MORAY WEST
OFFSHORE WINDFARM

Giulia Agnisola
Marine Scotland Licensing Operations Team
Marine Scotland
375 Victoria Road
Aberdeen
AB11 9DB

4 July 2018

Dear Ms Agnisola

Marine and Coastal Access Act 2009
Marine (Scotland) Act 2010
The Marine Works (Environmental Impact Assessment) Regulations 2007 (as amended)
The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017

Application by Moray Offshore Windfarm (West) Limited for a Marine Licence to Construct the Moray West Offshore Transmission Infrastructure

Moray Offshore Windfarm (West) Limited is a project company of EDP Renewables which is a leading global renewable energy company which develops and builds offshore wind farms in the UK.

Moray Offshore Windfarm (West) Limited hereby submits a Marine Licence application under Part 4 of the Marine (Scotland) Act 2010 and Part 4 of the Marine and Coastal Access Act 2009 for the deposit of substances and objects and the construction, alteration or improvement of works within the Scottish Marine Area and Scottish Offshore Region in relation to the Moray West Offshore Transmission Infrastructure (OfTI).

The proposed Moray West OfTI comprises:

- Up to two Offshore Substation Platforms (OSPs) with an indicative structure width and length of up to 100 m x 100 m and at a height above HAT of 70 m;
- Substructures and associated seabed foundations for OSPs;
- Up to 15 km of 33-400 kV subsea interconnector cables linking OSPs (if two OSPs are installed);
- Up to two 132-400 kV subsea export cables of approximately 65 km (per circuit, therefore 130 km in total) running from the OSPs to shoreline landfall; and
- Scour protection around OSP substructures and cable protection (if required).

The proposed Moray West OfTI will connect the Moray West Offshore Wind Farm to the onshore transmission infrastructure and ultimately the national electricity transmission system. It is likely that some elements of the OfTI will be located within the Moray West Offshore Wind Farm Site boundaries and other elements will be located out with the wind farm boundary within the Offshore Export Cable Corridor which runs from the southern boundary of the Moray West Offshore Wind Farm Site southwards to the Aberdeenshire coast.

Documentation Enclosed and Application Fee

Moray Offshore Windfarm (West) Limited has been in regular correspondence with Marine Scotland Licensing Operations Team regarding the Marine Licence application for the proposed Moray West OfTI. The application documents submitted consist of the following:

- This letter;
- A Marine Licence application form and supporting maps and co-ordinates;
- An Environmental Impact Assessment (EIA) Report and associated maps;
- A Non-Technical Summary;
- Pre-application Consultation Report
- Information to inform an appropriate assessment, in the form of a Habitats Regulations Appraisal Report; and
- USB drives containing electronic versions of the above documents.

A Marine Licence application fee for the sum of £34,210 for the proposed Moray West OfTI has been submitted electronically to the Scottish Government.

Related Applications

Separate Marine Licence and Section 36 consent applications for the Moray West Offshore Wind Farm have been submitted to Marine Scotland Licensing Operations Team. The EIA Report which accompanies this application has also been submitted with the applications for the Moray West Offshore Wind Farm.

The Moray West Onshore Transmission Infrastructure associated with the Moray West Offshore Wind Farm and Moray West OfTI will be subject to a separate application for planning under the Town and Country Planning (Scotland) Act 1997.

Public Notices / Advertisements

We confirm that advertisements regarding the application will be placed in the Banffshire Journal, the Press and Journal, the Scotsman newspaper and the Edinburgh Gazette on a date agreed with Marine Scotland Licensing Operations Team and again seven days later.

A copy of the application, with a plan showing the area to which it relates, together with a copy of the EIA Report discussing Moray Offshore Windfarm (West) Limited's proposals in more detail and presenting an analysis of the environmental implications will be made available for public inspection at the following locations:

The Highland Council Inverness Planning Office Glenurquhart Road Inverness IV3 5NX	Moray Council Elgin Planning Office High Street Elgin IV30 1BX
The Highland Council Caithness Planning Office Caithness House Market Place Wick KW1 4AB	Aberdeenshire Council Banff Planning Office Winston House 39 Castle Street Banff AB45 1DQ

Helmsdale Library and Service Point Dunrobin Street Helmsdale KW8 6JX	Buckie Library Cluny place Buckie AB56 1HB
Golspie Service Point and Registration Office Olsen House Main Street Golspie KW10 6RA	Brora Library Gower Street Brora Highland KW9 6PD

Once the application has been accepted by Marine Scotland Licensing Operations Team, the EIA Report and Non-Technical Summary will be published online at http://www.morayoffshore.com/moray-west/document-library/.

We look forward to hearing from you in relation to the formal acceptance of the application. Please do not hesitate to contact us if we can be of any assistance.

Yours faithfully

Daniel H. Finch
Director

marinescotland

The Scottish Government

T:+44 (0)1224 295579 F: +44 (0)1224 295524
E: MS.MarineLicensing@scotland.gsi.gov.uk

Marine Renewable Energy Projects in the Territorial Sea and UK Controlled Waters Adjacent to Scotland

Marine (Scotland) Act 2010

IMPORTANT: Before completing this form, please read these notes carefully.

The following numbered paragraphs correspond to the questions on the application form and are intended to assist applicants in completing the form. These explanatory notes are specific to this application and so applicants are advised to read these in conjunction with the General Guidance document. If further clarification is needed please contact Marine Scotland Licensing Operations Team (MS-LOT) on 01224 295579 or email:

MS.MarineLicensing@scotland.gsi.gov.uk

Please refer to the General Guidance for information regarding payment methods.

Marine Laboratory, PO Box 101, 375 Victoria Road,
Aberdeen AB11 9DB
www.scotland.gov.uk/marinescotland

Explanatory Notes

2. Applicant

The person, company or organisation making the application that will be named as the licensee on any licence issued.

3. Agent

Any person, company or organisation acting under contract (or other agreement) on behalf of any party listed in the answer to question 2, and having responsibility for the control, management or physical deposit of materials anywhere below the tidal limit of the mean high water springs (MHWS) (e.g. a consultancy company submitting the application or a contractor who will be carrying out the works.)

4. Duration of Project

Provide details of the proposed commencement and completion dates of the project. The start date will not normally be backdated, except in exceptional circumstances, since to commence a project for which a licence has not been obtained may constitute an offence resulting in appropriate legal action. A licence is normally valid for 1 calendar year or the duration of the project (whichever is longer). After this period, it may be necessary for licence holders to re-apply for a further licence to continue any ongoing work (i.e. the project will be reviewed to establish whether original details are being adhered to). Although Marine Scotland Licensing Operations Team (MS-LOT) will aim to write to licence holders one month before the expiry date of a licence, it is the licensee's responsibility to apply for any further licences or an extension prior to the expiry of the initial licence.

5. Description and Cost of the Proposed Project

(a) This estimate should only cover work taking place below the tidal level of MHWS and should take into consideration the cost of materials, labour fees etc.

(b) Where the project is expected to take longer than 12 consecutive months, this description must detail which elements are to be undertaken in the first 12 months, with an outline of the schedule for each further 12 month period (the method of work should be described in the answer to question 7). In the event that MS-LOT must undertake a wider consultation on your application this description may be used as a basis for informing other bodies as to the nature of the proposed work.

(c) Best describe the type of work proposed. Where the project involves a number of elements, please complete all appropriate boxes.

6. Location of Project

Include a list of the National Grid References (NGR) or latitude and longitude co-ordinates of the boundary points of the proposed project. In some cases, (e.g. the laying of cables) it may only be practicable to supply NGR or latitude and longitude co-ordinates for the start and end points.

NGR: Should consist of two letters followed by 10 digits (e.g. TL6320031700) where the first 5 digits are the eastings (read from the south west corner of an Ordnance Survey map) and the last 5 digits are northings.

Latitude & longitude: For positions read from charts of 1:25,000 scale or smaller, the format should be, e.g. 5555.55'N 222.22'W. The decimal point specifies that decimals of minutes are used and the datum is stated explicitly. If seconds are used then the datum should be explicitly marked, e.g. 55°55'44''N 2°22'11''W. For positions read from larger scale charts, e.g. 1:10,000, three decimal places of minutes should be used, e.g. 55°55.444'N 2°22.222'W.

It is important that the correct positions are included with this application, as any errors may result in the application being refused or delayed.

To supplement the information given in section 6, the following must be provided with the completed application form:

- a suitably scaled extract of an Ordnance Survey Map (1:2,500 scale but not more than 1:10,000) or Admiralty Chart which should be marked to indicate:
    - the full extent of the project in relation to the surrounding area;
    - either NGR or latitude and longitude co-ordinates defining the area of operation.
    - the level of MHWS;
    - any adjacent Special Area of Conservation (SAC), Special Protection Area (SPA), Site of Special Scientific Interest (SSSI), Ramsar or similar conservation area boundary.

These drawings/plans may be copied to others as part of the MS-LOT consultation process. If they are subject to copyright, **it is the responsibility of the applicant to obtain necessary approvals to reproduce the documents and to submit suitably annotated copies with the application.**

7. Method Statement

Please provide a full method statement, including details of any temporary structures/deposits that may be required below MHWS during the project, the ultimate fate of the structure and material used in its construction. Details of temporary structures will be included in any licence issued.

Proposed measures to ensure the marine environment is adequately safeguarded during the project should also be described, as should those taken to minimise any interference with other uses of the sea or foreshore.

