

Agenda Item	7.10
Report No	PLN/079/18

THE HIGHLAND COUNCIL

Committee: North Planning Applications Committee
Date: 27 November 2018
Report Title: 18/03309/S36: Moray Offshore Windfarm (West) Limited
Report By: Report by Area Planning Manager - North

Purpose/Executive Summary

Description: Offshore windfarm comprising installation of a maximum of 85 turbines with a maximum height to tip of 285m and rotor diameter of 250m.
Ward: 03 – Wick and East Caithness
Development category: Major
Reason referred to Committee: Section 36 application

Recommendation

Members are asked to agree the recommendation to **Raise an objection** as set out in section 12 of the report.

1. INTRODUCTION

- 1.1 The Council has been consulted by the Scottish Government (Marine Scotland) on an application submitted under Section 36 of the Electricity Act 1989 and Part 4 of the Marine and Coastal Access Act 2009 to construct and operate up to 85 wind turbine generated and associated substructures and seabed foundations, inter-array cables in the Outer Moray Firth.
- 1.2 The Council is not the determining authority but is an important consultee nonetheless. Unlike onshore development, were the Council to decide not to support the development, there would be no automatic Public Local Inquiry.
- 1.3 In January 2010, Moray Offshore Renewables Limited (MORL) was awarded a Zone Development Agreement (ZDA) by The Crown Estate for the development of an offshore wind farm within the Moray Firth Zone; one of two Zones identified in Scotland as part of the Crown Estate Round 3 offshore wind leasing programme. Detailed analysis of the Zone identified two separate development areas; the Eastern Development Area (EDA) and the Western Development Area (WDA). A decision was taken by the developer to progress the EDA first, as three separate wind farms, due to the presence of a greater number of constraints within the WDA. Applications for these were submitted in 2012. This scheme, now known as Moray East, was granted Section 36 consent and associated Marine Licences in 2014. A revision to this earlier consent was granted in 2018.
- 1.4 A grid connection agreement that enables a design output capacity for the EDA area of 1,500MW (1.5GW) has been secured. The Moray East site is now being developed as a single offshore windfarm. Support funding is in place; however only for 950MW. To achieve additional capacity therefore attention has now been turned to developing the WDA, which is now less constrained with the removal of the MoD practice area and the impending decommissioning of the Beatrice Oil Field and its associated infrastructure. The WDA area is now referred to as Moray West.
- 1.5 The developments proposed share similar characteristics, and therefore some of the environmental effects, to applications for onshore wind development and therefore this report will give consideration to those effects, positive and negative, in so far as they relate to the interests of the Council. This in the main relates to those effects on the human environment as opposed to the marine environment. Marine Scotland is best placed to consider effects on the latter.

2.0 PROPOSAL

- 2.1 The proposed development comprises one windfarm of up to 85 wind turbines and associated infrastructure and two off-shore substation platforms and associated interconnector cables that will be located within the existing export cable corridor that is used to transmit electricity generated to shore. The turbines are to be arranged in a grid layout pattern with a minimum of a 1km gap between them.

2.2 The application is supported by an Environmental Impact Assessment Report (EIA Report). Given many of the uncertainties around this type of development within what is a challenging marine environment, as well as the long lead time in which the project is likely to commence on site, the exact layout, design, number, height and support structure requirements for this development has yet to be determined. The EIA Report is based on a principle known as the ‘Design Envelope’; whereby the development for which consent is sought comprises a range of design parameters that are considered to be the ‘realistic worst case’ scenario for any given development option. This approach allows for flexibility in the design of the development while ensuring that all potentially significant effects (positive or adverse) are assessed within the EIA process and reported on.

2.3 The final number of turbines within the scheme as a whole will be dependent upon a range of factors including issues such as ground conditions and turbine size. For example, the larger the turbine the fewer the number since each turbine will require a greater swept path. The parameters for the scheme collectively range from 62 wind turbines at a height of 250m to 85 wind turbines at 164m. The capacity of individual turbines is unspecified. The reason for this approach is to allow the project to take advantage of advances in technology as the build programme progresses.

Table 1: Turbine Parameters				
Parameter	Model 1	Model 2	Model 3	Model 4
Maximum number	85	85	72	62
Maximum blade tip	199	230	265	285
Maximum rotor blade	164	195	230	250

2.4 The turbines will be supported by substructures and foundations which hold them in place on the seabed, four types are being considered for this windfarm which include:

- **Piled monopole foundations** – piles knocked or drilled into the seabed
- **Pin-pile jacket foundations** – steel lattice structure anchored to the sea bed with 3 – 4 small pin piles
- **Suction caisson foundations** supporting a monopole or jacket substructure – bucket shaped structure which penetrates the seabed, water is then pumped out. The suction caissons can be attached to the legs of steel lattice jacket substructures, or the bottom of a monopole substructure and;
- **Gravity base foundations** – concrete structures which sit on the seabed to create a stable foundation to support the tower(s)

2.5 With the turbines secured to the seabed a network of electricity cables (known as the inter-array cables), will connect each of the turbines to one of up to two offshore substation platforms (OSPs). These structures will be approximately 70m above water line and 100m in diameter.

- 2.6 Construction of the proposed wind farm and the transmission infrastructure is expected to take three years from commencement of the transmission infrastructure works to final commissioning of the wind farms. Offshore construction commencement is scheduled to begin early 2022 with the first electricity generation proposed for late 2024.
- 2.7 The development is expected to be operational for as long as the lease is in place. There is a legal requirement under the Energy Act 2004 for the site to be decommissioned at the end of its working life. A statement on decommissioning the windfarm has been included within the EIA Report but it is anticipated that this will be revisited, and therefore subject to further consideration; it is noted from the EIA Report that a decommissioning plan and programme would require to be submitted prior to the construction of the development.
- 2.8 Proposed onshore service infrastructure locations are located on the Aberdeenshire coast, based on these proposals, any onshore applications will not therefore be handled by The Highland Council.

