# LLŶR FLOATING OFFSHORE WIND PROJECT

## Llŷr 1 Floating Offshore Wind Farm

## Environmental Statement

## Volume 6: Appendix 7C – LVIA Cumulative Assessment

## August 2024

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FLOVENTIS ENERGY

## Document Status

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## Acronyms and abbreviations

| Acronym or Abbreviation | Definition | Acronym or Abbreviation | Definition |
|---|---|---|---|
| BESS | Battery Energy Storage System | PCNP | Pembrokeshire Coast National Park |
| LCA | Landscape Character Area | PPS | Pembroke Power Station |
| LVIA | Seascape, Landscape and Visual Assessment | PRoW | Public Right of Way |
| OnECC | Onshore Export Cable Corridor | WTG | Wind Turbine Generator |

## Glossary of project terms

| Term | Definition |
|---|---|
| The Applicant | The developer of the Project, Llŷr Floating Wind Limited |
| Array | All wind turbine generators, inter array cables, mooring lines, floating sub-structures and supporting subsea infrastructure within the Array Area, as defined, when considered collectively, excluding the offshore export cable(s). |
| Array Area | The area within which the wind turbine generators, inter array cables, mooring lines, floating sub-structures and supporting subsea infrastructure will be located |
| Floventis Energy | A joint venture company between Cierco Ltd and SBM Offshore Ltd of which Llŷr Floating Wind Limited is a wholly owned subsidiary. |
| Landfall | The location where the offshore export cable(s) from the Array Area, as defined, are brought onshore and connected to the onshore export cables (as defined) via the transition joint bays (TJB). |
| Llŷr 1 | The proposed Project, for which the Applicant is applying for Section 36 and Marine Licence consents. Including all offshore and onshore infrastructure and activities, and all project phases. |
| Marine Licence | A licence required under the Marine and Coastal Access Act 2009 for marine works which is administered by Natural Resources Wales (NRW) Marine Licensing Team (MLT) on behalf of the Welsh Ministers. |
| Offshore Development Area | The footprint of the offshore infrastructure and associated temporary works, comprised of the Array Area and the Offshore Export Cable Corridor, as defined, that forms the offshore boundary for the S36 Consent and Marine Licence application |
| Offshore Export Cable | The cable(s) that transmit electricity produced by the WTGs to landfall. |
| Offshore Export Cable Corridor (OfECC) | The area within which the offshore export cable circuit(s) will be located, from the Array Area to the Landfall. |
| Onshore Development Area | The footprint of the onshore infrastructure and associated temporary works, comprised of the Onshore Export Cable Corridor and the Onshore Substation, as defined, and including new access routes and visibility splays, that forms the onshore boundary for the planning application. |

| Term | Definition |
|---|---|
| Onshore Export Cable(s) | The cable(s) that transmit electricity from the landfall to the onshore substation |
| Onshore Export Cable Corridor (OnECC) | The area within which the onshore export cable circuit(s) will be located. |
| proposed Project | All aspects of the Llŷr 1 development (i.e. the onshore and offshore components). |
| Onshore Substation | Located within the Onshore Development Area, converts high voltage generated electricity into low voltage electricity that can be used for the grid and domestic consumption. |
| Onshore Substation Site | The area within which the Onshore Substation will be located. |
| Section 36 consent | Consent to construct and operate an offshore generating station, under Section 36 (S.36) of the Electricity Act 1989. This includes deemed planning permission for onshore works. |

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## 7-C – LVIA CUMULATIVE ASSESSMENT

### 7.1 Introduction

1. This appendix provides an assessment of potential cumulative landscape and visual effects resulting from the onshore elements of the Llŷr 1 Floating Offshore Wind Farm (proposed Project) in addition to identified cumulative projects. This appendix should be read in conjunction with **Chapter 07: Landscape and Visual** and with reference to **Section 7.9** of **Appendix 7A: LVIA Methodology** which provides details of the approach and assessment criteria related to the cumulative assessment.

### 7.2 Cumulative Baseline

2. As set out in **Appendix 7A: LVIA Methodology**, the cumulative assessment considers different cumulative scenarios related to the different status of the identified cumulative projects.

3. The consideration of existing development, including Pembroke Power Station, Pembroke Oil Refinery and the solar farms at Hoplass and Wogaston, is incorporated within the assessment against existing baseline conditions and the resulting effects described within the non-cumulative landscape and visual assessments. Two further scenarios are considered within this cumulative assessment, as follows:

   - Scenario 1: The cumulative effects of the proposed Project introduced into a baseline which includes energy developments which have been consented in addition to existing operational developments; and
   - Scenario 2: The cumulative effects of the proposed Project introduced into a baseline which includes select scoping stage energy projects in addition to consented and existing operational developments.