8. Permanent (and Temporary) Deposits

(a) Complete the appropriate box(es) to indicate all materials to be deposited below MHWS. If you propose using types of materials for which a specific box is not provided, please describe the nature of such material in the box marked “Other”.

(b) If any materials to be placed below MHWS are to be brought to the site by sea, give details of the material (e.g. clean rock, average particle size)the vessels to be used,

A chart should also be provided showing the proposed vessel route to the project site and details of any trans-shipment areas (i.e. where material may be off-loaded to smaller vessels/barges for transport inshore).

If temporary deposits are required, please provide details as with the permanent deposits above. The temporary deposit location details (NGR or Lat/Long) should be added to section 6 of the form, and the period of time the site will be used must be provided. If issuing a licence, MS-LOT will include on the document details of any area that has been approved as a temporary deposit site

9. Producer/Contractor

The person, company or organisation whose activities produce the material intended for deposit in the sea (e.g. the dredging or excavation contractor).

10. Holder

The person, company or organisation that will be in possession of the waste prior to its deposit in the sea. This will include those providing temporary storage facilities or transporting the material to the vessel for conveyance to the sea disposal site etc.

11. Agent

Any person, company or organisation acting under contract (or other agreement) on behalf of any party listed in the answer to sections 1, 9 or 10 and having responsibility for the control, management or deposit anywhere below the tidal limit of MHWS (e.g. a consultancy company submitting the application or a contractor who will be carrying out the operations).

12. Duration of Dredging/Drilling Operation

Provide details of the proposed commencement and completion dates of the operations. The start date will not normally be backdated, except in exceptional circumstances, since to commence a project for which a licence has not been obtained may constitute an offence resulting in appropriate legal action. A licence may be issued for up to 3 calendar years, although MS-LOT will aim to write to licence holders two months before the expiry date of a licence, it is the licensee's responsibility to apply for any further licences or an extension prior to the expiry of the initial licence.

13. Details of Dredging/Drilling and Disposal Vessel(s)

The name, operator and type of vessel, including the type of dredging/drilling plant (e.g. cutter-suction) should be entered. If vessel details are not available at the time of application, please indicate this on the form as these details will be required prior to licence issue.

14. Method Statement of Dredging/Drilling Operation

Provide a full method statement of the dredging/drilling operation. This should include details such as the rate of dredging/drilling, timing of the operation, order of the areas to be dredged/drilled and the precautions taken to protect both navigation and the environment.

15. Use of Explosives

Indicate whether explosives are to be used as part of the dredging operations. If yes, please indicate if a method statement has been provided with your application. If a method statement has been produced but is not available, please provide an explanation in the space provided.

16. Details of Areas to be Dredged/Drilled

This section requires data to be provided about the source area to be dredged and the type of material to be deposited.

Name of Area - An annotated chart/location plan (either at A3 or A4 format) of suitable scale (1:2,500 but no more than 1:10,000) should be provided, with each proposed dredge area marked and named. The chart/location plan should show the full extent of the project in relation to the surrounding area. These drawings/plans may be copied to others as part of MS-LOT consultation procedures. If they are subject to copyright, **it is the responsibility of the applicant to obtain necessary approvals to reproduce the documents and to submit suitably annotated copies with the application.**

Co-ordinates - Include a list of the National Grid References (NGR) or latitude and longitude co-ordinates of the boundary points for the proposed dredge areas.

- **NGR:** Should consist of two letters followed by 10 digits (e.g. TL6320031700) where the first 5 digits are the eastings (read from the south west corner of an Ordnance Survey map) and the last 5 digits are northings.

- **Latitude & longitude:** For positions read from charts of 1:25,000 scale or smaller, the format should be, e.g. 55°55.55'N 2°22.22'W. The decimal point specifies that decimals of minutes are used and the datum is stated explicitly. If seconds are used then the datum should be explicitly marked, e.g. 55°55'44''N 2°22'11''W. For positions read from larger scale charts, e.g. 1:10,000, three decimal

places of minutes should be used, e.g. 55°55.444'N 2°22.222'W.

Nature of Dredge/Drill Area - provide a description of the type of area to be dredged/drilled (e.g. river bed, sea, harbour, approach channel, estuary)

17. Details of Material to be Dredged/Drilled

Information is required for each of the areas listed in the answer to section 16. The applicant should indicate the following:

A pre-dredge survey and sediment chemical analysis report will be required by MS-LOT prior to the issue of a sea disposal licence. Please contact MS-LOT for details in relation to specific projects. In addition to those samples analysed by the applicant, sediment sub-samples must be submitted to MS-LOT as check monitoring may be required.

Physical Composition of Material - indicate the approximate proportions (by volume) of the different types of dredged materials which are expected to be removed from each area.

For the purposes of this application the following descriptions should be used:

Average particle size (Based on the Wentworth Table)		
Description	**Lower range**	**Upper range**
Boulders	256 mm+	
Cobbles	64 mm	256 mm
Pebbles	4mm	64 mm
Granules	2 mm	4mm
Sand	62 microns	2mm
Silt and clay		62 microns

Depth of Material to be Removed - indicate the maximum depth (in metres) below the current seabed level, to which it is expected dredging is to be carried out.

Estimated Specific Gravity - indicate the specific gravity of the material to be disposed.

Quantity to be Dredged/Drilled per Year - the amount of material to be dredged (per year) from each area. Indicate unit of measure, either in-situ cubic metres or metric tonnes.

18. Dredged/Drilled Material: Additional Information

Contamination - information should be given regarding contamination in any of the areas to be dredged/drilled e.g. waste discharges, man-made rubbish or industrial activity in close proximity.

Type of dredger - indicate the type of dredging plant to be used within each area.

Beneficial uses – include any intended beneficial use of material (details to be provided in the BPEO).

19. Details of Dredged/Drilled Material Quality

The applicant is required to have representative sediment samples analysed at a laboratory of choice. This is liable to extend the time required to consider your application **as no licence will be issued without provision of this chemistry data.** As part of the application consideration process, an assessment will be made of the

chemical and physical characteristics of the material to be deposited at sea and its potential effects upon the marine environment.

As part of the licence conditions, you may be required to take representative samples of the dredged/drilled material during the dredging/sea disposal operations for analysis by MS-LOT. In such cases, samples should be taken at specified locations and depths and placed in containers which will be provided. The samples should then be returned to MS-LOT at the Marine Laboratory Aberdeen. This process enables the UK to fulfil its obligations under international conventions.

20. Best Practicable Environmental Option (BPEO) Assessment

Under Part 4, Section 27(2) of the Marine (Scotland) Act 2010 (there is no equivalent provision under the Marine and Coastal Access Act 2009), the Licensing Authority has an obligation to consider the availability of practical alternatives when considering applications involving disposal of material at sea. In order for Marine Scotland to thoroughly assess the available alternative options and reach a properly considered decision, all sea disposal licence applications must be supported by a detailed assessment of the alternative options - a Best Practicable Environmental Option (BPEO) assessment. This should include a statement setting out the reasons which have led to the conclusion that deposit of the materials at sea is the BPEO. **Sea disposal applications will not be considered unless they are accompanied by a BPEO assessment.** All options in the BPEO should be explored fully (as per the guidance documents) otherwise your form and BPEO are liable to be returned to you thereby delaying processing of the application.

21. Sea Disposal Site Details

Provide details of the proposed sea disposal site for the dredged material and, if necessary, any alternative sea disposal site(s) considered. In determining whether to issue a licence, MS-LOT will take into account any site nominated by the applicant. However, should this site be unsuitable, the nearest suitable disposal site for the dredged material will be identified. Should you wish to establish a new site, please provide details in a covering letter with your application and MS-LOT will contact you to discuss your proposal before your application is determined. The cost of any site investigations to identify any new sea disposal site will normally be the responsibility of the applicant.

22. Other Consents

Detail all consents required for the proposed project and indicate those that you have applied for or received. In all cases the applicant must provide the name and address of the nearest Local Planning Authority for the location of the project.

23. Statutory Consenting Powers

Please describe in the answer to this question what (if any) statutory responsibilities you (or your client) have to consent any aspect of the project.

24. Advertising and Consultation

(a) Confirm whether the proposed project has been advertised, and if so how and where?

(b) Have the public been invited to comment on the proposed project? If so to whom and what was the closing date?

(c) Have any consultation meetings been held with the public? If so where and when?

25. Consultation with Conservation Bodies

Consenting Authorities have a duty to ensure marine projects will not have a significant adverse environmental impact, particularly upon designated conservation areas (e.g. SSSI, SAC, SPA, Ramsar sites etc). All details of

consultations with conservation bodies (e.g. SNH, JNCC) should be given, particularly where the applicant has statutory powers for consenting aspects of the project

In addition, guidance can be obtained from www.foodstandards.gov.uk/ with regards to the Shellfish Waters Directive (2006/113/EC) which has parameters set to protect the water quality in which edible shellfish are grown.

26. Designated Conservation Areas

Indicate whether the proposed project is located within or close to the boundaries of a conservation area such as a SAC, SPA, SSSI or Ramsar site (further information can be found on the SNH SiteLink webpage http://gateway.snh.gov.uk).

