

Gemma Clark

From: Lyn Farmer <lyn.farmer@aberdeenshire.gov.uk>
Sent: 12 May 2021 15:05
To: Gemma Clark
Cc: #Craig Watch EIA PM; Elizabeth Tully
Subject: RE: 14138 - Proposed Craig Watch Wind Farm - Noise Assessment Consultation

Good afternoon Gemma,

My Planning colleague, Elizabeth Tully, has reviewed your report and provided the comments below. In summary, I think it's fair to say that we are all in agreement that Timberford can be considered abandoned, however we would require more information in respect of the other two properties within Aberdeenshire before we could consider agreeing to scope these out from the noise survey. We would therefore request that these are included in the noise modelling until/unless such time as we have considered further submissions from you to support your view that they are indeed abandoned.

In the case of 'Timberford' it is clear, given there is no structure as such, that planning permission would be needed to bring this into use as a residential property.

The other two buildings ('Chapel Hill' and 'Unknown Building') are more substantial buildings/structures and give a little bit more to think about. There are four tests established by case law to consider for abandonment: it's physical condition; the period of non-use; the owners intentions; and whether there has been any intervening use. I think further information should be obtained by the developer in order to attempt to prove the abandonment case. Obviously, some will be easier to prove than others (it will of course be difficult to ascertain an owners intentions) but this could come down to the length of time the building has been vacant and whether there is any planning history for the building, but I don't believe we should be making a decision based solely on the submission of basic photographs. If it is concluded by the submission of additional information that the buildings are abandoned, then an application to bring it back into a residential use would be needed and a consideration of any noise impacts from the development could be taken into account. If it can't be concluded that the buildings are indeed abandoned, then applications to refurbish/renovate the buildings may be a 'householder' application where the principle of the building being a house would not be under consideration and therefore likely more difficult to raise any objection/refuse for noise issues.

I note that the TNEI document attached to your email states that Timberford and Chapel Hill were noted as being abandoned, derelict or uninhabitable within the Garbet WF EIAR. I have no information on whether we were consulted during the decision making for that, however would be minded to take a precautionary approach in this instance to ensure the advice we give is correct and based on more information.

Best regards,

Lyn

Lyn Farmer
Senior Environmental Health Officer
Environmental Health
Protective Services and Economic Development, Infrastructure Services, Aberdeenshire Council

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From: Gemma Clark <gemma.clark@tneigroup.com>
Sent: 11 May 2021 09:51
To: Lyn Farmer <lyn.farmer@aberdeenshire.gov.uk>
Cc: #Craig Watch EIA PM <CraigWatch@ramboll.com>; Elizabeth Tully <elizabeth.tully@aberdeenshire.gov.uk>
Subject: RE: 14138 - Proposed Craig Watch Wind Farm - Noise Assessment Consultation

Hi Lyn,

I hope that you are well. I am just following up on the emails below to check whether you and your planning colleagues have had a chance yet to consider my letter regarding the derelict/ abandoned properties near to the proposed Craig Watch Wind Farm? I am currently in the process of undertaking some noise modelling for the wind farm therefore if you could possibly come back to me today or tomorrow then that would be very much appreciated.

Kind regards

Gemma

Gemma Clark
Principal Consultant



Manchester | Newcastle | Glasgow | Cape Town | Dublin

Tel: +44(0)191 2111418

From: Lyn Farmer <lyn.farmer@aberdeenshire.gov.uk>
Sent: 28 April 2021 12:52
To: Gemma Clark <gemma.clark@tneigroup.com>
Cc: #Craig Watch EIA PM <CraigWatch@ramboll.com>; Elizabeth Tully <elizabeth.tully@aberdeenshire.gov.uk>
Subject: RE: 14138 - Proposed Craig Watch Wind Farm - Noise Assessment Consultation

Hi Gemma,

Many thanks for your report. I will have to liaise with my planning colleagues in relation to this report before I provide a response to you. We will endeavour to respond to you within 14 days.

Best regards,

Lyn

From: Gemma Clark <gemma.clark@tneigroup.com>
Sent: 28 April 2021 10:55
To: Lyn Farmer <lyn.farmer@aberdeenshire.gov.uk>; Douglas Caldwell <Douglas.Caldwell@moray.gov.uk>
Cc: #Craig Watch EIA PM <CraigWatch@ramboll.com>
Subject: RE: 14138 - Proposed Craig Watch Wind Farm - Noise Assessment Consultation

Hi Lyn,

Thanks for the email. Apologies for the oversight I had not appreciated that some of the buildings were within Aberdeenshire Council boundary until Douglas mentioned it the other day. Please find attached a letter outlining the identified derelict/ abandoned properties for your consideration.

