phase 1A begins on the site of the Development in accordance with this consent.

"Commencement of each Phase of the Development" means (i) the date on which Construction of Phase 1 begins on the site of the Development in accordance with this consent and (ii) the date on which Construction of Phase 1A begins on the site of the Development in accordance with this consent.

"Final Commissioning of each Phase of the Development" means (i) the date on which all wind turbine generators forming Phase 1 of the Development have supplied electricity on a commercial basis to the National Grid, or such earlier date as the Scottish Ministers deem the Phase 1 to be complete, and (ii) the date on which all wind turbine generators forming Phase 1A of the Development have supplied electricity on a commercial basis to the National Grid, or such earlier date as the Scottish Ministers deem the Phase 1A to be complete.

"Commissioning of the First WTG of each Phase of the Development" means (i) the date on which the first wind turbine generator forming Phase 1 of the Development has supplied electricity on a commercial basis to the National Grid, and (ii) the date on which the first wind turbine generator forming Phase 1A of the Development has supplied electricity on a commercial basis to the National Grid.

- 6.3.1 Revised copies of Annexes 1, 2 and 3 of the section 36 consents for the Development are issued together with this decision letter.
- 6.3.2 Copies of this letter have been sent to relevant onshore planning authorities: Angus Council, Dundee City Council, East Lothian Council, Fife Council and the Scottish Borders Council. This letter has also been published on the Marine Scotland Information website.
- 6.3.3 The Scottish Ministers' decision is final, subject to the right of any aggrieved person to apply to the Court of Session for judicial review. Judicial review is the mechanism by which the Court of Session supervises the exercise of administrative functions, including how the Scottish Ministers exercise their statutory function to determine applications for variation of a s.36 consent.
- 6.3.4 Your local Citizens' Advice Bureau or your solicitor will be able to advise you about the applicable procedures.

Yours sincerely,

Gayle Holland
Marine Scotland Licensing Operations Team
A member of the staff of the Scottish Government

## **DEFINITIONS AND GLOSSARY OF TERMS - In the decision letter attached at Annex C**

"BT" means British Telecom;

"CAA" means Civil Aviation Authority;

"DSLP" means Development Specification and Layout Plan;

"ELC" means East Lothian Council;

"HES" means Historic Environment Scotland;

"km" mean kilometres;

"LMP" means Lighting Marking Plan;

"m" means metre:

"MSS" means Marine Scotland Science:

"MCA" means Maritime and Coastguard Agency;

"MOD" means Ministry of Defence;

"MS-LOT" means Marine Scotland Licensing Operations Team;

"NLB" means Northern Lighthouse Board;

"RSPB" means Royal Society for the Protection of Birds;

"s.36" means section 36:

"the 2007 MW Regulations" means the Marine Works (Environmental Impact Assessment) Regulations 2007;

("the 2014 AA") means the appropriate assessment completed in 2014 in respect of the Existing Consents;

"the 2017 EW Regulations" means the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017;

"the 2017 Offshore Habitats Regulations" means the Conservation of Offshore Marine Habitats and Species Regulations 2017;

"the Company" means Seagreen Wind Energy Limited (No.1 Forbury Place, 43 Forbury Road, Reading, RG1 3JH);

"the Development" means the Seagreen Alpha and Seagreen Bravo offshore wind farms, approximately 27km off the Angus coastline;

"the Electricity Act" means the Electricity Act 1989;

"the Existing Consents" means the s.36 consents granted by the Scottish Ministers in favour of the Company on 10 October 2014;

"the Original Application" means the application submitted to the Scottish Ministers on 15 October 2012 for a s.36 consent by the Company;

"the Variation Application" means the application to vary the Existing Consents submitted to the Scottish Ministers on 19 April 2022 by the Company;

"the Variation Regulations" means the Electricity Generating Stations (Applications for Variation of Consent (Scotland) Regulations 2013;

"TPP" means Traffic and Transportation Plan;

"WTG" means wind turbine generator; and

"ZTV" means zone of theoretical visibility.

### Annex 1 of the Seagreen Alpha Offshore Wind Farm Consent

### **DESCRIPTION OF THE DEVELOPMENT**

The Development, located as shown on Figure 1 below, shall comprise a wind-powered electricity generating station in the FFZ, including:

1. not more than 75 three-bladed horizontal axis wind turbine generators of which (a) not more than 57 wind turbine generators shall be constructed in Phase 1; and (b) not more than 18 wind turbine generators shall be constructed in Phase 1A.

In respect of Phase 1, each wind turbine generator shall comprise:

- a) a maximum blade tip height of 209.7 metres (measured from LAT);
- b) a rotor diameter of between 122 and 167 metres;
- c) a hub height of between 87.1 and 126.2 metres (measured from LAT);
- d) a minimum blade tip clearance of between 29.8 and 42.7 metres (measured from LAT);
- e) blade width of up to 5.4 metres; and
- f) a minimum spacing of 1,000 metres;

In respect of Phase 1A, each wind turbine generator shall comprise:

- a) a maximum blade tip height of 285 metres (measured from LAT);
- b) a maximum rotor diameter of 242 metres;
- c) a hub height of between 118 and 165 metres (measured from LAT);
- d) a minimum blade tip clearance of between 34 and 45 metres (measured from LAT);
- e) blade width of up to 7.6 metres; and
- f) a minimum spacing of 1,000 metres;
- **2.** all foundations, substructures, fixtures, fittings, fixings, and protections;
- **3.** inter array cabling and cables up to and onto the offshore substation platforms; and
- **4.** transition pieces including access ladders / fences and landing platforms,

and, except to the extent modified by the foregoing, all as specified in the Application, the 2022 Variation Application, and by the conditions imposed by the Scottish Ministers. References to "the Development" in this consent shall be construed accordingly.

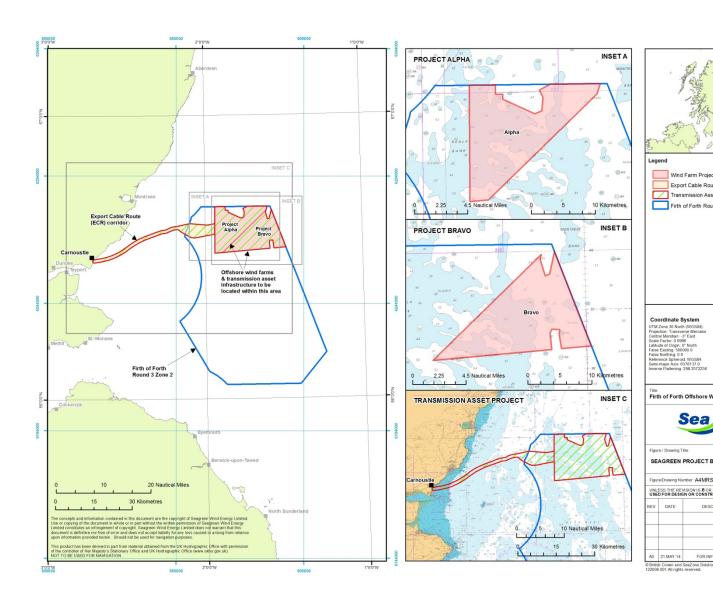


Figure 1: Development Location – see KEY

### **Annex 2 of the Seagreen Alpha Offshore Wind Farm Consent**

### **CONDITIONS OF THE SECTION 36 CONSENT**

The consent granted in accordance with section 36 of the Electricity Act 1989 is subject to the following conditions:

1. The consent is for a period from the date this consent is granted until the date occurring 25 years after the Final Commissioning of the Development. Written confirmation of the date of the Final Commissioning of the Development must be provided by the Company to the Scottish Ministers, the Planning Authority, the JNCC and SNH no later than one calendar month after the Final Commissioning of the Development. Where the Scottish Ministers deem the Development to be complete on a date prior to the date when all wind turbine generators forming the Development have supplied electricity on a commercial basis to the National Grid then, the Scottish Ministers will provide written confirmation of the date of the Final Commissioning of the Development to the Company, the Planning Authority, the JNCC and SNH no later than one calendar month after the date on which the Scottish Ministers deem the Development to be complete.

#### **Reason:** To define the duration of the consent.

2. The Commencement of the Development must be a date no later than 5 years from the date the consent is granted, or such later date from the date of the granting of this consent as the Scottish Ministers may hereafter direct in writing. The Commencement of Phase 1A of the Development must be a date no later than 3 years from the Commissioning of the First WTG, or such later date from the date of the Commissioning of the First WTG as the Scottish Ministers may hereafter direct in writing.

Reason: To ensure the Commencement of the Development is undertaken within a reasonable timescale after consent is granted.

3. Where the Secretary of State has, following consultation with the Scottish Ministers, given notice requiring the Company to submit to the Secretary of State a Decommissioning Programme, pursuant to section 105(2) and (5) of the Energy Act 2004, then construction may not begin on the site of the Development until after the Company has submitted to the Secretary of State a Decommissioning Programme in compliance with that notice. The Decommissioning Programme must be approved, in writing, by Scottish Ministers prior to Commencement of Phase 1A of the Development.

Reason: To ensure that a decommissioning programme is submitted to the Secretary of State where the Secretary of State has, following consultation with the Scottish Ministers, so required before any construction commences.

4. The Company is not permitted to assign this consent without the prior written authorisation of the Scottish Ministers. The Scottish Ministers may grant (with or without conditions) or refuse such authorisation as they, at their own discretion, see fit. The consent is not capable of being assigned, alienated or transferred otherwise than in accordance with the foregoing procedure.

### Reason: To safeguard the obligations of the consent if assigned to another company.

5. In the event that for a continuous period of 12 months or more any WTG installed and commissioned and forming part of the Development fails to produce electricity on a commercial basis to the National Grid then, unless otherwise agreed in writing by the Scottish Ministers and after consultation with the Company and any advisors as required at the discretion of the Scottish Ministers, any such WTG may be deemed by the Scottish Ministers to cease to be required. If so deemed, the WTG must be decommissioned and the area of the Site containing that WTG must be reinstated by the Company in accordance with the procedures laid out within the Company's Decommissioning Programme, within the period of 24 months from the date of the deeming decision by the Scottish Ministers.

**Reason:** To ensure that any redundant WTGs and associated ancillary equipment is removed from the Site in the interests of safety, amenity and environmental protection.

6. If any serious health and safety incident occurs on the Site requiring the Company to report it to the Health and Safety Executive, then the Company must also notify the Scottish Ministers of the incident within 24 hours of the Company becoming aware of an incident occurring.

Reason: To inform the Scottish Ministers of any serious health and safety incident occurring on the Site.

7. The Development must be constructed and operated in accordance with the terms of the Application and related documents, including the accompanying ES, the SEIS, the 2022 Variation Application, and Annex 1 of this letter, except in so far as amended by the terms of this section 36 consent.

Reason: To ensure that the Development is carried out in accordance with the Application documentation.

8. As far as reasonably practicable, the Company must, on being given reasonable notice by the Scottish Ministers (of at least 72 hours), provide transportation to and from the Site for any persons authorised by the Scottish Ministers to inspect the Site.

**Reason:** To ensure access to the Site for the purpose of inspection.

9. The Company must, no later than 6 months prior to the Commencement of the Development, submit a Construction Programme ("CoP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH, SEPA, MCA, NLB, RSPB Scotland, the Planning Authority and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The Development must, at all times, be constructed in accordance with the approved CoP (as updated and amended from time to time by the Company). Any updates or amendments made to the CoP (for the relevant Phase of the

Development) by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

The CoP must set out:

- a. The proposed date for Commencement of Development;
- b. The proposed timings for mobilisation of plant and delivery of materials, including details of onshore lay-down areas;
- c. The proposed timings and sequencing of construction work for all elements of the Development infrastructure;
- d. Contingency planning for poor weather or other unforeseen delays; and
- e. The scheduled date for Final Commissioning of the Development.

To be read alongside Condition 34.

### **Reason:** To confirm the timing and programming of construction.

The Company must, no later than 6 months prior to the Commencement of the 10. Development submit a Construction Method Statement ("CMS"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH, SEPA, MCA, NLB, RSPB Scotland, the Planning Authority and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The CMS must set out the construction procedures and good working practices for installing the Development. The CMS must also include details of the roles and responsibilities, chain of command and contact details of company personnel, any contractors or sub-contractors involved during the construction of the Development. The CMS must be in accordance with the construction methods assessed in the Application and must include details of how the construction related mitigation steps proposed in the ES and in the SEIS are to be delivered. The Development must, at all times, be constructed in accordance with the approved CMS (as updated and amended from time to time by the Company). Any updates or amendments made to the CMS by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

The CMS must, so far as is reasonably practicable, be consistent with the Design Statement ("DS"), the Environmental Management Plan ("EMP"), the Vessel Management Plan ("VMP"), the Navigational Safety Plan ("NSP"), the Piling Strategy ("PS"), the Cable Plan ("CaP") and the Lighting and Marking Plan ("LMP").

To be read alongside Condition 34.

**Reason:** To ensure the appropriate construction management of the Development, taking into account mitigation measures to protect the environment and other users of the marine area.

In the event that pile foundations are to be used, the Company must, no later than 6 months prior to the Commencement of the Development submit a Piling

Strategy ("PS"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH and any such other advisors as may be required at the discretion of the Scottish Ministers. The Development must, at all times, be constructed in accordance with the approved PS (as updated and amended from time to time by the Company). Any updates or amendments made to the PS by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

#### The PS must include:

- a. Full details of the proposed method and anticipated duration of piledriving at all locations;
- b. Details of soft-start piling procedures and anticipated maximum piling energy required at each pile location; and
- c. Details of any mitigation and monitoring to be employed during piledriving, as agreed the Scottish Ministers.