27. Environmental Assessment

Under the Marine Works (EIA) Regulations 2007, there may be a requirement for certain projects to undergo an Environmental |Impact Assessment (EIA) and produce an Environmental Statement (ES). If an EIA/ES is deemed necessary, MS-LOT cannot issue a marine Licence until the outcome of the EIA/ES has been determined. Please indicate whether any EIA has been carried out in respect of the proposed project, either under your own powers or as required by another authority. If such an assessment has been undertaken, please indicate if a copy has been provided with your application. If the statement/assessment has been completed but is not available, please provide an explanation in the space provided.

Additionally, please also give details regarding if and where a copy has been/is being made available for public inspection.

Other Considerations

Applicants should also be aware of the need to pay due regard to coastal and marine archaeological matters and attention is drawn to Historic Scotland's Operational Policy Paper HP6, "Conserving the Underwater Heritage". Please ensure that you have:

- completed **all** applicable sections of the application form;
- signed and dated the declaration;
- provided the correct relevant documents, charts, and continuation sheets (where necessary); and
- enclosed the correct payment (together with the remittance slip) or paid by means of BACS (if appropriate).

Otherwise your application may be delayed or returned to you.

Application for Marine Renewable Energy Projects in the Territorial Sea and UK Controlled Waters Adjacent to Scotland

(ML-003)

Marine (Scotland) Act 2010

It is the responsibility of the applicant to obtain any other consents or authorisations that may be required.

Under Part 4, Section 54 of the Marine (Scotland) Act 2010 and Section 101 of the Marine and Coastal Access Act 2009 all information contained within or provided in support of this application will be placed on the Public Register. There is no national security grounds for application information not going on the Register under the 2010 Act. Under the 2009 Act, application information goes on the Register unless the Secretary of State determines that it's disclosure in the Register would be contrary to the interests of national security.

Public Register

Is there any information contained within or provided in support of this application that you consider should not be included on the Public Register on the grounds that its disclosure

(a) would be contrary to the interests of national security; or YES ☐ NO ■

(b) would adversely affect the confidentiality of commercial or industrial information where such confidentiality is provided by law to protect a legitimate commercial interest? YES ■ NO ☐

If **YES**, to either (a) or (b), please provide full justification as to why all or part of the information you have provided should be withheld.

Publication of the information provided in Section 5a regarding the estimated cost of the works may prejudice the ongoing commercial tendering process.

1. Project Title and Payment Details

Please give a brief identifiable description, including the location, of the project.

Moray West Offshore Transmission Infrastructure (OfTI) located in the Moray Firth.

Payment: Enclosed payment ☐ BACS ■ **OR** Invoice ☐

2. Applicant Details

Title Mr Initials Daniel Surname Finch

Trading Title (if appropriate) Moray Offshore Windfarm (West) Limited

Address 5th Floor, Atria One, 144 Morrison Street, Edinburgh, EH3 8EX

Name of contact (if different) Sarah Edwards

Position within Company (if appropriate) Offshore Consents Manager

Telephone No. (inc. dialing code) 07741 140150

Fax No. (inc. dialing code) n/a

Company Registration No. 10515140

Email Sarah.Edwards@edpr.com

3. Agent Details (if any)

Title Initials Surname

Trading Title (if appropriate)

Address

Name of contact (if different)

Position within Company (if appropriate)

Telephone No. (inc. dialing code)

Fax No. (inc. dialing code)

Company Registration No.

Email

4. Duration of Project

Start date 2022

Expected completion date 2075

5. Description and Cost of the Proposed Project

(a) Estimated gross cost of the works proposed seawards of the tidal limit of MHWS

The value of these construction works is estimated to be in the region of £285 million.

(b) Give a detailed description of the proposed schedule of work.

See separate sheet. Also Chapter 4 'Description of Development' of the EIA Report (EIAR) contains more detailed information.

(c) Types of Work Proposed

General Marine Project (e.g. wave, tidal device, monopile turbine)

Offshore wind farm transmission infrastructure (see separate sheet and Chapter 4 of the EIAR).

Scientific/Marine Survey (e.g. geotechnical, geophysical, waverider):

Pre-construction geophysical and geotechnical surveys and deployment of metocean survey equipment.

Moorings (e.g. private, commercial):

Moorings may be established to support construction activities.

Dredging/Drilling Operations

A separate licence for dredging and/or drilling will be applied for if required.

6. Location of Project (including any temporary deposit locations)

This should include either National Grid References (NGR) or Latitude and Longitude co-ordinates defining the extent of the project.

Please see enclosed offshore transmission infrastructure location plan and list of co-ordinates.

7. Method Statement

Please refer to Chapter 4 of the EIAR. A detailed Construction Method Statement, Cable Plan and Construction Programme will be submitted for approval in advance of construction works commencing.

8. Permanent (and Temporary) Deposits

(a) Quantity of permanent (and temporary, where applicable) materials to be deposited below MHWS:

Type of Deposit	Nature of Deposit (P = Permanent, T = Temporary)	Deposit Quantity
Steel/Iron	P	See separate sheet Tonnes No. (if applicable)
Timber	n/a	See separate sheet m^3/tonnes
Plastic/Synthetic	P	See separate sheet m^2
Concrete	P	See separate sheet m^3
Silt	n/a	See separate sheet m^3
Sand	n/a	See separate sheet m^3
Stone/Rock/Gravel	P	See separate sheet Size range (mm) Total m^3
Concrete bags/mattresses	P	See separate sheet No. Dimensions Total m^3
Cable	P	See separate sheet Length (m)

Other (please describe below):
n/a

(b) Method of delivery of material. (see Guidance Notes)

By vessel. Details of vessels and routes to be used will be provided in a Vessel Management Plan that will be submitted for approval in advance of works commencing.

If necessary, please continue on a separate sheet and tick this box ☐

IF THE PROJECT INVOLVES DREDGING/DRILLING (AND DISPOSAL OF DREDGED MATERIALS AT SEA) THEN PLEASE COMPLETE THE FOLLOWING SECTIONS, OTHERWISE PROCEED TO SECTION 22

9. Dredging/Drilling Contractor/Producer Details

Title Initials Surname

Trading Title (if appropriate)

Address

Name of contact
(if different)

Position within Company
(if appropriate) Offshore Consents Manager

Telephone No.
(inc. dialing code) Fax No.
(inc. dialing code)

Company Registration No. Email

10. Holder

If the Holder is also the Applicant (shown at 2) tick the box and go to section 11 ☐

If the Holder is also the Producer (shown at 9) of the material tick the box and go to section 11 ☐

Title Initials Surname

Trading Title (if appropriate)

Address

Name of contact
(if different)

Position within Company
(if appropriate)

Telephone No.
(inc. dialing code) Fax No.
(inc. dialing code)

Company Registration No. Email

11. Agent

Title Initials Surname

Trading Title (if appropriate)

Address

Name of contact
(if different)

Position within Company (if appropriate) Offshore Consents Manager

Telephone No. (inc. dialing code)

Fax No. (inc. dialing code)

Company Registration No.

Email

If more than one 'Agent' please continue on a separate sheet and tick the box ☐

12. Duration of Dredging/Drilling Operation

When is it proposed to begin the dredging/drilling operation?

When are dredging/drilling and disposal operations expected to be completed?

13. Details of Dredging/Drilling and Disposal Vessel(s)

	Name of Vessel and Operator	Type of Vessel
(a)		
(b)		
(c)		
(d)		

14. Method Statement for Dredging/Drilling Operation

15. Use of Explosives

Will any part of the dredging operation involve the use of explosives? YES ☐ NO ☐

If YES,
Has a method statement regarding the use of explosives been submitted with this application?
YES ☐ NO ☐

If a method statement is not being submitted, please provide an explanation as to why.

16. Details of Areas to be Dredged/Drilled

Dredge/Drill Areas	Name of Area to be Dredged/Drilled	Co-ordinates	Nature of Dredged/Drilled Area
A			
B			
C			
D			
E			

If necessary please continue on a separate sheet and tick this box ☐

17. Details of Material to be Dredged/Drilled

For each of the areas at rows A –E above (plus any listed separately), provide the following information:

Dredge/Drill Areas	Estimated Specific Gravity	Physical Composition of Material	Depth of Material to be Removed (metres)	Quantity to be Dredged/Drilled per Year (either in-situ m^3 or metric tonnes)
A				
B				
C				
D				
E				

If necessary please continue on a separate sheet and tick this box ☐

18. Dredged/Drilled Material: Additional Information

For each of the areas at rows A – E above (plus any listed separately), provide the following information:

Dredge/Drill Areas	Type of Contamination	Type of Dredger	Beneficial Uses
A			
B			
C			
D			
E			

If necessary please continue on a separate sheet and tick this box ☐

19. Details of Dredged Material Quality

Has the dredged/drilled material been chemically analysed in the last 3 years? YES ☐ NO ☐

Can the samples be made available if required? YES ☐ NO ☐

If **NO**, when will they be available? ☐

20. Best Practicable Environmental Option (BPEO) Assessment

Has an up to date BPEO assessment been included with your application? YES ☐ NO ☐

21. Sea Disposal Site Details

Name of Disposal Site (or Oslo Code)	Co-ordinates of Disposal Site

22. Other Consents

Provide details below of all consents you have applied for or received.