If you have any questions, please do not hesitate to contact me. We look forward to hearing from you once you have had the chance to review the letter.

Kind regards

Gemma

Gemma Clark
Principal Consultant



Manchester | Newcastle | Glasgow | Cape Town | Dublin

Tel: +44(0)191 2111418

From: Lyn Farmer <lyn.farmer@aberdeenshire.gov.uk>

Sent: 28 April 2021 10:35

To: Gemma Clark <gemma.clark@tneigroup.com>; Douglas Caldwell <Douglas.Caldwell@moray.gov.uk>

Cc: #Craig Watch EIA PM <CraigWatch@ramboll.com>

Subject: RE: 14138 - Proposed Craig Watch Wind Farm - Noise Assessment Consultation

Good morning Gemma,

Can I ask whether the same report (regarding whether properties should be regarded as noise sensitive, or not) was also submitted to Aberdeenshire Council in relation to the properties within Aberdeenshire, or whether there are plans to do so? I have asked the Planning Case Officer for this site and she is not aware of having received anything in this regard, nor am I.

Best regards,

Lyn

Lyn Farmer
Senior Environmental Health Officer
Environmental Health
Protective Services and Economic Development, Infrastructure Services, Aberdeenshire Council

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Gemma Clark

From: Lyn Farmer <lyn.farmer@aberdeenshire.gov.uk>
Sent: 04 December 2020 17:00
To: Matthew Lambert
Subject: 14138 - Proposed Craig Watch Wind Farm - Noise Assessment Consultation

Dear Matthew,

Thank you for providing your monitoring proposals. I have reviewed the information and provide the following comments based on my current understanding of the project and without prejudice to any future discussion or decision;

- I'm pleased that the methodology is generally in accordance with ETSU-R-97, the IoA Good Practice Guide and SPGs and that you note the advice given in Aberdeenshire Council's developer guidance
- I am in agreement with the proposal to utilise available significant headroom, however, normally we would accept a 'rounding up' or 'rounding up plus 1dB' margin above predicted noise levels
- Having considered the general monitoring locations, I agree that these are generally in line with our expectations, however there are structures on our mapping system, with address points at Chapelhill (around the vicinity of 340879,836952) that may be residential dwellings or may be considered by our Planning Service to retain their status as dwellings (ie, could be redeveloped without needing new planning permission). If this is the case, then this location should be considered as a noise sensitive receptor. Similarly, Mill of Lynebain (341153, 835144) or Waterside (341341, 835057) may require consideration as the nearest NSR to the east
- Aberdeenshire Council Environmental Health are happy to receive an invitation (send to Lyn.Farmer@aberdeenshire.gov.uk) to attend installation of the noise monitoring equipment, and may attend depending on availability and weather/ease of access.
- With regard to other nearby wind turbine development, to the best of my knowledge, you have identified all those that I am aware of in your letter.

I trust the above will allow you to prepare your assessment, however if you have further queries please don't hesitate to ask.

Best regards,

Lyn

Lyn Farmer
Senior Environmental Health Officer
Environmental Health
Protective Services and Economic Development, Infrastructure Services, Aberdeenshire Council

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From: Matthew Lambert <matthew.lambert@tneigroup.com>
Sent: 20 November 2020 12:18
To: Lyn Farmer <lyn.farmer@aberdeenshire.gov.uk>
Subject: 14138 - Proposed Craig Watch Wind Farm - Noise Assessment Consultation

Dear Lyn Farmer

TNEI has been appointed by Craig Watch Wind Farm Limited to undertake a noise assessment for the proposed Craig Watch Wind Farm which is located on land approximately 8km southeast of Dufftown.

Please find attached a letter detailing the proposed approach to the noise assessment and proposed noise monitoring locations. We would welcome your comments at your earliest convenience.

If you would like to discuss the assessment further, please do not hesitate to contact me.

