HISTORIC ENVIRONMENT SCOTLAND | ÀRAINNEACHD EACHDRAIDHEIL ALBA

By email to: moray-west.representations@gov.scot

[Redacted]
Marine Renewables Casework Manager
Marine Scotland Licensing Operations Team
Marine Laboratory
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AB11 9DB

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Edinburgh
EH9 1SH

HMConsultations@hes.scot
T: 0131 668 8716

Our ref: AMN/16/GE
Our case ID: 300020921

13 December 2018

Dear Ms [Redacted]

The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017
The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017
Marine (Scotland) Act 2010
Moray West Offshore Wind Farm
Variations to Section 36 consent and Marine License applications and additional information

Thank you for your correspondence dated 04 May 2018 seeking our comments on the proposed variations and additional information for the above proposal. This letter contains our comments for our historic environment interests. Our remit is World Heritage Sites, scheduled monuments and their setting, category A-listed buildings and their setting, gardens and designed landscapes (GDLs) and battlefields in their respective inventories and historic marine protected areas (HMPAs). In this case, our advice also includes matters relating to marine archaeology outwith the scope of the terrestrial planning system.

Please also seek information and advice from the relevant local authorities' archaeology and conservation advisors who will also be able to give advice on historic environment issues, including matters such as unscheduled archaeology and category B and C listed buildings, which are outside Historic Environment Scotland's remit.

Historic Environment Scotland's position
Historic Environment Scotland (HES) does not object to the application. We have reviewed the additional information supplied in the Addendum Report along with the original EIA Report. Our detailed comments on the proposed variations and additional information can be found in the attached annex.

Our comments should be treated as a material consideration, and this advice should be taken into account in your decision making. Our view is that the proposals do not raise historic environment issues of national interest and therefore we do not object. Our decision not to object should not be taken as our support for the proposals. This application should be determined in accordance with national and local policy on development affecting the historic environment, together with related policy guidance.

Further Information
This response applies to the application currently proposed. An amended scheme may require another consultation with us.

Guidance about national policy can be found in our 'Managing Change in the Historic Environment' series available online at www.historicenvironment.scot/advice-and-support/planning-and-guidance/legislation-and-guidance/managing-change-in-the-historic-environment-guidance-notes. Technical advice is available through our Technical Conservation website at www.engineshed.org.

Please contact us if you have any questions about this response. The officer managing this case is Victoria Clements who can be contacted by phone on 0131 668 8730 or by email on Victoria.Clements@hes.scot.

Yours sincerely

Historic Environment Scotland

Annex

Proposed development

We understand from the additional information supplied in the Addendum Report and covering letter that there is a proposed variation to the site boundary for the development, along with proposals to exclude the Model 4 wind turbines and reduce the operational lifetime of the proposals from 50 years to 25 years. We understand that the variations are proposed to reduce potential effects from the scheme as identified in the current EIA Report in order to make the scheme acceptable to stakeholders.

Background

Historic Environment Scotland provided a consultation response to the EIA Report and applications in August 2018. We did not object to the application and were largely content with the information provided in the original EIA Report. We noted that consultations with HES and Marine Scotland should be clarified but were content with the proposed embedded mitigation for marine assets and the overall conclusions for effects on both marine assets and terrestrial assets within our remit.

Addendum report

We welcome the provision of additional information to support the proposed variations to the application and explain the reasoning behind the proposed changes to the scheme. Part 1 of the Addendum Report contains additional information relating to ornithology, acoustic energy modelling and updates to the seascape, landscape and visual impact assessment (SLVIA). We are content that this information does not relate to our cultural heritage remit.

Part 2 of the report contains the assessment of the proposed changes to the scheme. We welcome that a cultural heritage assessment has been included and that consideration has been given to the potential for altered effects on both marine archaeological assets and the setting of terrestrial assets. We are content with the updated baseline information, although we note the limitations implied by the lack of geophysical survey data available for the variation area being added to the south of the existing boundary.

We are content that the methodology used retains the same approach as used in the EIA Report. We note the assessments and conclusions provided in Tables 13.1 and 13.2 and the findings that the conclusions of the original EIA Report remain valid for both direct and indirect effects on marine assets, and for effects on the setting of terrestrial assets.

Variations to the application

We are content that the proposals to exclude the Model 4 wind turbines and reduce the operational lifetime of the development from 50 years to 25 years by conditions of

consent will fall within the worst case scenario assessed by the original EIA Report. We are therefore content that these proposed variations will not lead to increased effects on assets within our remit.

The addition of the variation area to the south of the current boundary as an area to include wind turbines rather than as an area simply for the export cables has the potential to lead to alterations in effect on both marine and terrestrial assets. Having reviewed the submitted information we are content that this variation is unlikely to lead to increased effects on the setting of any terrestrial assets. We are also content that with the implementation of the embedded mitigation, as with the rest of the site within the boundary, there is unlikely to be any increase to the effects on marine archaeological assets.

As in our previous response, we recommend that any consent/approval issued by Marine Scotland should ensure that the Written Scheme of Investigation (WSI) and Protocol for Archaeological Discoveries (PAD) must be approved by Marine Scotland and/or HES before the relevant works are allowed to progress.

Historic Environment Scotland
13 December 2018

Our Ref: MM/dr -19-01

Your Ref:

11 January 2019

E-mail: [Redacted]
E-mail: ms.marinerenewables@gov.scot

Scottish Fishermen's Federation
24 Rubislaw Terrace
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Scotland UK

T: +44 (0) 1224 646944
F: +44 (0) 1224 647058
E: sff@sff.co.uk

www.sff.co.uk

Dear Sirs

Moray West Offshore Wind Farm Variation request

The Scottish Fishermen's Federation, on behalf of the 400 plus vessels in membership of its 8 constituent associations, The Anglo Scottish Fishermen's Association, Fife Fishermen's Association. Fishing Vessel Agents and Owners Association, Mallaig & North West Fishermen's Association, Orkney Fisheries Association, Scottish Pelagic Fishermen's Association, the Scottish White Fish Producer's Association and Shetland Fishermen's Association wish to formally object to this application.

In the first instance the SFF considers the dropping of the model 4 turbine from the application as a negative impact on fishing options, given that using the 4 meant only 62 turbines as opposed to 85 for the model 3.Unfortunately this decision was taken without due consideration of the National Marine Plan, especially GP4, co-existence, which would have been best served by use of model 4 and GP17 and 18, fairness and engagement, and, of course F1 and 2.

The decision is further clouded, as per GP17, fairness, by the statement in 1.11.2.1 that dropping the model 4 would not affect the effect significance on SLVIA or aviation.

The total area affected by dropping model 4 is only marginally less, whereas model with more model 3 navigation is more likely to be affected.

The SFF is pleased to note the drop from 50 years to 25 years in farm life, but would still expect a decommissioning plan to show the area returning to its natural state at the end of life. However, whilst the application at various points e.g. Table 5.2 and 3 speaks of 36 months displacement/loss of access the SFF considers it essential to consider the worst case scenario of full closure over the 25 year life span. In this scenario we would expect a proper monitoring and assessment of the impacts of the farm on fishing and the CFMS to show how the fishing industry will be compensated for the loss of a generation worth of fishing.

- The SFF would contend that there is still insufficient evidence on all of these:-
- Increased sediment and deposition
- Noise and vibration
- Electromagnetic fields

Therefore there should be careful monitoring of these to give the fishing industry, regulators, and indeed, developers some much needed clarity on these matters, on grounds of GP4, 13, 18 and 19.

The application identifies squid and scallop fisheries as the most affected by the variation and as there is a much wider section of the fleet potentially affected the SFF must object to this on grounds of GP17, F1 and 2. Further proof of this, in table 5.1 identifies the Eastern ICES square as more important for scallops, squid and nephrops so again basis for objecting on GP4, 17, 19 and F1 and 2.

Finally, based on recent experience, the SFF would expect any licence to contain conditions referring to the navigation and cooperation of any vessels involved in construction operations with the fishing industry, as per GP4, 17, 18 and F3.