Type of Consent	(Tick appropriate box) Applied for	Not Applied for	Reference No.	Date of Issue of Consent
1. Local Planning Authority (LPA) (e.g. Town and Country Planning Act)		✔		
Name and address of LPA for Location of proposed works:				
2. Land Owner e.g. The Crown Estate	✔		Agreement for Lease	Awaiting
3. Local Port or Harbour Authority e.g. local work licence		✔		
4. Scottish Environment Protection Agency (SEPA)		✔		
5. Others		✔		

23. Statutory Consenting Powers

Do you, or (if appropriate) your client, have statutory powers to consent any aspect of this project?

No.

24. Advertising and Consultation

Have these proposals been advertised to the public? YES ■ NO □
If **YES**, how and where?

See separate sheet for full text. Details are set out in the Pre-Application Consultation Report which accompanies this application. Please also see enclosed EIAR, each topic chapter has a record of consultations relevant to that topic and a short summary of consultations is provided in Chapter 5 - EIA Methodology. Public Notice to be

Have the public been invited to submit comments? YES ■ NO □
If **YES**, to whom and by what closing date?

See separate sheet for full text. Details are set out in the Pre-Application Consultation Report which accompanies this application. Please see enclosed EIAR, each topic chapter has a record of consultations relevant to that topic and a short summary of consultations is provided in Chapter 5 - EIA Methodology. The public will be invited to

Have any consultation meetings with the public been arranged? YES ■ NO □
If **YES**, where and when are these to be held?

See separate sheet for full text. Details are set out in the Pre-Application Consultation Report which accompanies this application. Please see enclosed EIAR, each topic chapter has a record of consultations relevant to that topic and a short summary of consultations (including details of previously held public exhibitions) is provided in

25. Consultation with Conservation Bodies

Provide details of any consultation with Conservations Bodies, and, if appropriate, include copies of any correspondence with your application.

SNH have been consulted with extensively. Please see enclosed EIAR, each topic chapter has a record of consultations relevant to that topic and a short summary of consultations is provided in Chapter 5 - EIA Methodology.

26. Designated Conservation Areas

Are any parts of the proposed project located within the boundaries of a designated conservation area?

If yes, indicate approximate distance of the project from the boundary of the nearest conservation area(s)	Yes, within SSSI

If appropriate, are any parts of the proposed dredging and/or deposit operations located within the boundaries of a designated conservation area?

If yes, indicate approximate distance of the operations from the boundary of the nearest conservation area(s)	n/a

27. Environmental Assessment

Has an Environmental Impact Assessment (EIA)/Environmental Statement (ES) been undertaken to support any application in respect of the project, your own statutory powers (if applicable) or any other reason? YES ■ NO □

If **YES**, is a copy of the EIA/ES included with this application? YES ■ NO □

If the EIA/ES has been undertaken but has not been included with this application, please provide an

explanation below.

Is the EIA/ES available for public inspection? YES ☒ NO ☐
If **YES**, at what locations:

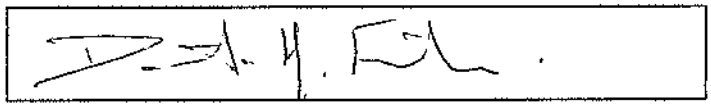
The Highland Council (Inverness and Caithness Planning Offices), Moray Council (Elgin Planning Office), Aberdeenshire Council (Banff Planning Office), Helmsdale Library and Service Point, Buckie Library, Golspie Service Point and Registration Office and Brora Library.

Declaration

I declare to the best of my knowledge and belief that the information given in this form and related papers is true.

WARNING

It is an offence under the Act under which this application is made to fail to disclose information or to provide false or misleading information.

Signature		Date	4 July 2018

Name in BLOCK LETTERS	DANIEL HENRY FINCH
Position within company (if appropriate)	Project Director

Please check carefully the information you have given and that all the enclosures (including copies) have been included.

Application Check List

1. Electronic Application

• Completed application form **x 1**	✔
• Project drawings **x 1**	✔
• Method Statement **x 1**	✔
• Maps/Charts **x 1**	✔
• Additional environmental information, eg. Photographs, Environmental Impact Assessment etc (if required) **x 1**	✔
• Payment (signed cheque or BACS details)	✔

2. Non-electronic Application

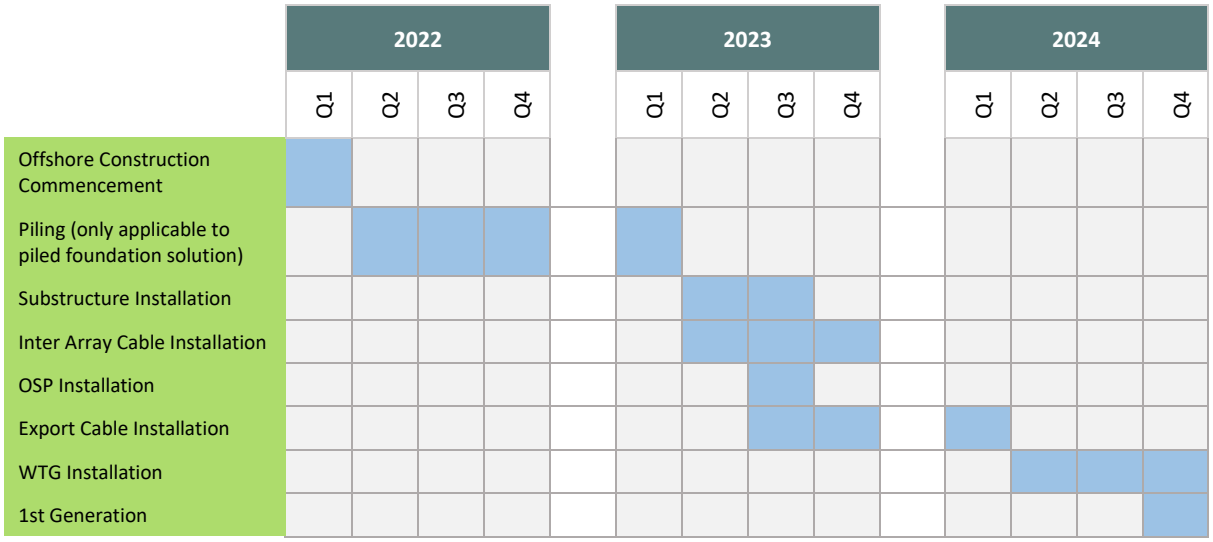
• Completed, signed application form **x 7**	
• Project drawings **x 7**	
• Method Statement **x 7**	
• Maps/Charts **x 7**	
• Additional information, eg. photographs, Environmental Impact Assessment etc (if required) **x 7 (dependent on size and relevance to consultees)**	
• Payment (signed cheque or BACS details)	

Moray West Offshore Transmission Infrastructure (OfTI) Marine Licence Application Supporting Information

Section 5 (b) Give a detailed description of the proposed schedule of work.

A high-level indicative construction programme is presented in the graph below. The programme illustrates the likely duration of the major installation elements, and how they may relate to one another if built out in a single construction campaign. It covers installation of the major components (including those of the offshore wind farm which will be licensed under a separate Marine Licence application) and does not include elements such as preliminary site preparation and commissioning of the wind farm post-construction. Offshore construction is currently planned to commence in 2022 and complete in 2024. First generation is currently predicted to occur in 2024 and the Wind Farm is currently predicted to be fully commissioned in 2025.

Timing of construction works will be subject to CfD and actual works durations will be dependent on a number of factors including, component and vessel availability, weather and final construction strategy. Construction is intended to take place 24 hours per day, 365 days per year, subject to weather conditions, until construction is complete.



The sequence of activities associated with the installation of the OfTI and Offshore Wind Farm are likely to be as follows, with various activities set out below being undertaken concurrently:

- Detailed pre-construction site investigations – some of these may be subject to separate licence applications;
- Onshore manufacture of components;
- Seabed preparation works;
- Transport to site and installation of foundations (monopiles, pin-piles, suction caissons and GBSs);
- Transport to site and installation of substructures (TPs and jacket structures) on pre-installed foundation structures;
- Transport to site and installation of inter-array cables;
- Transport to site and installation of OSPs;
- Transport to site and installation of export cables;

- Transport to site and installation of wind turbine generators; and
- System testing and commissioning.

Section 5(c) Types of Work Proposed
General Marine Project (e.g. wave, tidal device, monopile turbine)

The Moray West Offshore Transmission Infrastructure comprises:

- Up to two Offshore Substation Platforms (OSPs) with an indicative structure width and length of up to 100 m x 100 m and at a height above HAT of 70 m;
- Substructures and associated seabed foundations for OSPs;
- Up to 15 km of 33-400 kV subsea interconnector cables linking OSPs (if two OSPs are installed);
- Up to two 132-400 kV subsea export cables of approximately 65 km (per circuit, therefore 130 km in total) running from the OSPs to shoreline landfall; and
- Scour protection around OSP substructures and cable protection (if required).

Section 8 (a) Quantity of permanent (and temporary, where applicable) materials to be deposited below MHWS:

Type of Deposit	**Nature of Deposit (P = Permanent, T = Temporary)**	**Deposit Quantity**
Steel/Iron	P	Approximately 20,000 Tonnes for the steel substructures (total weight)
Timber	N/A	0 m^3/tonnes
Plastic/Synthetic	P	Approximately 2,000 Tonnes (total weight)
Concrete	P	Approximately 40,000 Tonnes for the steel substructures (total weight)
Silt	N/A	0 m^3
Sand	P	200,000 m^3
Stone/Rock/Gravel	P	Size range (mm): 15 – 200 Total m^3: Approximately 30,000 m^3 for the steel substructures. Also, up to 100,000 m^3 for protection of cables.