Kind regards
Matt

Matthew Lambert

Senior Consultant

Manchester | Newcastle | Glasgow | Cape Town

Tel: +44(0)191 211 1402

Address: TNEI, 7th Floor, West One, Forth Banks, Newcastle Upon Tyne, NE1 3PA
Registered in England & Wales No. 03891836

Registered Address: TNEI Services Ltd, Bainbridge House, 86-90 London Road, Manchester M1 2PW

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Please note that in response to the current COVID-19 position and latest Government advice, we have implemented some changes to our working practices. Whilst we have access to all of our offices should this be required, in light of current advice regarding minimum social contact, we are working from home wherever possible. We are however fully operational and our staff have normal working capability with remote access to our systems and we will continue to provide the service expected of us during this period. We will respond to changing Government advice and provide updates accordingly.

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Dh'fhaodadh fiosrachadh sochaire, a tha a-mhàin airson an neach gu bheil am post-dealain air a chur, a bhith an seo. Ma tha thu air am post-dealain fhaighinn mar mhearachd, gabh ar leisgeul agus cuir fios chun an neach a chuir am post-dealain agus dubh às am post-dealain an dèidh sin. 'S e beachdan an neach a chuir am post-dealain a tha ann an gin sam bith a thèid a chur an cèill agus chan eil e a' ciallachadh gu bheil iad a' riochdachadh beachdan

18 March, 2024

Ref: 15909-001 R0

Copy: Sent by email only

Gordon Buchanan
Environmental Health Officer
Aberdeenshire Council
Woodhill House
Westburn Road
Aberdeen
AB16 5GB

Dear Mr Buchanan,

**PROPOSED CRAIG WATCH WIND FARM SUPPLEMENTARY ENVIRONMENTAL INFORMATION –
NOISE ASSESSMENT (ECU00002177)**

As you may be aware, a planning application was submitted in June 2022 for the proposed Craig Watch Wind Farm ('the proposed development'), on land to the south east of Dufftown, Moray. The proposed wind turbines are located on the border of Moray and Aberdeenshire, with a number of turbines sited within each local authority area. Following post application consultation, Craig Watch Wind Farm Limited ('the Applicant') is proposing a number of amendments to the design of the proposed development to be issued in the form of a Supplementary Environmental Information (SEI) submission, and as part of that, TNEI Services Limited ('TNEI') are undertaking a revised noise assessment.

Due to an error during the submission process, the annexes which should have formed part of Technical Appendix 11.2 were omitted from Volume 4 of the Environmental Impact Assessment Report (EIAR) included within the Craig Watch Wind Farm Planning Application. As part of the SEI submission, we propose to include these annexes and the Technical Appendix 11.2 again, and will clearly mark the update to the main body of our Technical Appendix by showing any amendments as blue text.

In addition to design changes to the proposed development, the noise assessment will consider a revised cumulative scenario. The most significant change since June 2022 is the submission of a planning application for Clashindarroch Extension Wind Farm, located to the south east of the proposed development.

The noise assessment submitted in 2022 was undertaken in accordance with the methodologies outlined in ETSU-R-97 and the Institute of Acoustics' *'A Good Practice Guide to the Application of ETSU-R-97 for the Assessment and Rating of Wind Turbine Noise'* (the IOA GPG), which we intend to follow for the revised assessment. Section 5.4.2 of the IOA GPG discusses a method of apportioning ETSU-R-97 noise limits between concurrent wind farm applications in order to allow multiple developments to coexist. We propose to adopt this approach for the revised cumulative noise assessment, and the Applicant has approached the Agent of Clashindarroch Extension (Boralex) in order to seek their engagement with the process. To date, no response has been received from Boralex,

Newcastle
7th Floor, West One
Forth Banks
Newcastle Upon Tyne
NE1 3PA

Tel: +44(0)191 211 1400

therefore we would like to take this opportunity to agree the approach with you prior to the submission of the SEI.

The IOA GPG states that *'LPAs may wish to bring together concurrent wind farm applicants, such that apportionment can be discussed and agreed in conjunction with the applicants'*, however we are confident that in the event that Boralex does not engage with the process, that our proposed approach is robust and in line with all relevant guidance and current good practice to the point that Boralex's engagement would be desirable, but not essential to the process. While Boralex may decline to engage with the limit apportionment process, in the interest of ensuring that cumulative noise impacts are appropriately addressed, we would suggest that the Council encourage Boralex to explain their proposed approach to deriving Site Specific Noise Limits (SSNLs) at the noise receptors included in the Clashindarroch Extension noise assessment.

