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LICENCE/CONSENT VARIATION – VALIDATION OF APPROPRIATE ASSESSMENT

1 Licence Details

Licensee/Developer Name:	Inch Cape Offshore Limited
<u>Site Details:</u>	Inch Cape Offshore Wind Farm, in the Firth of Forth
Date Existing Licence/Consent Issued:	Original: 17 June 2019 (Revised Design) Varied: 1 July 2021 (section 36 consent only)
Date of Existing Appropriate Assessment ("AA"):	14 March 2019

2 Summary of proposed variation application:

On 22 November 2022, Inch Cape Offshore Limited ("ICOL") requested to vary its section 36 consent and generating station marine licence (06781/19/0) for the revised design of the Inch Cape Offshore Windfarm project in the Firth of Forth.

ICOL has requested to vary its section 36 consent to reduce the nominal turbine spacing from 1,278 metres to 1,025 metres.

ICOL has also requested to vary its associated generating station marine licence to reduce the nominal turbine spacing from 1,278 metres to 1,025 metres and to change the wording of section 2.1 of the marine licence to bring it in line with the existing section 36 consent and ICOL's preferred design scenario. No other changes have been proposed.

Section 2.1 of the marine licence currently states:

"Where the final design agreed through the Development Specification and Layout Plan ("DSLP") falls between A and B, the collision risk to birds must be no greater than assessed in the Appropriate Assessment. If required by the Licensing Authority the Licensee must provide evidence of this using the best available science."

ICOL proposes to change the wording to:

"Where the final design agreed through the Development Specification and Layout Plan ("DSLP") includes a combination of parameters from A and B, the collision risk to birds must be no greater than assessed in the Appropriate Assessment. If required by the Scottish Ministers the Licensee must provide evidence of this using the best available science." As part of its application, ICOL submitted a report containing collision risk estimates for key seabird species at Inch Cape Offshore Windfarm. The report concluded that the collision estimates associated with ICOL's preferred design scenario are lower than the worst-case collision mortality assessed at the time of the original application.

3 Summary of consultation responses – in relation to European protected sites:

MD-LOT consulted NatureScot, operating name of Scottish Natural Heritage, on 15 December 2022 and NatureScot provided a response on 1 February 2023. NatureScot provided no specific advice in relation to European protected sites or Habitats Regulation Appraisal ("HRA"), however it stated it is content that the Variation Report demonstrates that collision risk to key seabird species is no worse than that previously assessed in the 2018 EIAR scenarios.

MD-LOT followed up with NatureScot regarding HRA aspects of the proposed variation on 27 February 2023 and NatureScot provided a response on 9 March 2023. NatureScot stated that the proposed changes to layout and hammer energies would not result in significant increases in risk to key marine mammal and seabird receptors, nor would impacts to fish receptors be materially different. NatureScot also advised that the new conservation objectives for the Outer Firth of Forth and St Andrews Bay Complex SPA do not require a revision of the existing Appropriate Assessment. NatureScot concluded that the Appropriate Assessment dated 14 March 2019 remains valid. For completeness, NatureScot confirmed that assessment of fish receptors is not required under HRA.

MD-LOT consulted Royal Society for the Protection of Birds Scotland ("RSPB Scotland") on 15 December 2022 and RSPB Scotland provided a response to MD-LOT on 25 January 2023. RSPB Scotland reiterated its objection to the original projects as the impact on seabirds from the project in isolation and in-combination with the Neart na Gaoithe and Seagreen Offshore wind farms would constitute adverse effects on integrity of nearby Special Protection Areas ("SPAs"), including the Forth Islands SPA and Fowlsheugh SPA. RSPB Scotland noted that the proposed changes are predicted to slightly reduce impacts and viewed this positively in the context of the existing impacts. RSPB Scotland maintained its objection due to the in-combination impacts of the developments on designated sites.

4 Summary of other information in relation to European protected sites (MSS responses, external reports).

MSS was consulted on commercial fisheries aspects only and provided no advice in relation to European protected sites.

5 Updated in-combination assessment:

- a) Detail new plans or projects since date of existing AA.
- b) List plan or project titles for which licences/consents have expired since date of existing AA.
- c) Update assessment.

a)

Forth Islands SPA

00009818/ 00009819 - Forth Ports Ltd (Per RHDHV) - Construction and Dredge and Deposit - Port of Leith Outer Berth

Expansion and improvement of Outer Berth at Port of Leith.

Defence Infrastructure Organisation - Remediation and construction works - Dalgety Bay, Fife

The physical works required to address the radium contamination primarily comprise of a robust geotextile membrane of approximately 13,000 m² held in place and protected by a new revetment consisting of 9,500 m³ of rock armour. The existing Dalgety Bay Sailing Club slipway and jetty structures will also be removed and replaced with a single slipway and jetty structure. The work will involve excavation of the foreshore and will include the removal of 7,500 m³ of beach material to provide foundations for these structures and also to remove contamination at specific areas across the bay. The project will take place over 2 years with works only permitted between April and September.