Yours faithfully

[Redacted]

Defence Infrastructure Organisation

Claire Duddy
Assistant Safeguarding Officer
Ministry of Defence
Safeguarding Department
Kingston Road
Sutton Coldfield
West Midlands B75 7RL
United Kingdom

Telephone [MOD]: +44 (0)121 311 2143
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E-mail: Claire.duddy532@mod.gov.uk

Your Reference: Section 36

Our Reference: DIO 10036435 & 10044717

Ms [Redacted]
Marine Renewable Casework Manager
Marine Scotland Licensing Operations Team
Scottish Government
Marine Laboratory,
375 Victoria Road, Aberdeenshire
AB11 9DB

11th January 2019

Dear Ms [[Redact R d]

Moray Offshore Wind Farm (West) Section 36 Consent and Application Variation Request and Addendum

Application for Consents under Section 36 of the Electricity Act 1989 (as amended), Marine (Scotland) Act 2010 and Marine and Coastal Access Act 2009 to construct and operate the Moray West Offshore Wind Farm at a site approximately 22.5km southeast of the Caithness coastline and associated Offshore Transmission Infrastructure.

I write to confirm the safeguarding position of the Ministry of Defence (MOD) in relation to the above above application to construct and operate the Moray West Offshore Windfarm. The proposed development will comprise of up to 85 wind turbines with a maximum blade tip height of 265 metres and will be located approximately 22.5km southeast of the Caithness coastline.

Moray Offshore Windfarm (West) Limited has submitted new documents and additional information to vary their application to include an alternative Moray West development area (Moray Offshore West Alternative) that may be considered alongside the current Moray West development area (Moray Offshore West). In addition, the applicant also requests that the operational period of the offshore wind farm be reduced to 25 years rather than 50 years, and that the Model 4 wind turbine generator be excluded from the design envelope for both the current and alternative Moray West development areas.

The MOD has assessed the location and layout information provided for both of the proposed schemes (see Annex A & B below for boundary points used) and has identified the following:

Military Low Flying

Moray West Offshore and Moray West Offshore Alternative

The proposed development will affect military low flying training activities that may be conducted in the area, it will therefore be necessary for the turbine structures to be fitted with appropriate aviation warning lighting to maintain the safety of military aviation.

Air Traffic Control (ATC) Radar

Moray West Offshore and Moray West Offshore Alternative

The turbines will be 33.6km from, detectable by, and will cause unacceptable interference to the primary surveillance ATC radar at RAF Lossiemouth.

Wind turbines have been shown to have detrimental effects on the performance of primary surveillance radars. These effects include the desensitisation of radar in the vicinity of the turbines, shadowing and the creation of "unwanted" aircraft returns which air traffic controllers must treat as aircraft returns. The desensitisation of radar could result in aircraft not being detected by the radar and therefore not presented to air traffic controllers. Controllers use the radar to separate and sequence both military and civilian aircraft, and in busy uncontrolled airspace radar is the only sure way to do this safely. Maintaining situational awareness of all aircraft movements within the airspace is crucial to achieving a safe and efficient air traffic service, and the integrity of radar data is central to this process. The creation of "unwanted" returns displayed on the radar leads to increased workload for both controllers and aircrews. Furthermore, real aircraft returns can be obscured by a turbine's radar return, making the tracking of both conflicting unknown aircraft and the controllers' own traffic much more difficult.

An operational assessment of this proposal has identified that the proposed windfarm will have a significant and detrimental effect on the provision of air traffic services at RAF Lossiemouth.

Precision Approach Radar (PAR)

Moray West Offshore Alternative

The alternative scheme submitted extends the area in which wind turbines may be erected southwards. The most south easterly extent of the alternative scheme (represented by the boundary point at grid reference 336076, 902302) extends into the area surveyed by the PAR located at RAF Lossiemouth when it is used to manage air traffic landing on runway 23. The southernmost part of the alternative development area will be 36.7km from and visible to the PAR. Wind turbines up to the maximum sizes identified in this application built in this part of the alternative development zone would cause unacceptable interference to the PAR.

The PAR is a very accurate radar used by air traffic controllers to provide precise guidance to aircraft landing at RAF Lossiemouth in adverse conditions. The PAR surveys a segment of airspace beyond the end of each of the main runways at RAF Lossiemouth through which aircraft will complete their final approach to land. The accuracy and integrity of this radar is critical. Wind turbines constructed in line of sight of the PAR can cause localised "track seduction", leading to aircraft disappearing from the radar. A further possible effect is the overload of the radar's processor, in that wind turbines generate "false plots" which would use up its processing ability. Should this threshold be reached the radar may be unable to detect approaching aircraft targets. It is therefore necessary to ensure that wind turbines will not be erected within the area surveyed by the PAR.

I can confirm that, due to the adverse impacts the proposed development will have upon the effective operation of air traffic control radars, the MOD objects to this application in its current form.

It should be noted that our radar assessments have been completed using the coordinates provided for the maximum extent of the offshore windfarm development areas identified in this application. Should further details on the layout and dimensions of the proposal become available further technical and operational assessments can be completed to clarify the impact the development will have upon the MOD radars identified. We will gladly review more detailed plans and mitigation proposals that the applicant may wish to submit to us.

MOD Safeguarding wishes to be consulted and notified about the progress of this application and submissions relating to this proposal to verify that it will not adversely affect defence interests.

I trust this clarifies our position on this application. Please do not hesitate to contact me should you require any further information.

[Redacted]

[Redacted]

Assistant Safeguarding Officer
Defence Infrastructure Organisation

Annex A – Moray West Offshore Wind Farm Boundary Points

Turbine Number	Easting	Northing
1	345,614	906,812
2	344,527	903,810
3	336,076	902,302
4	333,123	904,088
5	328,204	902,286
6	328,204	905,456
7	328,204	906,265
8	328,204	906,701
9	328,248	906,747
10	328,282	906,783
11	328,311	906,815
12	328,511	907,032
13	328,769	907,320
14	329,023	907,614
15	329,270	907,912
16	329,514	908,215
17	329,751	908,521
18	329,793	908,577
19	329,822	908,614
20	330,054	908,924
21	330,280	909,239
22	330,501	909,557
23	330,717	909,880
24	330,909	910,178
25	331,058	910,371
26	331,290	910,682
27	331,516	910,996
28	331,701	911,262
29	331,801	911,407
30	332,016	911,728
31	332,226	912,055
32	332,429	912,385
33	332,628	912,718
34	332,820	913,055
35	333,007	913,394
36	333,166	913,696
37	333,191	913,704
38	334,355	914,092
39	334,888	914,284
40	335,530	914,543
41	335,639	914,589
42	335,995	914,743
43	336,347	914,904

44	336,457	914,955
45	336,509	914,975
46	336,870	915,116
47	337,229	915,265
48	337,585	915,419
49	337,937	915,580
50	338,287	915,747
51	338,354	915,780
52	338,419	915,811
53	338,767	915,984
54	339,110	916,163
55	339,215	916,220
56	339,393	916,316
57	339,452	916,348
58	339,789	916,538
59	340,123	916,735
60	340,454	916,937
61	340,781	917,146
62	341,104	917,359
63	341,424	917,579
64	342,052	918,034
65	342,360	918,270
66	342,663	918,511
67	342,963	918,758
68	343,257	919,009
69	343,463	919,189
70	343,469	919,195
71	343,764	919,446
72	344,055	919,703
73	344,341	919,965
74	344,622	920,232
75	344,898	920,503
76	345,170	920,779
77	345,437	921,061
78	345,699	921,347
79	345,957	921,637
80	346,208	921,931
81	346,455	922,230
82	346,697	922,534
83	346,933	922,842
84	347,164	923,153
85	347,390	923,469
86	347,408	923,497
87	347,428	923,524
88	347,445	923,548

89	347,513	923,632
90	347,755	923,936
91	347,991	924,243
92	348,002	924,258
93	348,206	924,421
94	348,505	924,668
95	348,728	924,859
96	349,404	923,891
97	349,952	922,874
98	350,362	921,904
99	350,487	921,515
100	350,648	921,017
101	350,828	920,169
102	350,986	919,306
103	351,055	918,099
104	351,006	916,957
105	350,878	916,156
106	350,757	915,543
107	350,533	914,672
108	350,164	913,727
109	349,594	911,516
110	348,932	911,516
111	348,163	910,588
112	347,428	909,846
113	346,550	909,150
114	346,387	908,947
115	345,614	906,812