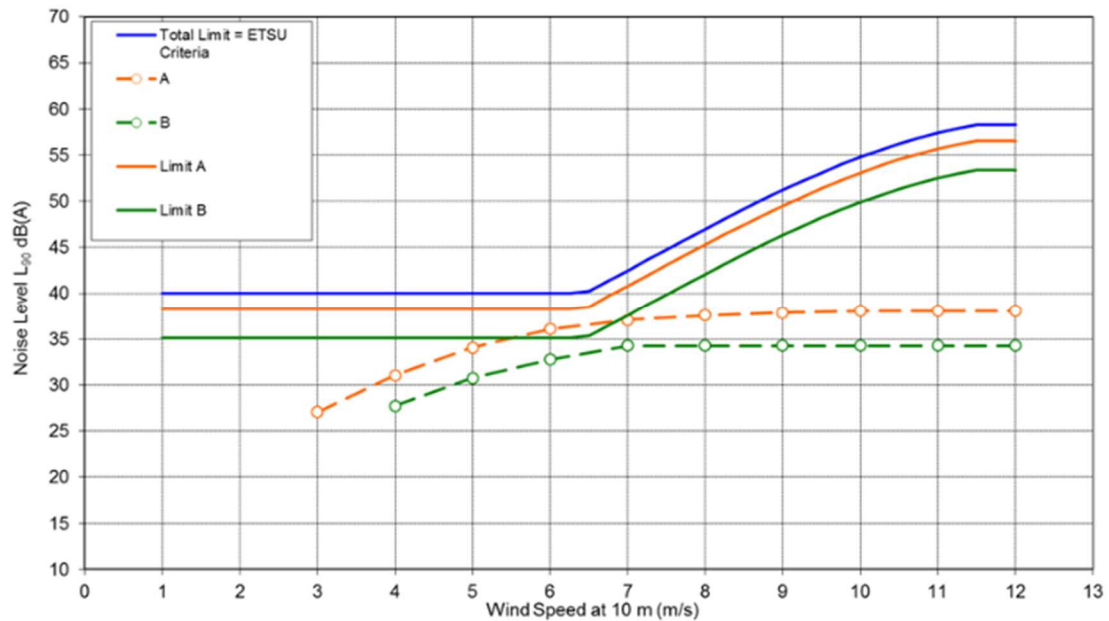
Proposed Noise Limit Apportionment Methodology

Our proposed approach to the noise limit apportionment is split into the key stages outlined below:

1. Undertake cumulative noise predictions at noise-sensitive receptors from all proposed (in planning), consented and operational wind developments in the area, with the exception of the proposed development and Clashindarroch Extension. These predictions include an additional +2 dB correction for each cumulative development, in order to account for any potential increase in noise level over the lifetime of the developments.
2. The predictions will then be logarithmically subtracted from the Total ETSU-R-97 Noise Limits (TNL) established in the Craig Watch Wind Farm EIAR, resulting in the Residual Noise Limits (RNL; effectively, the remaining available noise limit to be apportioned between the two proposed wind farms).
3. Where either of the two concurrent developments are predicted to be within 10 dB of the TNL, they will require a share of the limit in line with the following scenarios:
 - a. Where neither development is within 10 dB of the TNL, neither require a share of the limit and as such their respective Site Specific Noise Limits (SSNL) can be set at 10 dB below the TNL.
 - b. Where one development is within 10 dB of the TNL and the other is not, the SSNL for the higher development can be set equal to the RNL, and the lower set at 10 dB below the TNL.
 - c. Where both developments are predicted to be within 10 dB of the TNL, then the RNL will be apportioned between them on an acoustic energy basis. The result of this will be that the SSNL for each development will provide an equal amount of 'headroom' over their predicted levels.

Figure 7 of the IOA GPG, which illustrates noise limit apportionment on an acoustic energy basis, is reproduced below. While our proposed approach includes an additional step (accounting for other existing cumulative developments through calculation of the RNL), the graph shows an example of scenario 3c, described above.

IOA GPG Figure 7: Apportionment of ETSU-R-97 limits between two wind farms



Adoption of the approach outlined above will result in the production of a series of Site Specific Noise Limits at all the relevant properties for both the Clashindarroch Extension and Craig Watch Wind Farms. The limits would be applicable regardless of whether one or both developments are consented.