3. SITE DESCRIPTION

- 3.1 The site covers an area of approx. 225km² on the Smith Bank in the Outer Moray Firth, located approx. 22.5km (12 nm) from the Caithness coastline.
- 3.2 The development is located adjacent to the existing consented Moray East offshore wind farm with the consented Beatrice offshore wind farm located immediately adjacent beyond this to the north west. Beatrice is currently under construction with in excess of 20 of the 84 consented turbines having been installed at the time of writing. Overall Beatrice will have an installed capacity of 588MW.
- 3.3 There are no natural heritage designations on the site. However, there are a number of important designations located along the Highland coastline. These designations, and notified interests, include:
- Inner Moray Firth SPA – bottlenose dolphin, sandbank
 - Dornoch Firth and Morrich More SPA – common seal, sandbank, dune habitat and species
 - East Caithness Cliffs SPA, SSSI – seabirds incl. herring gull, guillemot, cormorant, shag, peregrine, kittiwake
 - North Caithness Cliffs SPA, SSSI (including Dunnet Head RSPB Reserve) – peregrine, puffin, fulmar kittiwake, guillemot
 - Berriedale and Langwell Waters SAC – Atlantic salmon
 - River Oykel SAC – Atlantic salmon, freshwater pearl mussel
 - River Thurso SAC – Atlantic salmon
 - River Evelix – Freshwater pearl mussel
 - River Moriston – Atlantic salmon, freshwater pearl mussel

- 3.4 From a landscape/seascape perspective, the development has a bearing on the National Seascape Unit of East Caithness and Sutherland as set out in the SNH Seascapes Report (SNH, 2005). This seascape unit includes Seascape Character Types (SCT) 1 – 3; Remote High Cliffs, Rocky Coastline with Open Sea Views and Deposition Coastline. SCT 2 – Rocky Coastline with Open Sea Views is the predominant type.
- 3.5 The key characteristics of the East Caithness and Sutherland unit are the predominantly low rocky coastline (with occasional low cliffs) and a narrow coastal shelf constrained by inland hills with direct sea views. The sea is open and expansive with settlement sparse, generally within small established settlements of strong historic/crofting pattern. This pattern is clearly evident within settlements such as Latheron, Clyth, Ulbster, Lybster, Sarclet and Keiss. The sensitivity of this seascape to change is regarded as low – medium with oil rigs and offshore wind turbines identified as an influence already on this unit.
- 3.6 There is one Special Landscape Area within the study area; Flow Country and Berriedale Coast (16.5km from the western extent of the proposed wind farm site).
- 3.7 From a cultural heritage perspective there are a number of important archaeological sites on the East Caithness coast of relevance to the proposed development. These include the Scheduled Ancient monuments of:

- Borrowston Broch
- Garrywhin Fort
- Tulloch Broch and field system
- Wag of Forse settlement
- Forse House settlement
- Watenan Broch
- Watenan Fort
- Dunbeath Inver Fort
- Latheronwheel promontory fort
- Cairn of Get
- The Hill o' Many Stanes

And, the following listed buildings:

- Cove Sea Skerries Lighthouse
- Dunbeath Castle
- Dunrobin Castle
- The Whaligoe Steps
- Dunbeath Portomin Harbour
- Lybster Harbour

- 3.8 There are a number of onshore wind energy schemes situated near to the East Caithness coast that are relevant to this application from the perspective of cumulative impact. These include:

- Buolfreich
- Causeymire
- Flex Hill
- Achairn
- Wathegar
- Wathegar 2
- Rumster
- Camster
- Burn of Whilk
- Stroupster
- Halsary
- Bad a Cheo
- Golticlay

4. PLANNING HISTORY

4.1	27.03.2012	12/00397/FUL - for the erection of a 50m onshore meteorological mast, to gather data for the proposed Moray Offshore Renewables Ltd (MORL) wind farms in the Outer Moray Firth, on land south-west of Lybster.	Planning permission granted
	19.03.2014	12/01659/S36 – Construction and operation of an offshore wind farm – Beatrice	Consent granted by Ministers
	19.03.2014	12/03359/S36 - Construction and operation of an offshore generating station (McColl).	Consent granted by Ministers
	19.03.2014	12/03360/S36 - Construction and operation of an offshore generating station (Telford).	Consent granted by Ministers
	19.03.2014	12/03361/S36 - Construction and operation of an offshore generating station (Stevenson).	Consent granted by Ministers
	19.03.2018	17/05856/S36 – Variation of consent for Moray East.	Consent granted by Ministers

5. PUBLIC PARTICIPATION

- 5.1 Advertised: Public Notice published 07/07/2018 and 06/09/2018 (HRA) in Edinburgh Gazette
- 5.2 Two representations against the proposal were received by the Council.
- 5.3 Material considerations raised are summarised as follows:
- a) Work boats travelling to existing development sites impacting on fishing gear causing financial loss to fishermen
 - b) There is no set transit route for vessels accessing development sites
 - c) Comments submitted around a lack of communication from the developer with fishermen relating to the proposal.
- 5.4 All letters of representation are available for inspection via the Council's eplanning portal which can be accessed through the internet www.wam.highland.gov.uk/wam.

6. CONSULTATIONS

Consultations undertaken by The Highland Council

- 6.1 **Sinclair Bay Community Council:** No response received.

- 6.2 **Wick Community Council:** No response received.
- 6.3 **Tannich and District Community Council:** No response received.
- 6.4 **Latheron and Lybster Community Council:** No response received.
- 6.5 **Berriedale and District Community Council:** No objection. The community council agreed to support the development but with reservations as to why community benefit was not offered given visual impact at night time.
- 6.6 **Helmsdale Community Council:** No response received.
- 6.7 **Brora Community Council:** No response received.
- 6.8 **Golspie Community Council:** No response received.
- 6.9 **Dornoch Community Council:** No response received.
- 6.10 **Tain Community Council:** No response received.
- 6.11 **Inver Community Council:** No response received.
- 6.12 **Tarbat Community Council:** No response received.
- 6.13 **Highland Council Coastal Planning Officer:** As the application site is beyond 12 nautical miles from the coast we have no jurisdiction and there is no formal regional marine planning arrangement for the area. As the key aspects of the landscape/seascape will be dealt with by the Landscape Officer no comments on this aspect of the development. While SNH/MSS are the lead agencies for biodiversity impacts, under the Council's biodiversity duty it should be noted that the proposal will have a significant impact on cetaceans, benthic species, priority marine features and birds during construction and operation of the windfarm due to noise, disturbance and collision. All biodiversity requirements should be concluded prior to determining any licence.
- 6.14 **Transport Planning:** It is not clear from the applicants submission how the development will be maintained and serviced when operational, should the construction and, or operational phases of the development be likely to impact on Highland Council transport infrastructure appropriate conditions should be attached to any permission granted.

It is recommended that conditions shall ensure that, prior to any works commencing, the detailed transport impacts of the development are clearly identified by the developer for the consideration and agreement of the Council. Construction and Traffic Management Plans shall be established by the developer in consultation and agreement with the Roads Authority and any other relevant stakeholders. Such plans shall include details of appropriate mitigation measures and steps to ensure that development traffic adheres to agreed routes.

Any works required within or alongside Council maintained roads will require the prior written approval of the Roads Authority.

- 6.15 **Highland and Islands Airports Ltd:** The development falls inside the safeguarded areas for Inverness Airport. The turbines will affect Wick Airport's Approach procedures both conventional and GNSS, the extent of the affects have been previously discussed with the developer and HIAL would work with the developer towards a resolution. However, HIAL would object to any proposal which impacts on the Instrument Flight Procedures or Navigation Aids unless a solution can be found to mitigate the effect on Inverness Airport's Operation.

Consultations undertaken by Scottish Government (Marine Scotland)

A summary of the relevant consultation responses is identified in respect of issues which fall within the remit of the Highland Council Local Authority Area.