Annex B – Moray West Offshore Wind Farm Alternative Boundary Points

Turbine Number	Easting	Northing
1	328,204	902,286
2	328,204	905,456
3	328,204	906,265
4	328,204	906,701
5	328,248	906,747
6	328,282	906,783
7	328,311	906,815
8	328,511	907,032
9	328,769	907,320
10	329,023	907,614
11	329,270	907,912
12	329,514	908,215
13	329,751	908,521
14	329,793	908,577
15	329,822	908,614
16	330,054	908,924
17	330,280	909,239
18	330,501	909,557
19	330,717	909,880
20	330,909	910,178
21	331,058	910,371
22	331,290	910,682
23	331,516	910,996
24	331,701	911,262
25	331,801	911,407
26	332,016	911,728
27	332,226	912,055
28	332,429	912,385
29	332,628	912,718
30	332,820	913,055
31	333,007	913,394
32	333,166	913,696
33	333,336	913,747
34	333,705	913,863
35	334,073	913,986
36	334,439	914,115
37	334,802	914,250
38	335,164	914,392
39	335,522	914,540
40	335,530	914,543
41	335,639	914,589
42	335,995	914,743
43	336,347	914,904

44	336,457	914,955
45	336,509	914,975
46	336,870	915,116
47	337,229	915,265
48	337,585	915,419
49	337,937	915,580
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51	338,354	915,780
52	338,419	915,811
53	338,767	915,984
54	339,110	916,163
55	339,215	916,220
56	339,393	916,316
57	339,452	916,348
58	339,789	916,538
59	340,123	916,735
60	340,454	916,937
61	340,781	917,146
62	341,104	917,359
63	341,424	917,579
64	341,740	917,804
65	342,052	918,034
66	342,360	918,270
67	342,663	918,511
68	342,963	918,758
69	343,257	919,009
70	343,463	919,189
71	343,469	919,195
72	343,764	919,446
73	344,055	919,703
74	344,341	919,965
75	344,622	920,232
76	344,898	920,503
77	345,170	920,779
78	345,437	921,061
79	345,699	921,347
80	345,957	921,637
81	346,208	921,931
82	346,455	922,230
83	346,697	922,534
84	346,933	922,842
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96	348,728	924,859
97	349,404	923,891
98	349,952	922,874
99	350,362	921,904
100	350,487	921,515
101	350,648	921,017
102	350,828	920,169
103	350,986	919,306
104	351,055	918,099
105	351,006	916,957
106	350,878	916,156
107	350,757	915,543
108	350,533	914,672
109	350,164	913,727
110	349,594	912,546
111	348,932	911,516
112	348,163	910,588
113	347,428	909,846
114	346,215	908,884
116	347,428	909,846
117	346,215	908,884

[Redacted]

Fordyce, Sandend & District Community Council

Further to your emails of 23rd & 27th November 2018 requesting further comment in respect of design revisions and other details pertaining to the Moray West OWF site boundary, turbine layout and other updated reports, we have considered our response as follows:-

The Council does not believe the updated offshore scheme will have any effect on our local Community and as such the Council has no comment or objection to the revised proposals.

Should the developer make further representations regarding the separate Transmission Infrastructure Application the Council retains its interest in all matters in this regard.

We thank you for consulting with us once again.

Regards

[Redacted]
Vice Chair
Fordyce Sandend & District Community Council

[Redacted]

Tel [Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

The Highland Council
Comhairle na Gàidhealtachd

[Redacted]
Marine Scotland Licensing Operations Team
Scottish Government
Marine Laboratory
375 Victoria Road
Aberdeen
AB11 9DB

e-mail: david.mudie@highland.gov.uk
Direct dial: (01463) 785028
Our Ref: 18/03309/S36
Your Ref:
Date: 28 January 2019

Dear [Reda

ELECTRICITY ACT 1989
The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017
The Electricity Works (Applications for Consent) Regulations 1990

MARINE (SCOTLAND) ACT 2010
MARINE AND COASTAL ACCESS ACT 2009
The Marine Works (Environmental Impact Assessment) Regulations 2017

APPLICATION FOR CONSENT UNDER SECTION 36 AND 36A OF THE ELECTRICITY ACT 1989 AND MARINE LICENCES UNDER PART 4 OF THE MARINE (SCOTLAND) ACT 2010 AND UNDER PART 4 OF THE MARINE AND COASTAL ACCESS ACT 2009 TO CONSTRUCT AND OPERATE THE MORAY WEST OFFSHORE WINDFARM, OUTER MORAY FIRTH.

Thank you for your consultation of 03 December 2018 in respect of the Addendum to the above proposal. Thank you for allowing an extension of time to respond.

As you may recall, at its meeting on 27 November 2018, following debate on matters relating to the residual visual impact of the proposal as well as the potential economic benefits to Highland, the Council's North Planning Applications Committee decided that it wished to Raise No Objection to the proposals.

The reasons provided by the Chair of the Committee were as follows:

Whilst it is acknowledged that the proposed development will sometimes, dependant on visibility, cause a detrimental impact on the open and panoramic sea views, recognised in the Council's Assessment of Highland Special Landscape Areas, the application needs to be assessed in its entirety. In support of the development are the likely positive effects on the local economy, in particular the amount of jobs that are to come to the Highlands; and the need to make Scotland self-sufficient in its energy generation, as supported by directives from the Scottish Government. In my mind, the economic benefits offered by this development outweigh the adverse impacts.

Members of the Committee were informed that an addendum had now been submitted, too late for it to consider at this meeting, and that this would need to be considered further.

The Addendum was presented to the Council's North Planning Applications Committee on 22 January 2019. The Committee decided that it is wished to Raise No Objection to the Addendum, subject to the following Conditions:

1. No development shall commence on any Phase of the development until the Council has been consulted, and given its considered opinion, on the design and layout options for that Phase having taken into consideration the design and layout of the neighbouring Phases of the Moray East windfarm development.

2. No development shall commence on any Phase until the Council has been consulted, and given its considered opinion, on the lighting requirements for the chosen design and layout options for that Phase having taken into consideration the design and layout of the neighbouring Phases of the Moray East windfarm development.

3. The applicant shall maximise the amount of GVA in terms of employment and associated economic activities that comes to the Highlands, as a result of the construction phase of the project.

4. The applicant shall continue dialogue with the Highland's renewable energy supply chain and its ports and harbours, including Nigg and Port of Cromarty as a potential operation and maintenance facility.

5. The applicant shall continue to work with the relevant public and private sector bodies in the Highlands to ensure that the area achieves maximum socio-economic returns from the development.

Full details of the Report to Committee can be obtained from our website at https://www.highland.gov.uk/meetings/meeting/4053/north_planning_applications_committee.

Minutes once available can be found at
https://www.highland.gov.uk/meetings/committee/36/north_planning_applications_committee

Should you require further advice or require any clarification on any aspect of the above please do not hesitate to contact me.

Yours sincerely

[Redacted]

Area Planning Manager North: Dafydd Jones, Council Offices, Dingwall IV15 9QN
Tel: 01349 886606

[Redacted]

Good afternoon,

VARIATION REQUEST FOR 18/00954/S36 - CONSTRUCT AND OPERATE AN OFFSHORE WINDFARM WITHIN THE MORAY FIRTH, KNOWN AS MORAY WEST WINDFARM

Further to your email of 23rd and 27th November regarding the proposed variation to the Moray West Section 36 offshore wind energy consultation, Moray Councils Planning and Regulatory Services Committee today considered the proposed variation and submitted addendum. Following consideration the Committee agreed not to raise any objection to the proposed variation and therefore Moray Council responds to the S36 consultation raising no objections.

If you require any further clarification please do not hesitate to contact me, at the below address.