Following the receipt of this letter, we would be grateful if you could confirm your agreement with the following points:

- The proposed format of annexes and technical appendices to be included within the SEI submission; and
- The proposed methodology for setting Site Specific Noise Limits for the concurrent Craig Watch and Clashindarroch Extension wind farm applications.

We would appreciate a response to this letter at your earliest convenience. If you have any questions, please do not hesitate to contact me or my colleague Gemma Clark. We look forward to hearing from you soon.

Yours sincerely,

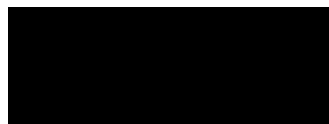


Mark Tideswell
BSc(Hons), Dip, AMIOA

Senior Consultant

mark.tideswell@tneigroup.com
Tel: 0191 329 3175

Reviewed and approved by:



Gemma Clark
BSc(Hons), MSc, MIOA

Principal Consultant

gemma.clark@tneigroup.com
Tel: 0191 211 1418

18 March, 2024

Ref: 15909-001 R0

Copy: Sent by email only

Douglas Caldwell
Environmental Health Officer
Moray Council
Council Office
High Street
Elgin
IV30 1BX

Dear Mr Caldwell,

**PROPOSED CRAIG WATCH WIND FARM SUPPLEMENTARY ENVIRONMENTAL INFORMATION –
NOISE ASSESSMENT (ECU00002177)**

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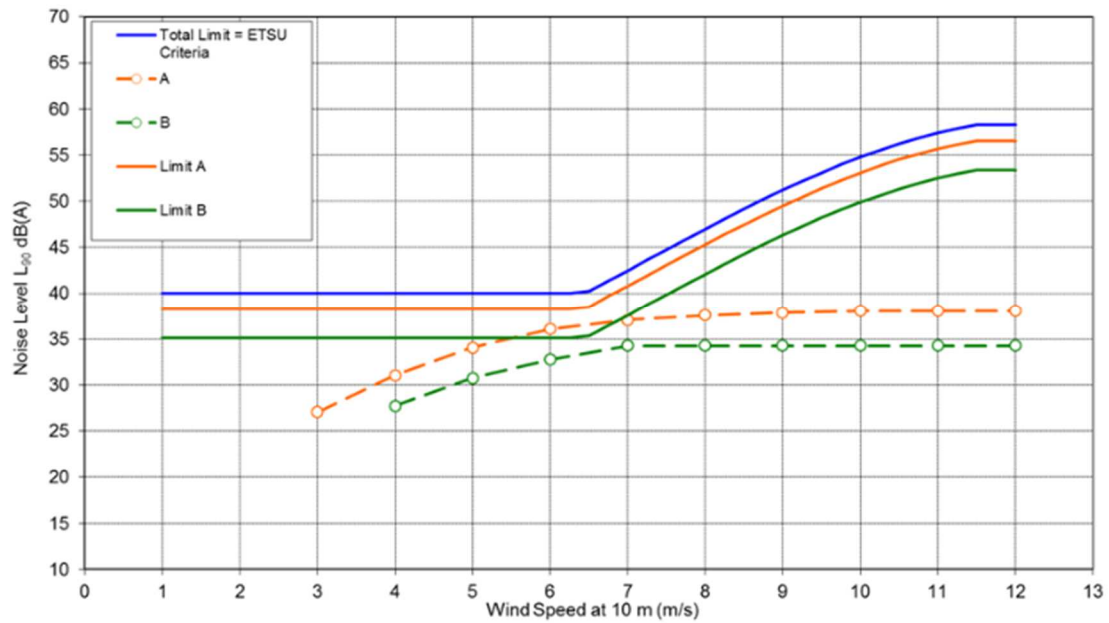
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IOA GPG Figure 7: Apportionment of ETSU-R-97 limits between two wind farms



Adoption of the approach outlined above will result in the production of a series of Site Specific Noise Limits at all the relevant properties for both the Clashindarroch Extension and Craig Watch Wind Farms. The limits would be applicable regardless of whether one or both developments are consented.

Following the receipt of this letter, we would be grateful if you could confirm your agreement with the following points:

- The proposed format of annexes and technical appendices to be included within the SEI submission; and
- The proposed methodology for setting Site Specific Noise Limits for the concurrent Craig Watch and Clashindarroch Extension wind farm applications.

