

14 SOCIO-ECONOMICS, RECREATION AND TOURISM

14.1 INTRODUCTION

1. This section of the ES Addendum presents an evaluation of the likely significant effects of the Amended Project on socio-economics, recreation and tourism associated with the amendments presented in Section 4: Amended Project Description. In addition, this section presents a discussion of the effects which may occur as a result of the most likely scenario. The assessment has been undertaken by SQW.
2. Specifically, this section of the ES Addendum assesses the effects associated with:
 - The Amended OfTW Corridor; and
 - Changes to the OfTW cable installation timescales.
3. This section is an addendum to Section 29: OfTW Socio-Economics, Recreation and Tourism of the Original ES. Where applicable, reference is made in this assessment to the Original ES.
4. It should be noted that the changes to the jack-up vessel footprints included in the Amended Project do not affect the worst case scenario in relation to the assessment of effects on socio-economics, recreation and tourism and have been scoped out in this assessment. There are therefore no amendments to Section 20: Wind Farm Socio-economics, Recreation and Tourism (see Section 14.3 for rationale).
5. This section includes the following elements:
 - Consultation;
 - Scope of Assessment;
 - Baseline;
 - Assessment Methodology;
 - Assessment of Potential Effects;
 - Mitigation Measures and Residual Effects;
 - Assessment of Cumulative Effects;
 - Statement of Significance; and
 - References.

14.2 CONSULTATION

6. Following the submission of the Original ES in April 2012 Beatrice Offshore Wind Farm Ltd (BOWL) has received consultation responses, via Marine Scotland Licensing Operations Team (MS-LOT) from various statutory and non-statutory consultees. There are no comments in relation to the socio-economics, recreation and tourism assessment which require addressing within this section. Comments raised by socio-economic, recreation and tourism stakeholders in relation to other technical disciplines have been addressed in the relevant sections of this ES Addendum.

14.3 SCOPE OF ASSESSMENT

7. As stated in Section 14.2 above, there are no consultation responses which require further information to be provided or otherwise addressing in this section. All consultation responses from socio-economic, recreation and tourism stakeholders have been addressed in other sections of this ES Addendum.
8. There are no amendments to methodologies or receptors which need to be presented in this section.
9. The further cumulative information relating to the Moray Firth Round 3 Zone does not require any amendment to the assessment of socio-economics, recreation and tourism.
10. The scope of this section has therefore been determined by considering the changes to the Project presented in Section 4: Amended Project Description. Specifically, as stated in Section 14.1, the effects associated with:
 - The Amended OfTW Corridor; and
 - Changes to the OfTW cable installation timescales.
11. The amended jack-up vessel footprints bear no relevance to the assessment of effects on socio-economics, recreation and tourism as the size of the footprint of a construction vessel does not affect the worst case scenario for the socio-economic, recreation and tourism assessment in the Original ES, and hence do not fall within the scope of this section
12. Section 14.6 considers the effects on socio-economics, recreation and tourism associated with the Amended Project. The conclusions of this assessment are supplemental to those of the Original ES and this section must be read alongside the Section 29: OfTW Socio-economics, Recreation and Tourism of the Original ES.

14.4 BASELINE

14.4.1 STUDY AREA

13. The Study Area was defined by the Local Authority boundaries, and in the case of recreation effects, the Moray coastline in the vicinity of landfall. The amendment to the Original OfTW Corridor does not have any bearings on these. Therefore, the Study Area for the assessment of effects on socio-economics, recreation and tourism remains unchanged from that presented in Section 29.2.1 of the Original ES.

14.4.2 BASELINE CONDITIONS

14. As the Study Area has not been amended, the baseline conditions remain unchanged from those presented in Section 29.3 of the Original ES.

14.5 ASSESSMENT METHODOLOGY

15. The assessment methodology remains unchanged from that presented in Section 29.2 of the Original ES.

14.5.1 WORST CASE SCENARIO

16. A description of the amendments to the Original Project is presented in Section 4: Amended Project Description. It should be noted that the worst case scenario with regards to socio-economic effects is taken as the greatest effect or change from the baseline.
17. The Original ES presented a worst case OfTW cable installation and protection scenario of 240 days. Since the submission of the Original ES, further information has become available relating to the construction processes for the Project. Consequently, this ES Addendum has considered a revised worst case OfTW cable installation scenario of 140 days per year for three years, plus an additional 90 days per year for cable protection operations (a total of 690 days).
18. The assessment of effects on socio-economics is based on expenditure over the construction period. The change to the Original OfTW Corridor and the amendment to the OfTW cable installation timescales are discussed with regard to the assessment of effects in Section 14.6.
19. With regard to tourism and recreation, the assessment of effects is related to the interaction of the Amended Project with tourism and recreational receptors. The Amended Project is discussed with regards to these effects in Section 14.6.
20. No further changes from the worst case scenario presented in the Original ES have been made.

