

## APPENDIX E

### BENTHIC ECOLOGY & COASTAL PROCESSES: SNH & JNCC ADVICE ON CUMULATIVE IMPACTS

- **Gravity bases**

Since the provision of our interim advice on Neart na Gaoithe (23 November 2012) and Seagreen phase 1 (28 March 2013), Marine Scotland have confirmed that use of gravity bases at proposed wind farm sites will be subject to a further marine licence and supporting EIA. This is in order to consider the required dredging and disposal of sediment. We welcome and support this approach. We can also confirm that there are no significant cumulative impacts across the Forth & Tay wind farm sites from sediment release associated with piled or drilled foundations.

- **Export cables and landfalls**

We confirm that there are no cumulative impacts associated with the export cables for each wind farm site in combination. The export cable for Neart na Gaoithe makes landfall at Thorntonloch, on which we have provided advice to Marine Scotland (23 November 2013) and East Lothian Council (15 February 2013). The export cable for Seagreen phase 1 makes landfall at Carnoustie, on which we have provided advice to Marine Scotland (28 March 2013) and Angus Council (10 July 2013). We will address the Inch Cape landfall (proposed around Cockenzie) in our response to Marine Scotland on the marine licence application, and in response to East Lothian Council on the planning application, when submitted.

- **Impacts on sandeels**

None of the Forth & Tay developers have carried out specific sandeel surveys to inform submitted applications, although some of them have recorded the presence of sandeels in their benthic trawls. If possible it may be desirable to micro-site turbines away from locations with high densities of sandeels. We note that piled foundations have a significantly smaller footprint compared to gravity bases in this regard, and we may recommend that gravity bases are not utilised in any key areas recorded for sandeels.

We recommend, if the proposals receive consent, that developers undertake specific sandeel surveys, following MSS guidance on methodology, in order to map sandeel densities across their wind farm sites. This will assist with any micro-siting and inform impact monitoring. The survey method and the distribution of sample locations should be such that it is repeatable during and after the construction phase for the purpose of impact monitoring.

- **Priority Marine Features**

*Arctica islandica* (ocean quahog)<sup>1</sup> has been recorded by both Inch Cape and Seagreen within their respective wind farm sites. The species is sensitive to smothering and we would welcome further discussion of potential mitigation measures with Marine Scotland and each developer. Neart na Gaoithe have not found any Priority Marine Features within their proposed wind farm site or corridor for the export cable.

- **Possible Marine Protected Area**

Our interim advice noted that the Seagreen phase 1 proposals (alpha and bravo) overlap with the possible Marine Protected Area (MPA) for the Firth of Forth Banks Complex, now released for public consultation. The main features are 'offshore subtidal sand and gravel habitat'; *Arctica islandica*; and 'shelf banks and mounds' (Wee Bankie – including Scalp Bank, Montrose Bank and Berwick Bank). We welcome the initial proposals from Seagreen to mitigate impacts to benthic habitats, including MPA features, as well as their continued engagement over the proposed management options for this MPA.<sup>2</sup>

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<sup>1</sup> *Arctica islandica* is included on OSPAR's list of threatened and/or declining species (OSPAR,2008b).

<sup>2</sup> [www.jncc.defra.gov.uk/pdf/SMPA\\_Firth\\_of\\_Forth\\_Banks\\_Complex\\_Management\\_Options\\_Paper\\_July\\_2013.pdf](http://www.jncc.defra.gov.uk/pdf/SMPA_Firth_of_Forth_Banks_Complex_Management_Options_Paper_July_2013.pdf)

- **Annex I habitats**

We confirm that there are no cumulative impacts arising from the Forth & Tay offshore wind proposals on Annex I habitats. Only Seagreen have recorded potential reef building species (such as *Sabellaria spinulosa*) within their wind farm site and we welcome their initial mitigation proposals in this regard.

- **Non-native species**

We would welcome further discussion of this aspect in order to inform good practice to reduce / avoid the possibility of introducing non-native species into the Forth & Tay region from the range of activities associated with the proposed wind farm developments.