

Wright H (Hamish)

From: andy.mulholland@dundeecity.gov.uk
Sent: 05 September 2019 11:53
To: MS Marine Renewables
Cc: alistair.hilton@dundeecity.gov.uk
Subject: Neart na Gaoithe - LMP Consultation - Response required by 02 October 2019

Dear Hamish

Thank you for your invitation to comment on the Lighting and Marking Plan associated with the above wind farm. Please note that at this time Dundee City Council has no comments to make.

Regards
Andy

Andrew Mulholland
Planning Officer
Planning Team
City Development Department
Dundee City Council
50 North Lindsay Street
DUNDEE
DD1 1LS

Phone: 01382 433612
Email: andy.mulholland@dundeecity.gov.uk
Web Page: <http://www.dundeecity.gov.uk>

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Wright H (Hamish)

From: Malcolm Morrison <M.Morrison@sff.co.uk>
Sent: 17 September 2019 14:25
To: MS Marine Renewables
Subject: RE: Neart na Gaoithe - LMP Consultation - Response required by 02 October 2019

Hamish

No comments on this plan from SFF,
Rgds Malcolm

From: MS.MarineRenewables@gov.scot [mailto:MS.MarineRenewables@gov.scot]
Sent: 04 September 2019 17:53
To: MARINEENERGY@nature.scot; navigationsafety@mcga.gov.uk; navigation@nlb.org.uk; windfarms@caa.co.uk; dio-safeguarding-wind@mod.gov.uk; Renewables <Renewables@sff.co.uk>; planning@angus.gov.uk; development.management@dundee.gov.uk; policy&projects@eastlothian.gov.uk; development.central@fife.gov.uk; customeradvice@scotborders.gov.uk
Cc: MS_Renewables@gov.scot; Sophia.Irvine@gov.scot; jessica.wilson@gov.scot
Subject: Neart na Gaoithe - LMP Consultation - Response required by 02 October 2019

Dear Sir/Madam,

ELECTRICITY ACT 1989

The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017

MARINE (SCOTLAND) ACT 2010, PART 4 MARINE LICENSING

The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017

Neart na Gaoithe Offshore Wind Limited, having received consent under the above legislation, has submitted to Marine Scotland Licensing Operations Team ("MS-LOT") a Lighting and Marking Plan ("LMP") in order to satisfy condition 20 of the Section 36 consent (as varied) and condition 3.2.2.19 of the Offshore Transmission Infrastructure Marine Licence (licence number: 06678/19/1).

The Marine Licence, section 36, decision notices and conditions, as well as other relevant documents, can be found on our website, following the link below:

<http://marine.gov.scot/ml/neart-na-gaoithe-offshore-windfarm-revised-design>

The conditions state that a LMP must be submitted to the Licensing Authority for their written approval following consultation.

We would appreciate any comments you may have on the proposed LMP, in order to determine whether it is fit for purpose for the Scottish Ministers approval.

If you wish to submit any comments, please send them to MS.MarineRenewables@gov.scot before the **02 October 2019**. If you are unable to meet this deadline please contact MS-LOT on receipt of this email.

Kind regards,

Hamish

Hamish Wright
Marine Licensing Support Officer
Marine Scotland - Marine Planning & Policy

Wright H (Hamish)

From: Miller, Craig <CMiller@scotborders.gov.uk>
Sent: 11 September 2019 14:49
To: MS Marine Renewables
Subject: RE: Neart na Gaoithe - LMP Consultation - Response required by 02 October 2019 18/00375/S36

Thank you for consulting Scottish Borders Council on the Lighting and Marking Plan. We understand the need for aviation and marine lighting given the location and height of the turbines.