Regards,

[Redacted]

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Working pattern - Mon to Friday (except Thurs PM)

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This email has been received from an external party and has been swept for the presence of computer viruses.
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Aberdeenshire
COUNCIL

Our Ref: APP/2018/1730
Your Ref: Moray West Offshore Windfarm

[Redacte
d]

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

19 December 2018

Dear Madam,

Electricity Act 1989 (as amended); Marine (Scotland) Act 2010; Marine and Coastal Access Act 2009; The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (as amended); The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (as amended); The Marine Works (Environmental Impact Assessment) Regulations 2007 (as amended); The Electricity (Applications for Consent) Regulations 1990 (as amended); Conservation (Natural Habitats) Regulations 1994 (as amended); Conservation of Offshore Marine Habitats and Species Regulations.

Application For Consent Under Section 36 Of The Electricity Act 1989 (As Amended) And Marine Licence Under Part 4 Of The Marine (Scotland) Act 2010 And Marine And Coastal Access Act 2009 To Construct And Operate Moray West Offshore Wind Farm, Approximately 22.5 Km Southeast Of The Caithness Coastline.

Thank you for your consultation dated 23 November 2018 concerning additional information and amendments made to the proposed Moray West Offshore Wind Farm.

We note the amendments made, but also that this variation is to be considered as an alternative to the proposal previously consulted on – but that either proposal could be approved (albeit only one built). Furthermore, it is noted that there are numerous overlapping or consistent factors between both potential developments.

In light of the above, we would refer back to our previous response dated 15 October 2018 and would confirm that cognisance should continue to be paid to this response and the issues raised within. The aforementioned response should be read in conjunction with the below assessment which offers comment on the proposed changes.

<u>Seascape and Landscape Visual Impact Assessment (SLVIA)</u>

The potential variation in the worst case scenario as previously outlined is noted –

namely the removal of the largest proposed wind turbine generator (WTG) meaning that maximum height of any WTG would now be 265m, and that the lifespan of the scheme would be reduced from 50 to 25 years. The reduction in height of WTG units and reduction in development lifespan do not give rise to any concerns with regard to these specific characteristics. These aspects are covered within the original design envelope originally presented and assessed.

It is appreciated that the reduction in height would lead to an increase in number of WTG units. While this has the potential to lead to a denser layout, we note the conclusions within the submitted Environmental Impact Assessment Report (EIAR) which outline that no additional adverse impacts are predicted to result from this change. From assessing this aspect, we are minded to agree with this conclusion. The denser layout is not considered to give rise to any concerns with regard to the proposal.

With regard to the revised proposal, it is noted that the horizontal extent of the proposed layout has been altered with the western edge of the site boundary pulled in and southern boundary extended southwards to encroach further into the proposed cable route corridor. The impacts of this change have the effect of compacting the horizontal extent of the development, but also mean that the southernmost WTG units would be closer to the Aberdeenshire boundary.

The submitted EIAR concludes that the overall visual impact upon Aberdeenshire from the development would not be altered as a result of the proposed variation. While WTG units would be closer and more densely packed, this would be offset by the reduction in height and horizontal extent of the development as a whole. The EIAR states that as a result the impacts from the operational development would be classed as being non-significant.

The submission includes 3 viewpoints within Aberdeenshire, as requested through the informal Scoping carried out ahead of the Addendum submission. It is noted that at the Findlater Castle, Sandend and Portsoy viewpoints that the closest WTG units would be located at a shorter distance to shore when compared to the original proposal. On average the closest WTG units would now each be approximately 3km closer, with the closest being 38.9km from the Findlater Castle viewpoint. The inclusion of smaller WTG units does again however mean that the number and density of WTG units within the scheme would increase and in turn there would be an increase in the number of WTG's theoretically visible, on average around 10 additional units from each viewpoint. The field of view of the development would however decrease for all viewpoints, we would agree that this reduces the horizontal extent of any visual impact. Similarly, with the smaller WTG units proposed, even with a number being closer to the coast it is agreed that these would not appear any more obtrusive on the seascape, owing to their smaller scale which at distances beyond 38.9km as noted would continue to be partially screened by the curvature of the earth and can be accepted as not resulting in an increased visual impact.

Significant adverse impacts are still anticipated from construction operations are still anticipated from Sandend – these have not altered through the proposal and as such this matter, owing to the temporary and short term nature, does not give rise to significant concerns.

Appreciating the closer and denser development, the conclusions of the submission can

be accepted and we are in agreement that the overall visual impact would not be increased to an unacceptable level from an Aberdeenshire perspective. While the submission highlights a reduced visual impact, we would suggest that within Aberdeenshire that this is more differential than reduced and are not in complete agreement that there would be a completely reduced impact across the scheme – however as above we are satisfied that this differential impact with an increased number of smaller, more densely packed WTG units that the proposal does not give rise to any significant SLVIA concerns.

As per our previous response, it would be preferred if any proposed WTG units could be of an appropriate scale with regard to neighbouring developments to reduce any potential adverse impacts as far as possible.

Socio-Economics

It is noted that the Offshore Transmission Infrastructure (OfTI) is to remain as previously proposed, thus limiting the impacts of the amended scheme to marine based recreation and tourism. With regard to Aberdeenshire, these impacts would not increase on interests such as watersports.

As per our previous response, we would highlight the potential nearshore impacts resulting from construction and OfTI and would reiterate our comments that cognisance should be paid to recreation receptors including watersports and climbers along the coast, with dialogue and consultation where appropriate. Please refer back to our previous response for added commentary on this issue.

Archaeology

The scope of the archaeological impact is to remain constant owing to the extent of the survey work previously undertaken and the fact that the amended proposals do not extend beyond this surveyed boundary. We would therefore refer back to our previous comments on this matter with regard to the securing of a Written Scheme of Investigation.

Other Matters

As above, it is noted that impacts upon the Onshore Interaction, Natural Heritage interests and aspects including Habitats Regulations would remain unaffected by the proposed revisions. As such, we would again refer to the comments raised in our previous response which are still considered to be relevant. These covered a range of issues such as the timing of works, protection of receptors along the shoreline, additional survey work and protection of the Site or Special Scientific Interest which runs along the coast.

Again, we would highlight that this updated response should be read alongside our previous response for full commentary and consideration of all issues.

Overall, Aberdeenshire Council have no objections to the application, subject to appropriate conditions or steps taken to cover appropriate mitigation.

I trust the above response has addressed your enquiry. In the event that you wish to

Aberdeenshire COUNCIL

discuss any matters relating to this issue please contact the case officer on the number at the head of this letter.

Yours faithfully

[Redacted]

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5 December 2018

[Redacted]

Marine Renewables Casework Manager
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moray-west.representations@gov.scot

Dear [Redact
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MORAY WEST - New Documents and Additional Information Application Consultation

I have read the relevant parts of the revised application on behalf of RYA Scotland and have consulted our local coastwatcher. We agree with the revisions. The only comment that I wish to make is that the alternative Moray West Site would be preferable to the original one from the point of view of recreational sailors.

Yours sincerely

[Redacted]

[I

sport scotland
LOTTERY FUNDED

The Royal Yachting Association Scotland
A company limited by guarantee and registered in Scotland
Number SC219439

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[Redacted]

Licensing Operations Team
Marine Renewables
Marine Scotland

By email to: MS.MarineRenewables@gov.scot

Your ref: Moray West Offshore Windfarm
Our ref:

21 August 2018

Dear Licensing Operations Team

Application for Consent under section 36 of the Electricity Act for the Proposed Moray West Offshore Windfarm

Thank you for the opportunity to comment on the application for consent for the Moray West Offshore Windfarm, as detailed in your email of 10 July 2018.

The MCA's remit for Offshore Renewables energy developments is to ensure that the safety of navigation is preserved, and our search and Rescue capability is maintained whilst progress is made towards government targets for renewable energy. This includes maintaining our obligations under The United Nations Convention of the Law of the Sea. As such we have the following comments to make:

MGN Checklist
A completed MGN 543 Checklist has been provided as part of the Navigation Risk Assessment, and MCA is content that all recommendations have been addressed.