Concrete bags/mattresses	P	No.: Approximately 2,500 Maximum Dimensions: 6 m x 3 x 1.5 m per concrete bag/mattress Total m^3: Up to 67,500 m^3 for protection of cables.
Cable	P	Maximum Length (m): 159,500

Other (please describe below): N/A

Section 24 Advertising and Consultation

Have these proposals been advertised to the public? **YES**

If YES, how and where?

Details are set out in the Pre-Application Consultation Report which accompanies this application. Please also see enclosed EIAR, each topic chapter has a record of consultations relevant to that topic and a short summary of consultations is provided in Chapter 5 - EIA Methodology. Public Notice to be placed in local newspapers for 2 week period, in The Scotsman for a 2 week period, and in the Edinburgh Gazette for a 2 week period. The EIAR will be publicly available at several locations (Section 27 below).

Have the public been invited to submit comments? **YES**

If YES, to whom and by what closing date?

Details are set out in the Pre-Application Consultation Report which accompanies this application. Please see enclosed EIAR, each topic chapter has a record of consultations relevant to that topic and a short summary of consultations is provided in Chapter 5 - EIA Methodology. The public will be invited to comment on the application via Public Notices in local and national newspapers. The closing date will be detailed in the public notice adverts.

Have any consultation meetings with the public been arranged? **YES**

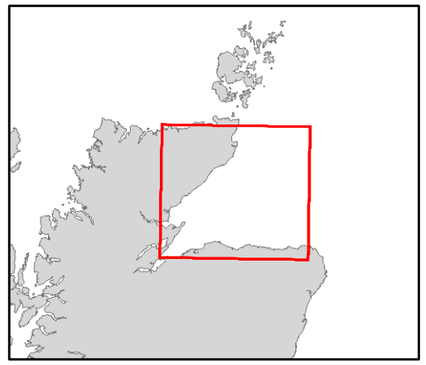
If YES, where and when are these to be held?

Details are set out in the Pre-Application Consultation Report which accompanies this application. Please see enclosed EIAR, each topic chapter has a record of consultations relevant to that topic and a short summary of consultations (including details of previously held public exhibitions) is provided in Chapter 5 - EIA Methodology. Public consultation will continue, including with local communities, during the post application period to keep them informed on progress of proposals.

MORAY WEST
OFFSHORE WINDFARM

KEY

- Ramsar Site
- Special Area of Conservation (SAC)
- Sites of Special Scientific Interest (SSSI)
- Special Protected Areas (SPA)
- Offshore Transmission Works License Area



Horizontal Scale: 1:400,000 A3 Chart

0 10,000 20,000 m

N

Geodetic Parameters:	WGS84 UTM Zone 30N
Produced: FG Reviewed: DO Approved: SE	
Date: 28/06/2018	Revision: A
REF: 8460005-DBB001-MWW-MAP-002	

Moray West Offshore Trasmission Infrastructure

Moray Offshore Windfarm (West) Ltd

ID	OSGB36 British National Grid			WGS84 Latitude - Longitude				WGS84 UTM Zone 30N	
	X_BNG	Y_BNG	NGR	Lat (DM.m)	Lon (DM.m)	Lat (DD)	Lon (DD)	X_UTM30N	Y_UTM30N
0	346215.08	908884.32	ND4621508884	58° 3.946' N	2° 54.796' W	58.06576	-2.91327	505117.13	6436034.64
1	346215.13	908884.34	ND4621508884	58° 3.946' N	2° 54.796' W	58.06576	-2.91327	505117.18	6436034.66
2	346215.12	908884.33	ND4621508884	58° 3.946' N	2° 54.796' W	58.06576	-2.91327	505117.17	6436034.64
3	346215.08	908884.32	ND4621508884	58° 3.946' N	2° 54.796' W	58.06576	-2.91327	505117.13	6436034.64
4	346215.08	908884.32	ND4621508884	58° 3.946' N	2° 54.796' W	58.06576	-2.91327	505117.13	6436034.64
5	343065.64	899771.65	NJ4306599771	57° 59.012' N	2° 57.866' W	57.98353	-2.96443	502103.18	6426876.94
6	346020.50	890913.13	NJ4602090913	57° 54.261' N	2° 54.747' W	57.90434	-2.91245	505188.59	6418063.71
7	347687.11	885916.90	NJ4768785916	57° 51.580' N	2° 52.994' W	57.85967	-2.88324	506928.77	6413092.98
8	349641.31	880058.65	NJ4964180058	57° 48.437' N	2° 50.944' W	57.80728	-2.84907	508969.21	6407264.62
9	349760.87	879700.26	NJ4976079700	57° 48.245' N	2° 50.819' W	57.80408	-2.84698	509094.04	6406908.05
10	356531.54	868675.19	NJ5653168675	57° 42.346' N	2° 43.864' W	57.70577	-2.73107	516026.38	6395984.75
11	356575.59	868603.46	NJ5657568603	57° 42.308' N	2° 43.819' W	57.70513	-2.73032	516071.48	6395913.68
12	357329.81	867424.28	NJ5732967424	57° 41.676' N	2° 43.047' W	57.69461	-2.71745	516842.98	6394745.82
13	357464.82	867183.80	NJ5746467183	57° 41.548' N	2° 42.909' W	57.69246	-2.71515	516981.51	6394507.36
14	357452.79	867109.61	NJ5745267109	57° 41.508' N	2° 42.920' W	57.69179	-2.71534	516970.58	6394433.01
15	357451.72	867103.02	NJ5745167103	57° 41.504' N	2° 42.921' W	57.69173	-2.71535	516969.61	6394426.40
16	357170.49	866866.26	NJ5717066866	57° 41.375' N	2° 43.202' W	57.68958	-2.72003	516691.92	6394185.53
17	357161.52	866858.71	NJ5716166858	57° 41.371' N	2° 43.211' W	57.68951	-2.72018	516683.06	6394177.85
18	357081.94	866791.72	NJ5708166791	57° 41.334' N	2° 43.290' W	57.68890	-2.72150	516604.48	6394109.69
19	357060.19	866815.68	NJ5706066815	57° 41.347' N	2° 43.312' W	57.68912	-2.72187	516582.38	6394133.33
20	357057.40	866818.75	NJ5705766818	57° 41.349' N	2° 43.315' W	57.68914	-2.72192	516579.55	6394136.36
21	357025.69	866853.67	NJ5702566853	57° 41.367' N	2° 43.347' W	57.68945	-2.72245	516547.33	6394170.81
22	356917.28	866769.54	NJ5691766769	57° 41.321' N	2° 43.455' W	57.68869	-2.72426	516440.18	6394085.09
23	356917.11	866768.37	NJ5691766768	57° 41.321' N	2° 43.456' W	57.68868	-2.72426	516440.02	6394083.92
24	356913.86	866745.80	NJ5691366745	57° 41.308' N	2° 43.459' W	57.68847	-2.72431	516437.11	6394061.30
25	356905.75	866689.54	NJ5690566689	57° 41.278' N	2° 43.466' W	57.68797	-2.72444	516429.83	6394004.93
26	356904.86	866683.30	NJ5690466683	57° 41.275' N	2° 43.467' W	57.68791	-2.72445	516429.03	6393998.68
27	356903.13	866671.30	NJ5690366671	57° 41.268' N	2° 43.469' W	57.68780	-2.72448	516427.48	6393986.66
28	356778.17	866595.99	NJ5677866595	57° 41.227' N	2° 43.593' W	57.68712	-2.72656	516303.65	6393909.52
29	356774.29	866593.65	NJ5677466593	57° 41.226' N	2° 43.597' W	57.68709	-2.72662	516299.80	6393907.12
30	356728.65	866566.14	NJ5672866566	57° 41.211' N	2° 43.643' W	57.68684	-2.72738	516254.58	6393878.94

