

## CNSE Project – Satisfactory Alternatives

### Option 1 – Do not undertake the survey.

Please can you consider the “do-nothing” approach within your application. Detail why this is not an option taking in to consideration the impact on EPS and why this is not a satisfactory alternative. (ie. not undertaking the surveys would result in no impact on EPS however the surveys are required....)

*Not undertaking the surveys would result in no impact on EPS, however the surveys are required to provide an accurate interpretation of the seabed, geophysical features, and environmental conditions. This will allow relevant Environmental Impact Assessments to be made of the proposed CNSE cable installation route, and installation methodology for the electrical cable.*

*The objective of the geophysical survey is to provide engineering level data suitable for cable route development/ selection and to inform cable burial risk assessment (CBRA). This requires mapping of bathymetry, seabed conditions, near surface and subsurface geology, in combination with intrusive investigations.*

*The objective of the environmental survey is to enable characterisation of physical seabed conditions, benthic ecology, water and sediment quality along the proposed cable route. The environmental survey includes determination of presence and extent of seabed habitats, with a focus on features of conservation interest such as Priority Marine Features (PMFs) and Annex 1 habitats and species.*

*The CNSE Project would not be able to proceed without the proposed environmental and geophysical survey being conducted. This is, therefore, not a satisfactory alternative.*

### Option 2 –Different Equipment

Please can you provide further information in respect of other potential equipment that could be used, how this would affect EPS and again why an alternative is not satisfactory.

The following table describes alternatives for equipment.

#	Base Plan (as is being planned for)	Alternative Plan	Impact on EPS	Why this option was rejected
1	Standard seabed survey vessel with surface mounted/towed sensors (nearshore scope)	Replace nearshore vessel with Un-manned Autonomous Surface Vehicle (ASV)	Reduced CO2 footprint lower exposure for EPS	Inability for ASV to acquire environmental physical samples for EIA environmental baseline. An additional vessel would be required to gather environmental samples.

2	Sub-bottom Profiler (SBP) acquired along the full survey corridor and on each survey line	Reduce volume of SBP data and limit acquisition to centre line of route(s) only and not wing lines	Reduced sound exposure in water column through less usage of the SBP	Shallow geology data (as derived from SBP data acquisition) is needed throughout the cable route corridor for trenching and lay design. SBP has been chosen to acquire the correct type of data at a required level of quality and coverage. Lower frequency equipment would not provide such reliable data and may require further marine survey effort.
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**Option 3 – Different Location**

Chrysaor have explained the reasoning regarding the selection of the cable route location, however, please can you provide further clarification on how different location(s) would impact EPS and why again this is not a satisfactory alternative..

*Following a review of approximately 15 alternative project development concepts, Power from Shore UK was identified as the preferred concept, utilising an SSE grid connection offer located in Peterhead.*

*Whilst a number of cable route options have been considered for the offshore element of the HDVC and HVAC cable corridors, the cable landfall location is largely driven by the grid connection offer and terms associated with this. Therefore the Project has a relatively short length of coastline to consider for potential landfall locations.*

*A full assessment of suitable landfall options was undertaken and this has undergone a number of iterations as new information has become available. Environmental sensitivities and proximity to any protected sites was a component of the assessment, and this has helped guide the search area for suitable cable corridors. Because the objective of this survey is to acquire geophysical information on the potential cable corridor, the survey location is fixed and there are no satisfactory alternative locations that would eliminate impacts on EPS.*

**Option 4 – Different Timing**

Please provide further in relation to consideration of different timing of the activity and the impact on EPS and why undertaking the surveys at a different time is not a satisfactory alternative.

*Survey activity in summer will allow the CNSE survey to avoid the majority of peak breeding seasons for species of concern, and will be carried out in an already busy*

*period of vessel activity. Surveys typically occur during the spring and summer months in order to avoid or minimise any delays due to weather downtime. Additionally, the EPS risk assessment undertaken to support this application indicates that there is unlikely to be a significant impact to the EPS that may be present.*

*In terms of other marine species, the risk assessment noted that during the summer months, basking sharks are considered to be at potential risk of collision with vessels associated with the survey activities. However, the potential to impact basking sharks was considered to be very low as this species is unlikely to be found within the vicinity of the planned survey*

*The vessel physical presence, including any lighting, has the potential to result in disturbance to seabirds. The proposed survey may coincide with sensitive periods for seabird species which utilise the marine environment, however the short-term and temporary nature of proposed activities and their limited spatial extent restrict the potential for significant impacts to birds. Additionally, the survey vessel will be travelling slowly and in a predetermined pattern. Therefore, the survey activities are highly unlikely to cause significant effects on the FCS of the qualifying bird features of the Buchan Ness to Collieston Coast SPA (which the survey will operate within).*

*The survey being conducted in the summer months will maximise the good weather availability to allow the survey to be completed with the shortest survey duration. Undertaking a survey at an alternative time, such as later on in the year, would likely result in delays due to bad weather, and therefore the vessel being onsite for longer. Surveys during winter months can expose crews to additional weather hazards, and can incur significant downtime due to poor weather resulting in delays to data acquisition. Therefore, a survey later in the year is not the preferred option. Nominal mitigation measures will be in place (in line with the JNCC guideline) which will further minimise potential impacts to EPS species. In addition, CNSE Project require the results from the survey to inform the EIA process as early as possible, and delaying the survey would impact the EIA process and timeline.*

*The CNSE Project is working on a very tight timeline to provide electrical power to offshore assets during 2028. A key milestone for the project and partners is the Final Investment Decision (FID) of late 2024/early 2025 which requires all necessary permits and consents to be in place – this includes the EIA. Following discussion with regulatory stakeholders, an EIA for the offshore elements of the CNSE project will be submitted in late 2023 to allow approval by FID. Therefore the summer period of 2023 is the optimal time for the project to gather environmental and geophysical data via survey vessel.*