The PS must be in accordance with the Application and must reflect any surveys carried out after submission of the Application. The PS must demonstrate how the exposure to and/or the effects of underwater noise have been mitigated in respect of the following species: bottlenose dolphin; harbour seal; grey seal; Atlantic salmon; cod; and herring.

The PS must, so far as is reasonably practicable, be consistent with the EMP, the Project Environmental Monitoring Programme ("PEMP") and the CMS.

To be read alongside Condition 34.

### **Reason**: To mitigate the underwater noise impacts arising from piling activity.

12. The Company must, no later than 6 months prior to the Commencement of the Development submit a Development Specification and Layout Plan ("DSLP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the MCA, NLB, CoS, the JNCC, SNH, SFF, CAA and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The Development must, at all times, be constructed in accordance with the approved DSLP (as updated and amended from time to time by the Company). Any updates or amendments made to the DSLP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

The DSLP must include, but not be limited to the following:

a. A plan showing the proposed location of each individual WTG (subject to any required micro-siting), including information on WTG spacing, WTG identification / numbering, location of the substation platforms, seabed conditions, bathymetry, confirmed foundation type for each WTG and any key constraints recorded on the Site;

- A list of latitude and longitude co-ordinates accurate to three decimal places of minutes of arc for each WTG. This should also be provided as a Geographic Information System ("GIS") shape file using WGS84 format;
- c. A table or diagram of each WTG dimensions including height to blade tip (measured above Lowest Astronomical Tide ("LAT")) to the highest point, height to hub (measured above LAT to the centreline of the generator shaft), rotor diameter and maximum rotation speed;
- d. The generating capacity of each WTG used on the Site (Annex 1, Inset A of Figure 1) and a confirmed generating capacity for the Site overall;
- e. The finishes for each WTG (see condition 19 on WTG lighting and marking); and
- f. The length and proposed arrangements on the seabed of all inter-array cables

To be read alongside Condition 34.

### **Reason:** To confirm the final Development specification and layout.

The Company must, prior to the Commencement of the Development submit a Design Statement ("DS") in writing, to the Scottish Ministers that includes representative wind farm visualisations from key viewpoints as agreed with the Scottish Ministers, based upon the final DSLP as approved by the Scottish Ministers (as updated and amended from time to time by the Company). The DS must be provided, for information only, to the Planning Authorities, and the JNCC, SNH and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The DS must be prepared and signed off by at least one qualified landscape architect, instructed by the Company prior to submission to the Scottish Ministers. The Development must, at all times, be constructed in accordance with the approved DS (as updated and amended from time to time by the Company).

To be read alongside Condition 34.

# Reason: To inform interested parties of the final wind farm scheme proposed to be built.

14. The Company must, no later than 6 months prior to the Commencement of the Development, submit an Environmental Management Plan ("EMP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH, SEPA, RSPB Scotland, WDC, ASFB and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The Development must, at all times, be constructed and operated in accordance with the approved EMP (as updated and amended from time to time by the Company). Any updates or amendments made to the EMP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

The EMP must provide the over-arching framework for on-site environmental management during the phases of development as follows:

- a. all construction as required to be undertaken before the Final Commissioning of the Development; and
- b. the operational lifespan of the Development from the Final Commissioning of the Development until the cessation of electricity generation (Environmental management during decommissioning is addressed by the Decommissioning Programme provided for by condition 3).

The EMP must be in accordance with the ES and SEIS as it relates to environmental management measures. The EMP must set out the roles, responsibilities and chain of command for the Company personnel, any contractors or sub-contractors in respect of environmental management for the protection of environmental interests during the construction and operation of the Development. It must address, but not be limited to, the following overarching requirements for environmental management during construction:

- a. Mitigation measures to prevent significant adverse impacts to environmental interests, as identified in the ES and pre-consent and pre-construction surveys, and include the relevant parts of the CMS (refer to condition 10);
- b. Pollution prevention measures and contingency plans;
- c. Management measures to prevent the introduction of invasive nonnative marine species;
- d. Measures to minimise, recycle, reuse and dispose of waste streams; and
- e. The reporting mechanisms that will be used to provide the Scottish Ministers and relevant stakeholders (including, but not limited to, the JNCC, SNH, SEPA, RSPB Scotland, MCA and NLB) with regular updates on construction activity, including any environmental issues that have been encountered and how these have been addressed.

The Company must, no later than 3 months prior to the Final Commissioning of the Development, submit an updated EMP, in writing, to cover the operation and maintenance activities for the Development to the Scottish Ministers for their written approval. Such approval may be given only following consultation with the JNCC, SNH, SEPA, RSPB Scotland and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The EMP must be regularly reviewed by the Company and the Forth and Tay Regional Advisory Group ("FTRAG") (referred to in condition 27) over the lifespan of the Development, and be kept up to date (in relation to the likes of construction methods and operations of the Development in terms of up to date working practices) by the Company in consultation with the FTRAG.

The EMP must be informed, so far as is reasonably practicable, by the baseline surveys undertaken as part of the Application and the PEMP.

To be read alongside Condition 34.

### Reason: To mitigate the impacts on the environmental interests during construction and operation.

15. The Company must, no later than 6 months prior to the Commencement of the Development submit a Vessel Management Plan ("VMP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH, WDC and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The Development must, at all times, be constructed and operated in accordance with the approved VMP (as updated and amended from time to time by the Company). Any updates or amendments made to the VMP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

The VMP must include, but not be limited to, the following details:

- a. The number, types and specification of vessels required;
- b. Working practices to minimise the use of ducted propellers;
- c. How vessel management will be coordinated, particularly during construction but also during operation; and
- d. Location of working port(s), how often vessels will be required to transit between port(s) and the Site and indicative vessel transit corridors proposed to be used during construction and operation of the Development.

The confirmed individual vessel details must be notified to the Scottish Ministers in writing no later than 14 days prior to the Commencement of the Development and thereafter, any changes to the details supplied must be notified to the Scottish Ministers, as soon as practicable, prior to any such change being implemented in the construction or operation of the Development.

The VMP must, so far as is reasonably practicable, be consistent with the CMS, the EMP, the PEMP, the NSP, and the LMP.

To be read alongside Condition 34.

#### **Reason:** To mitigate disturbance or impact to marine mammals and birds.

16. The Company must, no later than 3 months prior to the Commissioning of the first WTG, submit an Operation and Maintenance Programme ("OMP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH, SEPA, MCA, NLB, RSPB Scotland, the Planning Authority and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The OMP must set out the procedures and good working practices for operations and the maintenance of the WTG's, substructures, and inter-array cable network of the Development. Environmental sensitivities which may affect the timing of the operation and maintenance activities must be considered in the OMP.

Operation and maintenance of the Development must, at all times, proceed in accordance with the approved OMP (as updated and amended from time to time by the Company). Any updates or amendments made to the OMP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

The OMP must, so far as is reasonably practicable, be consistent with the EMP, the PEMP, the VMP, the NSP, the CaP and the LMP.

To be read alongside Condition 34.

# Reason: To safeguard environmental interests during operation of the offshore generating station.

- 17. The Company must, no later than 6 months prior to the Commencement of the Development submit a Navigational Safety Plan ("NSP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with MCA, NLB and any other navigational advisors or organisations as may be required at the discretion of the Scottish Ministers. The NSP must include, but not be limited to, the following issues:
  - a. Navigational safety measures;
  - b. Construction exclusion zones;
  - c. Notice(s) to Mariners and Radio Navigation Warnings;
  - d. Anchoring areas;
  - e. Temporary construction lighting and marking;
  - f. Emergency response and coordination arrangements for the construction, operation and decommissioning phases of the Development; and
  - g. Buoyage.

The Company must confirm within the NSP that they have taken into account and adequately addressed all of the recommendations of the MCA in the current Marine Guidance Note 371, and its annexes that may be appropriate to the Development, or any other relevant document which may supersede said guidance prior to approval of the NSP. The Development must, at all times, be constructed and operated in accordance with the approved NSP (as updated and amended from time to time by the Company). Any updates or amendments made to the NSP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

To be read alongside Condition 34.

#### **Reason:** To mitigate the navigational risk to other legitimate users of the sea.

18. The Company must, no later than 6 months prior to the Commencement of the Development submit a Cable Plan ("CaP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH, MCA, SFF and any

such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The CaP must be in accordance with the ES. The Development must, at all times, be constructed and operated in accordance with the approved CaP (as updated and amended from time to time by the Company). Any updates or amendments made to the CaP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

### The CaP must include the following:

- g. Details of the location and cable laying techniques for the inter array cables;
- h. The results of survey work (including geophysical, geotechnical and benthic surveys) which will help inform cable routing;
- Technical specification of inter array cables, including a desk based assessment of attenuation of electro-magnetic field strengths and shielding;
- j. A burial risk assessment to ascertain burial depths and where necessary alternative protection measures;
- k. Methodologies for surveys (e.g. over trawl) of the inter array cables through the operational life of the wind farm where mechanical protection of cables laid on the sea bed is deployed; and
- I. Methodologies for inter array cable inspection with measures to address and report to the Scottish Ministers any exposure of inter array cables.

To be read alongside Condition 34.

# Reason: To ensure all environmental and navigational issues are considered for the location and construction of the inter array cables.

19. The Company must, no later than 6 months prior to the Commencement of the Development submit a Lighting and Marking Plan ("LMP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with MCA, NLB, CAA, MOD and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The LMP must provide that the Development be lit and marked in accordance with the current CAA and MOD aviation lighting policy and guidance that is in place as at the date of the Scottish Ministers approval of the LMP, or any such other documents that may supersede said guidance prior to the approval of the LMP. The LMP must also detail the navigational lighting requirements detailed in IALA Recommendation O-139 or any other documents that may supersede said guidance prior to approval of the LMP.

The Company must provide the LMP, for information only, to the Planning Authorities, the JNCC, SNH and any other bodies as may be required at the discretion of the Scottish Ministers. The Development must, at all times, be constructed and operated in accordance with the approved LMP (as updated and amended from time to time by the Company). Any updates or amendments made to the LMP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

To be read alongside Condition 34.

### Reason: To ensure safe marking and lighting of the offshore generating station.

20. The Company must, prior to the erection of any WTGs of any Phase on the Site, submit an Air Traffic Control Radar Mitigation Scheme ("ATC Scheme"), in writing, to the Scottish Ministers for their written approval for that Phase. Such approval may only be granted following consultation by the Scottish Ministers with the MOD.

The ATC Scheme is a scheme designed to mitigate the impact of the Development upon the operation of the Primary Surveillance Radar at RAF Leuchars ("the Radar") and the air traffic control operations of the MOD which is reliant upon the Radar. The ATC Scheme for each Phase shall set out the appropriate measures to be implemented to mitigate the impact of that Phase of the Development on the Radar and shall be in place for the operational life of the Development provided the Radar remains in operation.

No turbines shall become operational for any Phase unless and until all those measures required by the approved ATC Scheme for that Phase to be implemented prior to the operation of the turbines have been implemented and the Scottish Ministers have confirmed this in writing. Each Phase of the Development shall thereafter be operated fully in accordance with the approved ATC Scheme for that Phase.

## Reason: To mitigate the adverse impacts of the Development on the air traffic control radar at RAF Leuchars and the operations of the MOD.

21. The Company must ensure that no part of any turbine for any Phase shall be erected above sea level within radar line of sight of the air defence radar at Remote Radar Head (RRH) Buchan unless and until an Air Defence Radar Mitigation Scheme ("the ADRM scheme") for that Phase has been submitted to and approved in writing by the Scottish Ministers in consultation with the MOD.

For the purposes of this condition, the ADRM Scheme means a detailed scheme to mitigate the adverse impacts of the Development on the air defence radar at RRH Buchan and the air surveillance and control operations of the MOD. The scheme will set out the appropriate measures to be implemented to that end.

No turbines forming part of a Phase shall become operational until:

- a. the mitigation measures which the approved ADRM Scheme for that Phase requires to be implemented prior to the operation of the turbines have been implemented; and
- b. any performance criteria specified in the approved ADRM Scheme for that Phase and which the approved ADRM Scheme for that Phase requires to have been satisfied prior to the operation of the turbines have been satisfied.

The Company shall thereafter comply with all other obligations contained within the approved ADRM Scheme for any Phase for the duration of the operation of that Phase of the Development.

Reason: To mitigate the adverse impact of the Development on air defence radar at Remote Radar Head (RRH) Buchan.

22. The Company must ensure that no part of any turbine for any Phase shall be erected above sea level within radar line of sight of the air defence radar at Remote Radar Head ("RRH") Brizlee Wood unless and until an Air Defence Radar Mitigation Scheme ("the ADRM scheme") for that Phase has been submitted to and approved in writing by the Scottish Ministers in consultation with the MOD.

For the purposes of this condition, the ADRM Scheme for each Phase means a detailed scheme to mitigate the adverse impacts of that Phase of the Development on the air defence radar at RRH Brizlee Wood and the air surveillance and control operations of the MOD. The scheme will set out the appropriate measures to be implemented to that end.

No turbines for any Phase shall become operational until:

- a. the mitigation measures which the approved ADRM Scheme for that Phase requires to be implemented prior to the operation of the turbines have been implemented; and
- b. any performance criteria specified in the approved ADRM Scheme for that Phase and which the approved ADRM Scheme for that Phase requires to have been satisfied prior to the operation of the turbines have been satisfied.

The Company shall thereafter comply with all other obligations contained within the approved ADRM Scheme for the duration of the operation of each Phase of the Development.

Reason: To mitigate the adverse impact of the development on air defence radar at Remote Radar Head (RRH) Brizlee Wood.