31	356721.33	866561.73	NJ5672166561	57° 41.208' N	2° 43.650' W	57.68680	-2.72751	516247.33	6393874.43
32	356701.28	866549.64	NJ5670166549	57° 41.202' N	2° 43.670' W	57.68669	-2.72784	516227.45	6393862.04
33	356513.36	866485.38	NJ5651366485	57° 41.166' N	2° 43.859' W	57.68610	-2.73098	516040.51	6393795.01
34	356501.00	866481.15	NJ5650166481	57° 41.163' N	2° 43.871' W	57.68606	-2.73119	516028.22	6393790.61
35	356485.47	866396.80	NJ5648566396	57° 41.118' N	2° 43.886' W	57.68530	-2.73143	516013.93	6393706.04
36	356485.15	866395.05	NJ5648566395	57° 41.117' N	2° 43.886' W	57.68528	-2.73144	516013.64	6393704.29
37	356475.34	866341.81	NJ5647566341	57° 41.088' N	2° 43.895' W	57.68480	-2.73159	516004.62	6393650.91
38	356473.70	866332.89	NJ5647366332	57° 41.083' N	2° 43.897' W	57.68472	-2.73162	516003.11	6393641.96
39	356471.66	866321.82	NJ5647166321	57° 41.077' N	2° 43.899' W	57.68462	-2.73165	516001.23	6393630.87
40	356469.07	866307.76	NJ5646966307	57° 41.070' N	2° 43.901' W	57.68450	-2.73169	515998.85	6393616.77
41	356379.75	866263.03	NJ5637966263	57° 41.045' N	2° 43.991' W	57.68409	-2.73318	515910.21	6393570.74
42	356221.14	866183.61	NJ5622166183	57° 41.001' N	2° 44.149' W	57.68336	-2.73582	515752.79	6393488.98
43	356215.56	866178.25	NJ5621566178	57° 40.999' N	2° 44.155' W	57.68331	-2.73592	515747.29	6393483.55
44	356152.30	866117.52	NJ5615266117	57° 40.965' N	2° 44.218' W	57.68276	-2.73697	515684.93	6393421.89
45	356054.44	866023.58	NJ5605466023	57° 40.914' N	2° 44.315' W	57.68190	-2.73859	515588.48	6393326.53
46	355792.92	866068.54	NJ5579266068	57° 40.937' N	2° 44.579' W	57.68228	-2.74298	515326.34	6393367.61
47	355522.31	866115.06	NJ5552266115	57° 40.960' N	2° 44.852' W	57.68267	-2.74753	515055.08	6393410.13
48	355499.46	866172.11	NJ5549966172	57° 40.991' N	2° 44.875' W	57.68318	-2.74792	515031.40	6393466.84
49	355483.51	866211.95	NJ5548366211	57° 41.012' N	2° 44.892' W	57.68354	-2.74820	515014.86	6393506.44
50	355494.76	866275.51	NJ5549466275	57° 41.047' N	2° 44.881' W	57.68411	-2.74802	515025.17	6393570.16
51	355506.49	866341.79	NJ5550666341	57° 41.082' N	2° 44.870' W	57.68471	-2.74784	515035.92	6393636.59
52	355508.92	866355.54	NJ5550866355	57° 41.090' N	2° 44.868' W	57.68483	-2.74780	515038.15	6393650.38
53	355531.25	866468.49	NJ5553166468	57° 41.151' N	2° 44.847' W	57.68585	-2.74745	515058.81	6393763.64
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55	355475.11	866612.20	NJ5547566612	57° 41.228' N	2° 44.905' W	57.68713	-2.74841	515000.56	6393906.50
56	355472.51	866658.90	NJ5547266658	57° 41.253' N	2° 44.908' W	57.68755	-2.74847	514997.27	6393953.16
57	355456.28	866850.39	NJ5545666850	57° 41.356' N	2° 44.926' W	57.68927	-2.74877	514978.21	6394144.38
58	355448.68	866940.04	NJ5544866940	57° 41.405' N	2° 44.935' W	57.69008	-2.74892	514969.29	6394233.90
59	355447.12	866958.39	NJ5544766958	57° 41.414' N	2° 44.937' W	57.69024	-2.74895	514967.47	6394252.22
60	355442.11	867017.50	NJ5544267017	57° 41.446' N	2° 44.943' W	57.69077	-2.74904	514961.58	6394311.25
61	355427.02	867016.28	NJ5542767016	57° 41.445' N	2° 44.958' W	57.69076	-2.74929	514946.51	6394309.80
62	355419.86	867015.69	NJ5541967015	57° 41.445' N	2° 44.965' W	57.69075	-2.74941	514939.36	6394309.11
63	355407.76	867014.71	NJ5540767014	57° 41.445' N	2° 44.977' W	57.69074	-2.74962	514927.27	6394307.95

64	355401.49	867014.20	NJ5540167014	57° 41.444' N	2° 44.983' W	57.69074	-2.74972	514921.02	6394307.35
65	355348.03	867009.85	NJ5534867009	57° 41.442' N	2° 45.037' W	57.69069	-2.75062	514867.63	6394302.22
66	355339.89	867009.19	NJ5533967009	57° 41.441' N	2° 45.045' W	57.69069	-2.75075	514859.50	6394301.43
67	355280.65	867004.38	NJ5528067004	57° 41.438' N	2° 45.105' W	57.69064	-2.75175	514800.34	6394295.74
68	355256.86	867002.44	NJ5525667002	57° 41.437' N	2° 45.129' W	57.69062	-2.75215	514776.59	6394293.46
69	355219.31	866999.39	NJ5521966999	57° 41.435' N	2° 45.167' W	57.69059	-2.75278	514739.08	6394289.85
70	355206.94	866998.38	NJ5520666998	57° 41.435' N	2° 45.179' W	57.69058	-2.75298	514726.73	6394288.67
71	354993.11	866981.00	NJ5499366981	57° 41.424' N	2° 45.394' W	57.69040	-2.75657	514513.20	6394268.13
72	354920.41	867031.80	NJ5492067031	57° 41.451' N	2° 45.468' W	57.69085	-2.75779	514439.76	6394317.85
73	354892.42	867127.63	NJ5489267127	57° 41.502' N	2° 45.497' W	57.69170	-2.75828	514410.35	6394413.25
74	354888.71	867140.30	NJ5488867140	57° 41.509' N	2° 45.501' W	57.69182	-2.75835	514406.46	6394425.87
75	354886.61	867368.30	NJ5488667368	57° 41.632' N	2° 45.505' W	57.69387	-2.75842	514401.00	6394653.80
76	354857.01	867331.60	NJ5485767331	57° 41.612' N	2° 45.535' W	57.69353	-2.75891	514371.94	6394616.67
77	354781.67	867252.48	NJ5478167252	57° 41.569' N	2° 45.610' W	57.69282	-2.76016	514297.78	6394536.45
78	354777.11	867247.70	NJ5477767247	57° 41.566' N	2° 45.614' W	57.69277	-2.76024	514293.30	6394531.60
79	354710.51	867214.30	NJ5471067214	57° 41.548' N	2° 45.681' W	57.69247	-2.76135	514227.20	6394497.22
80	354237.48	867167.14	NJ5423767167	57° 41.520' N	2° 46.156' W	57.69199	-2.76927	513754.94	6394443.09
81	354157.91	867267.40	NJ5415767267	57° 41.573' N	2° 46.238' W	57.69289	-2.77063	513673.90	6394542.16
82	354152.81	867269.05	NJ5415267269	57° 41.574' N	2° 46.243' W	57.69290	-2.77071	513668.78	6394543.73
83	352750.57	869026.32	NJ5275069026	57° 42.512' N	2° 47.675' W	57.70854	-2.79458	512240.84	6396280.03
84	346876.87	878957.78	NJ4687678957	57° 47.825' N	2° 53.720' W	57.79708	-2.89534	506221.50	6406123.09
85	346660.26	879415.51	NJ4666079415	57° 48.070' N	2° 53.945' W	57.80116	-2.89908	505998.16	6406577.54
86	346248.08	880812.16	NJ4624880812	57° 48.819' N	2° 54.380' W	57.81365	-2.90633	505565.43	6407967.86
87	345641.56	882626.06	NJ4564182626	57° 49.792' N	2° 55.017' W	57.82987	-2.91695	504932.22	6409772.48
88	343023.31	890456.63	NJ4302390456	57° 53.992' N	2° 57.774' W	57.89987	-2.96291	502198.67	6417562.96
89	340110.82	899167.54	NJ4011099167	57° 58.663' N	3° 0.854' W	57.97772	-3.01424	499157.84	6426229.21
90	338901.07	899484.42	NJ3890199484	57° 58.824' N	3° 2.086' W	57.98040	-3.03477	497943.63	6426528.12
91	338901.06	899484.42	NJ3890199484	57° 58.824' N	3° 2.086' W	57.98040	-3.03477	497943.62	6426528.12
92	338083.61	899698.54	NJ3808399698	57° 58.932' N	3° 2.919' W	57.98221	-3.04865	497123.14	6426730.11
93	338083.60	899698.54	NJ3808399698	57° 58.932' N	3° 2.919' W	57.98221	-3.04865	497123.14	6426730.11
94	328204.94	902286.14	ND2820402286	58° 0.237' N	3° 12.986' W	58.00395	-3.21644	487208.08	6429170.97
95	328204.94	902286.27	ND2820402286	58° 0.237' N	3° 12.986' W	58.00396	-3.21644	487208.08	6429171.10
96	328204.94	902335.31	ND2820402335	58° 0.264' N	3° 12.987' W	58.00440	-3.21645	487207.36	6429220.14