We have no comments to make,

Regards

Craig Miller
Principal Planning Officer
Regulatory Services
Scottish Borders Council
Tel: 01835 825029
E-mail : cmiller@scotborders.gov.uk

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From: Planning & Regulatory Services
Sent: 05 September 2019 14:06
To: Miller, Craig <CMiller@scotborders.gov.uk>
Subject: FW: Neart na Gaoithe - LMP Consultation - Response required by 02 October 2019

Received in PRS mailbox

From: Wilson, Fiona (Customer Services) **On Behalf Of** Customer Advice
Sent: 05 September 2019 12:06
To: Planning & Regulatory Services <prs@scotborders.gov.uk>
Subject: FW: Neart na Gaoithe - LMP Consultation - Response required by 02 October 2019

Northern Lighthouse Board

Your Ref: NnGOWL – LMP Consultation
Our Ref: AL/OPS/ML/O6_12_606

84 George Street
Edinburgh EH2 3DA
Switchboard: 0131 473 3100
Fax: 0131 220 2093
Website: www.nlb.org.uk
Email: enquiries@nlb.org.uk



Mr Hamish Wright
Marine Scotland – Marine Planning & Policy
Scottish Government
Marine Laboratory
375 Victoria Road
Aberdeen
AB11 9DB

9 September 2019

Dear Hamish

ELECTRICITY ACT 1989 (AS AMENDED)
The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2000 (As Amended)

MARINE (SCOTLAND) ACT 2010
The Marine Works (Environmental Impact Assessment) Regulations 2017 (As Amended)

Thank you for your e-mail correspondence dated 4th September 2019 regarding the submission by **Neart na Gaoithe Offshore Wind Limited (NnGOWL)** of the NnGOWL Lighting and Marking Plan (LMP), in accordance with Condition 20 of the Section S36 Consent, and Condition 3.2.2.19 of the OFTW Marine Licence, granted by Marine Scotland.

NLB have reviewed the NnG Lighting and Marking Plan and are satisfied that it meets all of the requirements of the S36 Consent and Marine Licenses.

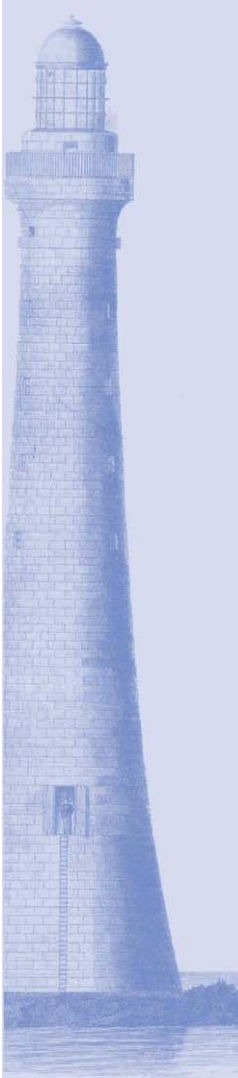
Northern Lighthouse Board have reviewed the content of Figure 5.2 (Marine Lighting – Operational) and make the following observations and recommendations;

- The turbines chosen as Significant Peripheral Structures are satisfactory with regard to navigational lighting.
- The number of sound signals is required to be increased to 13, with each SPS being fitted with a sound signal.
- This is due to the irregular positioning of turbines leading to significant distances between some locations. The effective range of sound signals can be considerably less than 2 nautical miles depending upon prevailing wind conditions, resulting in large gaps in audible coverage at the NnG site.

Yours sincerely

For the safety of all

Certified to: ISO 9001:2000 · The International Safety Management Code (ISM) · OHSAS 18001



[Redacted]

Peter Douglas
Navigation Manager

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Wright H (Hamish)

From: Helen Croxson <Helen.Croxson@mcga.gov.uk>
Sent: 02 October 2019 09:41
To: MS Marine Renewables
Cc: Nick Salter; Peter Lowson
Subject: RE: Neart na Gaoithe - LMP Consultation - Response required by 02 October 2019

