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Scottish Natural Heritage
Great Glen House,
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Dear Sir / Madam,

DRAFT SNH GUIDANCE ON SURVEY AND MONITORING IN RELATION TO MARINE RENEWABLES DEPLOYMENTS IN SCOTLAND - RESPONSE FROM AQUAMARINE POWER.

Aquamarine Power is grateful for the opportunity to comment on the draft Guidance on Survey and Monitoring in Relation to Marine Renewables Deployments in Scotland issued by Scottish Natural Heritage.

Please find below our detailed response. As requested it is structured into the following three sections.

1.1 The format and structure of the current reports

- The size of the report is unwieldy and will discourage its use. An Executive summary section detailing the report's key points and conclusions is crucial to its practical implementation.

1.2 Changes that should be considered

- The Oyster description in Table 1.1, Vol 1, should be updated with "Devices are situated in near shore environments, in depths of between 10 and 15m."
- When the document talks about AA, Natura 2000, there is often reference to 'not adversely affecting' or 'no impact' – reference should be made about the significance of the impact rather than whether there is or isn't an impact (e.g. no significant impact).
- Vol 1, Section 3, 2nd paragraph – please clarify that 'site location' refers to micro-siting of devices themselves / array layout, rather than site of the development? It is assumed this is the case as it would be unfeasible to monitor the distribution and abundance of key species of the region at large, prior to selecting the development area.

- Clarification is required to delineate the following: ‘development area’, ‘impact footprint’, ‘potential impact footprint’, ‘likely impact footprint’ and ‘survey corridors’. Whilst we realise these are site/project specific, we ask that you clarify how they are delineated, i.e. the criteria used. E.g. is development area boundary determined by the outermost devices, cable or pipeline infrastructures? What is the impact footprint delineated by and presumably there are different impact footprints for seabed/water column (benthos and marine habitat), marine species and birds – how are each delineated, what criteria will SNH use to decide? Potential impact footprint is mentioned in Vol 1, Section 3.2.10 but is rather ambiguous referring to the possibility of extending ‘several kilometres’ around the immediate boundary of the device. What criteria are used to decide on the need for and extent of survey corridors? Further, if any of these terms have the same meaning then one term should be used consistently.
- Vol 1, Section 3.2.4 and elsewhere (e.g. Vol 4, Section 8.3). It should be recognised that requirements for survey and monitoring periods may vary according to a) the sensitivity of the site and b) the risk posed by the device/development; and there are cases where less than 2 years of data is sufficient. - Vol 1, Section 3.2.4. We are encouraged to see ‘an acceptance of the limits on data collection and the ability to detect change may be required, with pragmatism and judgement on behalf of regulators focussing on the collection of sufficient data to inform the judgement of the regulator and their advisors on the basis of ‘best available knowledge’.’ We consider this a sensible and realistic approach. We are similarly encouraged by the pragmatic approach to Spatial Consideration for data collection in Vol 1, Section 3.2.5. and Distribution/abundance Data in Section 3.2.7. It would be useful to know if SNH and MS will accept/take this approach in their considerations of consents – again this sort of information would be useful in a summary guidance to developers, as proposed above.
- Vol 1, Section 3.2.12 We are supportive of building flexibility into survey design and monitoring programmes in order to accommodate learning over time and to thereby foster improvements, however it would be useful to know whether SNH/MS accept this (again something for the summary guidance to developers) and that there are no adverse impacts to this strategy in terms of SNH/MS demanding a ‘restart’ of data collection in light of new, improved methods, or in the case of post-consent monitoring that there would not be an untenable increase to consenting conditions. Flexibility should be used positively to improve data collection and environmental assessments, not negatively to penalise developers already embracing these responsibilities.
- Similarly we are supportive of the adaptive approaches for site management (Vol 1, Section 3.5; Vol 2, Section 5.2) although would caution (as with survey/monitoring desing flexibility) that if as is noted ‘it may be appropriate for licensing conditions and monitoring measures to be adapted in response to the results of ongoing monitoring’, adaption is positive so that it does not become a liability for developers over the longer term.
- Vol 1, Section 3.2.12 Encouraging standardisation and data compatibility – the document advises that to promote comparability, data should be collected using standardised methods, summarised in consistent ways and reported in common units. The best way to achieve this is for SNH/MS to set the standards: perhaps this could be in the summary guidance to developers.