Fowlsheugh SPA

Aberdeen Bay Offshore Wind Farm

An offshore wind powered electricity generating station and deployment centre, known as the European Offshore Wind Deployment Centre, with a maximum generating capacity of up to 100 MW, comprising of up to 11 offshore wind turbine generators ('WTG') All construction works have been completed for this project which is now in the operational stage, a variation was granted in 2020, extending the operational life until 2032.

Buchan Ness to Collieston Coast SPA

00009943 - SHET - Eastern Green Link 2 (EGL2)

Scottish Hydro Electric Transmission in collaboration with National Grid Electricity Transmission are developing a submarine High Voltage Direct Current ("HVDC") link between Peterhead in Aberdeenshire and Drax in North Yorkshire, referred to as the Eastern Green Link 2 Project ("EGL2"). EGL2 falls within both Scottish territorial waters within 12 nautical miles ("nm") and in Scottish offshore waters (> 12 nm). From the landfall at Sandford Bay south of Peterhead EGL2's Installation Corridor heads initially southeast, then broadly south towards the Scottish/English waters border and further in to English territorial waters. 3.2 EGL2 comprises approximately 436 kilometres of submarine HVDC cable, comprising 150 km in Scottish waters. 3.3 EGL2 is a submarine cable system made up of two HVDC single core metallic conductors and a fibre optic ("FO") cable, providing 2 Giga Watts of transmission reinforcement.

Aberdeen Bay Offshore Wind Farm

See above.

Moray West Offshore Wind Farm

The wind farm is located 22.5 km southeast off the Caithness coastline. The operational lifespan of the project is expected to be 25 years. The project covers a total area of approximately 225 km² and will be comprised of no more than 85 wind turbines with a maximum generating capacity of around 850 MW, along with associated offshore transmission infrastructure. The wind farm is currently under construction.

Outer Firth of Forth and St Andrews Bay Complex SPA

00009818/ 00009819 - Forth Ports Ltd (Per RHDHV) - Construction and Dredge and Deposit - Port of Leith Outer Berth

See above.

Dalgety Bay Sailing Club - Moorings - Dalgety Bay

Dalgety Bay Sailing Club are increasing the number of moorings in Dalgety Bay from 50 mooring to 80 moorings for private pleasure boating activities. The moorings will be in use from April to September each year.

Defence Infrastructure Organisation - Remediation and construction works - Dalgety Bay, Fife

See above.

Scottish Hydro Electric Power Distribution ("SHEPD") - Geophysical Surveys - Forth and Tay and Moray Regions

SHEPD are proposing to undertake geophysical surveys in the Moray Firth Marine Region and the Forth and Tay Marine Region along a number of cable routes. The proposal includes the use of Ultra-Short Baseline ("USBL") and Sub-Bottom Profiler ("SBP"). The proposal is due to commence once the licence is issued and is expected to be completed by 31 March 2023. Vessel presence and survey activities on all cables across the Moray Firth Marine Region and the Forth and Tay Marine Region are expected to take 7.22 days in total, with an additional 12 hours allowed for equipment calibrations for each survey mobilisation.

SEGL 1 HVDC Cable and Cable Protection

National Grid Electricity Transmission (NGET) and Scottish Power Transmission (SPT) are jointly developing a subsea High Voltage Direct Current (HVDC) link between Torness in East Lothian and Hawthorn Pit in County Durham.

Moray Firth SAC

EPS licence – geophysical surveys of ScotWind E1 East export cable corridor

Geophysical survey work using sub-bottom profiler, ultra-short base line and seismic equipment.

EPS licence – UXO clearance of Moray West wind farm and export cable corridor

Unexploded Ordnance Clearance of up to a maximum of 30 and the use of PAM and ADD equipment.

00009818/ 00009819 - Forth Ports Ltd (Per RHDHV) - Construction and Dredge and Deposit - Port of Leith Outer Berth

See above.

Aberdeen Bay Offshore Wind Farm

See above.

Ardersier Port Development

The Ardersier Port Development is located at the former McDermott Fabrication Yard, which lies approximately 7.5 km to the west of Nairn, 3 km northeast of the village of Ardersier and is bounded by the Moray Firth to the north. The site extends to 307 hectares in total (including marine and terrestrial aspects) and features an existing harbour which is protected by a naturally occurring sand and shingle spit known locally as Whiteness Head. The works involve port entrance/inner channel dredging. quav wall construction/realignment and quayside (berthing) dredgings and are scheduled to start in 2019 taking up to 5 years to complete. A dredge of 2,300,000 m³ of sand will be required to deepen the port entrance to -6.5 m chart datum. A cutter suction dredger will be used. An area of the inner channel will be dredged to -3 m chart datum by either plough dredging, backhoe dredger or land based equipment. Once dredging has been completed, the new 464 m sheet pile wall will be constructed alongside the existing guayside.