Hamish,

Thank you for the opportunity to comment on the draft LMP for the Neart na Gaoithe Offshore Windfarm project. We have now considered the plan and have no significant concerns to raise. We would however like to make the following comments and observations for consideration:

- 1) The MCA has now publish a new Hub ERCoP template which is essentially based on the existing template. We would request that section 24 be updated to refer to the new Hub ERCoP which will still apply to single projects. We note that in the table in section 6 it mentions that the LMP will be consistent with the ERCoP and we assume this in relation to the information it contains rather than the format.
- 2) The revised MGN 543 annex 5 includes the requirements for the red and green lights. We note that the LMP covers the detail on the green lights in section 28 but not on the red.
- 3) The MCA is content with the proposed numbering arrangements for the turbines. It follows a 'spreadsheet' format as far as possible considering the layout, whereby it is numbered in a logical and sequential manner. The MCA is yet to see the revised naming convention for the two substations, and we would like to be reconsulted on this aspect. We would expect the numbering to be unique from the turbines, and comply with the requirements of MGN 543 Annex 5 with regard to the format and distance requirements.
- 4) Our acceptance of this LMP is on the understanding that the Northern Lighthouse Board are content with regards to the lighting and marking arrangements.
- 5) We would also like to add in the legislation section that all vessels employed should comply with relevant maritime safety related legislation regarding vessel certification, manning and safety requirements, and any required survey, certification and inspection arrangements should be discussed and agreed with the relevant MCA Marine Office in advance of works commencing where necessary.

Kind regards

Helen



Helen Croxson, Offshore Renewables Advisor
Navigation Safety Branch, Bay 2/25
Maritime & Coastguard Agency
Spring Place, 105 Commercial Road, Southampton, SO15 1EG
Tel: 0203 8172426
Mobile: 07468353062

Wright H (Hamish)

From: Martin Mcgroarty <Martin.McGroarty@fife.gov.uk>
Sent: 01 October 2019 15:10
To: MS Marine Renewables
Subject: 19/02631/CON- Neart na Gaoithe - LMP Consultation - Response required by 02 October 2019

FAO Hamish Wright

Dear Hamish,

ELECTRICITY ACT 1989

The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017

MARINE (SCOTLAND) ACT 2010, PART 4 MARINE LICENSING

The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017

Having consulted with elected Members and colleagues, I can advise that Fife Council has no comment to make on the Lighting and Marking Plan for Neart na Gaoithe OWF.

Kind regards,
Martin

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Wright H (Hamish)

From: Squires, Jean <jsquires@eastlothian.gov.uk>
Sent: 02 October 2019 17:34
To: MS Marine Renewables
Subject: Neart na Gaoithe - DSLP and LMP Consultation - Response required by 02 October 2019

Hamish,

I refer you the consultation from Marine Scotland on the above, and have the following comments.

DSLP

The design shows 54 turbines, with six spare locations within the design envelope. One of the Council's main landscape concerns with the application was the spread of the windfarm across the horizon, in particular as it appears from the Seabird Centre and North Berwick area, and its effect on the seascape including the Bass Rock, a notable feature. This spread is further compounded when considered cumulatively with Inchcape proposals, which extend to the left in this view. Moving the four turbines that sit furthest right in the view from the Seabird Centre (possibly numbers D03, E02, F01 and G02) to the spare locations within the main body of the wind farm will help to reduce the spread of the wind farm across the horizon and increase the locations where the Bass Rock can be viewed in its natural setting, and the Council would request that this be considered.

This would also reduce the number of edge turbines, and therefore the number that require aviation lighting to 2000 candela.

Lighting and Marking Plan

Of the 54 turbines the 25 peripheral turbines are to be lit with flashing red lights at 2000 candela on the nacelle. All other turbines will be provided with 200 candela lights but these will not be lit during normal operation.

The LMP confirms that when visibility is greater than 5km the light intensity of these turbine lights will be reduced to not less than 10% (200 candela). I would suggest that there should be a *maximum* intensity for these reduced lights as well rather than just a 'not less than', which has no maximum limit. This is to avoid potential impact on night-time visual amenity and seascape of East Lothian.