- Vol 1 , Section 3.2.15 Dealing with uncertainty – definition is required for ‘precautionary approach’.
- The tables of the type of Tables 2.4 and 2.5 , Vol 2 provides clear, concise guidance on what species we should be considering within the EIA. However, it would be useful to know (perhaps within the Summary Guidance to Developers) what SNH/MS use to determine which species we should monitor, for example should we focus on those that are Priority Marine Features, plus any others common (more definition required) to our site; and to what degree is mitigation expected of PMFs compared to other species. It is difficult to determine this from the current guidance.
- Vol 2, Box 3.2. – it would be useful for the guidance to offer an understanding of what is considered ‘deliberate’. Particularly in points b ii), iii), iv) vii) and d), there is ambiguity as to whether the actions of a marine renewable developer installing and operating at sea could fall into these categories.
- It would be useful to advise whether construction/operational vessel traffic fall into the Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (applicable outwith 12nm territorial waters) (Vol 2, Section 3.4).
- Vol 2, Section 3.5 requires guidance as to how an area or resources used by individuals from an SAC outwith the development area are decided.
- Vol 2, Box 3.3 requires guidance as to what is considered by SNH/MS an ‘appropriate contribution’ to achieving favourable conservation status.
- Throughout the guidance on noise, there needs to be acknowledgement of the difference between, for example, a nearshore breaking-wave environment and an offshore environment; as the background noise will be much greater in the energetic nearshore zone. This has consequences for the consideration of noise from operation, construction, piling etc, which are more likely to be drowned-out and are more difficult to detect/measure due to the high ambient noise levels. The sensitivity of species to these activities will therefore also vary depending in which environment they take place in.
- Vol 2, Section 7.3 – there needs to be clarification of the term ‘immediately’ in the advice that ‘the impact monitoring “baseline” needs to be carried out immediately prior to the installation period’ and it is important that it allows sufficient time for the consents application process, contract placement and device manufacture.
- Vol 2, Section 7.3 – there is much ambiguity in ‘that the surveys are frequent enough and cover a long enough period to adequately characterise natural variation in numbers and distribution in order to detect a change out with this natural variation.’ and guidance from SNH/MS as to their expectations is required (summary guidance to developers).