BEAR Scotland - Bridge Maintenance Works - Kessock Bridge, Inverness-shire

This licence covers routine maintenance activities to be carried out on the bridge over a period of 5 years. All works will be highly localised and take place within the immediate vicinity of the bridge. With the exception of scour repairs and fender replacement, all maintenance activities will take place above MHWS. In most cases, activity duration is likely to be less than three months and for several activities, duration will be less than a few weeks. The exception being the painting of the superstructure which will take approximately 4 years to complete.

Beatrice Offshore Windfarm - Geophysical surveys, benthic surveys and visual inspections

The works involve geophysical surveys at the site of Beatrice Offshore Windfarm transmission infrastructure and turbine sub structures, located in the Outer Moray Firth approximately 13.5 km from the Caithness coastline, off the North East of Scotland and comprised of 84 fixed wind turbines, two offshore transformer modules, inter-array cables and two subsea export cables. The survey operations are scheduled to be undertaken between June 2020 and December 2023. There will be numerous survey campaigns within this period, with a total duration of 365 days.

Caledonia Export Cable Corridor Geotechnical Surveys

Geotechnical surveys to assess the conditions within the Caledonia Offshore Wind Farm export cable corridor area.

Installation of new long sea outfall, Spey Bay

Construction of a long sea outfall of approximately 1.9 km in length to discharge effluent from a distillery into the Moray Firth. The pipe is made of High Density Polyethylene and will be fitted with 2 discharge diffusers, one at the midline and one at the end of the outfall. This will be protected with approximately 300 tonnes of cobbles and 1500 tonnes of boulders. Land based trenching will be carried out in the nearshore intertidal section and the subtidal section will be trenched using marine plant, likely a back-hoe dredger. Material removed during trenching will be stockpiled adjacent to the trench to be used as backfill once the pipe and diffusers are installed. Anti-scour rock mattresses will be used to protect the diffusers. A temporary mooring buoy will be used to attach to the pipes in a storage area until they are required during the construction process. This buoy will be removed at the end of the construction process.

MarramWind Offshore Windfarm - Geophysical surveys of export cable corridor

The works involve geophysical surveys of the offshore export cable corridor for MarramWind offshore windfarm. The surveys are scheduled to take place between 1 March 2023 and 30 September 2023, with noise-generating activity occurring for a maximum of 100 days during this period.

Moray West Offshore Wind Farm

See above.

Peterhead Port Authority - Revetment Works, Alexandra Parade, Peterhead

The works are part of a larger project to strengthen the existing, circa 330 m long, sea defence revetment at Alexandra Parade, Peterhead. The project will be completed in two phases between April 2020 and December 2022. The project includes re-profiling of the existing revetment, formation of a toe trench and placement of various sizes of rock armour and pre-cast concrete units within the toe trench to create a toe mound. Re-profiling of the existing rock armour revetment will be undertaken by removing existing concrete elements and rock armour. Remaining sections of the concrete pitched revetment will then be broken up to improve porosity using an excavator mounted rock breaker. A rock embankment will be constructed using 1-3 Tonne ("T") rockfill to overlay the existing revetment. Pre-cast concrete armour base units (Xbloc units) will then be placed in the newly developed toe trench and overlayed with 10 T rock armour to create a toe mound. Xbloc units will be placed on the rock embankment slope, extending from the toe structure to the crest of the revetment.

Seagreen Wind Energy Limited - Geophysical Surveys - Seagreen 1A Cable Route

Seagreen proposes to install a further export cable to enable the subsequent build out of the Seagreen Alpha and Bravo Offshore Wind Farms. This export cable is to be known as Seagreen 1A and will make landfall at Cockenzie in the Firth of Forth. Seagreen propose to undertake geophysical surveys of the planned Seagreen 1A cable route. This will include the use of multi-beam echo sounder, side-scan sonar, sub-bottom profiler, magnetometer, sparker boomer and ultra-short base line. The total survey area covers approximately 548 square kilometres.

Firth of Tay and Eden Estuary SAC

EPS licence – geophysical surveys of ScotWind E1 East export cable corridor

See above.

00009818/ 00009819 - Forth Ports Ltd (Per RHDHV) - Construction and Dredge and Deposit - Port of Leith Outer Berth

See above.

<u>Scottish Hydro Electric Power Distribution ("SHEPD") - Geophysical Surveys - Forth and Tay and Moray Regions</u>

See above.

Seagreen Wind Energy Limited - Geophysical Surveys - Seagreen 1A Cable Route

See above.

Berwickshire and North Northumberland Coast SAC

EPS licence – geophysical surveys of ScotWind E1 East export cable corridor

See above.