Our main concern going forward is the proximity of the Moray West Offshore Windfarm (OWF) to the Moray East development, and the Beatrice OWF to the north, and the effect the potentially different layout designs will have on the safety of navigation and our search and rescue capability. The Moray East site is at a more advanced stage of development, and therefore the confirmed layout for Moray East will have an impact and provide constraints on what the MCA would accept for Moray West.

We note from the initial proposals that there is no designated navigational corridor or sufficient air space between Moray East and West sites to allow SAR helicopters to safely manoeuvre outside the turbine boundaries when conducting SAR operations. The site would be considered as one whole development and the applicant would need to liaise with the Moray East developers to ensure consistency across both sites, with regards to the layout, numbering, and lighting and marking. Therefore, consideration must be given to either lines of orientation that allow a continuous passage of vessels and/or SAR helicopters through the sites, or for sufficient air space in between Moray West and East.

The indicative layout appears to show two, if not three, lines of orientation however given the proximity to Moray East (which impacts the Moray West layout) and a resultant lane length of greater than 10nm, a helicopter refuge area is likely required. This should be sufficient air space to allow SAR helicopters to safely manoeuvre outside the turbine boundaries when conducting SAR operations.

The turbine layout design must be discussed with the MCA at the earliest opportunity and will require approval prior to construction to minimise the risks to surface vessels, including rescue boats, and Search and Rescue aircraft operating within the site. MCA will seek to ensure all structures are aligned in straight rows and columns. Multiple lines of orientation provide alternative options, and developers should plan for at least two lines of orientation unless there is clear evidence that fewer are acceptable. We would expect no outliers, and no option for curved boundaries.

Emergency Response Co-operation Plans

Moray West shall agree a SAR checklist with the MCA which outlines all the requirements relevant to the development as outlined in MGN 543 Annex 5. Part of this checklist will be the provision of an Emergency Response Cooperation Plan (ERCoP). A template is available on the MCA website at www.gov.uk, and an approved ERCOP will need to be in place prior to construction works commencing.

During SAR discussions, particular consideration will need to be given to the implications of the site size and location. Attention should be paid to the level of radar surveillance, AIS and shore-based VHF radio coverage and give due consideration for appropriate mitigation such as radar, AIS receivers and in-field, Marine Band VHF radio communications aerial(s) (VHF voice with Digital Selective Calling (DSC)) that can cover the entire wind farm sites and their surrounding areas.

Moray West will be required to conduct a radio survey prior to any construction activity taking place.

Aviation Lighting

The MCA require all aviation lighting to be visible 360° and compatible with night vision imaging systems, as detailed in CAP 764. Further information and specifications will be updated in our MGN shortly. There are lights available on the market that offer this capability therefore it is requested that Moray West comply.

Survey Data

MGN 543 Annex 2 Paragraph 6 requires that hydrographic surveys should fulfil the requirements of the International Hydrographic Organisation (IHO) Order 1a standard, with the final data supplied as a digital full density data set, and survey report to the MCA Hydrography Manager. This information has yet to be submitted.

Cable Routes

Export cable routes, cable burial protection index and cable protections are issues that are yet to be fully developed. However due cognisance needs to address cable burial and protection, particularly close to shore where impacts on navigable water depth may become significant. Any consented cable protection works must ensure existing and future safe navigation is not compromised. The MCA would accept a maximum of 5% reduction in surrounding depth referenced to Chart Datum.

We note that the Beatrice OWF cables run through the Moray West site, and this will need to be addressed in the cable burial plans.

Safety Zones
Safety zones during the construction, maintenance and decommissioning phases are supported, however it should be noted that operational safety zones may have a maximum 50m radius from the individual turbines. A detailed justification would be required for a 50m operational safety zone, with significant evidence from the construction phase in addition to the baseline NRA required supporting the case.

Cumulative Impacts The cumulative impact assessment in section 12.8 provides a comprehensive overview. Traffic in the area will be displaced by the development and the effects therefore need to be carefully monitored.

Liaison with local MCA Marine Office
The developers should be reminded that their contractors and subcontractors must have the required certification for all vessel operations, and early engagement with the local Marine Office should be undertaken where necessary to ensure there are no issues with regards to survey and inspections, towage, and safety requirements.

Yours sincerely,

[Redacted]

[Redacted]

Offshore Renewables Advisor
Navigation Safety Branch
Maritime and Coastguard Agency

Offshore Energy Liaison Officer
HM Coastguard
Maritime and Coastguard Agency

Cc'd to Northern Lighthouse Board

[Redacted]

Dear [Redacted]

Happy New Year. I hope you had a good festive break. I have reviewed the supplementary information provided to support the socioeconomic assessment for Moray West Offshore Windfarm. My comments on this information are as follows:

1. I had noted already that early responses from Moray West had sufficiently addressed my first and second queries with respect to baseline and impact assessment. The outstanding queries were only with respect to supporting evidence for the employment and GVA impact assessment.

2. It provides greater clarity and confidence to the analysis that Moray West have done to access the anticipated GVA and employment impacts of the development. The approaches taken appear very sensible in terms of sources of evidence and general assumptions made, and we can be confident in the results. We should commend Moray West for responding so positively to share with us the additional information.

3. Generally, the development is not expected to have significant GVA and employment impacts on the local study area and at the Scotland level, during both the construction and operations and maintenance stages. This is largely because currently only very small shares of the CAPEX and OPEX expenditure will be in the local area and in Scotland. We therefore welcome Moray West's initiatives to engage with and develop local supply chains for the development, as this would increase chances of realising higher GVA and employment impacts, including in Scotland.

Overall, I can confirm that all the queries I had with regards the socioeconomic impact assessment have been addressed.

Many thanks,

[Redacted]

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The Scottish Government

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Licensing Operations Team
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17 January 2019

Dear [Reda

MORAY WEST: MORAY OFFSHORE WINDFARM (WEST) LIMITED: ADDENDUM CONSULTATION

Marine Scotland Science has reviewed the submitted addendum and has provided the following comments.

Ornithology

MSS have reviewed the Addendum submitted by Moray West (Moray Offshore Windfarm (West) Limited - Volume 1: Addendum Report, hereafter 'Addendum') and the associated consultation response from Scottish Natural Heritage (SNH, consultation response dated 4th January 2019). At the time the MSS advice was prepared a consultation response from RSPB was not available.

The addendum includes a number of suggestions for adjustments or refinements in assessment methodology that are not currently widely agreed nor adopted in assessment. In the Addendum calculations are generally presented for multiple approaches depending on different assumptions being taken allowing the effect of suggested refinements on assessed impacts to be understood. The documents can be difficult to follow at times. Proposed improvements and refinements in assessment methodology identified following the Scoping Opinion may be included in assessments to provide additional context, but if to be used for the main assessment such deviations from Scoping Opinion should be discussed and agreed. When many changes to assessment methodology are included in Environmental Assessment reports that were not agreed during Scoping it is more challenging to evaluate assessed impacts as the underlying assumptions for changes to methodology must also be evaluated.

The Addendum was produced by the developer following a number of issues identified with the earlier application (EIA and HRA reports, July 2018) in consultation responses relevant to ornithology from SNH, MSS, and RSPB. In the addendum how identified issues have been addressed is helpfully summarised in a table (table 1.1, of Addendum).

Revised design envelope and suggested alternative site boundary

The addendum includes a revised design envelope and suggested alternative site boundary. As SNH have noted in their consultation response and in common with the developer's assessment, this does not lead to significant changes in assessed densities of birds (see Addendum – part 2 – section 7.7). As such the conclusions of the earlier EIA and HRA are still valid for all species except where other issues were identified, i.e. kittiwake and great black-backed gull that are assessed in the Addendum. Overall the reduction in operational period from 50 years to 25 years is expected to lead to a reduced population level impact for all species assessed in the long term. The developer has also committed to reducing the number of turbines from 85 to 79 if changes to other design parameters do not lead to a reduction in assessed collision mortality of kittiwake from 57 to 53 per year (Addendum Part 1 Chapter 3 and Part 2 section 7.4). Such a reduction in the number of turbines would be expected to lead to reduced calculated collisions for other species too.