- 6.16 **Historic Environment Scotland:** No objection. Content that no marine assets within the study area which are subject to statutory protection. Content that proposed mitigation within the archaeology and cultural heritage chapter of the EIA Report should be sufficient to deal with any unexpected discoveries on site. Also content that there will not be any direct physical impacts on nationally important environment assets on land.
- 6.17 **Ministry of Defence** object on the basis of unacceptable interference to ATC radar used by RAF Lossiemouth. If issues outlined are resolved the MOD will request that the turbines are fitted with aviation lighting.
- 6.18 **Joint Radio Company:** No objection. Comment on potential for the development to impact on radio systems operated by utility companies. If proposals change may require further consultation.
- 6.19 **Maritime and Coastguard Agency:** Concern raised regarding the cumulative impact of all developments and the potential different layouts which could have an impact on the safety of navigation and search and rescue capabilities. Final turbine layout design must be discussed with the MCA at the earliest opportunity. Liaison with the local MCA Marine Office to ensure that all contractors have the required certification for vessel operations.
- 6.20 **NATS:** A technical impact is anticipated which has been deemed unacceptable as the development is likely to cause false primary plots to be generated.
- 6.21 **Northern Lighthouse Board:** No objection. Raise the issue that a Navigational Safety Plan and Lighting and Marking Plan will be required.
- 6.22 **RSPB:** Object due to the potential adverse effect on Black-legged Kittiwake found at East Caithness Cliffs SPA and North Caithness Cliffs SPA. The accuracy in the EIA in respect of assessment birds including the Great Black Backed Gull, Gannet, Herring gull and the auks is questioned. The lack of a full-two year dedicated survey is not considered acceptable.

The growth of the sector, and the growth of its impact on seabirds, is happening at a rate that far outpaces existing and potential future reductions in impact that can be realised by better science and new turbine designs. The predicted in-combination impacts are of such a large scale that this project would be clearly unacceptable.

- 6.23 **Scottish Fishermen's Federation:** Object. Consider that the development is contrary to Scotland's National Marine Plan. Consider that the socio-economic impacts of potential loss and impact on fishing grounds have not been adequately considered as each vessel is different and generally family run. The SFF would expect the developers to host the CFWG and use this in a meaningful way to ensure that development impact on fishing is limited. The need for a real personal contact is necessary to avoid misunderstandings.
- 6.24 **SEPA:** No objection subject to attaching a condition to any consent which secures best practice decommissioning at that time.
- 6.25 **SNH:** Object to the proposal. It is considered the development will have an adverse effect on the site integrity for kittiwake as a qualifying interest of the East and North Caithness Cliffs SPAs in combination with the Moray East and Beatrice offshore windfarms with the key impact being collision risk.
- 6.26 **Marine Scotland Science:**

31.08.2018

Cod - Limited consideration of the effects on any displacement of cod through noise emissions. It is noted that to minimise impacts that piling between February – March out with the spawning period would be welcomed.

Sandeels - it is noted that consideration should be given to micro siting of gravity bases to avoid areas of suitable habitat.

Commercial Fisheries – Agree with proposed mitigation identified, a meeting with fishing representatives will be required. Detail on the short term loss of fishing grounds and settlements impacting vessels and interfering with fishing activities will require to be further considered in a CFMS. There is no reference to a resolution mechanism in cases where transiting construction vessels cause damage to deployed strings of creels – this should also be covered in a CFMS. Post construction access to the site by fishing vessels requires to be covered.

Benthic Ecology – Concern over the use of gravity bases and route of export cable, recommend HDD over open cut trenching to minimise impacts on the intertidal and benthic environment.

Fish and shellfish – Support the conclusions of the screening report and that the studies which the developer is undertaking is helping with gaps in knowledge, particularly with regard to the spatial and temporal aspects of salmon smolt movement.

Aquaculture – Note that there are 5 active shellfish sites in the Moray Firth and 3 shellfish sites permitted which do not yet have authorisation to put anything in the water. It is not expected that any land based freshwater sites will be affected by the development.

05.09.2018

Further commented following SNH and RSPB consultation responses this includes an assessment of the information submitted with regard to collision risk and the studies and calculations undertaken.

Great black-back gull – Support the view of SNH that there is insufficient information to assess the potential impact on the species. Based on the information submitted it is not considered the data is sufficiently representative to screen out the species within the East Caithness Cliffs SPA.

Fulmar – Further explanation of the different approach used in assessing effects on Fulmar as other species would be useful.

Marine Mammals – Confirm that further work required with regard to conversion factor used in underwater noise modelling.

- 6.27 **Marine Analytical Unit** commented that the socio-economic impact assessment failed to provide evidence of how socio-economic indicators identified will change as a result of the development. There is limited evidence to understand the social impacts in terms of impact on the population in the local study area, the local labour market and demand for services.

No detail has been provided on the expected expenditure on the development and assumptions for determining number of jobs, it is therefore difficult to test the credibility of figures provided in the report.

Conclude that evidence is too limited to form a view of the socio-economic impact of the development including whether there are any actions which need to be taken to maximise the positive impacts, or to mitigate the negative impacts.

7. DEVELOPMENT PLAN POLICY

The following policies are relevant to the assessment of the application:

Highland Wide Local Development Plan 2012

- 7.1 28 - Sustainable Development
49 - Coastal Development
57 - Natural, Built & Cultural Heritage
58 - Protected Species
59 - Other important Species
67 - Renewable Energy Developments
69 - Electricity Transmission Infrastructure

8. OTHER RELEVANT POLICY

Highland Renewable Energy Strategy (HRES) (2006)

- 8.1 HRES recognises the potential of Offshore Wind, predicting that ‘technology should be proven by 2010 with rapid growth thereafter.’ It sets out installed capacity targets of 200MW by 2015, 1,000MW by 2020 and 1,975MW by 2050. It also identifies the Smith Bank as a preferred development area.

Scottish Government Planning Policy and Guidance

National Planning Framework 3

- 8.2 NPF 3 provides a context for establishing Scotland as a leading location for the development of renewable energy technology and an energy exporter over the long term. It encourages a mix of technologies and recognises the contribution of offshore wind including the two existing consented wind farms in the Outer Moray Firth.

Scotland’s National Marine Plan (2015)

- 8.3 The Plan sets out strategic policies for the sustainable development of Scotland’s marine resources out to 200 miles off-shore. The plan sets out objectives and an approach to managing the sustainable development of human impact on Scotland’s seas. The plan identifies a number of marine sectors which includes off-shore and marine renewable energy. This recognises the importance of off shore wind energy as contributing to renewables energy targets, decarbonisation targets and the economic benefits. It also recognises the potential for impacts to other marine sectors such as fisheries, aquaculture, shipping and defence. The Outer Moray Firth is identified as an offshore wind zone.