The LMP notes that the lighting intensity will be controlled automatically by visibility meters fitted to four wind turbines to be agreed with the CAA around the periphery of the development. When visibility is greater than 5km the light intensity of the 2000 candela lights will be automatically reduced. The LMP states that lighting will be reduced or increased if one visibility meter picks up a change in conditions. How does this work if visibility to the south and west is over 5km but visibility to the northeast is reduced? This means all lights will be at 2000 candela and may then be visible from East Lothian. Lighting should be controlled in groups of areas linked to the sensors. The LMP notes that aviation lighting will also be controllable from the Marine Co-ordination Centre so that they can be switched on/off centrally. More information on how this will be controlled should be provided and what happens if the automatic sensors do not work properly and lighting is visible from East Lothian.

Paragraph 28 on page 28 notes that all turbines and OSPs will be lit by a low intensity green heli-hoist light capable of both steady and flashing illumination. I can find no information on the intensity of this light or the height of the light on the wind turbine. The intensity and height of this lighting and times of operation should be provided for comment.

The layout of the turbines means that all the peripheral turbines to the west and south sides are visible from views from North Berwick westwards in East Lothian. This will mean the full spread across the horizon of lit turbines. With

the reduction in intensity with increased visibility this should mean that no lighting is visible from Eats Lothian, however if this is not the case then the full wind farm will be visible at night as well as during the day. From the A198 to the east of North Berwick there will be three lit turbines clumped to the west of the Bass Rock and one close to the west side of the Bass Rock, with the majority of the lit turbines to the east of the Bass Rock. In views from Dunbar and further east the lit turbines to the western side of the windfarm appear in a clumped line to the west and could create increased lighting intensity in these views. The lit turbines to the rest of the wind farm and more spread across the horizon in these views.

Given the confirmation that lighting intensity will be reduced at visibility over 5km then turbine lighting should not be visible from East Lothian. If lit turbines are visible it gives us comfort that this can be raised with and addressed by the Marine Co-ordination Centre. However, we are aware that aviation lighting on nearby structures (the St James Centre Cranes, and Methil wind turbine) is visible over similar distances. We would therefore request that the Lighting Plan provides for monitoring of lighting including whether or not it is visible from East Lothian. The Council requests that, should the lighting be visible from East Lothian, and the impact be considered by the Council to be adverse, that lighting requirements are kept under review. In this case, should the requirement for aviation lighting change (for example due to technological advances) then the lighting should be altered in a reasonable time frame to mitigate the adverse impact identified.

The Council notes the Environment Report (ER) paragraphs 142 and 143 of the project description, said:

“142. The turbines and associated support structures will be marked according to the requirements of the Northern Lighthouse Board (NLB). Consultation is ongoing but the colour of the turbine tower, nacelle and blades is likely to be light grey RAL 7035. The transition piece and tower will be yellow above LAT to an agreed height above highest astronomical tide (HAT).

143. As for the turbines, the OSP(s) will be marked according to the requirements of the NLB. Navigation markings may be allocated solely to a number of wind turbines in the field.”

The LMP shows red circles and tips on the blades. Although it was noted that the turbines would be marked in line with the requirements of the NLB, it is the Councils' view that red markings, if visible from East Lothian, are potentially worse than the worst case assessed in the visual information shown in the ER LVIA section. Can the applicant supply information on whether or not these markings will be discernible from East Lothian, and if so, that they are no more than the minimum required.

The LMP includes at 5.7 'Additional lighting not required by Conditions'. This section covers miscellaneous lighting not required for navigational safety. It notes that this lighting will not impact on navigational lights. For the avoidance of doubt, this section should include that such lighting will not be visible from mainland East Lothian either.