We would appreciate a response to this letter at your earliest convenience. If you have any questions, please do not hesitate to contact me or my colleague Gemma Clark. We look forward to hearing from you soon.

Yours sincerely,

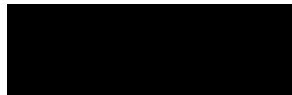


Mark Tideswell
BSc(Hons), Dip, AMIOA

Senior Consultant

mark.tideswell@tneigroup.com
Tel: 0191 329 3175

Reviewed and approved by:



Gemma Clark
BSc(Hons), MSc, MIOA

Principal Consultant

gemma.clark@tneigroup.com
Tel: 0191 211 1418

Annex 3 – Field Data Sheets / Installation Report

Craig Watch Wind Farm Baseline Noise Survey - Installed Noise Monitoring Locations



Present during the course of the installation:

- Ewan Watson, TNEI services Ltd
- Douglas Caldwell (EHO), Moray Council

Unless specified, all noise meters were installed at least 3.5 m from any hard-reflecting surface except the ground and less than 20 m from the dwelling and away from obvious noise sources, such as boiler flues.

Detailed information and pictures for each of the installed locations are provided below. The original full-size pictures are available on request.

Noise Monitoring Location Latitude Longitudes

NML	Lat Long
NML01 - Tighnaird	57.413365°, -2.974263°
NML02 - Lynebain	57.404508°, -2.979213°
NML03 - Bellcherrie	57.392975°, -2.998772°
NML04 - Easterton	57.383670°, -3.007254°
NML05 - Rhinturk	57.382155°, -3.055691°

NML01 - Tighnaid



North West



North East



South West



Description

Installed at NML01, Tighnaird, property in Aberdeenshire located to the north east of the proposed Craig Watch wind farm site.

The noise monitoring equipment was installed to the south west of the property, on a raised bank at the edge of the amenity area. It was placed away from an external heating unit. At time of installation, the property was undergoing some construction work on an outhouse style building located to the rear of the property, less than 10 m away from the noise monitoring equipment (seen in photo).

Construction noise was the primary sound source noted whilst on site. Birdsong, wind in the surrounding foliage, sheep bleating and planes passing overhead were other sources of noise noted during installation.

NML02 - Lynebain



South West



North West



North East



Description

Installed at NML02, located to the east/south east of the proposed Craig Watch wind farm site.

The noise monitoring equipment was installed to the north of the property, on a raised bank behind an outhouse style building. This was in order to mitigate the river noise which was quite prominent in certain locations to the south of the property, but not so in this location.

A small drainage ditch lies behind the installation location, but it was dry and had no indication that water was running through it. No pipes or spouts were observed.

Birdsong, and wind in the surrounding foliage and sheep bleating were the main noise sources observed, as well as faint river noise from the south.

A rain gauge was installed at the location.

NML03 - Bellcherrie



North East



South West



South East



Description

Installed at NML03, located to the south east of the proposed Craig Watch wind farm site.

The kit was installed to the south east of the property, in the front garden area. This was due to large trees in the back garden being very prominent noise sources when the wind was blowing.

Birdsong, wind in the surrounding foliage (front and back garden), music playing faintly from the house and the occasional car passing were the sources of noise noted during installation.

NML04 - Easterton



North



South



East



West



Description

Installed at NML04, located to the south east/south of the proposed Craig Watch wind farm site.

The noise monitoring equipment was installed to the east of the property, in the front garden area. This was chosen as the back garden area was quite heavily influenced by the sound of large trees swaying in the wind.

Birdsong and slight wind in the surrounding foliage were the only sources of noise noted during installation.

A rain gauge was installed at this location.

NML05 - Rhinturk



South



East



West



Description

Installed at NML05, located to the south/south west of the proposed Craig Watch wind farm site.

The noise monitoring equipment was installed to the south of the property due to the influence of large trees swaying in the wind to the north of the property. The noise monitoring equipment was installed on a small, concreted area for stability as the grassy area was quite undulating.

Birdsong, a tractor in the distance, cars passing on the A941 to the south and wind in the surrounding foliage were the sources of noise noted during installation.