Scottish Planning Policy

- 8.4 SPP recognises that support for renewable energy projects and the need to protect and enhance Scotland’s natural and historic environment must be regarded as compatible goals. The planning system has a significant role in securing appropriate protection to the natural and historic environment without unreasonably restricting the potential for renewable energy. National policies highlight potential areas of conflict, but also advise that detrimental effects can often be mitigated and or effective planning conditions can be used to overcome potential objections to development.
- 8.5 Criteria outlined within SPP for the assessment of applications include landscape and visual impact; effects on heritage and historic environment; contribution to renewable energy targets; effect on the local and national economy and tourism and recreation interests; benefits and dis-benefits to communities; aviation and telecommunications; noise and shadow flicker; and cumulative impact.

Scottish Energy Strategy: The future of energy in Scotland (2017)

- 8.6 This document sets out Scotland's Energy Strategy until 2050 which sets targets such as 50% of Scotland's heat, transport and electricity consumption to be supplied from renewable resources. The strategy identifies off-shore wind as being integral to meeting these targets and the subsequent industrial and economic potential benefits attached to offshore wind development are recognised. This is further emphasised in the objectives of the National Marine Plan (2015).

9. ASSESSMENT

- 9.1 This is not a planning application. However, the proposals share some similar characteristics to on-shore wind energy projects and will have an effect on the environment of Highland, from both a natural heritage and human perspective. This is particularly the case for the latter. It is therefore appropriate that any determination be made on the planning merits in so far as they relate to the Council's interests. The construction of the neighbouring Beatrice off-shore windfarm is currently underway. This gives a good indication of the scale of turbines and visual impact that the development may have which is useful in considering the proposals cumulatively along with the consented Moray East development. The presence of the Beatrice Demonstrator Turbines is helpful in consideration of the linear extent of development proposed.

Determining Issues

- 9.2 This means that the application requires to be assessed against all policies of the Development Plan relevant to the application, all national and local policy guidance and all other material considerations relevant to the application.

Planning Considerations

- 9.3 The key considerations in this case are:
- a) Compliance with the development plan and other planning policy
 - b) Habitat and Species
 - c) Commercial fisheries and fishing interests
 - d) Aeronautical and maritime safety
 - e) Telecommunications/TV
 - f) Seascape, landscape and visual effects, taking into account residential amenity
 - g) Socio-economics

Development plan/other planning policy

- 9.4 Scottish Government Policy is strongly supportive of renewable energy development. This reflects the international desire to be more carbon neutral as well as ensuring secure, reliable and affordable energy supplies and to capitalise on the investment potential for the Scottish supply chain.

- 9.5 The Development Plan recognises the potential for renewable energy development in Highland. While the development plan does not specifically reference offshore wind energy within policy, it is considered that the key policy relating to renewable energy, Policy 67 (Renewable Energy Developments), of The Highland wide Local Development Plan would apply. This gives general support to renewable energy development highlighting the need to take into consideration the contribution to meeting energy targets and any positive or negative effects on the local/national economy. Various safeguards are built into the policy wording reflecting the need to balance this support with the impact on matters such as habitats and species, landscape and visual impact, residential amenity, telecommunications, navigation to name a few. Proposals need to demonstrate that they are not significantly detrimental to such concerns.
- 9.6 In addition, Policies 28 (Sustainable Design), 57 (Cultural and Built Heritage), 58 (Protected Species) and 61 (Landscape) of the Highland wide Local Development Plan are all relevant and require to be given due consideration.
- 9.7 Offshore renewable energy potential is identified within the Highland Renewable Energy Strategy (HRES), with an area around the Smith Bank highlighted as a preferred development area. HRES identified a potential offshore capacity for Highland of 1,000MW by 2020 and 1,975MW by 2050. Beatrice development alone would provide 588MW by 2019. With 950MW of the 1,116MW consented for Moray East likely to be built out, a total 1,538MW would be deployed by 2022 in the Outer Moray Firth alone. Although not specified within the submission Moray West would increase this, based on a likely Model 2 or 3 turbine and an assumption of coming within the 7-10MW each range, to 2,388MW by 2024.
- 9.8 The Development Plan supports the broad principle of renewable energy development in this location, with HRES given specific preference to the location for this type of technology. Providing that the impacts of the development are not considered to be **significantly detrimental**, particularly in relation to the natural and human environment of the Highland area, the proposals would comply with the Development Plan.

Habitats and Species

- 9.9 It is considered that Marine Scotland is more appropriately placed to come to a view on the acceptability or otherwise of effects on the marine environment and ecology generally albeit the effects of the development may extend to terrestrial designations that are within the Council area. Having said that, it will ultimately be a requirement of Scottish Ministers in coming to a decision on the scheme to undertake an Appropriate Assessment, taking into account the advice of SNH and RSPB of the effects on the qualifying interest of any international designations such as SAC's or SPA's.
- 9.10 SNH has objected to the development on the basis that it considers that the development is likely to have an adverse effect on the site integrity for kittiwake as a qualifying interest of the East and North Caithness Cliffs SPAs in combination

with the Moray East and Beatrice offshore windfarms; the key impact being collision risk. This is further emphasised by RSPB, which objects on the same grounds.

- 9.11 With regard to off-shore ecology, Marine Scotland has its own internal consultee; Marine Scotland Science. It supports SNHs current view that there is insufficient information to assess the potential impact on East Caithness Cliffs SPA and its qualifying interests. It was concluded that the datasets provided within the EIA Report are unlikely to be sufficient representative to justify screening out of Great Black Gull. Marine Scotland Science also commented on marine mammals, fish ecology and benthic ecology but as indicated above it will be for Marine Scotland to come to a view on the acceptability or otherwise of the effects within the marine environment.

Commercial Fisheries and Fishing Interests

- 9.12 Since the development will effectively restrict access to fishing grounds, both during construction and operation, the applicant has undertaken a study of the effect of the proposal on commercial fishing interests. As commercial fishing within the Outer Moray Firth does form part of the Highland economy, it could have an effect on the Highland community. There are commercial fishing concerns operating from Invergordon, Wick and Scrabster with smaller scale lobster/crab creel interests at most harbours along the Caithness and Sutherland coast.
- 9.13 The EIA Report identifies that fisherman can potentially be affected by the development by way of loss of, or damage to fishing gear, by interactions with construction/operational vessels. Within the application area it is noted that there is a local scallop fleet, white fish and squid trawlers accessing the area. The report concludes that the effects on commercial fisheries were not significant due to the localised nature of such fisheries. It was also noted that 36 months of restrictions to fishing grounds was not significant. Marine Scotland note that it will be necessary to submit a Commercial Fisheries Mitigation Strategy and that part of this condition should involve consultation with the fishing industry as all construction schedules from surrounding development becomes available over time.
- 9.14 The Scottish Fishermen's Federation object on behalf of vessels in its membership stating that it fails to comply with Scotland's National Marine Plan. It is noted at the end of the consultation that it is hoped Marine Scotland should ensure that sustainability and co-existence should be translated into meaningful compliance measures. This may relate back to the relationship between fishermen and developers in obtaining compensation where equipment has been impacted due to existing developments ongoing within the firth. The difficulties in making contact with the relevant people in which to raise concerns with regard to the Beatrice development has been raised in representations made to Highland Council. While the Council has no control over this, it is considered appropriate, as suggested by Marine Scotland's internal consultees, that local fishermen should be part of the Commercial Fisheries Mitigation Strategy prior to any mitigation being agreed.