97	328204.94	904979.08	ND2820404979	58° 1.688' N	3° 13.035' W	58.02814	-3.21726	487168.21	6431863.38
98	328204.94	905456.08	ND2820405456	58° 1.945' N	3° 13.044' W	58.03242	-3.21740	487161.15	6432340.28
99	328204.94	906265.01	ND2820406265	58° 2.381' N	3° 13.059' W	58.03968	-3.21765	487149.17	6433149.04
100	328204.94	906701.90	ND2820406701	58° 2.616' N	3° 13.067' W	58.04361	-3.21778	487142.70	6433585.85
101	328248.14	906747.19	ND2824806747	58° 2.641' N	3° 13.024' W	58.04402	-3.21707	487185.22	6433631.77
102	328282.17	906783.98	ND2828206783	58° 2.661' N	3° 12.990' W	58.04436	-3.21650	487218.69	6433669.06
103	328311.49	906815.70	ND2831106815	58° 2.679' N	3° 12.961' W	58.04465	-3.21601	487247.54	6433701.20
104	328511.67	907032.19	ND2851107032	58° 2.797' N	3° 12.761' W	58.04662	-3.21269	487444.48	6433920.62
105	328769.66	907320.98	ND2876907320	58° 2.955' N	3° 12.504' W	58.04926	-3.20841	487698.14	6434213.17
106	329023.08	907614.46	ND2902307614	58° 3.116' N	3° 12.252' W	58.05193	-3.20420	487947.16	6434510.34
107	329270.98	907912.57	ND2927007912	58° 3.279' N	3° 12.006' W	58.05465	-3.20009	488190.59	6434812.07
108	329514.38	908215.46	ND2951408215	58° 3.445' N	3° 11.764' W	58.05741	-3.19606	488429.46	6435118.51
109	329751.30	908521.20	ND2975108521	58° 3.612' N	3° 11.528' W	58.06019	-3.19214	488661.80	6435427.69
110	329793.82	908577.64	ND2979308577	58° 3.642' N	3° 11.486' W	58.06071	-3.19144	488703.47	6435484.75
111	329822.11	908614.03	ND2982208614	58° 3.662' N	3° 11.458' W	58.06104	-3.19097	488731.22	6435521.56
112	330054.44	908924.46	ND3005408924	58° 3.832' N	3° 11.227' W	58.06386	-3.18712	488958.91	6435835.36
113	330280.39	909239.53	ND3028009239	58° 4.004' N	3° 11.003' W	58.06673	-3.18339	489180.15	6436153.71
114	330501.74	909557.48	ND3050109557	58° 4.177' N	3° 10.784' W	58.06962	-3.17973	489396.74	6436474.88
115	330717.57	909880.13	ND3071709880	58° 4.353' N	3° 10.570' W	58.07255	-3.17617	489607.75	6436800.67
116	330909.06	910178.29	ND3090910178	58° 4.515' N	3° 10.381' W	58.07525	-3.17301	489794.78	6437101.61
117	331058.06	910371.16	ND3105810371	58° 4.621' N	3° 10.233' W	58.07701	-3.17054	489940.89	6437296.64
118	331290.20	910682.37	ND3129010682	58° 4.790' N	3° 10.002' W	58.07984	-3.16670	490168.38	6437611.23
119	331516.88	910996.49	ND3151610996	58° 4.962' N	3° 9.777' W	58.08270	-3.16295	490390.36	6437928.65
120	331701.21	911262.47	ND3170111262	58° 5.107' N	3° 9.594' W	58.08511	-3.15990	490570.71	6438197.31
121	331759.13	911346.19	ND3175911346	58° 5.152' N	3° 9.537' W	58.08587	-3.15895	490627.38	6438281.87
122	331801.39	911407.29	ND3180111407	58° 5.186' N	3° 9.495' W	58.08643	-3.15825	490668.73	6438343.59
123	332016.07	911728.94	ND3201611728	58° 5.361' N	3° 9.282' W	58.08935	-3.15470	490878.60	6438668.35
124	332226.25	912055.27	ND3222612055	58° 5.539' N	3° 9.074' W	58.09231	-3.15123	491083.90	6438997.73
125	332429.96	912385.36	ND3242912385	58° 5.719' N	3° 8.872' W	58.09531	-3.14787	491282.68	6439330.78
126	332628.21	912718.27	ND3262812718	58° 5.900' N	3° 8.676' W	58.09833	-3.14460	491475.96	6439666.57
127	332820.94	913055.01	ND3282013055	58° 6.083' N	3° 8.486' W	58.10138	-3.14143	491663.66	6440006.10
128	333007.27	913394.58	ND3300713394	58° 6.268' N	3° 8.302' W	58.10446	-3.13837	491844.92	6440348.36
129	333166.18	913696.80	ND3316613696	58° 6.432' N	3° 8.146' W	58.10720	-3.13576	491999.33	6440652.88

130	333336.49	913747.37	ND3333613747	58° 6.461' N	3° 7.973' W	58.10768	-3.13289	492168.85	6440705.96
131	333705.98	913863.62	ND3370513863	58° 6.527' N	3° 7.599' W	58.10878	-3.12665	492536.55	6440827.66
132	334056.96	913980.91	ND3405613980	58° 6.593' N	3° 7.244' W	58.10988	-3.12073	492885.72	6440950.14
133	334073.68	913986.50	ND3407313986	58° 6.596' N	3° 7.227' W	58.10993	-3.12045	492902.35	6440955.97
134	334439.58	914115.77	ND3443914115	58° 6.669' N	3° 6.856' W	58.11115	-3.11427	493266.27	6441090.64
135	334802.89	914250.75	ND3480214250	58° 6.745' N	3° 6.489' W	58.11242	-3.10815	493627.51	6441230.98
136	335164.33	914392.20	ND3516414392	58° 6.824' N	3° 6.123' W	58.11374	-3.10205	493986.78	6441377.76
137	335522.24	914540.15	ND3552214540	58° 6.907' N	3° 5.761' W	58.11512	-3.09602	494342.43	6441530.98
138	335530.59	914543.69	ND3553014543	58° 6.909' N	3° 5.753' W	58.11515	-3.09588	494350.73	6441534.64
139	335542.04	914548.55	ND3554214548	58° 6.912' N	3° 5.741' W	58.11520	-3.09569	494362.10	6441539.68
140	335639.05	914589.79	ND3563914589	58° 6.935' N	3° 5.643' W	58.11558	-3.09405	494458.48	6441582.35
141	335909.57	914706.46	ND3590914706	58° 7.000' N	3° 5.370' W	58.11667	-3.08950	494727.23	6441703.00
142	335995.14	914743.36	ND3599514743	58° 7.021' N	3° 5.283' W	58.11701	-3.08805	494812.23	6441741.16
143	336347.65	914904.36	ND3634714904	58° 7.111' N	3° 4.927' W	58.11851	-3.08212	495162.28	6441907.36
144	336457.17	914955.08	ND3645714955	58° 7.139' N	3° 4.816' W	58.11898	-3.08027	495271.03	6441959.69
145	336509.98	914975.43	ND3650914975	58° 7.150' N	3° 4.763' W	58.11917	-3.07938	495323.53	6441980.82
146	336772.50	915078.50	ND3677215078	58° 7.208' N	3° 4.497' W	58.12014	-3.07495	495584.48	6442087.76
147	336870.42	915116.94	ND3687015116	58° 7.230' N	3° 4.398' W	58.12049	-3.07330	495681.81	6442127.65
148	337009.86	915174.87	ND3700915174	58° 7.262' N	3° 4.257' W	58.12103	-3.07095	495820.37	6442187.63
149	337229.08	915265.94	ND3722915265	58° 7.313' N	3° 4.035' W	58.12188	-3.06725	496038.19	6442281.93
150	337585.05	915419.61	ND3758515419	58° 7.399' N	3° 3.675' W	58.12331	-3.06125	496391.81	6442440.86
151	337827.15	915530.30	ND3782715530	58° 7.461' N	3° 3.430' W	58.12434	-3.05717	496632.23	6442555.12
152	337843.14	915537.61	ND3784315537	58° 7.465' N	3° 3.414' W	58.12441	-3.05690	496648.10	6442562.66
153	337937.43	915580.72	ND3793715580	58° 7.489' N	3° 3.319' W	58.12481	-3.05532	496741.74	6442607.16
154	338287.99	915747.43	ND3828715747	58° 7.581' N	3° 2.965' W	58.12636	-3.04941	497089.77	6442779.04
155	338354.81	915780.49	ND3835415780	58° 7.600' N	3° 2.897' W	58.12666	-3.04828	497156.09	6442813.08
156	338419.73	915811.69	ND3841915811	58° 7.617' N	3° 2.831' W	58.12695	-3.04719	497220.52	6442845.24
157	338767.61	915984.89	ND3876715984	58° 7.713' N	3° 2.480' W	58.12856	-3.04133	497565.78	6443023.56
158	339110.94	916163.65	ND3911016163	58° 7.813' N	3° 2.133' W	58.13021	-3.03555	497906.39	6443207.38
159	339215.65	916220.19	ND3921516220	58° 7.844' N	3° 2.027' W	58.13073	-3.03379	498010.25	6443265.46
160	339393.12	916316.01	ND3939316316	58° 7.897' N	3° 1.848' W	58.13162	-3.03080	498186.26	6443363.90
161	339452.52	916348.09	ND3945216348	58° 7.915' N	3° 1.788' W	58.13191	-3.02980	498245.17	6443396.84
162	339789.56	916538.94	ND3978916538	58° 8.020' N	3° 1.447' W	58.13367	-3.02412	498579.32	6443592.66