23. The Company must ensure that no turbine forming part of a Phase shall be erected until a Primary Radar Mitigation Scheme ("PRMS") for that Phase agreed with the Operator has been submitted to and approved in writing by the Scottish Ministers in order to mitigate the impact of that Phase of the Development on the Primary Radar Installation at Perwinnes and associated air traffic management operations.

No blades shall be fitted to any turbine forming part of a Phase unless and until the approved Primary Radar Mitigation Scheme for that Phase has been implemented and the development shall thereafter be operated fully in accordance with such approved Scheme for that Phase.

### **Reason:** To mitigate the adverse impact of the development on air traffic operations.

24. The Company must, prior to the Commencement of each Phase of the Development and following confirmation of the approved DSLP for that Phase by the Scottish Ministers (refer to condition 12), provide the positions and maximum heights of the WTGs and construction equipment over 150 m (measured above LAT) and any Offshore Sub-Station Platforms for that Phase of the Development to the United Kingdom Hydrographic Office ("UKHO") for aviation and nautical charting purposes. The Company must, within 1 month of the Final Commissioning of each Phase of the Development provide coordinates accurate to three decimal places of minutes of arc for each WTG position and maximum heights of the WTGs for that Phase to the UKHO for aviation and nautical charting purposes.

### Reason: For aviation and navigational safety.

25. The Company must, at least 6 months prior to the Commencement of the Development, submit a Traffic and Transportation Plan ("TTP") in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with Transport Scotland and any such other advisors as may be required at the discretion of the Scottish Ministers. The TTP must set out a mitigation strategy for the impact of road based traffic and transportation associated with theconstruction of the Development. The Development must be constructed and operated in accordance with the approved TTP (as updated and amended from time to time, following written approval from the Scottish Ministers).

To be read alongside Condition 34.

### **Reason**: To maintain the free flow and safety of the Trunk Road network.

The Company must, no later than 6 months prior to the Commencement of the Development submit a Project Environmental Monitoring Programme ("PEMP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH, RSPB Scotland, WDC, ASFB and any other ecological advisors or organisations as required at the discretion of the Scottish Ministers. The PEMP must be in accordance with the Application as it relates to environmental monitoring.

The PEMP must set out measures by which the Company must monitor the environmental impacts of the Development. Monitoring is required throughout the lifespan of the Development where this is deemed necessary by the Scottish Ministers. Lifespan in this context includes pre-construction, construction, operational and decommissioning phases.

Monitoring must be done in such a way so as to ensure that the data which is collected allows useful and valid comparisons between different phases of the Development. Monitoring may also serve the purpose of verifying key predictions in the Application. In the event that further potential adverse environmental effects are identified, for which no predictions were made in the

Application, the Scottish Ministers may require the Company to undertake additional monitoring.

The Scottish Ministers may agree that monitoring may be reduced or ceased before the end of the lifespan of the Development.

The PEMP must cover, but not be limited to the following matters:

- a. Pre-construction, construction (if considered appropriate by the Scottish Ministers) and post-construction monitoring surveys for:
  - 1. Birds;
  - 2. Sandeels;
  - 3. Marine fish;
  - 4. Diadromous fish;
  - 5. Benthic communities; and
  - 6. Seabed scour and local sediment deposition.
- b. The participation by the Company in surveys to be carried out in relation to marine mammals as set out in the Marine Mammal Monitoring Programme ("MMMP"); and
- c. The participation by the Company in a National Strategic Bird Monitoring Framework ("NSBMF") and surveys to be carried out in relation to regional and / or strategic bird monitoring including but not necessarily limited to:
  - 1. the avoidance behaviour of breeding seabirds around turbines;
  - 2. flight height distributions of seabirds at wind farm sites;
  - 3. displacement of kittiwake, puffin and other auks from wind farm sites; and
  - 4. effects on survival and productivity at relevant breeding colonies

All initial methodologies for the above monitoring must be approved, in writing, by the Scottish Ministers and, where appropriate, in consultation with the Forth and Tay Regional Advisory Group ("FTRAG") referred to in condition 27 of this consent. Any pre-consent surveys carried out by the Company to address any of the above species may be used in part to discharge this condition subject to the written approval by the Scottish Ministers.

The PEMP is a live document and must be regularly reviewed by the Scottish Ministers, at timescales to be determined by the Scottish Ministers, in consultation with the FTRAG to identify the appropriateness of on-going monitoring. Following such reviews, the Scottish Ministers may, in consultation with the FTRAG, require the Company to amend the PEMP and submit such an amended PEMP, in writing, to the Scottish Ministers, for their written approval. Such approval may only be granted following consultation with FTRAG and any other ecological, or such other advisors as may be required at the discretion of the Scottish Ministers. The PEMP, as amended from time to time, must be fully implemented by the Company at all times.

The Company must submit written reports and associated raw data of such monitoring surveys to the Scottish Ministers at timescales to be determined by the Scottish Ministers in consultation with the FTRAG. Subject to any legal restrictions regarding the treatment of the information, the results are to be made publicly available by the Scottish Ministers, or by such other party appointed at their discretion.

To be read alongside Condition 34.

## Reason: To ensure that appropriate and effective monitoring of the impacts of the Development is undertaken.

27. The Company must participate in any Forth and Tay Regional Advisory Group ("FTRAG") established by the Scottish Ministers for the purpose of advising the Scottish Ministers on research, monitoring and mitigation programmes for, but not limited to, ornithology, diadromous fish, marine mammals and commercial fish. Should a Scottish Strategic Marine Environment Group ("SSMEG") be established (refer to condition 28), the responsibilities and obligations being delivered by the FTRAG will be subsumed by the SSMEG at a timescale to be determined by the Scottish Ministers.

# Reason: To ensure effective environmental monitoring and mitigation is undertaken at a regional scale.

28. The Company must participate in any Scottish Strategic Marine Environment Group ("SSMEG") established by the Scottish Ministers for the purposes of advising the Scottish Ministers on research, monitoring and mitigation programmes for, but not limited to, ornithology, diadromous fish, marine mammals and commercial fish.

# Reason: To ensure effective environmental monitoring and mitigation is undertaken at a National scale.

- 29. Prior to the Commencement of the Development, the Company must at its own expense, and with the approval of the Scottish Ministers in consultation with the JNCC and SNH, appoint an Ecological Clerk of Works ("ECoW"). The ECoW must be appointed in time to review and approve the final draft version of the first plan or programme submitted under this consent to the Scottish Ministers for approval, until the Final Commissioning of the Development. The responsibilities of the ECoW must include, but not be limited to:
  - a. Quality assurance of final draft version of all plans and programmes required under this consent;
  - b. Provide advice to the Company on compliance with consent conditions, including the conditions relating to the CMS, the EMP, the PEMP, the PS (if required), the CaP and the VMP:
  - c. Monitor compliance with the CMS, the EMP, the PEMP, the PS (if required), the CaP and the VMP;

- d. Provide reports on point c) above to the Scottish Ministers at timescales to be determined by the Scottish Ministers; and
- e. Inducting site personnel on site / works environmental policy and procedures.

To be read alongside Condition 34.

# Reason: To ensure that appropriate and effective monitoring of the impacts of the Development is undertaken.

The Company must, to the satisfaction of the Scottish Ministers, participate in the monitoring requirements as laid out in the 'National Research and Monitoring Strategy for Diadromous Fish' so far as they apply at a local level. The extent and nature of the Company's participation is to be agreed by the Scottish Ministers in consultation with the FTRAG.

### Reason: To ensure effective monitoring of the effects on migratory fish at a local level.

The Company must, no later than 6 months prior to the Commencement of the Development, submit a Commercial Fisheries Mitigation Strategy ("CFMS"), in writing, to the Scottish Ministers for their written approval. The Company must remain a member of the Forth and Tay Offshore Wind Developers Group-Commercial Fisheries Working Group or any successor group formed to facilitate commercial fisheries dialogue in the Forth and Tay regions.

The Company must include in the CFMS a mitigation strategy for each commercial fishery that Ministers are reasonably satisfied would be adversely affected by the Development. The CFMS must, in particular, include mitigation measures for lobster stock enhancement if the Scottish Ministers are satisfied that such mitigation measures are reasonably necessary. The Company must implement all mitigation measures committed to be carried out by the Company within the terms of the CFMS. The Company must require all of its contractors, and sub-contractors, to co-operate with the fishing industry to ensure the effective implementation of the CFMS.

To be read alongside Condition 34.

#### **Reason:** To mitigate the impact on commercial fishermen.

32. Prior to the Commencement of the Development a Fisheries Liaison Officer ("FLO"), approved in writing by Scottish Ministers, in consultation with the FTOWDG-CFWG, must be appointed by the Company for the period from Commencement of the Development until the Final Commissioning of the Development. The Company must notify the Scottish Ministers of the identity and credentials of the FLO before Commencement of the Development by including such details in the EMP (referred to in condition 14). The FLO must establish and maintain effective communications between the Company, any contractors or sub-contractors, fishermen and other users of the sea during the construction of the Development, and ensure compliance with best practice guidelines whilst doing so.

The responsibilities of the FLO must include, but not be limited to:

- a. Establishing and maintaining effective communications between the Company, any contractors or sub-contractors, fishermen and other users of the sea concerning the overall project and any amendments to the CMS and site environmental procedures;
- b. Provision of information relating to the safe operation of fishing activity on the site of the Development; and
- c. Ensuring that information is made available and circulated in a timely manner to minimise interference with fishing operations and other users of the sea.

To be read alongside Condition 34.

### Reason: To mitigate the impact on commercial fishermen.

The Company must, no later than 6 months prior to the Commencement of the Development submit a Marine Archaeology Reporting Protocol which sets out what the Company must do on discovering any marine archaeology during the construction, operation, maintenance and monitoring of the Development, in writing, to the Scottish Ministers for their written approval. Such approval may be given only following consultation by the Scottish Ministers with any such advisors as may be required at the discretion of the Scottish Ministers. The Reporting Protocol must be implemented in full, at all times, by the Company.

To be read alongside Condition 34.

# Reason: To ensure any discovery of archaeological interest is properly and correctly reported.

- 34. In respect of the Company carrying out the Development in Phases:
  - (a) any notification to or approval from the Scottish Ministers in respect of conditions 9, 10, 11, 12, 13, 14, 15, 17, 18, 19, 25, 26, 29, 31, 32 and 33 which would otherwise be required prior to Commencement of the Development shall instead be required prior to Commencement of each Phase of the Development. The Commencement of Phase 1A of the Development must not commence until such approval has been granted by Scottish Ministers;
  - (b) any approval from the Scottish Ministers in respect of condition 14 which would otherwise be required prior to Final Commissioning of the Development shall instead be required prior to the Final Commissioning of each Phase of the Development; and
  - (c) any approval from the Scottish Ministers in respect of condition 16 which would otherwise be required prior to the Commissioning of the first WTG of the Development shall instead be required prior to Commissioning of the First WTG of each Phase of the Development.

The Company must submit plans required by conditions 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 25, 26, 31 and 33 for approval in respect of Phase 1A as

### ANNEX C Draft Decision Notice and Proposed Variation

updates to those plans submitted in respect of Phase 1. These updated plans must incorporate the requirements of each respective post-consent plan condition in relation to Phase 1A of the Development.

Reason: To ensure that the obligations for each Phase of the Development are discharged appropriately.

### Annex 3 of the Seagreen Alpha Offshore Wind Farm Consent

#### **DEFINITIONS AND GLOSSARY OF TERMS**

In this decision letter and in Annex 1 and 2:

"the Application" includes the Application letter and Environmental Statement submitted to the Scottish Ministers by Seagreen Wind Energy Limited, on behalf of Seagreen Alpha Wind Energy Limited and Seagreen Bravo Wind Energy Limited, on 15<sup>th</sup> October 2012; the Supplementary Environmental information Statement submitted to the Scottish Ministers by Seagreen Wind Energy Limited on the 18<sup>th</sup> October 2013; and the SEIS Erratum submitted to the Scottish Ministers by Seagreen Wind Energy Limited on the 11<sup>th</sup> March 2014.

"AA" means Appropriate Assessment.

"CAPEX" means Capital Expenditure.

"Commencement of the Development" means the date on which Construction begins on the site of the Development in accordance with this consent.

"Commissioning of the First WTG" means the date on which the first wind turbine generator forming the Development has supplied electricity on a commercial basis to the National Grid.

"Construction" means as defined at section 64(1) of the Electricity Act 1989, read with section 104 of the Energy Act 2004.

"Danger Area" means the seaward extent of MOD Danger Area D604 into which military firing practise at Barry Buddon Range is conducted.

"Decommissioning Programme" means the programme for decommissioning the relevant object, to be submitted by the Company to the Secretary of State under section 105(2) of the Energy Act 2004 (as amended).

"Design Envelope", also referred to as Rochdale Envelope, is an approach to consenting and environmental impact, named after a UK planning law case, which allows a project description to be broadly defined, within a number of agreed parameters, for the purposes of a consent application.

"ECoW" means Ecological Clerk of Works.

"EIA" means Environmental Impact Assessment.

"EMF" means Electromagnetic Fields.

"EPS" means European Protected Species.

"ERCoP" means Emergency Response & Cooperation Plan.

### ANNEX C Draft Decision Notice and Proposed Variation

"ES" means the Environmental Statement submitted to the Scottish Ministers by the Seagreen Wind Energy Limited on 15<sup>th</sup> October 2012 as part of the Application as defined above.

"EU" means European Union.

"FFZ" means Firth of Forth Zone.

"Final Commissioning of the Development" means the date on which all wind turbine generators forming the Development have supplied electricity on a commercial basis to the National Grid, or such earlier date as the Scottish Ministers deem the Development to be complete.

"FLO" means a Fisheries Liaison Officer.