Aeronautical and Maritime Safety

- 9.15 The proposed wind farm has potential to affect both civil and military aviation interests. The developments lie within an area of uncontrolled airspace where there is no mandatory requirement to be in communication with or receive radar service from any air traffic control (below 19,500ft). Pilots are ultimately responsible for seeing and avoiding obstacles. Controlled airspace is established above this point. Having said that, both military and civilian navigational services exist for aircraft transiting the area regardless of height.
- 9.16 National Air Traffic Services outline that a technical impact is anticipated which has been deemed unacceptable as the development is likely to cause false primary plots to be generated.
- 9.17 Highlands and Islands Airports Limited (HIAL) would object to any proposal which impacts on the Instrument Flight Procedures or Navigation Aids unless a solution can be found to mitigate the effect on Inverness Airport's Operation.
- 9.18 From a military perspective, MOD object to the proposal since there is potential for interference with its air traffic control radar at RAF Lossiemouth.
- 9.19 Despite the applicant offering mitigation to overcome the issues around radar and instrument approach procedure matters, there remains some uncertainty regarding aircraft navigational safety with the developer requiring entering into further consultation with the interested consultees prior to the turbines being operational.
- 9.20 It should be noted that respondents with regard to military and civil aviation have indicated that aviation lighting will require to be attached to turbines. A significant number of turbines will be permanently lit. Only once the scheme design has been finalised will exact lighting requirements become known.
- 9.21 The Maritime and Coastguard Agency has raised concern regarding the cumulative impact of all developments and the potential different layouts which could have an impact on the safety of navigation and search and rescue capabilities. The Northern Lighthouse Board (NLB) identifies marking and lighting requirements. Every turbine tower is likely to have its base painted yellow and permanent flashing lights placed on peripheral and intermediate structures. Again only once the scheme design has been finalised will exact lighting requirements become known.

Telecommunications/TV

- 9.22 No issues have been raised with regard to possible conflict with telecommunications installations. It may be possible for the development to affect non-satellite digital television reception. However, suitable mitigation could be put in place for those affected.

Seascape, Landscape and Visual Impact

- 9.23 The applicant has undertaken a Seascape, Landscape and Visual Impact Assessment (SLVIA) to determine the likely significant effects of the proposed windfarm and transmission infrastructure, on its own and cumulatively with neighbouring offshore development. This assessment is based on a 'worst case' of which there are four scenarios.
- 85 number, 230m height to tip (Model 2)
 - 72 number, 265m in height to tip (Model 3)
 - 41 number, 285m in height to tip (Model 4a)
 - 62 number, at 285m height to tip (Model 4f)
- 9.24 The applicant has undertaken an assessment of the visual effects from a number of viewpoints, 16 of which are within Highland. The viewpoints were chosen to be representative of a number of receptors and took into consideration residential areas, transport routes, historic environment features and recreational areas.
- 9.25 In the viewpoint assessment undertaken, significant visual impacts were identified at ten viewpoints between Wick and Brora. These viewpoints include Wick (VP3), Sarclet (VP4), Lybster (VP7), Dunbeath (VP9a), Navidale (VP12) and Brora (VP13a).
- 9.26 In addition to assessment of viewpoints, the SLVIA covers a range of impacts on seascape, landscape and visual receptors along the eastern coast of Caithness, Sutherland and Easter Ross. Within this area there are important key characteristics of the interaction between visual receptors, the sea and landscapes which increase receptor sensitivity and which are not given adequate weight within the assessment and designed mitigation.
- 9.27 These characteristics can be summarised as:
- Access to open sea views
 - Access to views across the Moray Firth to the north coast of Moray
 - Framed 'slot' views from incised valleys at Dunbeath and Berriedale.
- 9.28 While the majority of coastal viewpoints have been assessed as receiving significant adverse impacts, the loss of these particular qualities is not highlighted. Assessment of magnitude of change is focused on elements such as horizontal angle of view occupied by the development, but does not relate that to the extent of sea horizon to open sea which is available to the view. As such, statements of 'affected angle of view' do not reflect useful information about the effect on the receptor. This is contrary to the approach of the SNH Commissioned Report No. 103 'An assessment of the sensitivity and capacity of the Scottish seascape in relation to windfarms' which specifically identifies that 'the amount of horizon the development occupies will be determined by distance from shore and also by how much horizon can be seen in that view.' Making clear that occupation of the available horizon is the significant element rather than just the included angle. This is made clearer in relation to slot views such as those at Dunbeath where the sea

horizon is bounded by rising slopes. The SNH report states; 'Turbines conflicting with slot views. Where the horizontal extent of the sea view is limited turbines may dominate horizon line.'

- 9.29 The SLVIA also fails to consider adequately the transition between sea horizon views and views to the Moray coast over the Firth. This transition from inner to outer firth is a characteristic of the experience of traveling on coastal roads in this area and of views, particularly more elevated views where settlements rise up slopes and gain a different perspective from the transport corridor view.
- 9.30 The importance of open and panoramic sea views is recognised within the Highland Council Assessment of Highland Special Landscape Areas, which describe the Key and Special Qualities of areas which are deemed to be 'at least regionally important for scenic quality'. The citations for two SLAs make specific reference:
- 06. The Flow Country and Berriedale Coast, and
 - 09. Loch Fleet, Loch Brora and Glen Loth
- 9.31 SNH Landscape Character Assessments for coastal landscapes within the Zone of Theoretical Visibility also draw attention to the importance of the relationship between the land, sea and sky, particularly in relation to:
- Coastal strip, and
 - Long Beaches, Dunes and Links
- 9.32 In not considering these elements sufficiently in the assessment, they have not been addressed by design mitigation, resulting in views where slot views are 'closed off' with turbines occupying the available horizon, and views where no open sea horizon is available because the development overlaps the cross-firth views to Moray.
- 9.33 Although there is capacity for development on the site, the development as currently proposed is not acceptable. The westward extent of the development should be limited to ensure that visual receptors may still appreciate view to open sea horizons that are not entirely contained by turbines and clear horizon should be maintained between the westward extent of development and the eastern extent of visibility of the Moray coast. It is suggested that in broad terms this equates to excluding development west of a line drawn between Lybster on the Caithness coast and Portknockie on the Moray coast. This line is essentially where the existing Beatrice Demonstrator turbines are.
- 9.34 Of all the assessed scenarios, the preference in terms of scale would be the Model 2 turbine. Any larger a turbine may add further complication in relation to perception of scale when considered in relation to the existing consented development.