The fog signal is to be of a 2 nautical mile range. This should not be audible from East Lothian however we would ask that a maximum audible range is also agreed to ensure that it cannot be heard from East Lothian.

The Council notes and welcomes that no marking of the export cable landfall is considered necessary.

If you have any questions on the above, please contact J Squires on 01620 827370 or via email at jsquires@eastlothian.gov.uk

J Squires

Pp Keith Dingwall

Planning Service Manager

East Lothian Council, John Muir House, Haddington, EH41 3HA

Email: jsquires@eastlothian.gov.uk

Website: www.eastlothian.gov.uk/localplan



Scottish Natural Heritage
Dualchas Nàdair na h-Alba
nature.scot

Marine Scotland
Marine Laboratory
PO Box 101
375 Victoria Road
Aberdeen
AB11 9DB

Your ref: Neart na Gaoithe Offshore
Wind Farm

Our ref: CNS/REN/OSWF/ Neart na
Gaoithe /Post consent

Date: 17 September 2019

For the attention of:

By email only: Hamish Wright

Hamish.wright@gov.scot
MS.MarineRenewables@gov.scot

Dear Hamish,

Neart na Gaoithe Offshore Wind Farm Limited (NnGOWL) Discharge of Conditions – Consent Plans

Thank you for your consultation on the 4th September 2019 on the consent plans submitted by Neart na Gaoithe Offshore Wind Farm Limited (NnGOWL) submitted for the purpose of discharging consent conditions. Within this letter we provide advice as outlined below on the following plans:

- Development Specification and Layout Plan (DSLPL) (NNG-NNG-ECF-PLN-0003)
- Lighting and Marking Plan (LMP) (NNG-NNG-ECF-PLN-0009)

Concurrently, we have also been consulted on the proposed scope for the Design Statement (DS), received from NnGOWL on the 5th September 2019 (NNG-NNG-ECF-LET-0017). We therefore also provide our advice below on key viewpoints for inclusion within the Design Statement.

Design Statement key viewpoints & Lighting and Marking Plan

We agree with the structure proposed for the Design Statement (DS) and our advice in relation to viewpoints and visualisations are made in the context of the information submitted in the Lighting and Marking Plan.

We agree with the seven viewpoints proposed which are consistent with the original project ES (2012), ES Addendum (2013) and the revised project EIA (2018) EIA¹. Easy comparison between the finalised layout and the earlier indicative layout will be facilitated by using the same format. The quality of the 2018 baseline visuals is acceptable, although we advise that there should be sufficient contrast in each image between the turbines and the background.

¹<https://nngoffshorewind.com/downloads/environmental-impact-assessment-report/volume-3-seascape-landscape-and-visual-impact-assessment-visualisations-and-figures/>

Night time assessment

There is no mention in the DS scope of any night time assessment. The Lighting and Marking Plan indicates that only the peripheral turbines are to be lit with 2000cd lights (the interior lights will be 200cd). Nevertheless, we advise that a minimum of one, preferably two sets of updated night time visualisations are submitted.

Night time viewpoint N2 (B961, Carmyllie) was used previously in 2018. We suggest this viewpoint is used as it shows views down the south west edge of the array which is aligned broadly NW/SE such that it will represent a worst case scenario of overlapping 2000cd lights. In addition, we advise that a viewpoint is used in close proximity to the array, such as the previously used night time viewpoint N5 Crail.

The baseline images should be re-rendered to show slightly better contrast between the land, sea and sky. Low light levels represent typical twilight conditions (i.e. dawn / dusk) and allow some consideration of the landscape context. Further, we advise that the lights themselves would be significantly brighter than shown in the 2018 images. For reference, Moray West recently submitted materials which provide a good example of night time visuals.

Development Specification and Layout Plan (DSLP)

We have no specific comment to make with respect to the DSLP.

We hope these comments are helpful. If further information or advice is required please contact me in the first instance: karen.taylor@nature.scot or via my direct dial on 0131 316 2693.