"GIS" means Geographic Information System.

"GVA" means Gross Value Added and represents a measure of the contribution to the economy of each individual producer, industry or sector in the United Kingdom.

"GW" means gigawatt.

"HRA" means Habitats Regulations Appraisal.

"IALA Recommendation O-139" means the International Association of Marine Aids to Navigation and Lighthouse Authorities Recommendation O-139 On The Marking of Man Made Offshore Structures.

"LAT" means Lowest Astronomical Tide.

"LSE" means Likely Significant Effect.

"MGN371" means Marine Guidance Note 371 and refers to the Maritime and Coastguard Agency Marine Guidance Note 371 Offshore Renewable Energy installations (OREI's) – Guidance on UK Navigational Practice, Safety and Emergency Response Issues.

"MHWS" means Mean High Water Springs.

"MLWS" means Mean Low Water Springs.

"MPA" means Marine Protected Area.

"MW" means megawatt.

"nm" means nautical miles.

"NSBMF" means National Strategic Bird Monitoring Framework.

"O&M" means operation and maintenance.

"Operator" means NERL (En Route) plc, incorporated under the Companies Act (4129273) whose registered office is 4000 Parkway, Whiteley, Fareham, Hants PO15 7FL or such other organisation licensed from time to time under sections 5 and 6 of the Transport Act 2000 to provide air traffic services to the relevant managed area (within the meaning of section 40 of that Act).

"the Planning Authorities" means Angus Council and Fife Council.

"PMF" means Priority Marine Feature.

"SAC" means Special Area of Conservation.

"Scottish marine area" has the meaning given in section 1 of the Marine (Scotland) Act 2010.

"Scottish offshore region" has the meaning given in section 322 of the Marine and Coastal Access Act 2009 (as amended).

"SEA" means Strategic Environmental Assessment.

"SEIS" means Supplementary Environmental information Statement" and refers to the covering letter and report, submitted to the Scottish Ministers by Seagreen Wind Energy Limited on the 18<sup>th</sup> October 2013.

"Soft start piling" means the gradual increase of piling power, incrementally over a set time period, until full operational power is achieved.

"SPA" means Special Protection Area.

"SPP" means Scottish Planning Policy.

"SSMEG" means Scottish Strategic Marine Environment Group. A group yet to be formed, responsible for overseeing monitoring and mitigation on a National scale, set up by the Scottish Ministers.

"STA" means Seagreen Transmission Asset.

"the Company" means Seagreen Alpha Wind Energy Limited, 55 Vastern Road, Reading, Berkshire, RG1 8BU. Company Number: 07185533.

"the Development" means the Seagreen Alpha Wind Farm in the Firth of Forth Zone.

"the Erratum" means the SEIS Erratum submitted to the Scottish Ministers by Seagreen Wind Energy Limited on the 11th March 2014 as a result of comments received by Repsol, the company developing the Inch Cape Offshore Wind farm.

### ANNEX C Draft Decision Notice and Proposed Variation

"the Proposal" means the proposed Seagreen Phase 1 Project, consisting of all two wind farms: Seagreen Alpha Offshore Wind Farm and Seagreen Bravo Offshore Wind Farm.

"the Radar" means the Primary Surveillance Radar at RAF Leuchars.

"the Site" means the area shaded in red in Annex 1, Inset A of Figure 1.

"the Zone" means Firth of Forth Round 3 Zone 2 leasing agreements in the UK Renewable Energy Zone.

"UK" means United Kingdom.

"WGS84" means the World Geodetic System 1984.

"WTG" means wind turbine generator.

"ZAP" means Zone Appraisal and Planning.

"ZDA" means Zone Development Agreement.

"the 2022 Variation Application" includes the variation application letter and environmental appraisal report submitted to the Scottish Ministers by Seagreen Wind Energy Limited on 19 April 2022.

"Phase 1" has the meaning given in Annex 1 of this consent.

"Phase 1A" has the meaning given in Annex 1 of this consent.

"Phase" means either Phase 1 or Phase 1A of the Development, all as defined in Annex 1 of this consent.

"Commencement of Phase 1A of the Development" means the date on which Construction of Phase 1A begins on the site of the Development in accordance with this consent.

"Commencement of each Phase of the Development" means (i) the date on which Construction of Phase 1 begins on the site of the Development in accordance with this consent and (ii) the date on which Construction of Phase 1A begins on the site of the Development in accordance with this consent.

"Final Commissioning of each Phase of the Development" means (i) the date on which all wind turbine generators forming Phase 1 of the Development have supplied electricity on a commercial basis to the National Grid, or such earlier date as the Scottish Ministers deem the Phase 1 to be complete, and (ii) the date on which all wind turbine generators forming Phase 1A of the Development have supplied electricity on a commercial basis to the National Grid, or such earlier date as the Scottish Ministers deem the Phase 1A to be complete.

"Commissioning of the First WTG of each Phase of the Development" means (i) the date on which the first wind turbine generator forming Phase 1 of the Development has supplied electricity on a commercial basis to the National Grid, and (ii) the date on which the first wind turbine generator forming Phase 1A of the Development has supplied electricity on a commercial basis to the National Grid.

### **Organisations**

"AIA" means Aberdeen International Airport.

"AC" means Angus Council.

"AMSGA" means Arbroath and Montrose Static Gear Association.

"ASFB" means The Association of Salmon Fishery Boards.

"CAA" means The Civil Aviation Authority.

"CFWG" means Commercial Fisheries Working Group a Working group part of FTOWDG.

"CGLMC" means Carnoustie Golf Links Management Committee.

"CoS" means The Chamber of Shipping.

"FC" means Fife Council.

"FMA" means the Fishermen's Mutual Association (Pittenweem) Ltd

"FTOWDG" means The Forth and Tay Offshore Wind Developers Group A group formed, and set up, to develop the Commercial Fisheries Mitigation Strategy, and as forum to facilitate on-going dialogue with the commercial fishing industry.

"FTRAG" means Forth and Tay Regional Advisory Group.

"IALA" means International Association of Marine Aids to Navigation and Lighthouse Authorities.

"ICOL" means Inch Cape Offshore Limited.

"JNCC" means The Joint Nature Conservation Committee.

"MCA" means The Maritime and Coastguard Agency.

#### ANNEX C Draft Decision Notice and Proposed Variation

"MMO" means Marine Management Organisation.

"MOD" means Ministry of Defence.

"MS-LOT" means Marine Scotland Licensing Operations Team.

"MSS" means Marine Scotland Science.

"NATS" means National Air Traffic Service.

"NLB" means The Northern Lighthouse Board.

"NNGOWL" means Neart na Gaoithe Offshore Wind Limited.

"Repsol" means Repsol Nuevas Energias UK Limited.

"RSPB Scotland" means The Royal Society for the Protection of Birds Scotland.

"RYA Scotland" means Royal Yachting Association Scotland.

"SAS" means Surfers Against Sewage.

"SAWEL" means Seagreen Alpha Wind Energy Limited.

"SBWEL" means Seagreen Bravo Wind Energy Limited.

"SEPA" means The Scottish Environment Protection Agency.

"SFF" means The Scottish Fisherman's Federation.

"SG" means The Scottish Government.

"SMRU" means Sea Mammal Research Unit.

"SNH" means Scottish Natural Heritage.

"SWEL" means Seagreen Wind Energy Limited.

"TCE" means The Crown Estate.

"UKHO" means United Kingdom Hydrographic Office.

"UNECE " means United Nations Economic Commission for Europe.

"WDC" means Whale and Dolphin Conservation.

### Plans, Programmes and Statements

"ADRM scheme" means Air Defence Radar Mitigation Scheme.

"ATC Scheme" means Air Traffic Control Radar Mitigation Scheme. A detailed scheme to mitigate the adverse impacts of the Development on the air traffic control radar at RAF Leuchars and the air surveillance and control operations of the Ministry of Defence. The scheme will set out the appropriate measures to be implemented to that end.

"CaP" means Cable Plan.

"CFMS" means Commercial Fisheries Mitigation Strategy - the final document produced from consultation between Seagreen Wind Energy Limited and the Forth & Tay Offshore Wind Developers Group - Commercial Fisheries Working Group ("FTOWDG-CFWG").

"CMS" means Construction Method Statement.

"CoP" means Construction Programme.

"DS" means Design Statement.

"DSLP" means Development Specification and Layout Plan.

"EMP" means Environmental Management Plan.

"LMP" means Lighting and Marking Plan.

"MMMP" means Marine Mammal Monitoring Programme which is a programme to be put in place by the licensee to monitor the effects of the Seagreen Alpha Offshore Limited wind farm on marine mammals in co-ordination (through the Forth and Tay Regional Advisory Group ("FTRAG")) with other MMMPs to be developed by other Forth and Tay projects, as required by the Licensing Authority.

"NPF2" means Scotland's National Planning Framework 2.

"NPF3" means Scotland's National Planning Framework 3.

"NREAP" means UK Government's National Renewable Energy Action Plan.

"NSP" means Navigational Safety Plan.

"OMP" means Operation and Maintenance Programme.

"PEMP" means Project Environmental Monitoring Programme.

"Primary Radar Mitigation Scheme" or "Scheme" means a detailed scheme agreed with the Operator which sets out the measures to be taken to mitigate at all times the impact of the development on the PERWINNES primary radar and air traffic management operations of the Operator.

"PRMS" means Primary Radar Mitigation Scheme.

"PS" means Piling Strategy.

"RRH" means Remote Radar Head and it may refer to Air Defence Radar at RRH Buchan or to the Air Defence Radar at RRH Brizlee Wood.

"the Strategy" means "National Research and Monitoring Strategy for Diadromous Fish" and refers to a strategy that will be formulated from the Marine Scotland Science Report 05/13 – "The Scope of Research Requirements for Atlantic Salmon, Sea Trout and European Eel in the Context of Offshore Renewables" to monitor migratory fish at a strategic level.

"TTP" means Traffic and Transportation Plan.

"VMP" means Vessel Management Plan.

### **Legislation**

"Wild Birds Directive" means Council Directive 79/409/EEC of 2<sup>nd</sup> April 1979 on the conservation of wild birds, as amended and as codified by Directive 2009/147/EC of the European Parliament and of the Council of 30<sup>th</sup> November 2009.

"the Electricity Act" means the Electricity Act 1989 (as amended).

"Habitats Directive" means Council Directive 92/43/EEC of 21st May 1992 on the conservation of natural habitats and wild fauna and flora (as amended).

"the Habitats Regulations" means the Conservation (Natural Habitats, & c.) Regulations 1994 (as amended) and the Offshore Marine Conservation (Natural Habitats, & c.) Regulations 2007 (as amended).

### ANNEX C Draft Decision Notice and Proposed Variation

"the 1990 Regulations" means the Electricity (Applications for Consent) Regulations 1990 (as amended).

"the 1994 Regulations" means the Conservation (Natural Habitats, & c.) Regulations 1994 (as amended).

"the 1999 Order" means The Scotland Act 1998 (Transfer of Functions to the Scotlish Ministers etc.) Order 1999.

"the 2000 Regulations" means the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2000 (as amended).

"the 2007 Regulations" means the Offshore Marine Conservation (Natural Habitats, & c.) Regulations 2007 (as amended).

"the 2009 Act" means Marine and Coastal Access Act 2009 (as amended).

"the 2010 Act" means Marine (Scotland) Act 2010.

"SPG" means the Fife Council's Supplementary Planning Guidance (SPG) on Wind Energy 2011 which supplements the local plan policies.

"the Statement" means The UK Marine Policy Statement 2011.

"TAYplan SDP" means the TAYplan Strategic Development Plan.

### **Annex 1 of the Seagreen Bravo Offshore Wind Farm Consent**

### **DESCRIPTION OF THE DEVELOPMENT**

The Development, located as shown on Figure 1 below, and shall comprise a wind-powered electricity generating station in the FFZ, including:

 not more than 75 three-bladed horizontal axis wind turbine generators of which (a) not more than 57 wind turbine generators shall be constructed in Phase 1; and (b) not more than 18 wind turbine generators shall be constructed in Phase 1A.

In respect of Phase 1, each wind turbine generator shall comprise:

- a) a maximum blade tip height of 209.7 metres (measured from LAT);
- b) a rotor diameter of between 122 and 167 metres;
- c) a hub height of between 87.1 and 126.2 metres (measured from LAT);
- d) a minimum blade tip clearance of between 29.8 and 42.7 metres (measured from LAT);
- e) blade width of up to 5.4 metres; and
- f) a minimum spacing of 1,000 metres;

In respect of Phase 1A, each wind turbine generator shall comprise:

- a) a maximum blade tip height of 285 metres (measured from LAT);
- b) a maximum rotor diameter of 242 metres;
- c) a hub height of between 118 and 165 metres (measured from LAT);
- d) a minimum blade tip clearance of between 34 and 45 metres (measured from LAT);
- e) blade width of up to 7.6 metres; and
- f) a minimum spacing of 1,000 metres;
- 2. all foundations, substructures, fixtures, fittings, fixings, and protections;
- 3. inter array cabling and cables up to and onto the offshore substation platforms; and
- 4. transition pieces including access ladders / fences and landing platforms,

and, except to the extent modified by the foregoing, all as specified in the Application, the 2022 Variation Application, and by the conditions imposed by the Scottish Ministers. References to "the Development" in this consent shall be construed accordingly.