Socio-Economics

- 9.35 The EIA Report gives consideration to the socio-economic impact of the Moray West development but understandably given the scale of the proposal, the study area considers it across four local authority areas of Highland, Moray, Aberdeenshire and the City of Aberdeen, rather than focussing on Highland per se.
- 9.36 Details on the level of job opportunities and associated economic activity related to procurement, construction, operation, and decommissioning of the project that the development could generate is provided, albeit the detail limited. In the construction phase, the base case value (i.e. assuming the current supply chain) for the wind farm and infrastructure as a whole in terms of Gross Value Added (GVA) for Scotland is assessed as being in the region of between £50m and £180m or 0.1%. Of this the study area is likely to benefit to the tune of between £10m and £50m shared between Aberdeen, Aberdeenshire, Moray and Highland. As with employment, GVA concentrated in smaller areas where there is port activity.
- 9.37 The EIA Report recognises the existing local renewable energy supply chain. This supply chain has a high degree of expertise in the energy sector, not least because of skill sets developed in the Oil and Gas and nuclear industries. There would seem scope for the Highlands to significantly increase its share of the construction element of the development.
- 9.38 Both Nigg and Wick have benefited directly from the Beatrice development, both during construction and with Wick identified as the key operation and maintenance (O&M) base long term high value jobs have been created. There has been no commitment from Moray West as yet on which ports might be used for its construction and O&M (that could provide for between 20 – 40 jobs). It is possible, as highlighted within the EIA Report, that the cumulative impact of construction timescales might mean that there is insufficient capacity within the existing sites to ensure that these bases would continue to be used. Alternative locations exist on the Moray/Aberdeenshire coast. Having said that, the sites within Highland, with the experience gained to date, are possibly best placed to capitalise on the opportunities presented.

10. CONCLUSION

- 10.1 The Development Plan and national planning policy support renewable energy development where projects can be located without undue environmental or amenity impact. The Highland Renewable Energy Strategy considers this part of the Moray Firth as a suitable site for offshore wind development.
- 10.2 The benefits of the proposal must be weighed against potential drawbacks and then considered in the round.
- 10.3 The project carries with it considerable support in principle by virtue of the Government's policy position and the higher targets for renewable energy production. The Moray West development would make a considerable contribution to installed capacity of renewable energy and therefore the Government's

aspiration for a low carbon economy. In addition, the project brings with it considerable capital spend that has potential for direct and indirect economic benefit to the Highlands. This could extend not only to construction but also operation of the development. This is welcomed.

- 10.4 As is evident from the assessment however, many of the impacts of the proposal have either not been adequately addressed, or mitigated. Both SNH and RSPB object on the basis of impacts on ornithology; MoD and HIAL have concerns regarding aviation; the Scottish Fisherman's Federation and local fisherman raise concerns that the socio-economic impacts of potential loss and impact on fishing grounds have not been adequately considered. It appears therefore that considerable work is still required to address these issues and further assessment and mitigation will likely be required.
- 10.5 The most significant residual effect from the Council's perspective is the impact on visual amenity and how our landscape and seascape are appreciated. The acceptability of the proposals with regard to their visual impact is largely a subjective matter. However, by its own admission the applicant considers there to be significant adverse visual effects on the coastline between Wick and Brora. Notwithstanding this, no significant mitigation is advanced. There is no final design for the wind farm and it is not known at this time how it will relate to the existing consented development.
- 10.6 Notwithstanding these aspects, in many parts of the coast horizontal extent of sea view is limited; views out to sea are contained within headlands. In these views, in combination with the already consented schemes, turbines would come to dominate the horizon. Limiting the extent of turbines westward would at least afford some views to open seas with uninterrupted horizon. This effect is damaging to the open and panoramic sea views for which this landscape is renowned for. In addition, this could be beneficial for those coast to coast views that are a feature of the transition into the Inner Moray Firth.
- 10.7 With this in mind, while accepting that there is capacity for further development within this development zone, mitigation in the form of removal of turbines from the westward extent is necessary. This is to ensure that visual receptors can still appreciate views to open sea horizons that are not entirely contained by turbines and also where a clear horizon can be maintained between the westward extent of development and the eastern extent of visibility of the Moray coast. This broadly equates to excluding development west of a line drawn between Lybster on the Caithness coast and Portknockie on the Moray coast; essentially to where the existing Beatrice Demonstrator turbines are when viewed from Lybster.
- 10.8 Discussion has taken place with the applicant on the need to reduce the extent of the development. A revised proposal was tabled for discussion but this did not address the concerns raised. Since it is likely that turbines will need to be removed to meet with the concerns of SNH and RSPB in all likelihood a revised layout will be included within an addendum in due course. If it does not provide mitigation to the extent expressed above then it will continue to be unacceptable.

- 10.9 It is considered that the visual and associated effects of the development on the Caithness/Sutherland coast are not outweighed by the potential economic benefits of the project.
- 10.10 All relevant matters have been taken into account when appraising this application. It is considered that the proposal does not accord with the principles and policies contained within the Development Plan and is unacceptable in terms of applicable material considerations.

11. IMPLICATIONS

- 11.1 Resource: Not applicable
- 11.2 Legal: Not applicable
- 11.3 Community (Equality, Poverty and Rural): Not applicable
- 11.4 Climate Change/Carbon Clever: Not applicable
- 11.5 Risk: Not applicable
- 11.6 Gaelic: Not applicable

12. RECOMMENDATION

It is recommended that The Highland Council **Raise an objection** for the following reasons:

1. The proposal is contrary to Policy 28 - Sustainable Design, Policy 67 - Renewable Energy Developments and Policy 57 - Natural, Built & Cultural Heritage of the Highland wide Local Development Plan as it would have a significantly detrimental impact on the open and panoramic sea views that are identified as special qualities of the Council's Special Landscape Area citations for this coastline. In particular, the extent to which turbines would dominate the horizon in 'slot' views and result in a loss of uninterrupted views of the Moray coast.
2. The proposal would not preserve the natural beauty of the area surrounding the application site as required under Schedule 9(3)(2) of the 1989 Act.