Noise Monitoring Field Data Sheet

Project Title	Craig Watch Wind Farm	Project Number	14138
Client	Craig Watch Wind Farm Limited	Surveyor	EW

MONITORING LOCATION

Location Name	NML01 – Tighnaird
Description	The noise monitoring equipment was installed to the south west of the property, on a raised bank at the edge of the amenity area. It was placed away from an external heating unit.
Approximate National Grid Reference	341569, 836310
Noise sources noted during installation, weekly inspection and removal	Birdsong and wind induced noise from trees and foliage

NOISE MONITORING EQUIPMENT DETAILS

	Kit Number	Model	Serial Number	Last Calibrated/ Conformance Checked
Sound Level Meter	SLM048	NL-52	00386761	10/09/2020
Pre Amplifier	SLM048	NH-21	33387	10/09/2020
Microphone	SLM048	UC-53A	317048	10/09/2020
Calibrator	CAL008	Rion NC-75	35002724	04/02/2021

NOISE MONITORING EQUIPMENT SETTINGS

	Network (A,B,Z)	Index and Time	Time Weighting (Slow, Fast)	Range (dB)	Audio
Parameters Recorded	A	LA9010min, LAeq10min	Fast	20-110	No

DATA

File Name	Start Time	End Time	Cal. at Start	Cal. at End	Drift	Observations
0101	15:50 18/03/21	3:00 25/03/21	94.0	93.5	-0.5	<p>Installation</p> <ul style="list-style-type: none"> - Birdsong dominant - Wind in trees - Work taking place on garage/out building - Some sheep bleating - Occasional plane overhead - Software issue therefore meter only logged for one week <p>Maintenance Visit</p> <ul style="list-style-type: none"> - Work taking place on garage/out building - Birdsong - Sheep Bleating - No wind, very calm
0102	11:20 15/04/21	13:50 04/05/21	94.0	94.2	+0.2	<p>Maintenance Visit</p> <ul style="list-style-type: none"> - Wind in trees - Occasional car passing by - No construction work taking place - Birdsong
0103	14:00 04/05/21	14:35 18/05/21	94.0	94.2	+0.2	<p>Decommissioning</p> <ul style="list-style-type: none"> - Birdsong - Faint vegetation rustle - Sheep Bleating

PHOTOGRAPHS



NML01 – NW



NML01 – NE



NML01 – SW

Noise Monitoring Field Data Sheet

Project Title	Craig Watch Wind Farm	Project Number	14138
Client	Craig Watch Wind Farm Limited	Surveyor	EW

MONITORING LOCATION

Location Name	NML02 – Lynebain
Description	The noise monitoring equipment was installed to the north of the property, on a raised bank behind an outhouse style building. This was in order to mitigate the river noise which was quite prominent in certain locations to the south of the property, but not so in this location.
Approximate National Grid Reference	341255, 835330
Noise sources noted during installation, weekly inspection and removal	Birdsong, wind induced noise from trees and foliage and distant river noise to the South

NOISE MONITORING EQUIPMENT DETAILS

	Kit Number	Model	Serial Number	Last Calibrated/ Conformance Checked
Sound Level Meter	SLM022	NL-32	00703291	17/09/2020
Pre Amplifier	SLM022	NL-32	33387	17/09/2020
Microphone	SLM022	NL-32	317048	17/09/2020
Calibrator	CAL008	Rion NC-75	35002724	04/02/2021

NOISE MONITORING EQUIPMENT SETTINGS

	Network (A,B,Z)	Index and Time	Time Weighting (Slow, Fast)	Range (dB)	Audio
Parameters Recorded	A	LA9010min, LAeq10min	Fast	20-110	No

DATA

File Name	Start Time	End Time	Cal. at Start	Cal. at End	Drift	Observations
0201	11:00 18/03/21	10:00 15/04/21	94.0	93.8	-0.2	Installation <ul style="list-style-type: none"> - Noise from wind in trees - Sheep bleating - Birdsong - Distant river noise to South Maintenance Visit <ul style="list-style-type: none"> - Birdsong - Sheep Bleating - River faintly audible to South
0202	10:10 15/04/21	13:20 04/05/21	94.0	94.1	0.1	Maintenance Visit <ul style="list-style-type: none"> - Wind in vegetation - Birdsong - Sheep Bleating - River faintly audible to South
0203	13:30 04/05/21	14:00 18/05/21	94.0	94.1	0.1	Decommissioning <ul style="list-style-type: none"> - Faint river noise - Birdsong - Sheep Bleating - Slight vegetation noise

PHOTOGRAPHS



NML02 – SW



NML02 – NW



NML02 – NE

Noise Monitoring Field Data Sheet

Project Title	Craig Watch Wind Farm	Project Number	14138
Client	Craig Watch Wind Farm Limited	Surveyor	EW

MONITORING LOCATION

Location Name	NML03 – Bellcherrie
Description	The kit was installed to the south east of the property, in the front garden area. This was due to the noise from the wind passing through the large trees in the back garden being very dominant when the wind was blowing.
Approximate National Grid Reference	340076, 834061
Noise sources noted during installation, weekly inspection and removal	Birdsong and wind induced noise from trees and foliage.