Changes in assessment methodology

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SNH in their consultation response to the Addendum provide helpful comments on the different changes to assessment methodology suggested by the developer. MSS generally concur with the conclusions reached by SNH though give the following additional comments.

Flight speeds: The kittiwake flight speed currently used in most assessments (13.1 ms^{-1}, from 28 birds measured by Pennycuick 1987 http://jeb.biologists.org/content/128/1/335 and later included in Alerstam et al. 2007, https://doi.org/10.1371/journal.pbio.0050197) is higher than has been recorded in most other studies (range 9-13 ms^{-1}, see table 2 in Elliott et al. Movement Ecology (2014) https://doi.org/10.1186/s40462-014-0017-2). The Skov et al. (2018, https://tethys.pnnl.gov/publications/orjip-bird-collision-and-avoidance-study) study measurements of flight speed (8.71 ms^{-1}) suggested by the developer and that SNH stated they were content with add to the data available to help inform assessments. The Skov et al. (2018) measured flight speed is less than previously measured flight speeds for kittiwake. MSS would advise that a review of published flight speeds (including Skov et al. 2018), considering the representativeness of the dataset and sample size, may be a helpful exercise to be undertaken more generally to determine the most appropriate flight speeds to use in collision risk modelling.

Avoidance rates: SNH advised that work is underway to review use of Skov et al. (2018) avoidance rates (ARs). This is likely referring to a very recently published report (Bowgen, K. & Cook, A. 2018. Bird Collision Avoidance: Empirical evidence and impact assessments. JNCC Report No. 614, JNCC, Peterborough, ISSN 0963-8091. http://jncc.defra.gov.uk/page-7680). MSS had not reviewed that report at the time of giving this advice. MSS concur with SNH that existing SNCB advised ARs be used to facilitate comparability with assessments for other developments in Scottish waters until a considered view on the Thanet and Bowgen & Cook report is available.

Biologically Defined Minimum Population Size (BDMPS) for Kittiwake. Research is ongoing into the non-breeding season movements of kittiwake, and when more of this information becomes available it may be appropriate to review how the BDMPS is used for kittiwake. At this stage, MSS consider that any such review may be premature, and thus, MSS agree with SNH's opinion on this.

Kittiwake

Updated collision estimates are presented both calculated following SNH advised method and the developer's method.

SNH give their assessment for relevant SPA population impacts for East Caithness Cliffs SPA and North Caithness Cliffs SPA following collision mortality alone. Results are also presented (Addendum – part 1 – section 3.5) for the combined impact of collisions and displacement as requested by MSS. Kittiwake may be vulnerable to both displacement and collision, though collision impacts are assessed to be greater than those from displacement. Assessment methods do not currently allow for these two possible impact pathways to be accurately assessed in combination (i.e. displaced or barriered birds are not simultaneously also vulnerable to collision). Inclusion of displacement in addition to collision leads to greater assessed impacts.

Great black-backed gull

Apportioning offshore development impacts to relevant SPA populations is challenging for gull species (*Larus spp.*) with generalist foraging ecologies. Great black-backed gull in common with some other gull species (e.g. herring and lesser black-backed gulls) may use a wide variety of different foraging habitats including both offshore, near shore, and inland sites.

Thaxter et al. (2012) is cited (3.7.1 of Addendum) in support of a mean-max foraging range of great black-backed gull of approximately 40 km, however this reference does not include data for the species. There are very few data on foraging ranges for the species, though some estimates do exist which support using 40 km (see table E1 in Habitats Regulations Appraisal of the Sectoral Marine Plans for Offshore Renewable Energy in Scottish Waters: Screening Review, Report R.2121b, July 2013, https://www2.gov.scot/Resource/0042/00428018.pdf).

In the vicinity of the development East Caithness Cliffs SPA is the only SPA site with likely potential connectivity to the development site. The developer argues that there is limited evidence for connectivity (1.10.2.3, 3.7.2 and 3.7.4.2 of Addendum) between the SPA and the development site (i.e. only a small proportion of the SPA population are likely to forage within the development footprint). The developer argues for this based on a GPS tracking dataset (Archibald et al. 2014) that found the majority of foraging to be inshore and coastal, with limited offshore, and none within the development site. There are a number of limitations to that study which should be considered in relation to its use to generalise to the wider breeding season, the study being of only a few individuals, with very short tracking periods (a few days at most), and a limited

seasonal coverage. These issues were previously highlighted in our earlier consultation response (MSS consultation response to Moray West EIA Report and RIAA). The Addendum in the relevant HRA section (3.7.4.2) does not mention the study's limitations nor address the earlier highlighted concerns of MSS. The study included additional indirect sources of information reflecting on foraging distribution, with analysis of the pellets and regurgitates from the gulls. These dietary information are limited to relatively few samples (20 pellets and 11 regurgitates) though suggest mostly coastal foraging with potential for some offshore foraging too (30% of pellets included fish) (Archibald et al. 2014). It is the MSS view that sufficient general evidence is available (reviewed in section 3.7.4.2 of the Addendum) together with the limited area specific data (cited Archibald et al. 2014) to support the argument put forward by Moray West that foraging by Great black-backed gull in the windfarm lease area is likely to be limited, and that this should be considered in any assessment.

During the non-breeding period it is likely that a very high proportion of the great black-backed gulls present in the development area are from out with the Moray area, with many likely to be migrants from northern Scandinavia and Russia. Great black-backed gulls breeding around the Moray Firth are likely more sedentary, remaining in the area throughout the year. During the non-breeding period a much lower proportion of gulls at sea are likely to originate from the Moray coast (including East Caithness Cliffs SPA) than during the breeding period. A helpful discussion on this is provided by the developer (section 3.7.5 of Addendum).

Development alone
The developer assesses that no more than 1.6 breeding great black-backed gull adults would have collision mortality during the breeding period per year. Overall collision mortality for the development alone is 4 individuals during the breeding season, with the number of 1.6 reached by excluding likely sub-adults (36%) and sabbaticals (further 35% of remaining adults). The developer then suggests based on limited to no connectivity between the development site and East Caithness Cliffs SPA that close to zero of these 1.6 collisions should be apportioned to the SPA. SNH state (point 13 of Appendix A to consultation response) that there is no evidence for reducing the number of breeding bird collisions from East Caithness Cliffs SPA to such an extent. MSS do not agree that there is 'no evidence', as the evidence reviewed by Moray West (discussed above) does suggest that the majority of great black-backed gull from the SPA are likely to foraging primarily along the coast, though with some offshore foraging. This would further reduce the number of collisions apportioned back to ECC SPA.

A similar approach is taken for the non-breeding season with 5-6 collisions calculated during non-breeding per year. Of these a very high proportion are thought to be immatures (45%), and many of the remaining adults are likely to be birds that have migrated in from elsewhere. Thus, <1 collision is thought likely to be apportioned back to East Caithness Cliffs SPA. SNH appear to be content with this view for the non-breeding period (SNH consultation response, point 13 of Appendix A).

In combination
The in combination numbers for the development plus the other Moray developments (Moray East and Beatrice Offshore Windfarms) have not been apportioned to East Caithness Cliffs SPA (section 3.7.8). The Appropriate Assessments for Moray East (MORL) and Beatrice (BOWL) Offshore Windfarms assessed 14.82 (8.62 from BOWL and 6.20 from MORL) great black-backed gulls of all ages or 3.95 (2.01 from BOWL and 1.94 from MORL) breeding birds would have collision mortality each year originating from East Caithness Cliffs SPA (https://www2.gov.scot/Topics/marine/Licensing/marine/scoping/Beatrice/appropass).
As the developer notes, the as built scenarios for the Moray East and Beatrice developments both include reduced numbers of wind turbine generators (3.7.8 of Addendum), thus the collisions calculated for these scenarios would likely be less.

SNH advised that insufficient information was available to reach a conclusion for great black-backed gull as a qualifying feature of East Caithness Cliffs SPA (SNH Consultation response to Addendum). Apportioning both breeding and non-breeding impacts for the three Moray developments in combination for the breeding and non-breeding period to East Caithness Cliffs SPA would aid in assessment. Recalculating collision mortality for BOWL and MORL for as built scenarios would also be consistent with the approach taken for kittiwake. Population viability analyses performed in small increments (e.g. 2 birds) across the range of assessed in combination impacts depending on different assumptions used (e.g. in apportioning) could prove useful in considering the possible impacts at the SPA population level.