Signature: Dafydd Jones

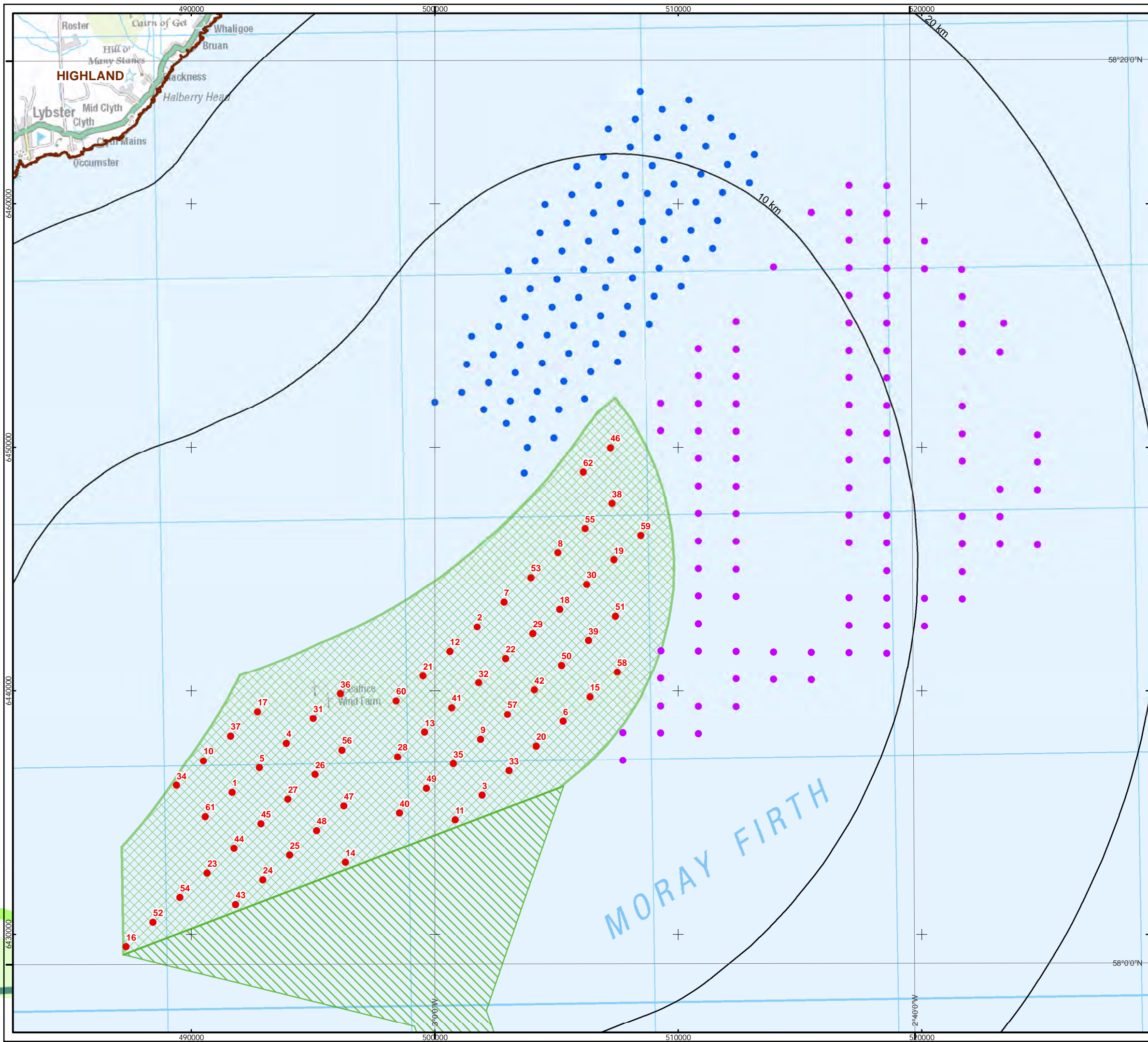
Designation: Area Planning Manager – North

Author: Laura Stewart/David Mudie

Background Papers: Documents referred to in report and in case file.

Relevant Plans: Plan 1 - Location Plan- Map 002
Plan 2 - Location Plan – Map 003
Plan 3 - Layout Plan – Map 182

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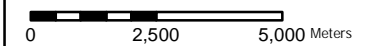
MORAY WEST OFFSHORE WINDFARM

KEY

- Moray West Site
- Offshore Export Cable Corridor
- 10km Distance Radii
- Local Authority Boundary
- Turbine Layout Scenario 4f (62 Turbines, 285m to tip)
- BOWL Turbines (Under Construction)
- Moray East Current Base Case Layout