Yours sincerely,

KAREN TAYLOR
Marine Sustainability Adviser

CC Sophia Irvine, MSLOT; Euan Walker, NnGOWL



Defence Infrastructure Organisation

Jill Roberts
Assistant Safeguarding Manager
Ministry of Defence
Safeguarding – Wind Energy
Kingston Road
Sutton Coldfield
West Midlands B75 7RL
United Kingdom

Ref: Neart na Gaoithe Offshore Wind Farm

Telephone [MOD]: +44 (0)072905 6607

Our Ref: DIO10040201

E-mail: Jillian.roberts156@mod.gov.uk

Hamish Wright
Marine Licensing Support Officer
Marine Scotland- Marine Planning & Policy
Scottish Government
Marine Laboratory
375 Victoria Road
Aberdeen
AB11 9DB

10 October 2019

Dear Hamish

Please quote in any correspondence: DIO10040201

Site Address: Northeast of Firth of Forth and 15.5km east of Fife Ness.

Thank you for consulting the Ministry of Defence (MOD) on the proposed Lighting and Marking Plan (LMP) in accordance with Electricity Act 1989 (The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017) and Marine (Scotland) ACT 2010, part 4 Marine Licensing (The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017).

The application was received on 4th September 2019 and addresses the specific requirements of condition 20 attached to the Section 36 S(S36) consent and Marine Licences issued to Neart na Gaoithe Offshore Wind Farm, which received on 4th September we 2019.

Having reviewed the relevant documents I can confirm that the MOD have no objection.

I trust this is clear however, should you have any questions please do not hesitate to contact me.

Yours sincerely

[Redacted]

Jill Roberts
Assistant Safeguarding Manager
Defence Infrastructure Organisation

[Redacted]

From: Wells Andy <Andrew.Wells@caa.co.uk>
Sent: 02 December 2019 00:22
To: Claire Gilchrist <Claire.Gilchrist@nngoffshorewind.com>
Subject: RE: Neart na Gaoithe Offshore Wind Farm - Turbine Visibility Meters

Dear Claire,

Thank you for your continued patience and apologies that due to an unforeseen high workload, this has not been addressed until now.

I have now received comments from within the CAA on the LMP. We note that the distances between turbines NG-H06 and NG-G02 as well as NG-H23 and NG-D23 exceed 5 km and therefore request that turbines NG-G04 and NG-F22 are considered as part of the perimeter aviation lighting scheme.

In terms of the visibility sensors, we are content that these provide adequate representation across the wind farm.

Please do not hesitate to contact me to discuss this further if you wish.

Kind regards

Andy

Andy Wells

Policy Lead Spectrum and Surveillance Policy
Future Safety
Civil Aviation Authority

Tel: 0330 138 3166
Mob: [Redacted]

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From: Claire Gilchrist <Claire.Gilchrist@nngoffshorewind.com>
Sent: 20 November 2019 09:41
To: Wells Andy <Andrew.Wells@caa.co.uk>
Subject: RE: Neart na Gaoithe Offshore Wind Farm - Turbine Visibility Meters
Importance: High

Good morning,

I am just emailing with regards to my previous correspondence below, I tried to phone this morning but was not able to get through.

We are looking to finalise our Lighting and Marking Plan as soon as possible and currently I am not sure it has been reviewed by CAA. We also require input from CAA regarding the proposed locations of turbine visibility meters. Would you be able to provide an indication of whether you are able to respond to these queries.

Please do not hesitate to contact me with any queries at your earliest convenience

Kind regards,

Claire

Claire Gilchrist

Offshore Survey Consents Lead



EDF Renewables, UK

NnG Offshore Wind

Atria One, Level Six,

144 Morrison Street,

Edinburgh, EH3 8EX

Skype: +44 131 376 9929

Mobile: [Redacted]

www.edf-re.uk

www.nngoffshorewind.com