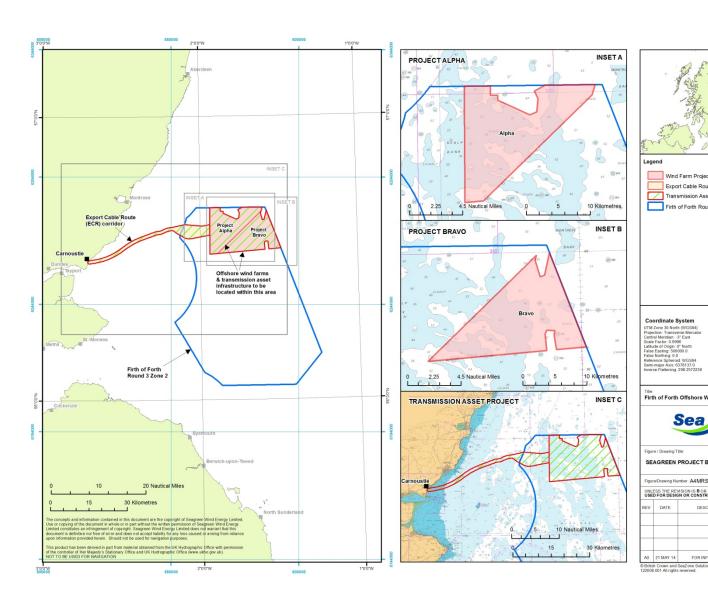


Figure 1: Development Location – see KEY

### **Annex 2 of the Seagreen Bravo Offshore Wind Farm Consent**

### **CONDITIONS OF THE SECTION 36 CONSENT**

The consent granted in accordance with section 36 of the Electricity Act 1989 is subject to the following conditions:

1. The consent is for a period from the date this consent is granted until the date occurring 25 years after the Final Commissioning of the Development. Written confirmation of the date of the Final Commissioning of the Development must be provided by the Company to the Scottish Ministers, the Planning Authority, the JNCC and SNH no later than one calendar month after the Final Commissioning of the Development. Where the Scottish Ministers deem the Development to be complete on a date prior to the date when all wind turbine generators forming the Development have supplied electricity on a commercial basis to the National Grid, then, the Scottish Ministers will provide written confirmation of the date of the Final Commissioning of the Development to the Company, the Planning Authority, the JNCC and SNH no later than one calendar month after the date on which the Scottish Ministers deem the Development to be complete.

#### **Reason:** To define the duration of the consent.

The Commencement of the Development must be a date no later than 5 years from the date the consent is granted, or such later date from the date of the granting of this consent as the Scottish Ministers may hereafter direct in writing. The Commencement of Phase 1A of the Development must be a date no later than 3 years from the Commissioning of the First WTG, or such later date from the date of the Commissioning of the First WTG as the Scottish Ministers may hereafter direct in writing.

Reason: To ensure the Commencement of the Development is undertaken within a reasonable timescale after consent is granted.

3. Where the Secretary of State has, following consultation with the Scottish Ministers, given notice requiring the Company to submit to the Secretary of State a Decommissioning Programme, pursuant to section 105(2) and (5) of the Energy Act 2004, then construction may not begin on the site of the Development until after the Company has submitted to the Secretary of State a Decommissioning Programme in compliance with that notice. The Decommissioning Programme must be approved, in writing, by Scottish Ministers prior to Commencement of Phase 1A of the Development.

Reason: To ensure that a decommissioning programme is submitted to the Secretary of State where the Secretary of State has, following consultation with the Scottish Ministers, so required before any construction commences.

4. The Company is not permitted to assign this consent without the prior written authorisation of the Scottish Ministers. The Scottish Ministers may grant (with or without conditions) or refuse such authorisation as they, at their own discretion, see fit. The consent is not capable of being assigned, alienated or transferred otherwise than in accordance with the foregoing procedure.

### **Reason:** To safeguard the obligations of the consent if assigned to another company.

5. In the event that for a continuous period of 12 months or more any WTG installed and commissioned and forming part of the Development fails to produce electricity on a commercial basis to the National Grid then, unless otherwise agreed in writing by the Scottish Ministers and after consultation with the Company and any advisors as required at the discretion of the Scottish Ministers, any such WTG may be deemed by the Scottish Ministers to cease to be required. If so deemed, the WTG must be decommissioned and the area of the Site containing that WTG must be reinstated by the Company in accordance with the procedures laid out within the Company's Decommissioning Programme, within the period of 24 months from the date of the deeming decision by the Scottish Ministers.

Reason: To ensure that any redundant WTGs and associated ancillary equipment is removed from the Site in the interests of safety, amenity and environmental protection.

6. If any serious health and safety incident occurs on the Site requiring the Company to report it to the Health and Safety Executive, then the Company must also notify the Scottish Ministers of the incident within 24 hours of the Company becoming aware of an incident occurring.

Reason: To inform the Scottish Ministers of any serious health and safety incident occurring on the Site.

7. The Development must be constructed and operated in accordance with the terms of the Application and related documents, including the accompanying ES, the SEIS, the 2022 Variation Application, and Annex 1 of this letter, except in so far as amended by the terms of this section 36 consent.

Reason: To ensure that the Development is carried out in accordance with the Application documentation.

8. As far as reasonably practicable, the Company must, on being given reasonable notice by the Scottish Ministers (of at least 72 hours), provide transportation to and from the Site for any persons authorised by the Scottish Ministers to inspect the Site.

**Reason:** To ensure access to the Site for the purpose of inspection.

9. The Company must, no later than 6 months prior to the Commencement of the Development submit a Construction Programme ("CoP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH, SEPA, MCA, NLB, RSPB Scotland, the Planning Authority and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The Development must, at all times, be constructed in accordance with the approved CoP (as updated and amended from time to time by the Company). Any updates or amendments made to the CoP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

#### The CoP must set out:

- a. The proposed date for Commencement of Development;
- b. The proposed timings for mobilisation of plant and delivery of materials, including details of onshore lay-down areas;
- c. The proposed timings and sequencing of construction work for all elements of the Development infrastructure;
- d. Contingency planning for poor weather or other unforeseen delays; and
- e. The scheduled date for Final Commissioning of the Development.

To be read alongside Condition 34.

### **Reason:** To confirm the timing and programming of construction.

The Company must, no later than 6 months prior to the Commencement of the Development submit a Construction Method Statement ("CMS"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH, SEPA, MCA, NLB, RSPB Scotland, the Planning Authority and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The CMS must set out the construction procedures and good working practices for installing the Development. The CMS must also include details of the roles and responsibilities, chain of command and contact details of company personnel, any contractors or sub-contractors involved during the construction of the Development. The CMS must be in accordance with the construction methods assessed in the Application and must include details of how the construction related mitigation steps proposed in the ES and in the SEIS are to be delivered. The Development must, at all times, be constructed in accordance with the approved CMS (as updated and amended from time to time by the Company). Any updates or amendments made to the CMS by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

The CMS must, so far as is reasonably practicable, be consistent with the Design Statement ("DS"), the Environmental Management Plan ("EMP"), the Vessel Management Plan ("VMP"), the Navigational Safety Plan ("NSP"), the Piling Strategy ("PS"), the Cable Plan ("CaP") and the Lighting and Marking Plan ("LMP").

To be read alongside Condition 34.

**Reason:** To ensure the appropriate construction management of the Development, taking into account mitigation measures to protect the environment and other users of the marine area.

In the event that pile foundations are to be used, the Company must, no later than 6 months prior to the Commencement of the Development, submit a Piling Strategy ("PS"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish

Ministers with the JNCC, SNH and any such other advisors as may be required at the discretion of the Scottish Ministers. The Development must, at all times, be constructed in accordance with the approved PS (as updated and amended from time to time by the Company). Any updates or amendments made to the PS by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

#### The PS must include:

- a. Full details of the proposed method and anticipated duration of piledriving at all locations;
- b. Details of soft-start piling procedures and anticipated maximum piling energy required at each pile location; and
- c. Details of any mitigation and monitoring to be employed during piledriving, as agreed the Scottish Ministers.

The PS must be in accordance with the Application and must reflect any surveys carried out after submission of the Application. The PS must demonstrate how the exposure to and/or the effects of underwater noise have been mitigated in respect of the following species: bottlenose dolphin; harbour seal; grey seal; Atlantic salmon; cod; and herring.

The PS must, so far as is reasonably practicable, be consistent with the EMP, the Project Environmental Monitoring Programme ("PEMP") and the CMS.

To be read alongside Condition 34.

#### Reason: To mitigate the underwater noise impacts arising from piling activity.

12. The Company must, no later than 6 months prior to the Commencement of the Development, submit a Development Specification and Layout Plan ("DSLP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the MCA, NLB, CoS, the JNCC, SNH, SFF, CAA and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The Development must, at all times, be constructed in accordance with the approved DSLP (as updated and amended from time to time by the Company). Any updates or amendments made to the DSLP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

The DSLP must include, but not be limited to the following:

- a. A plan showing the proposed location of each individual WTG (subject to any required micro-siting), including information on WTG spacing, WTG identification / numbering, location of the substation platforms, seabed conditions, bathymetry, confirmed foundation type for each WTG and any key constraints recorded on the Site;
- b. A list of latitude and longitude co-ordinates accurate to three decimal places of minutes of arc for each WTG. This should also be provided as

- a Geographic Information System ("GIS") shape file using WGS84 format;
- c. A table or diagram of each WTG dimensions including height to blade tip (measured above Lowest Astronomical Tide ("LAT")) to the highest point, height to hub (measured above LAT to the centreline of the generator shaft), rotor diameter and maximum rotation speed;
- d. The generating capacity of each WTG used on the Site (Annex 1, Inset B of Figure 1) and a confirmed generating capacity for the Site overall;
- e. The finishes for each WTG (see condition 19 on WTG lighting and marking); and
- f. The length and proposed arrangements on the seabed of all inter-array cables.

To be read alongside Condition 34.

### Reason: To confirm the final Development specification and layout.

13. The Company must, prior to the Commencement of the Development, submit a Design Statement ("DS") in writing, to the Scottish Ministers that includes representative wind farm visualisations from key viewpoints as agreed with the Scottish Ministers, based upon the final DSLP as approved by the Scottish Ministers (as updated and amended from time to time by the Company). The DS must be provided, for information only, to the Planning Authorities, and the JNCC, SNH and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The DS must be prepared and signed off by at least one qualified landscape architect, instructed by the Company prior to submission to the Scottish Ministers. The Development must, at all times, be constructed in accordance with the approved DS (as updated and amended from time to time by the Company).

To be read alongside Condition 34.

# Reason: To inform interested parties of the final wind farm scheme proposed to be built.

14. The Company must, no later than 6 months prior to the Commencement of the Development, submit an Environmental Management Plan ("EMP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH, SEPA, RSPB Scotland, WDC, ASFB and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The Development must, at all times, be constructed and operated in accordance with the approved EMP (as updated and amended from time to time by the Company). Any updates or amendments made to the EMP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

The EMP must provide the over-arching framework for on-site environmental management during the phases of development as follows:

- a. all construction as required to be undertaken before the Final Commissioning of the Development; and
- b. the operational lifespan of the Development from the Final Commissioning of the Development until the cessation of electricity generation (Environmental management during decommissioning is addressed by the Decommissioning Programme provided for by condition 3).

The EMP must be in accordance with the ES and SEIS as it relates to environmental management measures. The EMP must set out the roles, responsibilities and chain of command for the Company personnel, any contractors or sub-contractors in respect of environmental management for the protection of environmental interests during the construction and operation of the Development. It must address, but not be limited to, the following overarching requirements for environmental management during construction:

- a. Mitigation measures to prevent significant adverse impacts to environmental interests, as identified in the ES and pre-consent and pre-construction surveys, and include the relevant parts of the CMS (refer to condition 10);
- b. Pollution prevention measures and contingency plans;
- c. Management measures to prevent the introduction of invasive nonnative marine species;
- d. Measures to minimise, recycle, reuse and dispose of waste streams; and
- e. The reporting mechanisms that will be used to provide the Scottish Ministers and relevant stakeholders (including, but not limited to, the JNCC, SNH, SEPA, RSPB Scotland, MCA and NLB) with regular updates on construction activity, including any environmental issues that have been encountered and how these have been addressed.

The Company must, no later than 3 months prior to the Final Commissioning of the Development, submit an updated EMP, in writing, to cover the operation and maintenance activities for to the Scottish Ministers for their written approval. Such approval may be given only following consultation with the JNCC, SNH, SEPA, RSPB Scotland and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The EMP must be regularly reviewed by the Company and the Forth and Tay Regional Advisory Group ("FTRAG") (referred to in condition 27) over the lifespan of the Development, and be kept up to date (in relation to the likes of construction methods and operations of the Development in terms of up to date working practices) by the Company in consultation with the FTRAG.

The EMP must be informed, so far as is reasonably practicable, by the baseline surveys undertaken as part of the Application and the PEMP.

To be read alongside Condition 34.

Reason: To mitigate the impacts on the environmental interests during construction and operation.

15. The Company must, no later than 6 months prior to the Commencement of the Development, submit a Vessel Management Plan ("VMP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH, WDC and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The Development must, at all times, be constructed and operated in accordance with the approved VMP (as updated and amended from time to time by the Company). Any updates or amendments made to the VMP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

The VMP must include, but not be limited to, the following details:

- e. The number, types and specification of vessels required;
- f. Working practices to minimise the use of ducted propellers;
- g. How vessel management will be coordinated, particularly during construction but also during operation; and
- h. Location of working port(s), how often vessels will be required to transit between port(s) and the Site and indicative vessel transit corridors proposed to be used during construction and operation of the Development.

The confirmed individual vessel details must be notified to the Scottish Ministers in writing no later than 14 days prior to the Commencement of the Development, and thereafter, any changes to the details supplied must be notified to the Scottish Ministers, as soon as practicable, prior to any such change being implemented in the construction or operation of the Development.

The VMP must, so far as is reasonably practicable, be consistent with the CMS, the EMP, the PEMP, the NSP, and the LMP.