- When considering level of uncertainty, is there a specific level of CV (e.g. Section 7.4, Vol 2) that SNH/MS would require to accept the results of the monitoring? Guidance is required so developers know what to aim for.
- The document seems to suggest that developers will be required to use photo-ID and/or telemetry for cetaceans (Table 8.1, Vol 2) – is that the what MS/SNH expect, despite the limitations of these techniques (as discussed in the document)?
- In consideration of the use of hydrophones and acoustic data loggers (e.g. Vol 2, Section 8.2.2), there should be consideration of the practicality of deploying such devices in the nearshore energetic wave environment. There is mention of such devices (e.g. the POD and cPOD) drifting away from harbours where waters are relatively calm; it follows that there is significantly increased risk of this in the breaking-wave zone. The success of these devices can therefore be considerably limited. Similarly, there should be consideration of the effectiveness of such devices in high energy, noisy, breaking-wave environments.
- In Vol 2, Section 10.3 it is advised that ‘Best practice should include avoidance or exclusion of developments from core home ranges’ – it would be useful for SNH/MS to direct developers to this information/maps.
- When considering mitigation measures (e.g. Vol 2, Section 10.3), it is important to recognise the limited weather/season windows for offshore construction/installation and the considerably increased HSE risks and technical challenges posed by pushing these activities into unsuitable seasons in order to avoid species feeding, breeding, or migrating. There appears to have been no consideration given to HSE and the danger is that it will follow that users of this document will similarly fail to prioritise it.
- When the recording of data is limited by weather conditions, it is important to know that developers will not be penalised by SNH/MS for incomplete data sets. The danger is that it may encourage activities to be persisted with in dangerous weather conditions. Is important that allowances are given to this by SNH/MS in considering the data/EIA and making their consenting recommendations.
- Vol 2, Section 12.2.4 states that ‘little training is required to deploy and retrieve a POD’. This is an irresponsible message to convey as training and competence are key to reducing HSE risks and this should be particularly stressed in high risk environments such as deploying equipment offshore. Examples of training required include offshore survival tickets, commercial diving tickets if diving required.
- Vol 3, Section 9.3 refers to the need for developers to detect and identify collision events, if a ‘deploy and monitor’ strategy is adopted by the regulators; however it is acknowledge that the techniques and equipment required to do this are still in the test stage. It is important therefore that the lack of suitable/proven technology does not holdup developers and it is therefore impractical for this to be requested through consenting conditions at this stage.

- Vol 3, Section 10 We appreciate the useful summary of survey and monitoring methods tables.
- Vol 3, Section 11.3 – clarification required of what the ‘tiered approach’ would be.
- Vol 3, Section 12 – understanding needs to be conveyed as to why the ship-based marine mammal and bird surveys need to be simultaneous in this case?
- Vol 3, Section 12 - understanding needs to be conveyed as to why the onshore VP marine mammal and bird surveys should not be simultaneous in this case?
- Vol 4, Section 4.3.2 requires more guidance on how activities (installation/operation) can be acceptably conducted within 1km of bird breeding sites, as is possible with nearshore activities.

1.3 Key issues that you would wish to see incorporated within the guidance note

- Significantly throughout the whole document there is no consideration given to HSE aspects, which is of grave concern to us. It is imperative that SNH/MS place HSE at the forefront, particularly when considering recommendations or placing requirements on developers to carry out survey and monitoring activities. It is imperative that when requesting data gathering, consideration must be given as to whether the data is critical or “nice to have” and that thought is given to the implications of requesting data gathering; particularly if the work to gather that data involves hazardous activities such as diving. To foster this culture, it would be responsible to include HSE considerations throughout this document.
- We need to see how SNH and MS are objectively and consistently going to assess EIA/consents applications and make their recommendations and consenting decision. The guidance does not need to be device specific to do this as this depends on device/site technicalities; however SNH/MS could communicate to us guidance on the sensitivities of species/habitats and the degree of mitigation they expect, as well as highlighting ‘showstoppers’, so that developers can assess the financial and practical implications of such restrictions on the project and produce an EIA/monitoring plan that is appropriate to mitigate the risks.
- This Guidance should tie in with and directly reference any future Deploy and Monitor Strategy and vice versa.
- The ‘Guidance to assist developers in understanding when an EPS licence may be required in relation to cetaceans’ should tie in with this guidance; and the future deploy and monitor policy.
- Whilst this guidance is very comprehensive, what still remains to be required by developers is a summarised document outlining what SNH/MS consider acceptable (and unacceptable) to make their recommendations for consent. It may be appropriate to include a checklist, which developer can include in the EIA to show they have fulfilled the regulators requirements in the surveying/monitoring that they have carried out. This would give developers confidence that that

they are investing in the right surveys and monitoring programmes and are meeting SNH/MS requirements.

In conclusion, Aquamarine Power is grateful for the opportunity to comment on this consultation document and is willing to maintain dialogue with SNH and Marine Scotland in the continued development of this Guidance. Should any questions arise from our comments, we would be happy and willing to provide further clarification.

With kind regards

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