4. A third scenario related to application stage developments was scoped out of the assessment as no related application stage developments were identified within the Study Area.

5. **Table 7C-1,** below provides details of the identified cumulative projects and indicates which scenario they are considered within. As set out in **Chapter 07: Landscape and Visual** and **Appendix 7A: LVIA Methodology**, the short list of cumulative projects included within the assessment has been identified through desk based analysis and modelling and include those schemes located within the 1 km and 3 km Study Areas (as agreed with NRW) and with the potential to contribute to a cumulative effect. The short list includes a number of scoping stage projects at the request of NRW.

*Table 7C-1. Projects considered in the landscape and visual cumulative assessment*

| Project Name | Project Status | Cumulative Scenario | |
|---|---|---|---|
| | | 1 | 2 |
| Erebus Substation and Onshore Cable | Consented | X | X |
| Goldborough Battery Energy Storage System (BESS) | Scoping | | X |
| Greenlink Substation | Existing | X | X |
| Hoplass Solar Farm | Existing | X | X |
| Lambeeth BESS | Scoping | | X |
| Pembroke Power Station (PPS) | Existing | X | X |
| PPS BESS | Scoping | | X |
| PPS Green Hydrogen | Scoping | | X |

| Project Name | Project Status | Cumulative Scenario 1 | Cumulative Scenario 2 |
|---|---|---|---|
| PPS Synchronous Condenser | Consented | X | X |
| Wogaston Solar Farm | Existing | X | X |

6. In addition to the above, initial consideration was given to inclusion of the onshore elements of Valorous and the Pembrokeshire Demonstration Zone within the shortlisted projects. However, these were scoped out due to a lack of available information on the specific locations of the landfalls, cable routes and substations.

### 7.3 Construction and Decommissioning

7. Potential cumulative effects resulting from construction and decommissioning of the proposed Project would only occur if these activities happened concurrently or sequentially with construction or decommissioning of one or more of the identified cumulative schemes. There is no certainty on timing of construction and decommissioning activity and therefore no certainty whether a cumulative effect would occur. For the purposes of assessment it is assumed that construction and decommissioning of the proposed Project and identified cumulative projects would largely occur concurrently.

#### *7.3.1. Landscape Character*

8. The non-cumulative assessment identified that the proposed Project would result in very little or no change and a negligible adverse significance of effect on the Southern Haven Developed, Southern Haven Industrial Fringe and Southern Haven Mudflats LCAs. It is therefore considered that the proposed Project would have little or no contribution to cumulative change in relation to each of these receptors and as such they are not considered further in this cumulative assessment.

**Sensitivity of Receptors**

9. For the purposes of cumulative assessment, sensitivity is considered to be the same as that identified within the main assessment, **high** for the majority of the landscape receptors, and **medium** for Hundleton and Lamphey LCA.

**Cumulative Scenario 1**

*Baseline*

10. In this scenario construction of Erebus Substation and Onshore Cable would occur in small parts of a number of the identified landscape receptors, including the PCNP. Construction of the PPS Synchronous Condenser would be screened from the majority of the Study Area and where visible would contribute very little to the cumulative baseline.

*Magnitude of Cumulative Impact*

11. The Onshore Export Cable for the proposed Project would follow a similar route to that of the Erebus Onshore Cable, although with the Landfall of the proposed Project located near Freshwater West resulting in an overall shorter length. If installation of the onshore cables of both projects were to happen concurrently the additional change resulting from the proposed Project would largely be limited to the Landfall. There is potential for this to result in localised, temporary and short duration cumulative change on a small part of the PCNP and Freshwater West/Brownslade Burrows LCA.

12. If construction was to occur sequentially, with the proposed Onshore Export Cable construction happening immediately after installation of the Erebus onshore cable, the main impression of change would be an increase in duration of activity and direct landscape impacts. This would generally be limited and localised, focused on the small areas within or immediately adjacent to the Onshore Export Cable Corridor (OnECC).

13. Construction of the Onshore Substation would be within a similar, but slightly separated part of the Hundleton and Lamphey LCA to the Erebus Substation. The proposed Project would therefore represent a slight increase in the influence of construction, limited to a localised part of the LCA. Potential additional change on the remaining LCAs and the PCNP would be more limited.

14. Overall, it is anticipated that construction of the proposed Project would result in a localised slight change to each of the landscape receptors included in the cumulative assessment, indicating a **small** magnitude of cumulative impact.