To be read alongside Condition 34.

### Reason: To mitigate disturbance or impact to marine mammals and birds.

16. The Company must, no later than 3 months prior to the Commissioning of the first WTG, submit an Operation and Maintenance Programme ("OMP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH, SEPA, MCA, NLB, RSPB Scotland, the Planning Authority and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The OMP must set out the procedures and good working practices for operations and the maintenance of the WTG's, substructures, and inter-array cable network of the Development. Environmental sensitivities which may affect the timing of the operation and maintenance activities must be considered in the OMP.

Operation and maintenance of the Development must, at all times, proceed in accordance with the approved OMP (as updated and amended from time to time by the Company). Any updates or amendments made to the OMP by the

Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

The OMP must, so far as is reasonably practicable, be consistent with the EMP, the PEMP, the VMP, the NSP, the CaP and the LMP.

To be read alongside Condition 34.

### Reason: To safeguard environmental interests during operation of the offshore generating station.

- 17. The Company must, no later than 6 months prior to the Commencement of the Development, submit a Navigational Safety Plan ("NSP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with MCA, NLB and any other navigational advisors or organisations as may be required at the discretion of the Scottish Ministers. The NSP must include, but not be limited to, the following issues:
  - a. Navigational safety measures;
  - b. Construction exclusion zones;
  - c. Notice(s) to Mariners and Radio Navigation Warnings;
  - d. Anchoring areas;
  - e. Temporary construction lighting and marking;
  - f. Emergency response and coordination arrangements for the construction, operation and decommissioning phases of the Development; and
  - g. Buoyage.

The Company must confirm within the NSP that they have taken into account and adequately addressed all of the recommendations of the MCA in the current Marine Guidance Note 371, and its annexes that may be appropriate to the Development, or any other relevant document which may supersede said guidance prior to approval of the NSP. The Development must, at all times, be constructed and operated in accordance with the approved NSP (as updated and amended from time to time by the Company). Any updates or amendments made to the NSP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

To be read alongside Condition 34.

#### **Reason:** To mitigate the navigational risk to other legitimate users of the sea.

18. The Company must, no later than 6 months prior to the Commencement of the Development, submit a Cable Plan ("CaP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH, MCA, SFF and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The CaP must be in accordance with the ES. The Development must, at all times, be constructed and operated in accordance

with the approved CaP (as updated and amended from time to time by the Company). Any updates or amendments made to the CaP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

#### The CaP must include the following:

- a. Details of the location and cable laying techniques for the inter array cables;
- b. The results of survey work (including geophysical, geotechnical and benthic surveys) which will help inform cable routing;
- Technical specification of inter array cables, including a desk based assessment of attenuation of electro-magnetic field strengths and shielding;
- d. A burial risk assessment to ascertain burial depths and where necessary alternative protection measures;
- e. Methodologies for surveys (e.g. over trawl) of the inter array cables through the operational life of the wind farm where mechanical protection of cables laid on the sea bed is deployed; and
- f. Methodologies for inter array cable inspection with measures to address and report to the Scottish Ministers any exposure of inter array cables.

To be read alongside Condition 34.

### Reason: To ensure all environmental and navigational issues are considered for the location and construction of the inter array cables.

19. The Company must, no later than 6 months prior to the Commencement of the Development, submit a Lighting and Marking Plan ("LMP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with MCA, NLB, CAA, MOD and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The LMP must provide that the Development be lit and marked in accordance with the current CAA and MOD aviation lighting policy and guidance that is in place as at the date of the Scottish Ministers approval of the LMP, or any such other documents that may supersede said guidance prior to the approval of the LMP. The LMP must also detail the navigational lighting requirements detailed in IALA Recommendation O-139 or any other documents that may supersede said guidance prior to approval of the LMP.

The Company must provide the LMP, for information only, to the Planning Authorities, the JNCC, SNH and any other bodies as may be required at the discretion of the Scottish Ministers. The Development must, at all times, be constructed and operated in accordance with the approved LMP (as updated and amended from time to time by the Company). Any updates or amendments made to the LMP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

To be read alongside Condition 34.

#### Reason: To ensure safe marking and lighting of the offshore generating station.

20. The Company must, prior to the erection of any WTGs of any Phase on the Site, submit an Air Traffic Control Radar Mitigation Scheme ("ATC Scheme"), in writing, to the Scottish Ministers for their written approval for that Phase. Such approval may only be granted following consultation by the Scottish Ministers with the MOD.

The ATC Scheme is a scheme designed to mitigate the impact of the Development upon the operation of the Primary Surveillance Radar at RAF Leuchars ("the Radar") and the air traffic control operations of the MOD which is reliant upon the Radar. The ATC Scheme for each Phase shall set out the appropriate measures to be implemented to mitigate the impact of that Phase of the Development on the Radar and shall be in place for the operational life of the Development provided the Radar remains in operation.

No turbines shall become operational for any Phase unless and until all those measures required by the approved ATC Scheme for that Phase to be implemented prior to the operation of the turbines have been implemented and the Scottish Ministers have confirmed this in writing. Each Phase of the Development shall thereafter be operated fully in accordance with the approved ATC Scheme for that Phase.

## Reason: To mitigate the adverse impacts of the Development on the air traffic control radar at RAF Leuchars and the operations of the MOD.

21. The Company must ensure that no part of any turbine for any Phase shall be erected above sea level within radar line of sight of the air defence radar at Remote Radar Head (RRH) Buchan unless and until an Air Defence Radar Mitigation Scheme ("the ADRM scheme") for that Phase has been submitted to and approved in writing by the Scottish Ministers in consultation with the MOD.

For the purposes of this condition, the ADRM Scheme means a detailed scheme to mitigate the adverse impacts of the Development on the air defence radar at RRH Buchan and the air surveillance and control operations of the MOD. The scheme will set out the appropriate measures to be implemented to that end.

No turbines forming part of a Phase shall become operational until:

- a. the mitigation measures which the approved ADRM Scheme for that Phase requires to be implemented prior to the operation of the turbines have been implemented; and
- b. any performance criteria specified in the approved ADRM Scheme for that Phase and which the approved ADRM Scheme for that Phase requires to have been satisfied prior to the operation of the turbines have been satisfied.

The Company shall thereafter comply with all other obligations contained within the approved ADRM Scheme for any Phase for the duration of the operation of that Phase of the Development.

Reason: To mitigate the adverse impact of the Development on air defence radar at Remote Radar Head (RRH) Buchan.

22. The Company must ensure that no part of any turbine for any Phase shall be erected above sea level within radar line of sight of the air defence radar at Remote Radar Head ("RRH") Brizlee Wood unless and until an Air Defence Radar Mitigation Scheme ("the ADRM scheme") for that Phase has been submitted to and approved in writing by the Scottish Ministers in consultation with the MOD.

For the purposes of this condition, the ADRM Scheme for each Phase means a detailed scheme to mitigate the adverse impacts of that Phase of the Development on the air defence radar at RRH Brizlee Wood and the air surveillance and control operations of the MOD. The scheme will set out the appropriate measures to be implemented to that end.

No turbines for any Phase shall become operational until:

- a. the mitigation measures which the approved ADRM Scheme for that Phase requires to be implemented prior to the operation of the turbines have been implemented; and
- b. any performance criteria specified in the approved ADRM Scheme for that Phase and which the approved ADRM Scheme requires to have been satisfied prior to the operation of the turbines have been satisfied.

The Company shall thereafter comply with all other obligations contained within the approved ADRM Scheme for the duration of the operation of each Phase of the Development.

Reason: To mitigate the adverse impact of the development on air defence radar at Remote Radar Head (RRH) Brizlee Wood.

23. The Company must ensure that no turbine forming part of a Phase shall be erected until a Primary Radar Mitigation Scheme ("PRMS") for that Phase agreed with the Operator has been submitted to and approved in writing by the Scottish Ministers in order to mitigate the impact of the that Phase of Development on the Primary Radar Installation at Perwinnes and associated air traffic management operations.

No blades shall be fitted to any turbine forming part of a Phase unless and until the approved Primary Radar Mitigation Scheme for that Phase has been implemented and the development shall thereafter be operated fully in accordance with such approved Scheme for that Phase.

**Reason:** To mitigate the adverse impact of the development on air traffic operations.

24. The Company must, prior to the Commencement of each Phase of the Development following confirmation of the approved DSLP for that Phase by the Scottish Ministers (refer to condition 12), provide the positions and maximum heights of the WTGs and construction equipment over 150 m (measured above LAT) and any Offshore Sub-Station Platforms for that Phase of the Development to the United Kingdom Hydrographic Office ("UKHO") for aviation and nautical charting purposes. The Company must, within 1 month of the Final Commissioning of each Phase of the Development provide coordinates accurate to three decimal places of minutes of arc for each WTG position and maximum heights of the WTGs for that Phase to the UKHO for aviation and nautical charting purposes.

#### **Reason:** For aviation and navigational safety.

25. The Company must, at least 6 months prior to the Commencement of the Development, submit a Traffic and Transportation Plan ("TTP") in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with Transport Scotland and any such other advisors as may be required at the discretion of the Scottish Ministers. The TTP must set out a mitigation strategy for the impact of road based traffic and transportation associated with the construction of the Development. The Development must be constructed and operated in accordance with the approved TTP (as updated and amended from time to time, following written approval from the Scottish Ministers).

To be read alongside Condition 34.

#### **Reason**: To maintain the free flow and safety of the Trunk Road network.

The Company must, no later than 6 months prior to the Commencement of the Development, submit a Project Environmental Monitoring Programme ("PEMP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH, RSPB Scotland, WDC, ASFB and any other ecological advisors or organisations as required at the discretion of the Scottish Ministers. The PEMP must be in accordance with the Application as it relates to environmental monitoring.

The PEMP must set out measures by which the Company must monitor the environmental impacts of the Development. Monitoring is required throughout the lifespan of the Development where this is deemed necessary by the Scottish Ministers. Lifespan in this context includes pre-construction, construction, operational and decommissioning phases.

Monitoring must be done in such a way so as to ensure that the data which is collected allows useful and valid comparisons between different phases of the Development. Monitoring may also serve the purpose of verifying key predictions in the Application. In the event that further potential adverse environmental effects are identified, for which no predictions were made in the

Application, the Scottish Ministers may require the Company to undertake additional monitoring.

The Scottish Ministers may agree that monitoring may be reduced or ceased before the end of the lifespan of the Development.

The PEMP must cover, but not be limited to the following matters:

- a. Pre-construction, construction (if considered appropriate by the Scottish Ministers) and post-construction monitoring surveys for:
  - 1. Birds;
  - 2. Sandeels;
  - 3. Marine fish:
  - 4. Diadromous fish;
  - 5. Benthic communities; and
  - 6. Seabed scour and local sediment deposition.
- b. The participation by the Company in surveys to be carried out in relation to marine mammals as set out in the Marine Mammal Monitoring Programme ("MMMP"); and
- c. The participation by the Company in a National Strategic Bird Monitoring Framework ("NSBMF") and surveys to be carried out in relation to regional and / or strategic bird monitoring including but not necessarily limited to:
  - 1. the avoidance behaviour of breeding seabirds around turbines;
  - 2. flight height distributions of seabirds at wind farm sites;
  - 3. displacement of kittiwake, puffin and other auks from wind farm sites; and
  - 4. effects on survival and productivity at relevant breeding colonies

All initial methodologies for the above monitoring must be approved, in writing, by the Scottish Ministers and, where appropriate, in consultation with the Forth and Tay Regional Advisory Group ("FTRAG") referred to in condition 27 of this consent. Any pre-consent surveys carried out by the Company to address any of the above species may be used in part to discharge this condition subject to the written approval by the Scottish Ministers.

The PEMP is a live document and must be regularly reviewed by the Scottish Ministers, at timescales to be determined by the Scottish Ministers, in consultation with the FTRAG to identify the appropriateness of on-going monitoring. Following such reviews, the Scottish Ministers may, in consultation with the FTRAG, require the Company to amend the PEMP and submit such an amended PEMP, in writing, to the Scottish Ministers, for their written approval. Such approval may only be granted following consultation with FTRAG and any other ecological, or such other advisors as may be required at the discretion of the Scottish Ministers. The PEMP, as amended from time to time, must be fully implemented by the Company at all times.

The Company must submit written reports and associated raw data of such monitoring surveys to the Scottish Ministers at timescales to be determined by the Scottish Ministers in consultation with the FTRAG. Subject to any legal restrictions regarding the treatment of the information, the results are to be made publicly available by the Scottish Ministers, or by such other party appointed at their discretion.

To be read alongside Condition 34.

### Reason: To ensure that appropriate and effective monitoring of the impacts of the Development is undertaken.

27. The Company must participate in any Forth and Tay Regional Advisory Group ("FTRAG") established by the Scottish Ministers for the purpose of advising the Scottish Ministers on research, monitoring and mitigation programmes for, but not limited to, ornithology, diadromous fish, marine mammals and commercial fish. Should a Scottish Strategic Marine Environment Group ("SSMEG") be established (refer to condition 28), the responsibilities and obligations being delivered by the FTRAG will be subsumed by the SSMEG at a timescale to be determined by the Scottish Ministers.

### **Reason:** To ensure effective environmental monitoring and mitigation is undertaken at a regional scale.

28. The Company must participate in any Scottish Strategic Marine Environment Group ("SSMEG") established by the Scottish Ministers for the purposes of advising the Scottish Ministers on research, monitoring and mitigation programmes for, but not limited to, ornithology, diadromous fish, marine mammals and commercial fish.