00009818/ 0000	9819 -	Forth	Ports	Ltd	(Per	RHDHV)) –	Construction	and	Dredge	and
Deposit - Port of	Leith Or	uter Be	<u>ərth</u>							-	

See above.

Aberdeen Bay Offshore Wind Farm

See above.

Isle of May SAC

EPS licence – geophysical surveys of ScotWind E1 East export cable corridor

See above.

00009818/ 00009819 - Forth Ports Ltd (Per RHDHV) - Construction and Dredge and Deposit - Port of Leith Outer Berth

See above.

Aberdeen Bay Offshore Wind Farm

See above.

Seagreen Wind Energy Limited - Geophysical Surveys - Seagreen 1A Cable Route

See above.

Dredging operations identified as having a likely significant effect on a designated site/designated sites also affected by the ICOL proposal

Location of Dredge	Amount of Dredge	Dredge Spoil	Dates of Licence	Designated Site
	Iviaterial	Area		
Aberdeen North and South Harbour	North – 139,500 wet tonnes from navigation channel; 45,500 from the River Dee; 110,500 from berths and docks. South – 133,000 wet tonnes.	Aberdeen	01/02/2023- 31/02/2026	Moray Firth SAC
Arbroath Harbour	20,640 wet tonnes per year	Arbroath	13/07/2022- 12/07/2024	Moray Firth SAC
Banff Harbour	10,000 wet tonnes	Either 80% to Macduff and 20% for beach nourishment project, or 100% Macduff	16/12/2022- 15/12/2023	Moray Firth SAC
Boddam Harbour	8,000 wet tonnes per year	Buchan Ness	01/10/2021- 30/09/2024	Moray Firth SAC and Buchan Ness to Collieston Coast SAC
Buckie	16,665 wet tonnes per year	Buckie	16/03/2021- 15/03/2024	Moray Firth SAC
Burghead	30,800 wet tonnes per year	Burghead	16/03/2021- 15/03/2024	Moray Firth SAC
Cullen Harbour	10,000 wet tonnes over three year period	Buckie	02/07/2020- 02/06/2023	Moray Firth SAC
Port of Inverness	9,750 wet tonnes over three years	Cromarty	01/07/2022- 30/06-2025	Moray Firth SAC
Port of Kirkcaldy	63,000 wet tonnes over three years	Kirkcaldy	22/12/2021- 21/12/2024	Moray Firth SAC and Outer Firth of Forth and St

				Andrews Bay Complex SPA
Montrose Harbour	246,000 wet tonnes	Either Montrose Bay Trial site, or Lunan Bay	24/09/2022- 23/09/2023	Moray Firth SAC

b)

Isle of May SAC and Moray Firth SAC

Aberdeen Harbour Expansion Project

Moray Firth SAC

Port of Cromarty Firth – Phase 4 – construction, dredging, sea disposal and land reclamation

Firth of Tay and Eden Estuary SAC

University of St Andrews – Guardbridge, Fife – seawall repairs

c)

There are no new plans or projects likely to have a significant effect on the St Abb's Head to Fast Castle SPA. MD-LOT therefore concludes that there will be no adverse effect on the site integrity of St Abb's Head to Fast Castle SPA as a result of the ICOL proposal incombination with other plans or projects.

There are several new plans or projects likely to have a significant effect on each of the other designated sites for which the original AA was undertaken. MD-LOT concludes that, providing the above new plans or projects are carried out in accordance with any conditions in their respective AAs, there will be no adverse effect on the site integrity of the Forth Islands SPA, Fowlsheugh SPA, Buchan Ness to Collieston Coast SPA, Outer Firth of Forth and St Andrews Bay Complex SPA, Moray Firth SAC, Firth of Tay and Eden Estuary SAC, Berwickshire and North Northumberland Coast SAC and Isle of May SAC from the ICOL proposal in-combination with other projects.

6 Conclusion - Consideration of whether AA completed for the original decision is still valid:

No consultation responses or representations have been received which would invalidate the conclusions or alter the outcome of the AA completed on 14 March 2019.

MD-LOT concludes that the proposed variation to ICOL's section 36 consent and generating station marine licence is not likely to have an adverse effect on the site integrity of St Abb's Head to Fast Castle SPA, Forth Islands SPA, Fowlsheugh SPA, Buchan Ness to Collieston Coast SPA, Outer Firth of Forth and St Andrews Bay Complex SPA, Moray Firth SAC, Firth of Tay and Eden Estuary SAC, Berwickshire and North Northumberland

Coast SAC and Isle of May SAC either alone or in-combination with other plans and projects, provided the conditions of the original AA are adhered to.

Name	Assessor or Approver	Date
Lauren Cowan	Assessor	03 March 2023
Naomi Gibson	Approver	30 March 2023