*Significance of Cumulative Effect*

15. The sensitivity of the landscape receptors is considered to be **medium** or **high** and the magnitude of the cumulative impact resulting from the addition of the proposed Project to cumulative scenario 1 is assessed as **small**. Therefore, the cumulative effect would be **minor adverse** and **not significant**.

**Cumulative Scenario 2**

*Baseline*

16. Construction of each of the scoping stage cumulative projects would largely occur within the Hundleton and Lamphey LCA, with potential to result in a noticeable, although temporary, alteration to a small part of this LCA to the south of PPS. Outside of this area there would be little or no impression of change in addition to that described in relation to scenario 1.

*Magnitude of Cumulative Impact*

17. With the exception of Hundleton and Lamphey LCA, there would be little or no influence of construction of the scoping stage cumulative projects on the majority of the landscape receptors and as such potential cumulative impacts would be the same as for scenario 1, **small**.

18. In relation to Hundleton and Lamphey LCA, there is potential for additional direct and indirect change to a localised area resulting from construction of the Onshore Substation and part of the Onshore Export Cable. This would marginally increase the influence of construction over a slightly greater extent, although would be temporary in nature and of a short duration and largely experienced in the context of more widespread influence of the cumulative projects. Magnitude of cumulative impact is assessed as **small**.

*Significance of Cumulative Effect*

19. The sensitivity of this Hundleton and Lamphey LCA is considered to be **medium** and the magnitude of the cumulative impact during construction in relation to cumulative scenario 2 is assessed as **small**. Therefore, the cumulative effect would be **minor adverse** and **not significant**.

20. Cumulative effects on the remaining landscape receptors would be the same as for scenario 1, **minor adverse** and **not significant**.

*7.3.2. Visual Amenity*

21. As identified in the non-cumulative assessment, there would be no or very little visibility of construction of the proposed Project from Viewpoint C: Pembrokeshire Coast Path, Pwllcrochan and therefore it has not been considered further in the cumulative assessment. It is anticipated that there would be no potential visibility of construction of the consented or scoping stage cumulative projects from Viewpoint B: Minor Road, south of Rhoscrowther as such it has also been scoped out of the cumulative assessment

22. The following provides an assessment of cumulative impacts and effects on the remaining viewpoints.

**Cumulative Scenario 1**

*Baseline*

23. Construction of Erebus Substation and Onshore Cable would introduce movement and activity to views from the majority of the viewpoints, generally resulting in relatively limited change to the existing baseline. The exceptions are at Viewpoint F: Right of Way, west of Lambeeth Farm and Viewpoint G: Goldborough Road (west) where construction of the Erebus Substation would be in the foreground, resulting in a larger influence. PPS Synchronous Condenser would be predominantly screened and as such would not contribute to the cumulative baseline.

*Magnitude of Impact*

24. Construction of the Onshore Export Cable would largely be seen within the same part of the view as Erebus and therefore additional change would be limited and largely resulting from an increase in duration. The exception would be at Viewpoint A: B4320, The Burrows where the proposed Project would add construction to a new part of the view. Construction of the Onshore Substation would add further activity and movement into views from a number of viewpoints, most notably from select properties represented by Viewpoint E: Wallaston Green. Overall, construction of the proposed Project would result in relatively limited change in addition to that of Erebus and would be temporary in nature and of a short duration, and as such the magnitude of cumulative impact is assessed as **small** for each of the viewpoints.

*Significance of Cumulative Effect*

25. The sensitivity of receptors at the viewpoints is considered to be **medium** or **high** and the magnitude of the cumulative impact resulting from construction of the proposed Project in addition to cumulative scenario 1 is assessed as **small**. Therefore, the cumulative effect would be **minor adverse** and **not significant**.

**Cumulative Scenario 2**

*Baseline*

26. Construction of the scoping stage cumulative projects would add further construction activity and/or increase the period over which construction would be visible in the majority of the viewpoints, with the greatest influence likely to be on Viewpoint F: Right of Way, west of Lambeeth Farm and Viewpoint G: Goldborough Road (west), as per scenario 1.

*Magnitude of Impact*

27. There would be very little or no visibility of construction of the scoping stage cumulative projects from Viewpoint A: B4320, The Burrows and as such cumulative change would be the same as scenario 1, **small** magnitude.