Marine Mammals

MSS have reviewed the Offshore Wind Farm and Offshore Transmission Infrastructure (OfTI) application addendum (volume 1 and volume 2).

MSS welcome the inclusion of the re-analysis of some of the more relevant scenarios regarding the noise modelling assessment using the 1% conversion factor, as opposed to the 0.5% conversion factor on which the assessment is based. MSS maintain their position that there is no robust scientific evidence or support for using the 0.5% conversion factor and that the 1% conversion factor would have been more reflective of the precautionary principle based on the current best scientific evidence.

The relevant tables in Section 4.5 for low and high frequency cetaceans indicate that the cumulative PTS zones are discernibly larger for 1% than for 0.5%; this is especially true for low frequency cetaceans. Despite this increase, MSS agree with the conclusion of both MOWL and SNH, that for all marine mammals the effect of PTS is of minor significance and is therefore not significant in EIA terms. With respect to disturbance; despite an increase in the number of animals disturbed, the percentage of the reference population for each species remains small. Consequently, MSS are content with the conclusion of both MOWL and SNH, that the impact of disturbance for all species remains minor and therefore not significant in EIA terms.

As noted by SNH, some scenarios do have large effect zones for cumulative PTS for minke whale, which are at distances that are unlikely to make current mitigation practices effective. Therefore, an EPS license for injury may be required. MSS note that this is likely to be a precautionary measure. For example, one important assumption of the model is that the animal will flee to a maximum of 25 km; therefore, if the noise modelling predicts that the sound propagates further than 25 km and/or if the animal flees towards the coast and becomes 'trapped', it is possible for the animal to accumulate the dose, and thus exceed the cumulative PTS threshold. However, MSS consider these to be unlikely real-world scenarios.

Benthic Ecology

MSS is satisfied that no significant differences in the benthic ecology of the new site have been reported. MSS's comments about the previous iteration of this report are still relevant but MSS is satisfied that these comments were adequately addressed in a telephone conversation with the contractor in October 2018. These responses are detailed in the Addendum Report 1.

Diadromous Fish

MSS recently commented on the EIAR Main Text which it felt was reasonably up to date as regards likelihood that salmon are likely to be present - this is a rapidly advancing area as regards knowledge we now have, particularly with respect to smolts.

The new addendum is to provide updates and additional information, respond to comments and support proposed changes to the design envelope. MSS would have hoped that the new addendum would not revert to out of date thinking, yet that is what has happened in some of the text on salmon.

To recap, information from netting survey work in 2017 and 2018 has shown that the out movement of salmon smolts in the Moray Firth is not a coastal following process, but that they head out across the main firth. 2018 survey work has better coverage and confirmed a main band of smolt movement in the southern half of the firth which the 2017 work had indicated. The new combined Moray West site boundary appears to lie to a little to the north of the main band of movement. MSS will arrange for the developer to get maps showing both the site boundary and where smolts were caught in the Moray Firth in the 2017 and 2018 surveys. Sea trout were also caught at various locations well away from the coast.

What is now said in Addendum Table 5.1 (Fish and shellfish ecology characteristics of the proposed mitigation and proposed variation areas) "Salmon….. The general understanding / evidence is that the migrations routes for salmon between their natal rivers and distant feeding grounds (around Greenland) tend to be coastal. Salmon are therefore unlikely to be present in significant densities in the proposed mitigation or proposed variation areas". This coastal following statement conflicts with the above information and also with what is in the EIAR Main Text.

There are also in Addendum Table 5.3 (Assessment of effects associated with the proposed Alternative Moray West Site area) in connection with EMF, statements of the type that Sensitivity reduced to low as sea trout and salmon are not expected to be present in the proposed variation area, which I think again may reflect out of date thinking based on the assumption of coastal following.

What happens regarding the above getting corrected?

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The various comments received on the EIAR Main Text, including from MSS, are detailed along with notes from Moray West in a well presented annex (Annex A). There are comments from SNH in relation to diadromous fish including on soft starts to piling. MSS would note that while not MSS is not suggesting that these should not take place, that there is growing evidence that fish including diadromous fish will often stay put when subjected to noisy activities.

MSS also notes that there were no responses from the local salmon and sea trout statutory bodies, which are the District Salmon Fishery Boards, on the EIAR Main Text, and that Moray West's covering letter for the application variation request and addendum does not mention them in the list of consultees. Could you let MSS know the situation please.

Marine fish

MSS is content that the addendum document considers the comments made for Marine Fish Ecology within the Fish and Shellfish ecology section. No further comments to make.

Commercial fisheries

MSS appreciates the presented responses to comments provided on the original application. One point that should be raised however is to Moray West's response in relation to a post-construction monitoring programme focusing on commercial fisheries, to validate the assumption and findings of the assessment. The response to this point is that no post construction monitoring is proposed on the basis that Marine Scotland already possesses the tools required to monitor vessel activity post construction, and therefore would be best placed to carry this out. This is not entirely correct. MSS does have the ability to monitor vessel activity for vessels over 12 m and are developing tools to consider vessels under 10 m. This still leaves a monitoring gap for the 10 – 12 m vessels. Further, despite MSS possessing the ability to monitor some sections of the fleet, this does not abrogate Moray West's responsibility to validate the assumptions made within the EIA.

Hopefully these comments are helpful to you. If you wish to discuss any matters further contact the MSS Renewables in-box at MS_Renewables@gov.scot

Yours sincerely

[Redacted]

Technical Officer

Marine Scotland Science

17 January 2019

INVESTOR IN PEOPLE
POSITIVE ABOUT DISABLED PEOPLE

[Redacted]

Our position in relation to the proposed amendments remains that as provided on the 16th of July in relation to the existing proposal in that NATS (en-route) objects to the development due to the predicted impact on our Allanshill RADAR.

NATS are however, actively engaging with the developer in order to explore options for mitigation.

Kind regards

NATS Safeguarding

D: 01489 444687
E: NATSSafeguarding@nats.co.uk

4000 Parkway, Whiteley,
Fareham, Hants PO15 7FL
www.nats.co.uk

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

Dear Sirs,

I refer to the development referenced above. NATS anticipates an impact upon its infrastructure and its operation from the application, and as such has objected to the development.

NATS can now confirm that it has identified and defined a technical mitigation for the **original** proposal for this site; the mitigation is tangible and can be delivered within the lifetime of a planning consent. The only outstanding matter in respect of delivering mitigation is the contract and funding arrangement to secure its delivery. NATS is positively engaged with the applicant in respect of these contractual agreements and has no reason to believe that they will not be forthcoming in the near future. As soon as the agreement is entered into by the applicant, NATS will be in a position to withdraw its objection subject to the imposition of appropriate conditions ensuring mitigation delivery, until such time however, it maintains its objection.

Notwithstanding the above, NATS is also aware of and is working with the developer, on the details of a revised scheme. The revised scheme being sought is anticipated to benefit from an adaptation of the currently envisaged mitigation. While the technical solution currently identified is anticipated to be valid for this revised scheme, NATS is necessarily having to undertake some technical work to accommodate the changes. Once the adapted mitigation is approved by all stakeholders, NATS will be happy to submit a further representation advising the Scot Govt of this. At the same time NATS will be happy to provide an update in respect of any progress in the contractual negotiations.

I trust this clarifies our position, but should you require any further information or an update at any time, do not hesitate to contact us.

Regards
[Redacte
NATS Safeguarding Office

Sacha Rossi
ATC Systems Safeguarding Engineer

D: 01489 444 205
E: sacha.rossi@nats.co.uk

4000 Parkway, Whiteley,
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[Redacted]

[Redacted]

copies from your

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[Redacted]

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Northern Lighthouse Board

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Website: www.nlb.org.uk
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Your Ref: Email – Moray West
Our Ref: PD/OPS/ML/O6_01_551

Marine Renewables
Marine Scotland – Marine Planning & Policy
Scottish Government
Marine Laboratory
375 Victoria Road
ABERDEEN
AB11 9DB

21 December 2018

MORAY WEST – New Documents and Additional Information Application Consultation

We are in receipt of correspondence dated 23 and 27 November 2018 requesting comments regarding the additional application information submitted by **Moray Offshore Windfarm (West) Ltd** with regard to the Moray West Offshore Wind farm.