14.5.2 MOST LIKELY SCENARIO

21. A description of a most likely scenario is presented in Section 4: Amended Project Description. As stated above, the assessment of effects on socio-economics is based on the expenditure of the Amended Project over a timeframe.
22. As detailed in Table 4.1A, the most likely turbine capacity cannot be defined. As the assessment of socio-economic effects is based on the capacity of the Wind Farm, a nominal turbine capacity for the most likely scenario is required to be estimated. For the purposes of this most likely scenario discussion, the turbine capacity has been estimated as 6 MW. With regard to socio-economics, the most likely scenario could result in the Amended Project having an installed capacity of 840 MW, presuming a 6 MW turbine is installed across the 140 turbine bases.
23. The capital expenditure costs of developing and constructing an offshore wind farm, using Renewable UK's industry standard figures (RenewableUK, 2011), are estimated to be around £3m per MW.
24. As stated in Section 20.2.2 of the Original ES, a decrease in the installed capacity of the Project would lead to a decrease in the expected capital expenditure. The 1 GW scheme assessed in the Original ES would require an estimated £3bn of investment. The most likely scenario would, based on the £3m per MW estimate, require an investment of £2.52bn. NB. Whilst industry standard figures have been used as described above, it is currently anticipated the capital expenditure costs of developing and constructing an offshore wind farm are greater than £3m per MW.

25. OfTW cable installation timescales for the most likely are for a OfTW cable installation scenario of 187 days in Year 1 and 100 days in Year 2, plus an additional 128 days in Year 1 and 64 days in Year 2 for cable protection operations (a total of 479 days).
26. The most likely scenario does not present any parameters which would potentially alter the assessment of tourism and recreation.

14.6 ASSESSMENT OF POTENTIAL EFFECTS

14.6.1 WORST CASE SCENARIO

14.6.1.1 GVA Effect

27. The effect of the OfTW on gross value added (GVA) is based on an estimate of the associated expenditure that will be made in the installation and decommissioning of the OfTW. The amendment to the Original OfTW Corridor and the amendment to the OfTW cable installation timescales will not affect Amended Project expenditure and therefore the GVA within the Study Area is unchanged. Whilst some elements of the construction process will change as a result of the extended timeframe of OfTW cable installation operations, e.g. duration of employment and ship hire, the temporary nature of the works will result in limited further effects to those originally assessed.
28. The assessment of potential effects on GVA therefore remains unchanged from that presented in the Original ES, Section 29.4.1.

14.6.1.2 Employment Effects

29. The effect of the OfTW on employment is based on estimates of the associated expenditure that will be made on the installation and decommissioning of the OfTW. The amendment to the Original OfTW Corridor will not affect the Amended Project expenditure and therefore the associated employment effects within the Study Area are unchanged. As stated above, whilst some elements of the construction process will change as a result of the extended timeframe of OfTW cable installation operations, e.g. duration of employment and ship hire, the temporary nature of the works will result in limited further effects to those originally assessed.
30. The assessment of potential effects on employment therefore remains unchanged from that presented in the Original ES, Section 29.4.2.

14.6.1.3 Recreation Effects

31. The effect of the OfTW on recreation relates to surfing and sea kayaking. Effects would occur if the Amended OfTW Corridor directly affected access or changed the nature of these sites. This is not the case.
32. As such, the amendment to the Original OfTW Corridor does not affect the conclusions of the assessment in the Original ES, presented in Section 29.4.3.

14.6.1.4 *Tourism (Marine Wildlife)*

33. Although any visual effects of the OfTW are scoped out, the OfTW could have an effect on marine wildlife tourism if it affects either the behaviour of the marine mammals that attract visitors or access to them.
34. As detailed in Section 29.4.4 of the Original ES, effects on the Whale and Dolphin Conservation Society's Scottish Dolphin Centre will only occur while the cabling vessel is working close to the shore. The amendment to the Original OfTW Corridor is approximately 45 km from the Moray coast. As such no effects in addition to those presented in the Original ES are anticipated. The amendment to the Original OfTW Corridor therefore does not affect the conclusions made in the Original ES, presented in Section 29.4.4.

14.6.2 MOST LIKELY SCENARIO

35. As discussed in Section 14.5.2, the estimated reduction in investment from the worst case scenario to the most likely scenario is £3bn to £2.52bn (based solely on Renewable UK [2011] figures). This still represents a substantial investment which is of the same magnitude of that of the Original ES and the worst case scenario with regard to the assessment of socio-economic effects.
36. Whilst some elements of the construction process will change as a result of the reduced timeframe of OfTW cable installation operations, e.g. duration of employment and ship hire, the temporary nature of the works will result in a limited reduction of effects to those originally assessed.
37. As such, the most likely scenario does not sufficiently differ from the worst case so as to result in any changes to the outcome of the assessment with regard to socio-economic effects.

14.7 MITIGATION MEASURES AND RESIDUAL EFFECTS

38. The assessment of potential effects remains unchanged from the Original ES and therefore as per Section 29.5 of the Original ES, no mitigation is recommended.
39. Residual effects remain unchanged from those presented in the Original ES, Section 29.6.

14.8 ASSESSMENT OF CUMULATIVE EFFECTS

40. Cumulative effects for socio-economics, recreation and tourism are presented in Section 20.7 of the Original ES. Cumulative effects remain unchanged from those presented in Section 20.7 of the Original ES.

14.9 STATEMENT OF SIGNIFICANCE

41. As the findings of the assessment in the Original ES remain unchanged, the statement of significance also remains unchanged from that presented in Section 29.9 of the Original ES.

14.10 REFERENCES

42. There are no further references to those presented in the Original ES, Section 29.10.