# Reason: To ensure effective environmental monitoring and mitigation is undertaken at a National scale.

- 29. Prior to the Commencement of the Development, the Company must at its own expense, and with the approval of the Scottish Ministers in consultation with the JNCC and SNH, appoint an Ecological Clerk of Works ("ECoW"). The ECoW must be appointed in time to review and approve the final draft version of the first plan or programme submitted under this consent to the Scottish Ministers for approval, until the Final Commissioning of the Development. The responsibilities of the ECoW must include, but not be limited to:
  - a. Quality assurance of final draft version of all plans and programmes required under this consent;
  - b. Provide advice to the Company on compliance with consent conditions, including the conditions relating to the CMS, the EMP, the PEMP, the PS (if required), the CaP and the VMP;
  - c. Monitor compliance with the CMS, the EMP, the PEMP, the PS (if required), the CaP and the VMP;

- d. Provide reports on point c) above to the Scottish Ministers at timescales to be determined by the Scottish Ministers; and
- e. Inducting site personnel on site / works environmental policy and procedures.

To be read alongside Condition 34.

# Reason: To ensure that appropriate and effective monitoring of the impacts of the Development is undertaken.

The Company must, to the satisfaction of the Scottish Ministers, participate in the monitoring requirements as laid out in the 'National Research and Monitoring Strategy for Diadromous Fish' so far as they apply at a local level. The extent and nature of the Company's participation is to be agreed by the Scottish Ministers in consultation with the FTRAG.

#### Reason: To ensure effective monitoring of the effects on migratory fish at a local level

The Company must, no later than 6 months prior to the Commencement of the Development, submit a Commercial Fisheries Mitigation Strategy ("CFMS"), in writing, to the Scottish Ministers for their written approval. The Company must remain a member of the Forth and Tay Offshore Wind Developers Group-Commercial Fisheries Working Group or any successor group formed to facilitate commercial fisheries dialogue in the Forth and Tay regions.

The Company must include in the CFMS a mitigation strategy for each commercial fishery that Ministers are reasonably satisfied would be adversely affected by the Development. The CFMS must, in particular, include mitigation measures for lobster stock enhancement if the Scottish Ministers are satisfied that such mitigation measures are reasonably necessary. The Company must implement all mitigation measures committed to be carried out by the Company within the terms of the CFMS. The Company must require all of its contractors, and sub-contractors, to co-operate with the fishing industry to ensure the effective implementation of the CFMS.

To be read alongside Condition 34.

#### **Reason**: To mitigate the impact on commercial fishermen.

32. Prior to the Commencement of the Development, a Fisheries Liaison Officer ("FLO"), approved in writing by Scottish Ministers, in consultation with the FTOWDG-CFWG, must be appointed by the Company for the period from Commencement of the Development until the Final Commissioning of the Development. The Company must notify the Scottish Ministers of the identity and credentials of the FLO before Commencement of the Development by including such details in the EMP (referred to in condition 14). The FLO must establish and maintain effective communications between the Company, any contractors or sub-contractors, fishermen and other users of the sea during the construction of the Development, and ensure compliance with best practice

guidelines whilst doing so.

The responsibilities of the FLO must include, but not be limited to:

- a. Establishing and maintaining effective communications between the Company, any contractors or sub-contractors, fishermen and other users of the sea concerning the overall project and any amendments to the CMS and site environmental procedures;
- b. Provision of information relating to the safe operation of fishing activity on the site of the Development; and
- c. Ensuring that information is made available and circulated in a timely manner to minimise interference with fishing operations and other users of the sea.

To be read alongside Condition 34.

#### Reason: To mitigate the impact on commercial fishermen.

The Company must, no later than 6 months prior to the Commencement of the Development, submit a Marine Archaeology Reporting Protocol which sets out what the Company must do on discovering any marine archaeology during the construction, operation, maintenance and monitoring of the Development, in writing, to the Scottish Ministers for their written approval. Such approval may be given only following consultation by the Scottish Ministers with any such advisors as may be required at the discretion of the Scottish Ministers. The Reporting Protocol must be implemented in full, at all times, by the Company.

To be read alongside Condition 34.

### Reason: To ensure any discovery of archaeological interest is properly and correctly reported.

- 34. In respect of the Company carrying out the Development in Phases:
  - (a) any notification to or approval from the Scottish Ministers in respect of conditions 9, 10, 11, 12, 13, 14, 15, 17, 18, 19, 25, 26, 29, 31, 32 and 33 which would otherwise be required prior to Commencement of the Development shall instead be required prior to Commencement of each Phase of the Development. The Commencement of Phase 1A of the Development must not commence until such approval has been granted by Scottish Ministers;
  - (b) any approval from the Scottish Ministers in respect of condition 14 which would otherwise be required prior to Final Commissioning of the Development shall instead be required prior to the Final Commissioning of each Phase of the Development; and
  - (c) any approval from the Scottish Ministers in respect of condition 16 which would otherwise be required prior to the Commissioning of the first WTG of the Development shall instead be required prior to Commissioning of the First WTG of each Phase of the Development.

The Company must submit plans required by conditions 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 24, 25, 26, 31 and 33 for approval in respect of Phase 1A as updates to those plans submitted in respect of Phase 1. These updated plans must incorporate the requirements of each respective post-consent plan condition in relation to Phase 1A of the Development.

Reason: To ensure that the obligations for each phase of the Development are discharged appropriately.

#### Annex 3 of the Seagreen Bravo Offshore Wind Farm Consent

#### **DEFINITIONS AND GLOSSARY OF TERMS**

In this decision letter and in Annex 1 and 2:

"the Application" includes the Application letter and Environmental Statement submitted to the Scottish Ministers by Seagreen Wind Energy Limited, on behalf of Seagreen Alpha Wind Energy Limited and Seagreen Bravo Wind Energy Limited, on 15<sup>th</sup> October 2012; the Supplementary Environmental information Statement submitted to the Scottish Ministers by Seagreen Wind Energy Limited on the 18<sup>th</sup> October 2013; and the SEIS Erratum submitted to the Scottish Ministers by Seagreen Wind Energy Limited on the 11<sup>th</sup> March 2014.

"AA" means Appropriate Assessment.

"CAPEX" means Capital Expenditure.

"Commencement of the Development" means the date on which Construction begins on the site of the Development in accordance with this consent.

"Commissioning of the First WTG" means the date on which the first wind turbine generator forming the Development has supplied electricity on a commercial basis to the National Grid.

"Construction" means as defined at section 64(1) of the Electricity Act 1989, read with section 104 of the Energy Act 2004.

"Danger Area" means the seaward extent of MOD Danger Area D604 into which military firing practise at Barry Buddon Range is conducted.

"Decommissioning Programme" means the programme for decommissioning the relevant object, to be submitted by the Company to the Secretary of State under section 105(2) of the Energy Act 2004 (as amended).

"Design Envelope", also referred to as Rochdale Envelope, is an approach to consenting and environmental impact, named after a UK planning law case, which allows a project description to be broadly defined, within a number of agreed parameters, for the purposes of a consent application.

"ECoW" means Ecological Clerk of Works.

"EIA" means Environmental Impact Assessment.

"EMF" means Electromagnetic Fields.

"EPS" means European Protected Species.

"ERCoP" means Emergency Response & Cooperation Plan.

"ES" means the Environmental Statement submitted to the Scottish Ministers by the Seagreen Wind Energy Limited on 15<sup>th</sup> October 2012 as part of the Application as defined above.

"EU" means European Union.

"FFZ" means Firth of Forth Zone.

"Final Commissioning of the Development" means the date on which all wind turbine generators forming the Development have supplied electricity on a commercial basis to the National Grid, or such earlier date as the Scottish Ministers deem the Development to be complete.

"FLO" means a Fisheries Liaison Officer.

"GIS" means Geographic Information System.

"GVA" means Gross Value Added and represents a measure of the contribution to the economy of each individual producer, industry or sector in the United Kingdom.

"GW" means gigawatt.

"HRA" means Habitats Regulations Appraisal.

"IALA Recommendation O-139" means the International Association of Marine Aids to Navigation and Lighthouse Authorities Recommendation O-139 On The Marking of Man Made Offshore Structures.

"LAT" means Lowest Astronomical Tide.

"LSE" means Likely Significant Effect.

"MGN371" means Marine Guidance Note 371 and refers to the Maritime and Coastguard Agency Marine Guidance Note 371 Offshore Renewable Energy installations (OREI's) – Guidance on UK Navigational Practice, Safety and Emergency Response Issues.

"MHWS" means Mean High Water Springs.

"MLWS" means Mean Low Water Springs.

"MPA" means Marine Protected Area.

"MW" means megawatt.

"nm" means nautical miles.

"NSBMF" means National Strategic Bird Monitoring Framework.

"O&M" means operation and maintenance.

"Operator" means NERL (En Route) plc, incorporated under the Companies Act (4129273) whose registered office is 4000 Parkway, Whiteley, Fareham, Hants PO15 7FL or such other organisation licensed from time to time under sections 5 and 6 of the Transport Act 2000 to provide air traffic services to the relevant managed area (within the meaning of section 40 of that Act).

"the Planning Authorities" means Angus Council and Fife Council.

"PMF" means Priority Marine Feature.

"SAC" means Special Area of Conservation.

"Scottish marine area" has the meaning given in section 1 of the Marine (Scotland) Act 2010.

"Scottish offshore region" has the meaning given in section 322 of the Marine and Coastal Access Act 2009 (as amended).

"SEA" means Strategic Environmental Assessment.

"SEIS" means Supplementary Environmental information Statement" and refers to the covering letter and report, submitted to the Scottish Ministers by Seagreen Wind Energy Limited on the 18<sup>th</sup> October 2013.

"Soft start piling" means the gradual increase of piling power, incrementally over a set time period, until full operational power is achieved.

"SPA" means Special Protection Area.

"SPP" means Scottish Planning Policy.

"SSMEG" means Scottish Strategic Marine Environment Group. A group yet to be formed, responsible for overseeing monitoring and mitigation on a National scale, set up by the Scottish Ministers.

"STA" means Seagreen Transmission Asset.

"the Company" means Seagreen Alpha Wind Energy Limited, 55 Vastern Road, Reading, Berkshire, RG1 8BU. Company Number: 07185533.

"the Development" means the Seagreen Alpha Wind Farm in the Firth of Forth Zone.

"the Erratum" means the SEIS Erratum submitted to the Scottish Ministers by Seagreen Wind Energy Limited on the 11th March 2014 as a result of comments received by Repsol, the company developing the Inch Cape Offshore Wind farm.

"the Proposal" means the proposed Seagreen Phase 1 Project, consisting of all two wind farms: Seagreen Alpha Offshore Wind Farm and Seagreen Bravo Offshore Wind Farm.

"the Radar" means the Primary Surveillance Radar at RAF Leuchars.

"the Site" means the area shaded in red in Annex 1, Inset A of Figure 1.

"the Zone" means Firth of Forth Round 3 Zone 2 leasing agreements in the UK Renewable Energy Zone.

"UK" means United Kingdom.

"WGS84" means the World Geodetic System 1984.

"WTG" means wind turbine generator.

"ZAP" means Zone Appraisal and Planning.

"ZDA" means Zone Development Agreement.

"the 2022 Variation Application" includes the variation application letter and environmental appraisal report submitted to the Scottish Ministers by Seagreen Wind Energy Limited on 19 April 2022.

"Phase 1" has the meaning given in Annex 1 of this consent

"Phase 1A" has the meaning given in Annex 1 of this consent

"Phase" means either Phase 1 or Phase 1A of the Development, all as defined in Annex 1 of this consent.

"Commencement of Phase 1A of the Development" means the date on which Construction of Phase 1A begins on the site of the Development in accordance with this consent.

"Commencement of each Phase of the Development" means (i) the date on which Construction of Phase 1 begins on the site of the Development in accordance with this consent and (ii) the date on which Construction of Phase 1A begins on the site of the Development in accordance with this consent.

"Final Commissioning of each Phase of the Development" means (i) the date on which all wind turbine generators forming Phase 1 of the Development have supplied electricity on a commercial basis to the National Grid, or such earlier date as the Scottish Ministers deem the Phase 1 to be complete, and (ii) the date on which all wind turbine generators forming Phase 1A of the Development have supplied electricity on a commercial basis to the National Grid, or such earlier date as the Scottish Ministers deem the Phase 1A to be complete.

"Commissioning of the First WTG of each Phase of the Development" means (i) the date on which the first wind turbine generator forming Phase 1 of the Development has supplied electricity on a commercial basis to the National Grid, and (ii) the date on which the first wind turbine generator forming Phase 1A of the Development has supplied electricity on a commercial basis to the National Grid.

#### **Organisations**

"AIA" means Aberdeen International Airport.

"AC" means Angus Council.

"AMSGA" means Arbroath and Montrose Static Gear Association.

"ASFB" means The Association of Salmon Fishery Boards.

"CAA" means The Civil Aviation Authority.

"CFWG" means Commercial Fisheries Working Group a Working group part of FTOWDG.

"CGLMC" means Carnoustie Golf Links Management Committee.

"CoS" means The Chamber of Shipping.

"FC" means Fife Council.

"FMA" means the Fishermen's Mutual Association (Pittenweem) Ltd

"FTOWDG" means The Forth and Tay Offshore Wind Developers Group A group formed, and set up, to develop the Commercial Fisheries Mitigation Strategy, and as forum to facilitate on-going dialogue with the commercial fishing industry.

"FTRAG" means Forth and Tay Regional Advisory Group.

"IALA" means International Association of Marine Aids to Navigation and Lighthouse Authorities.

"ICOL" means Inch Cape Offshore Limited.

"JNCC" means The Joint Nature Conservation Committee.

"MCA" means The Maritime and Coastguard Agency.

"MMO" means Marine Management Organisation.

"MOD" means Ministry of Defence.