NOISE MONITORING EQUIPMENT DETAILS

	Kit Number	Model	Serial Number	Last Calibrated/ Conformance Checked
Sound Level Meter	SLM046	NL-52	00386759	10/09/2020
Pre Amplifier	SLM046	NL-52	33387	10/09/2020
Microphone	SLM046	NL-52	317048	10/09/2020
Calibrator	CAL008	Rion NC-75	35002724	04/02/2021

NOISE MONITORING EQUIPMENT SETTINGS

	Network (A,B,Z)	Index and Time	Time Weighting (Slow, Fast)	Range (dB)	Audio
Parameters Recorded	A	LA9010min, LAeq10min	Fast	20-110	No

DATA

File Name	Start Time	End Time	Cal. at Start	Cal. at End	Drift	Observations
0301	12:30 18/03/21	23:40 24/03/21	94.0	94.0	0.0	Installation <ul style="list-style-type: none"> - Birdsong - Wind in trees to rear of property - Music playing from property when installing - Occasional car passing by on adjacent road Maintenance Visit <ul style="list-style-type: none"> - Birdsong - Occasional clanging noise from barn - Cows - Some rustle in grass/trees when wind picked up
0302	10:50 15/04/21	13:00 04/05/21	94.0	94.1	+0.1	Maintenance Visit <ul style="list-style-type: none"> - Wind in trees dominant - Sheep bleating - Birdsong - Very occasional car passing by
0303	13:10 04/05/21	13:40 18/05/21	94.0	94.1	+0.1	Decommissioning <ul style="list-style-type: none"> - Sheep bleating - Cattle mooing in distance - Birdsong - Very faint vegetation rustle

PHOTOGRAPHS



NML03 – NE



NML03 – SW



NML03 – SE

Noise Monitoring Field Data Sheet

Project Title	Craig Watch Wind Farm	Project Number	14138
Client	Craig Watch Wind Farm Limited	Surveyor	EW

MONITORING LOCATION

Location Name	NML04 – Easterton
Description	The noise monitoring equipment was installed to the east of the property, in the front garden area. This was chosen as the back garden area was quite heavily influenced by the sound of large trees swaying in the wind.
Approximate National Grid Reference	339541, 833034
Noise sources noted during installation, weekly inspection and removal	Birdsong and slight wind in the surrounding foliage were the only sources of noise noted.

NOISE MONITORING EQUIPMENT DETAILS

	Kit Number	Model	Serial Number	Last Calibrated/ Conformance Checked
Sound Level Meter	SLM045	NL-52	00386758	10/09/2020
Pre Amplifier	SLM045	NL-52	33387	10/09/2020
Microphone	SLM045	NL-52	317048	10/09/2020
Calibrator	CAL008	Rion NC-75	35002724	04/02/2021

NOISE MONITORING EQUIPMENT SETTINGS

	Network (A,B,Z)	Index and Time	Time Weighting (Slow, Fast)	Range (dB)	Audio
Parameters Recorded	A	LA9010min, LAeq10min	Fast	20-110	No

DATA

File Name	Start Time	End Time	Cal. at Start	Cal. at End	Drift	Observations
0401	13:00 18/03/21	00:20 25/03/21	94.0	93.9	-0.1	Installation - Birdsong - Wind in trees to rear of property Maintenance Visit - Birdsong - Sheep Bleating
0402	09:40 15/04/21	11:53 04/05/21	94.0	93.9	-0.1	Maintenance Visit - Wind in the trees dominant - Occasional sheep bleating
0403	12:10 04/05/21	12:30 18/05/21	94.0	94.1	0.1	Decommissioning - Sheep bleating - Birdsong - Distant farm machinery noise

PHOTOGRAPHS



NML04 - N



NML04 - S



NML04 - E



NML04 - W