163	339939.30	916626.99	ND3993916626	58° 8.069' N	3° 1.296' W	58.13448	-3.02161	498727.73	6443682.92
164	340123.83	916735.49	ND4012316735	58° 8.129' N	3° 1.110' W	58.13548	-3.01850	498910.62	6443794.13
165	340454.56	916937.58	ND4045416937	58° 8.241' N	3° 0.776' W	58.13734	-3.01294	499238.29	6444001.08
166	340781.60	917146.15	ND4078117146	58° 8.356' N	3° 0.446' W	58.13926	-3.00744	499562.17	6444214.46
167	340955.06	917260.57	ND4095517260	58° 8.419' N	3° 0.271' W	58.14031	-3.00452	499733.91	6444331.44
168	341105.00	917359.47	ND4110517359	58° 8.473' N	3° 0.120' W	58.14122	-3.00200	499882.35	6444432.55
169	341424.78	917579.20	ND4142417579	58° 8.594' N	2° 59.797' W	58.14323	-2.99662	500198.82	6444656.97
170	341740.95	917804.62	ND4174017804	58° 8.718' N	2° 59.479' W	58.14530	-2.99131	500511.59	6444887.04
171	342052.53	918034.64	ND4205218034	58° 8.844' N	2° 59.165' W	58.14741	-2.98608	500819.70	6445121.64
172	342360.49	918270.28	ND4236018270	58° 8.974' N	2° 58.854' W	58.14956	-2.98090	501124.11	6445361.80
173	342663.87	918511.46	ND4266318511	58° 9.106' N	2° 58.549' W	58.15177	-2.97581	501423.87	6445607.44
174	342963.71	918758.33	ND4296318758	58° 9.241' N	2° 58.247' W	58.15402	-2.97078	501719.99	6445858.71
175	343257.96	919009.81	ND4325719009	58° 9.379' N	2° 57.950' W	58.15632	-2.96584	502010.45	6446114.51
176	343332.38	919074.93	ND4333219074	58° 9.415' N	2° 57.875' W	58.15691	-2.96459	502083.90	6446180.72
177	343463.81	919189.91	ND4346319189	58° 9.478' N	2° 57.743' W	58.15796	-2.96238	502213.59	6446297.63
178	343469.43	919195.30	ND4346919195	58° 9.481' N	2° 57.737' W	58.15801	-2.96229	502219.14	6446303.10
179	343667.25	919363.86	ND4366719363	58° 9.573' N	2° 57.538' W	58.15955	-2.95897	502414.42	6446474.57
180	343764.54	919446.77	ND4376419446	58° 9.619' N	2° 57.440' W	58.16031	-2.95734	502510.47	6446558.91
181	344055.09	919703.87	ND4405519703	58° 9.759' N	2° 57.148' W	58.16265	-2.95246	502797.15	6446820.26
182	344341.14	919965.64	ND4434119965	58° 9.903' N	2° 56.860' W	58.16504	-2.94766	503079.27	6447086.22
183	344622.53	920232.00	ND4462220232	58° 10.048' N	2° 56.577' W	58.16747	-2.94295	503356.65	6447356.72
184	344731.48	920339.38	ND4473120339	58° 10.107' N	2° 56.467' W	58.16845	-2.94112	503463.99	6447465.69
185	344898.49	920503.99	ND4489820503	58° 10.197' N	2° 56.299' W	58.16995	-2.93832	503628.53	6447632.75
186	344973.93	920580.37	ND4497320580	58° 10.239' N	2° 56.223' W	58.17064	-2.93706	503702.83	6447710.24
187	345170.79	920779.69	ND4517020779	58° 10.347' N	2° 56.025' W	58.17246	-2.93376	503896.70	6447912.44
188	345437.59	921061.02	ND4543721061	58° 10.501' N	2° 55.757' W	58.17502	-2.92929	504159.28	6448197.67
189	345699.89	921347.01	ND4569921347	58° 10.657' N	2° 55.494' W	58.17762	-2.92490	504417.29	6448487.50
190	345957.53	921637.58	ND4595721637	58° 10.815' N	2° 55.235' W	58.18026	-2.92058	504670.57	6448781.85
191	346208.78	921931.99	ND4620821931	58° 10.976' N	2° 54.983' W	58.18293	-2.91638	504917.42	6449079.93
192	346430.50	922200.72	ND4643022200	58° 11.122' N	2° 54.760' W	58.18537	-2.91267	505135.11	6449351.91
193	346455.45	922230.97	ND4645522230	58° 11.139' N	2° 54.735' W	58.18565	-2.91226	505159.61	6449382.52
194	346670.63	922500.84	ND4667022500	58° 11.286' N	2° 54.520' W	58.18810	-2.90866	505370.75	6449655.54
195	346697.63	922534.70	ND4669722534	58° 11.304' N	2° 54.492' W	58.18840	-2.90821	505397.23	6449689.78

196	346933.33	922842.08	ND4693322842	58° 11.472' N	2° 54.256' W	58.19119	-2.90427	505628.34	6450000.62
197	347164.45	923153.27	ND4716423153	58° 11.641' N	2° 54.025' W	58.19402	-2.90041	505854.80	6450315.18
198	347390.05	923469.04	ND4739023469	58° 11.813' N	2° 53.799' W	58.19688	-2.89664	506075.67	6450634.24
199	347408.84	923497.28	ND4740823497	58° 11.828' N	2° 53.780' W	58.19713	-2.89633	506094.04	6450662.75
200	347428.48	923524.56	ND4742823524	58° 11.843' N	2° 53.760' W	58.19738	-2.89600	506113.27	6450690.32
201	347445.33	923548.21	ND4744523548	58° 11.856' N	2° 53.743' W	58.19760	-2.89572	506129.78	6450714.22
202	347513.49	923632.75	ND4751323632	58° 11.902' N	2° 53.675' W	58.19836	-2.89458	506196.66	6450799.75
203	347755.49	923936.43	ND4775523936	58° 12.067' N	2° 53.432' W	58.20112	-2.89053	506434.12	6451106.97
204	347991.89	924243.76	ND4799124243	58° 12.234' N	2° 53.195' W	58.20391	-2.88658	506665.92	6451417.75
205	348002.22	924258.29	ND4800224258	58° 12.242' N	2° 53.185' W	58.20404	-2.88641	506676.03	6451432.43
206	348206.43	924421.86	ND4820624421	58° 12.332' N	2° 52.978' W	58.20553	-2.88297	506877.78	6451599.01
207	348505.40	924668.76	ND4850524668	58° 12.467' N	2° 52.676' W	58.20778	-2.87794	507173.04	6451850.30
208	348728.26	924859.15	ND4872824859	58° 12.571' N	2° 52.451' W	58.20952	-2.87419	507393.03	6452043.96
209	349405.00	923891.98	ND4940523891	58° 12.055' N	2° 51.748' W	58.20091	-2.86246	508084.00	6451087.00
210	349953.00	922874.68	ND4995322874	58° 11.510' N	2° 51.175' W	58.19184	-2.85292	508647.00	6450078.00
211	350362.67	921904.44	ND5036221904	58° 10.990' N	2° 50.745' W	58.18317	-2.84575	509071.00	6449114.00
212	350487.93	921515.51	ND5048721515	58° 10.782' N	2° 50.612' W	58.17969	-2.84354	509202.00	6448727.00
213	350648.56	921017.05	ND5064821017	58° 10.514' N	2° 50.442' W	58.17524	-2.84070	509370.00	6448231.00
214	350828.01	920169.24	ND5082820169	58° 10.059' N	2° 50.248' W	58.16764	-2.83747	509562.00	6447386.00
215	350986.25	919306.75	ND5098619306	58° 9.595' N	2° 50.076' W	58.15991	-2.83460	509733.00	6446526.00
216	351006.04	918961.12	ND5100618961	58° 9.409' N	2° 50.052' W	58.15681	-2.83419	509757.91	6446180.72
217	351055.36	918099.52	ND5105518099	58° 8.945' N	2° 49.990' W	58.14908	-2.83317	509820.00	6445320.00
218	351006.41	916957.06	ND5100616957	58° 8.329' N	2° 50.026' W	58.13881	-2.83376	509788.00	6444177.00
219	350878.53	916156.82	ND5087816156	58° 7.897' N	2° 50.146' W	58.13161	-2.83577	509672.00	6443375.00
220	350757.41	915543.51	ND5075715543	58° 7.566' N	2° 50.262' W	58.12609	-2.83769	509560.00	6442760.00
221	350533.47	914672.68	ND5053314672	58° 7.095' N	2° 50.479' W	58.11825	-2.84131	509349.00	6441886.00
222	350164.40	913727.99	ND5016413727	58° 6.583' N	2° 50.842' W	58.10972	-2.84737	508994.00	6440936.00
223	349594.79	912546.23	ND4959412546	58° 5.943' N	2° 51.407' W	58.09904	-2.85678	508442.00	6439746.00
224	349506.90	912409.64	ND4950612409	58° 5.868' N	2° 51.495' W	58.09781	-2.85825	508356.15	6439608.13
225	348932.42	911516.87	ND4893211516	58° 5.383' N	2° 52.068' W	58.08972	-2.86779	507795.00	6438707.00
226	348171.61	910597.86	ND4817110597	58° 4.883' N	2° 52.830' W	58.08138	-2.88049	507047.93	6437776.87
227	348163.53	910588.11	ND4816310588	58° 4.878' N	2° 52.838' W	58.08129	-2.88063	507040.00	6437767.00
228	347863.46	910285.54	ND4786310285	58° 4.712' N	2° 53.139' W	58.07854	-2.88565	506744.46	6437460.03

229	347428.42	909846.87	ND4742809846	58° 4.473' N	2° 53.575' W	58.07455	-2.89292	506316.00	6437015.00
230	347211.58	909674.85	ND4721109674	58° 4.379' N	2° 53.794' W	58.07298	-2.89656	506101.75	6436839.80
231	346453.64	909073.57	ND4645309073	58° 4.049' N	2° 54.556' W	58.06749	-2.90927	505352.85	6436227.39
232	346215.08	908884.32	ND4621508884	58° 3.946' N	2° 54.796' W	58.06576	-2.91327	505117.13	6436034.64