Horizontal Scale: 1:150,000

A3 Chart



Geodetic Parameters: WGS84 UTM Zone 30N

Produced: JM
Reviewed: RC
Approved: FG

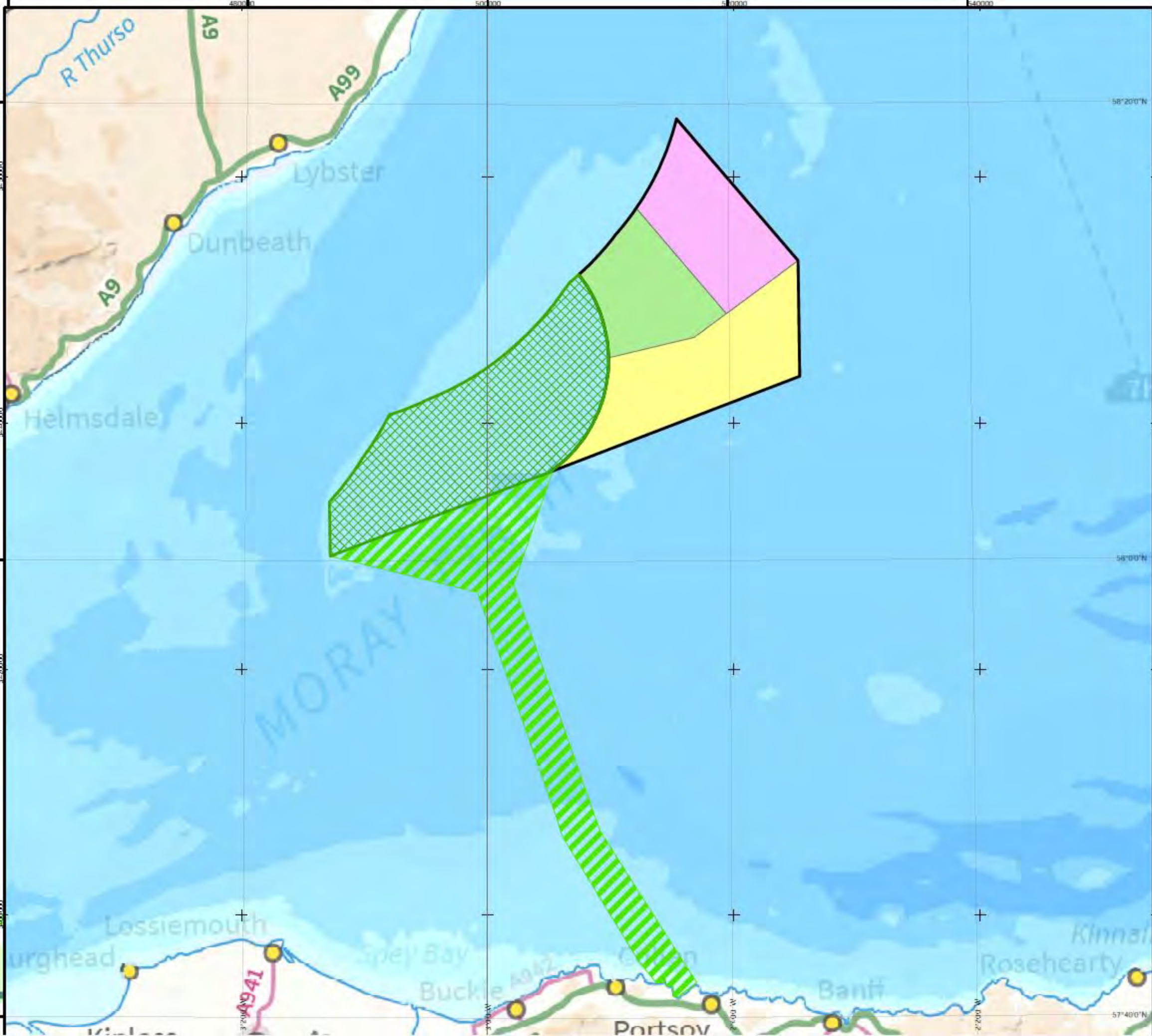
Date: 22/06/2018 Revision: E

REF: 8460005-PPW0180-GOE-MAP-182




Appendix 14.4.1
Cumulative Offshore Wind Farms
(including Moray East CBCL)

Moray Offshore
Windfarm (West) Ltd




MORAY WEST OFFSHORE WINDFARM








KEY


-  Moray West Site
-  Offshore Export Cable Corridor
-  Moray East Site

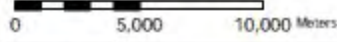
Round 3 Wind Farm Boundaries

-  Z1 Stevenson
-  Z1 MacColl
-  Z1 Telford

Bathymetry (m LAT)

-  <= 500
-  <= 100
-  <= 50
-  <= 20
-  <= 10

Horizontal Scale: 1:300,000 A3 Chart 



Geodetic Parameters: WGS84 UTM Zone 30N

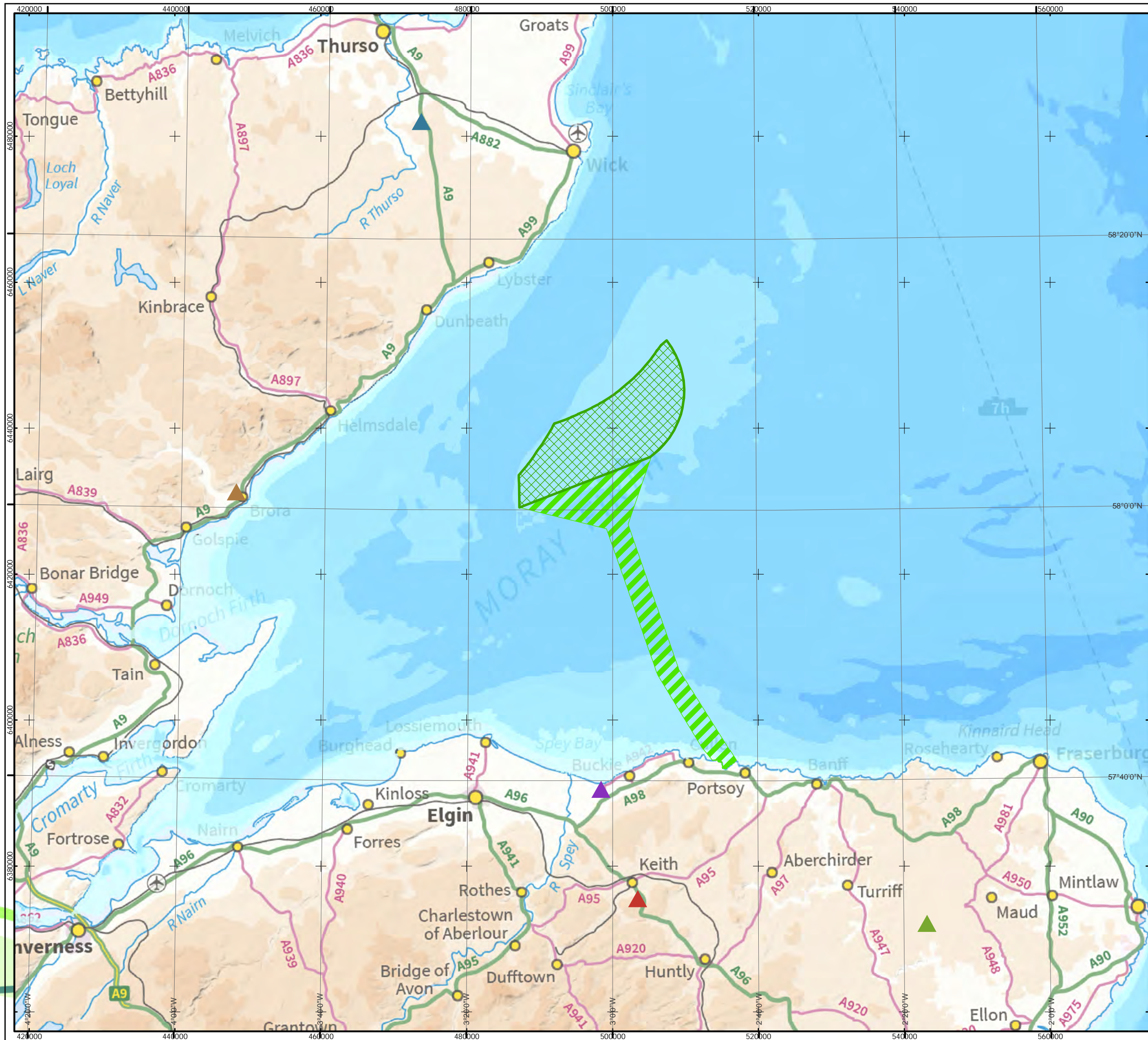
Produced: RC
Reviewed: SM
Approved: FG

Date: 28/03/2018 Revision: B

REF: 8460005-PPW0180-GOE-MAP-002

Figure 3.4.1: Round 3 Wind Farms in the Moray Firth Zone

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MORAY WEST OFFSHORE WINDFARM

KEY

- Moray West Site
- Offshore Export Cable Corridor

Grid Interface Point

- Blackhillock
- Brora/Dunbeath
- Cullen/Portgordon
- New Deer
- Spittal

Bathymetry (m LAT)

- ≤500
- ≤100
- ≤50
- ≤20
- ≤10

Horizontal Scale: 1:500,000 A3 Chart

0 12,500 25,000 Meters

Geodetic Parameters: WGS84 UTM Zone 30N

Produced: RC
 Reviewed: SM
 Approved: FG

Date: 23/05/2018 Revision: B
 REF: 8460005-PPW0180-GOE-MAP-003

Figure 3.6.1: Grid Interface Point

Moray Offshore
Windfarm (West) Ltd