We note that the revised information includes:

- A request to reduce the development envelope
- A request to vary the offshore wind farm site boundary

We would advise that our previous recommendations as per our letter AL/OPS/ML/O6_01_523 dated 7 August 2018 remain valid.

[Redacted]

Scottish Environment Protection Agency
Buidheann Dìon Àrainneachd na h-Alba

Our ref: PCS/162524
Your ref:

If telephoning ask for:
Zoe Griffin

21 December 2018

[Redacted]
Marine Scotland
Marine Laboratory
375 Victoria Road
Aberdeen
AB11 9DB

By email only to: ms.marinerenewables@gov.scot

Dear Ms [Redacted]

Application for Consent under Section 36 of the Electricity Act 1989 (as amended) and Marine Licence under Part 4 of the Marine (Scotland) Act 2010 and Marine and Coastal Access Act 2009 to construct and operate Moray Offshore Windfarm (West) Limited

Thank you for your consultation email which SEPA received on 23 November 2018.

To assist with streamlining the consultation process, we now focus our site specific advice where we can add best value in terms of enabling good development and protecting Scotland's environment.

We do not provide site specific advice on marine consultations of this nature (offshore). Instead, please refer to our standing advice on marine consultations within guidance document SEPA standing advice for The Department of Energy and Climate Change and Marine Scotland on marine consultations.

If, after consulting this guidance, you still require our comment on some site specific issue which is not adequately dealt with by the standing advice, then we would welcome the opportunity to be re-consulted. Please note that the site specific issue on which you are seeking our advice must be clearly indicated in the body of the consultation email or letter.

Further information on our consultation arrangements generally can be found in How and when to consult SEPA.

If you have any queries relating to this letter, please contact me by telephone on 01224 266636 or e-mail at planning.aberdeen@sepa.org.uk.

Yours sincerely

[Redacted]

Disclaimer
This advice is given without prejudice to any decision made on elements of the proposal regulated by us, as such a decision may take into account factors not considered at this time. We prefer all the technical information required for any SEPA consents to be submitted at the same time as the planning or similar application. However, we consider it to be at the applicant's commercial risk if any significant changes required during the regulatory stage necessitate a further planning application or similar application and/or neighbour notification or advertising. We have relied on the accuracy and completeness of the information supplied to us in providing the above advice and can take no responsibility for incorrect data or interpretation, or omissions, in such information. If we have not referred to a particular issue in our response, it should not be assumed that there is no impact associated with that issue. For planning applications, if you did not specifically request advice on flood risk, then advice will not have been provided on this issue. Further information on our consultation arrangements generally can be found on our website planning pages.

[Redacted]

OUR REF; WID10816 & 10883

Dear Sir/Madam

Thank you for your email dated 23/11/2018.

We have studied this Windfarm proposal with respect to EMC and related problems to BT point-to-point microwave radio links.

The conclusion is that, the Project indicated should not cause interference to BT's current and presently planned radio network.

Kind Regards,
[Redacted]
Fibre and Network Delivery
Radio Frequency Allocation & Network Protection (BNJ553)
Openreach
Tel: 0113 8074481
Mobile 07711111453
Web: www.openreach.co.uk
PLEASE ALWAYS RESPOND TO radionetworkprotection@bt.com

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giving nature a home

Scotland

[Redacted]

Licensing Operations Team
Marine Laboratory
375 Victoria Road
Aberdeen
AB11 9DB

11th January 2018

Dear Ms [Redacted]

ADDITIONAL INFORMATION - APPLICATION FOR CONSENT TO CONSTRUCT AND OPERATE MORAY WEST OFFSHORE WIND FARM, APPROXIMATELY 22.5 KM SOUTHEAST OF THE CAITHNESS COASTLINE

Thank you for consulting RSPB Scotland on the additional information submitted in support of the Moray West offshore wind farm application. Unless otherwise stated, the points raised in our previous response of 7th September 2018 remain the same.

The potential impacts on seabird populations are a significant constraint to further offshore wind deployment in the Moray Firth. In response to this fact, the additional information details the changes made to the project that reduce the predicted effects. For example, the period of operation applied for has been reduced from 50 to 25 years. RSPB Scotland welcomes these changes and efforts to reduce the overall risk posed to seabird populations.

A number of refinements are also suggested in the additional information, which serve to lower the predicted environmental effects. The assessment gives two outputs, one with and one without the refinements to the parameters and methodologies. In the absence of fuller justification for the refinements the assessment without has informed RSPB Scotland's position.

As stated in our previous response, RSPB Scotland acknowledges that some, but not all, of the suggested refinements have merit and adequate justification for their use in the impact assessment. Some however, require further consideration and analysis to ensure their validity or applicability. Additionally, there exist other parameters for which there is little certainty. We note each of the suggested refinements are selected to demonstrate where the assessment has potentially overestimated the impacts.

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Chairman, Committee for Scotland: Prof Colin Galbraith Director, RSPB Scotland: Anne McCall
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BirdLife

In order to present an objective interpretation of the environmental assessment it is also necessary to consider all parameters and the uncertainties attributed to each. Especially where some, as currently used, may under-estimate the scale of impact. For example for flight height Harwood *et al.*[1] report potential underestimation using conventional methods of recording and Skov *et al.*[2] recorded higher flight heights than the generic heights used in collision risk models.

The additional information shows that the impacts on receptor populations, with and without the suggested refinements, would have an adverse effect on the relevant SPAs. For instance:

- **Kittiwake:**
  - in-combination with other offshore wind farms in the Moray Firth and UK east coast, collision and displacement mortalities combined and apportioned to the East Caithness Cliffs SPA is predicted to be 386 per annum, which is equivalent to a counterfactual of population size of 21% after 25 years of operation.
  - For North Caithness Cliffs the outputs equate to 57 mortalities per annum and a CPS of 13%.
- **Guillemot:**
  - in-combination total of 260 birds per annum, equivalent to a CPS of 3.6% at East Caithness Cliffs population. This impact is on top of the decline of 6.2% since 1999.
- **Razorbill:**
  - In-combination displacement impacts total 40 birds per annum, which equates to a CPS of 2.8% at East Caithness Cliffs SPA. A potential impact on the population which has seen an increase of 69.5% since 1999.

The additional information does not contain an assessment or provide the contextual information necessary to determine the potential impacts on gannet and herring gull populations at relevant SPAs. Our concerns as set out in our original response remain for both these species.

On the basis of the above outputs and especially the predicted impacts on kittiwake, RSPB Scotland's position remains unchanged. For the auk species, whilst the impacts are relatively small when compared to kittiwake, there remains considerable uncertainty with the assessment, the extent of which has not been quantified. This omission means an appropriate level of precaution has not, nor cannot, be assigned for the purposes of decision-making.

The in-combination impacts on seabird populations from the Moray Firth and other UK east coast projects are unacceptable; are significant in EIA (Environmental Impact Assessment) terms; and constitute an adverse effect on integrity of relevant Special Protection Areas (SPAs), particularly for the kittiwake population at ECC SPA. For these reasons, **RSPB Scotland object to the Moray West offshore wind farm application**.

Yours sincerely,

{SENT BY EMAIL}

[Redacted]
Senior Conservation Planner

[1] Harwood, AJP, Perrow, MR and Berridge, RJ (2018) Use of an optical rangefinder to assess the reliability of seabird flight heights from boat-based surveyors: implications for collision risk at offshore wind farms. J Field Ornithol. 89(4), 372-383.

[2] Skov, H., Heinänen, S., Norman, T., Ward, R.M., Méndez-Roldán, S. & Ellis, I. 2018. ORJIP Bird Collision and Avoidance Study. Final report – April 2018. The Carbon Trust. United Kingdom. 247 pp.