"MS-LOT" means Marine Scotland Licensing Operations Team.

"MSS" means Marine Scotland Science.

"NATS" means National Air Traffic Service.

"NLB" means The Northern Lighthouse Board.

"NNGOWL" means Neart na Gaoithe Offshore Wind Limited.

"Repsol" means Repsol Nuevas Energias UK Limited.

"RSPB Scotland" means The Royal Society for the Protection of Birds Scotland.

"RYA Scotland" means Royal Yachting Association Scotland.

"SAS" means Surfers Against Sewage.

"SAWEL" means Seagreen Alpha Wind Energy Limited.

"SBWEL" means Seagreen Bravo Wind Energy Limited.

"SEPA" means The Scottish Environment Protection Agency.

"SFF" means The Scottish Fisherman's Federation.

"SG" means The Scottish Government.

"SMRU" means Sea Mammal Research Unit.

"SNH" means Scottish Natural Heritage.

"SWEL" means Seagreen Wind Energy Limited.

"TCE" means The Crown Estate.

"UKHO" means United Kingdom Hydrographic Office.

"UNECE " means United Nations Economic Commission for Europe.

"WDC" means Whale and Dolphin Conservation.

#### Plans, Programmes and Statements

"ADRM scheme" means Air Defence Radar Mitigation Scheme

"ATC Scheme" means Air Traffic Control Radar Mitigation Scheme. A detailed scheme to mitigate the adverse impacts of the Development on the air traffic control radar at RAF Leuchars and the air surveillance and control operations of the Ministry of Defence. The scheme will set out the appropriate measures to be implemented to that end.

"CaP" means Cable Plan.

"CFMS" means Commercial Fisheries Mitigation Strategy - the final document produced from consultation between Seagreen Wind Energy Limited and the Forth & Tay Offshore Wind Developers Group - Commercial Fisheries Working Group ("FTOWDG-CFWG").

"CMS" means Construction Method Statement.

"CoP" means Construction Programme.

"DS" means Design Statement.

"DSLP" means Development Specification and Layout Plan.

"EMP" means Environmental Management Plan.

"LMP" means Lighting and Marking Plan.

"MMMP" means Marine Mammal Monitoring Programme which is a programme to be put in place by the licensee to monitor the effects of the Seagreen Alpha Offshore Limited wind farm on marine mammals in co-ordination (through the Forth and Tay Regional Advisory Group ("FTRAG")) with other MMMPs to be developed by other Forth and Tay projects, as required by the Licensing Authority.

"NPF2" means Scotland's National Planning Framework 2.

"NPF3" means Scotland's National Planning Framework 3.

"NREAP" means UK Government's National Renewable Energy Action Plan.

"NSP" means Navigational Safety Plan.

"OMP" means Operation and Maintenance Programme.

"PEMP" means Project Environmental Monitoring Programme.

"Primary Radar Mitigation Scheme" or "Scheme" means a detailed scheme agreed with the Operator which sets out the measures to be taken to mitigate at all times the impact of the development on the PERWINNES primary radar and air traffic management operations of the Operator.

"PRMS" means Primary Radar Mitigation Scheme.

"PS" means Piling Strategy.

"RRH" means Remote Radar Head and it may refer to Air Defence Radar at RRH Buchan or to the Air Defence Radar at RRH Brizlee Wood.

"the Strategy" means "National Research and Monitoring Strategy for Diadromous Fish" and refers to a strategy that will be formulated from the Marine Scotland Science Report 05/13 – "The Scope of Research Requirements for Atlantic Salmon, Sea Trout and European Eel in the Context of Offshore Renewables" to monitor migratory fish at a strategic level.

"TTP" means Traffic and Transportation Plan

"VMP" means Vessel Management Plan.

#### Legislation

"Wild Birds Directive" means Council Directive 79/409/EEC of 2<sup>nd</sup> April 1979 on the conservation of wild birds, as amended and as codified by Directive 2009/147/EC of the European Parliament and of the Council of 30<sup>th</sup> November 2009.

"the Electricity Act" means the Electricity Act 1989 (as amended).

"Habitats Directive" means Council Directive 92/43/EEC of 21<sup>st</sup> May 1992 on the conservation of natural habitats and wild fauna and flora (as amended).

"the Habitats Regulations" means the Conservation (Natural Habitats, & c.) Regulations 1994 (as amended) and the Offshore Marine Conservation (Natural Habitats, & c.) Regulations 2007 (as amended).

"the 1990 Regulations" means the Electricity (Applications for Consent) Regulations 1990 (as amended).

"the 1994 Regulations" means the Conservation (Natural Habitats, & c.) Regulations 1994 (as amended).

"the 1999 Order" means The Scotland Act 1998 (Transfer of Functions to the Scotlish Ministers etc.) Order 1999.

"the 2000 Regulations" means the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2000 (as amended).

"the 2007 Regulations" means the Offshore Marine Conservation (Natural Habitats, & c.) Regulations 2007 (as amended).

"the 2009 Act" means Marine and Coastal Access Act 2009 (as amended).

"the 2010 Act" means Marine (Scotland) Act 2010.

"SPG" means the Fife Council's Supplementary Planning Guidance (SPG) on Wind Energy 2011 which supplements the local plan policies.

"the Statement" means The UK Marine Policy Statement 2011.

"TAYplan SDP" means the TAYplan Strategic Development Plan.

#### **ANNEX D** Validation of Appropriate Assessment

#### marine scotland



T: +44 (0)300 244 5046

E: ms.marinerenewables@gov.scot

# LICENCE/CONSENT VARIATION – VALIDATION OF APPROPRIATE ASSESSMENT

#### 1 Licence Details

<u>Licensee/Developer Name:</u> <u>Seagreen Wind Energy Limited</u>

(Company Number 06873902)

("SWEL")

Site Details: Seagreen Alpha and Seagreen Bravo

Offshore Wind Farms approximately 27

km to the east of Angus ("the

Development").

Date Existing Licence/Consent Issued: Section 36 consents issued 10 October

2014 (as subsequently varied on 28

August 2018) ("the Existing

Consents"); and

Marine licences 04676/19/0 and

04677/19/0 dated 12 December 2019; and marine licence 04678/19/0 dated 6

March 2019 (together "the Marine

Licences").

Date of Existing Appropriate Assessment ("AA"): 10 October 2014 ("the 2014 AA")

#### 2 Summary of proposed variation application:

Variation application to amend the Existing Consents and the Marine Licences in the following respects:

Increase the size of 36 of the 150 consented but not constructed Wind Turbine Generators ("WTG") with a variation in parameters to include increases in (a) the maximum rotor diameter from 167 metres ("m") to 242m, (b) the maximum blade chord width from 5.4m to 7.6m, (c) the maximum tip height from 209.7m to 285m, (d) the minimum tip height (air gap) from 29.8m to 34m and (e) the maximum hub height from 126.2m to 165m.

 Increase the weight of the steel seabed deposits associated with the Offshore Substation Platforms ("OSPs") from 13,000 tonnes to 22,560 tonnes

("the Variation Application").

The only impact of the Variation Application to ornithological features that required further assessment was collision risk during operation. Alongside the Variation Application SWEL provided an environmental appraisal report, supported by an additional collision risk modelling ("CRM") report. The CRM concluded a significant reduction in predicted collision mortalities for Northern gannet and Black-legged kittiwake when comparing between the Existing Consents and the Variation Application. The updated modelling also shows a reduction in predicted collision mortalities for European herring gull for all but one modelling scenario where one additional European herring gull was predicted to be taken.

The Variation Application does not result in any clear impact pathway to any qualifying interests of the Special Areas of Conservation considered in the 2014 AA accompanying the Existing Consents and these have therefore not been considered any further.

If consent is granted for this Variation Application, the Scottish Ministers will vary the Marine Licences in respect of the Development, in accordance with section 72(3)(d) of the Marine and Coastal Access Act 2009 to ensure consistency with the Existing Consents. MS-LOT will also consider the request by the Company to increase the weight of the steel seabed deposits associated with the OSPs within the transmission works marine licence under section 72(3)(d) of the MCAA 2009.

### 3 Summary of consultation responses – in relation to European protected sites:

NatureScot (operational name of Scottish Natural Heritage) noted that it was content that there would be no material change to predicted ornithology impacts as a result of the Variation Application.

The Royal Society for the Protection of Birds ("RSPB") Scotland raised concerns on the impact of the 114 WTG currently under construction, as well as the other 36 WTG if varied, on the overall populations of Northern gannet, Black-legged kittiwake and European herring gull in the Firth of Forth and Tay region. RSPB Scotland noted that SWEL is not building to the worst-case scenario in the Existing Consents and therefore when comparing the parameters of the WTGs currently under construction, as approved under the Development Specification and Layout Plan, with those in the Variation Application, the proposed variations result in a slightly higher estimate collision risk mortality for Northern gannet, Black-legged kittiwake and European Herring gull. However, RSPB Scotland acknowledged that, when compared with the assessment undertaken for the Existing Consents, the Variation Application would result in a lower estimated annual mortality for Northern gannet, Black-legged kittiwake and European Herring gull.

### 4 Summary of other information in relation to European protected sites (MSS responses, external reports).

MSS acknowledged that the results of the CRM Option 2 indicated that for all but one scenario presented, the Variation Application will have lower collision risk than the Existing Consents. The one exception was for European herring gull, however the results indicated that only one additional European herring gull was predicted to be taken, when compared with the original project. Therefore, MSS advised that the increased collision risk estimate for the species is acceptable at this level, and agreed with NatureScot that there would be no material change to predicted ornithological impacts from the proposed Variation Application.

### 5 Conclusion - Consideration of whether AA completed for the original decision is still valid:

No consultation responses, advice, external reports or representations have been received which would invalidate the conclusions or alter the outcome of the 2014 AA in respect of the Existing Consents.

The AA completed for the original decision is still valid in its conclusion that the proposal is not likely to have an adverse impact on the site integrity of the Buchan Ness to Collieston Coast SPA, Fowlsheugh SPA, Forth Islands SPA and St Abb's Head to Fast Castle SPA, either alone or in combination with other projects providing the mitigation measures previously secured remain in place.

#### Outer Firth of Forth and St Andrews Bay Complex SPA

At the time the Existing Consents were granted in 2014 the Outer Firth of Forth and St Andrews Bay Complex SPA was a draft SPA, and was therefore not considered in the AA for the Existing Consents. The Outer Firth of Forth and St Andrews Bay Complex SPA was designated in December 2020 and therefore requires to be considered in relation to the Variation Application.

The Outer Firth of Forth and St Andrews Bay Complex SPA was considered in an AA completed by the Scottish Ministers in relation to the Inch Cape Offshore Windfarm ("ICOL") in March 2019. At this time the SPA was a proposed SPA but in accordance with Scottish Government policy it was considered and assessed as if it was designated. The ICOL AA included a complete assessment of the Outer Firth of Forth and St Andrews Bay Complex SPA in relation to the Northern gannet, Black-legged kittiwake, European herring gull, Atlantic puffin, Common Guillemot and razorbill qualifying features, for ICOL in-combination with other projects including the Existing Consents. This assessment concluded that there would be no adverse effect on the integrity of the Outer Firth of Forth and St Andrews Bay Complex SPA. As the CRM for the Variation Application has demonstrated less impact than the Existing Consents, the conclusions from the ICOL AA for the Outer Firth of

Forth and St Andrews Bay Complex SPA can be relied upon in relation to Variation Application.

Since the ICOL AA was completed the conservation objectives for the Outer Firth of Forth and St Andrews Bay Complex SPA have changed and are detailed below:

- 1. To ensure that the qualifying features of the Outer Firth of Forth and St Andrews Bay Complex SPA are in favourable condition and make an appropriate contribution to achieving Favourable Conservation Status.
- 2. To ensure that the integrity of the Outer Firth of Forth and St Andrews Bay Complex SPA is restored in the context of environmental changes by meeting objectives 2a, 2b and 2c for each qualifying feature:
- 2a The populations of the qualifying features are viable components of the Outer Firth of Forth and St Andrews Bay Complex SPA.
- 2b. The distribution of the qualifying features is maintained throughout the site by avoiding significant disturbance of the species.
- 2c. The supporting habitats and processes relevant to qualifying features and their prey resources are maintained, or where appropriate restored, at the Outer Firth of Forth and St Andrews Bay Complex SPA.

The <u>Conservation and Management Advice</u> published by NatureScot provides further advice on the interpretation of these conservation objectives.

Despite the change in conservation objectives NatureScot raised no concerns in relation to impacts on the Outer Firth of Forth and St Andrews Bay Complex SPA in its consultation response to the Variation Application. In addition NatureScot was consulted on a draft of this AA validation and advised that it agreed with the conclusions reached.

Therefore the Scottish Ministers conclude that if the Variation Application is granted, there will not be an adverse effect on the site integrity of the Outer Firth of Forth and St Andrews Bay Complex SPA from the Development incombination with other plans and projects.

The proposed Berwick Bank Offshore Windfarm, for which an application is expected to be submitted in December 2022 is likely to have in-combination effects with the Development. Any AA completed in respect of the Berwick Bank Offshore Windfarm will be required to fully consider the in-combination effects with the Development before any decision is made. In addition since the Existing Consents were granted, the Scotwind lease option agreements have been awarded, some of the lease areas on the east coast of Scotland may have in-combination effects with the Development. An iterative plan review of the Sectoral Marine Plan for offshore wind is being undertaken and is due to complete in 2023. The AA for this will fully consider any in-combination effects with the Development.

### Annex D Validation of Appropriate Assessment

Name	Assessor or Approver	Date
Rebecca Bamlett	Assessor	07/09/2022
Kerry Bell	Approver	16/09/2022