28. In relation to Viewpoint F: Right of Way, west of Lambeeth Farm and Viewpoint G: Goldborough Road (west), construction of the cumulative projects in this scenario would be

more widespread and/or over a greater duration, strongly influencing the theoretical cumulative baseline. Although the proposed Project would add further construction activity into the view it would be more distant, partially screened and occupy a smaller part of the view and as such would represent little additional change, with limited contribution to the sense of cumulative impact. The magnitude of cumulative impact on these viewpoints would therefore be **negligible** for scenario 2.

29. For the remaining viewpoints, although construction of the proposed Project would add further activity and movement into views it would generally result in relatively limited change and would be both temporary and of a short duration. Magnitude of cumulative impact is therefore assessed as **small**.

*Significance of Cumulative Effect*

30. The sensitivity of receptors at the viewpoints is considered to be **medium** or **high.** The magnitude of the cumulative impact resulting from construction of the proposed Project in addition to cumulative scenario 2 is assessed as **small** for the majority of the viewpoints, resulting in a **minor adverse** and **not significant** cumulative effect.

31. A lower magnitude of cumulative impact of **negligible** is assessed for Viewpoint F: Right of Way, west of Lambeeth Farm and Viewpoint G: Goldborough Road (west), resulting in a **negligible adverse** and **not significant** cumulative effect.

### 7.4 Operation

*7.4.3. Landscape Character Overview*

32. The non-cumulative assessment identified that the proposed Project would result in very little or no change and a negligible adverse significance of effect on the majority of the landscape receptors found within the Study Area, including the PCNP. As a result it is considered that the Onshore Substation would have little or no contribution to cumulative change in relation to the PCNP and majority of the LCAs found within the Study Area. These receptors are therefore not considered further in this cumulative assessment.

33. The exception to this is the Hundleton and Lamphey LCA for which the non-cumulative assessment identified slightly greater impacts. Many of the identified cumulative projects are also located within this LCA and therefore an assessment of potential cumulative effects on this receptor is provided below.

*7.4.4. Hundleton and Lamphey LCA*

**Sensitivity of Receptor**

34. For the purposes of cumulative assessment, sensitivity is considered to be the same as that identified within the main assessment, **medium**.

**Cumulative Scenario 1**

*Baseline*

35. In this scenario the Erebus Substation would be located within this LCA, immediately south of the existing Greenlink substation, adding to the existing context and locally increasing the influence of development within the northern part of this LCA.

36. The PPS Synchronous Condenser would be located with the adjacent Southern Haven Industrial Fringe LCA. The main structures would be located immediately adjacent to the PPS and would largely be screened from this LCA by the adjacent buildings and existing woodland such that it would add very little to the cumulative baseline.

*Magnitude of Cumulative Impact*

37. The Onshore Substation would add a further energy related development within the north of this LCA. It would result in a very localised additional direct change within the development footprint, going from an agricultural field to a substation, although with the majority of the field boundary hedgerows retained. Indirect change resulting from visibility of the Onshore Substation would occur over a slightly larger extent, although the proposed Project would not add visibility of energy development to new parts of this LCA.

38. Overall, the Onshore Substation would slightly increase the presence of energy development within a localised and limited part of this landscape where such development is already a feature. Magnitude of cumulative impact is assessed as **small**.

*Significance of Cumulative Effect*

39. The sensitivity of this LCA is considered to be **medium** and the magnitude of the cumulative impact resulting from the addition of the proposed Project to cumulative scenario 1 is assessed as **small**. Therefore, the cumulative effect would be **minor adverse** and **not significant**.

**Cumulative Scenario 2**

*Baseline*

40. In this scenario, the Goldborough, Lambeeth and PSS BESS projects would all be located within this LCA, adding to the concentration of energy developments north of the B4320 and towards the PPS. The PPS Green Hydrogen project would be located east of the PPS and PPS Synchronous Condenser within the adjacent Southern Haven Industrial Fringe LCA. The scoping stage projects in conjunction with the existing and consented developments would reinforce the impression of an energy landscape in a localised part of this LCA.

*Magnitude of Cumulative Impact*

41. The Onshore Substation would add a further energy development into this LCA, located between the existing Hoplass Solar Farm and the Goldborough BESS north of Wallaston. As with scenario 1, the proposed Project would not result in additional areas of visibility of energy development or indirect change within this LCA. Against a baseline which includes a number of additional developments, the Onshore Substation would contribute less to the overall sense of change and although it may slightly increase the presence of energy development within a very localised and limited part of this landscape it would not tip the balance into creating a more widespread sense of an energy landscape. Magnitude of cumulative impact for this scenario is assessed as **small**.

*Significance of Cumulative Effect*

42. The sensitivity of this LCAs is considered to be medium and the magnitude of the cumulative impact resulting from the addition of the proposed Project to cumulative scenario 2 is assessed as small. Therefore, the cumulative effect would be **minor adverse** and **not significant**.

*7.4.5. Residual Cumulative Effects*

43. It is anticipated that mitigation measures, such as woodland and tree planting, would be incorporated into each of the cumulative projects which is likely to reduce their influence on the character of this LCA in the longer term.

44. Tree and woodland planting have also been incorporated into the design of the proposed Project which is likely to further reduce the localised influence on the landscape over time, reducing potential cumulative effects.

*7.4.6. Visual Amenity*

45. As with landscape character, those viewpoints and visual receptors identified in the non-cumulative assessment as receiving only a negligible effect have been scoped out of the cumulative assessment due to no potential for significant effects. There would be no potential visibility of the consented or scoping stage cumulative projects from Viewpoint B: Minor Road, south of Rhoscrowther or Viewpoint E: Wallaston Green and as such they have also been scoped out of the cumulative assessment. The following provides an assessment of cumulative effects on the remaining viewpoint locations.

**Viewpoint D: B4320, Wogaston**

*Cumulative Scenario 1*

46. The consented Erebus Substation would be partially visible, appearing beyond the agricultural buildings and trees at Wallaston. Although it would add a further built development Erebus would have only a very minor influence on the view. The PPS Synchronous Condenser would be screened from this location and as such would not contribute to the cumulative baseline.

47. There is likely to be little or no impression of a cumulative change in relation to scenario 1 from this viewpoint and as such the impact and effect resulting from the proposed Project would be as set out in the non-cumulative assessment (**Section 7.5.15** of **Appendix 7B: LVIA Detailed Assessment**).

*Cumulative Scenario 2*

48. The majority of the scoping stage cumulative projects would be screened from this location and as such would not contribute to the cumulate baseline. However, Goldborough BESS would be visible to the northeast, introducing a series of relatively low level structures and adding to the range of energy related development visible across the view.

49. The Onshore Substation would add a further energy development to the northeast, occupying a location between Hoplass Solar Farm Goldborough BESS. The Onshore Substation would occupy a smaller part of the view relative to these other projects and although within a similar part of the view would appear slightly separate, with open fields between each project. The Onshore Substation would add further to the range of energy development and appear taller than the adjacent solar farm and BESS but would not appear out of scale or more noticeable or prominent than other projects.

50. Overall the proposed Project would represent a slight additional change to the view, slightly increasing the influence of energy development which is an existing notable feature across the view. The magnitude of cumulative impact would be **small** and when combined with the **high** sensitivity is considered to result in a **minor adverse (not significant)** cumulative effect.

51. Over time, mitigation planting included as part of the proposed Project would help to partially screen and assimilate the Onshore Substation into the view.

**Viewpoint F: Right of Way, west of Lambeeth Farm**

*Cumulative Scenario 1*

52. The consented Erebus Substation would be located within the foreground of the view west from the viewpoint location and in views from most section of this short route. Erebus in combination with the existing Greenlink substation and existing overhead lines and wind

turbine would have a strong influence on the baseline view. The PPS Synchronous Condenser would be screened from this location and as such would not contribute to the cumulative baseline.

53. The proposed Project would add a further substation into views from this route. From the viewpoint location the Onshore Substation would be largely screened and would be more distant than Erebus and Greenlink such that the additional change would be barely perceptible. There is likely to be greater visibility of the Onshore Substation towards the west end of the Public Right of Way (PRoW), occupying a small but relatively important part of the view when travelling west, adding a further development into views from the route which are already heavily influenced by electrical infrastructure. Overall, the proposed Project would represent a limited additional change and would generally appear less prominent than the cumulative schemes.

54. On balance the magnitude of cumulative impact would be **small** and when combined with the **medium** sensitivity is considered to result in a **minor adverse (not significant)** cumulative effect.

55. Over time, mitigation planting included as part of the proposed Project would help to partially screen and assimilate the Onshore Substation into the view.

*Cumulative Scenario 2*

56. Lambeeth BESS would be located in close proximity to the north west of this location, adjacent to Greenlink and adding to the strong influence of energy developments in the view. The PSS BESS is likely to be largely screened, although there may be glimpsed views from parts of the PRoW. The Goldborough BESS would be visible from the western part of the route, further adding to the influence of development in the cumulative baseline. PSS Green Hydrogen would be predominantly screened from the viewpoint and PRoW such that it would not contribute to the cumulative baseline.

57. The proposed Project would introduce a further energy development into views from the western part of this PRoW occupying a small but relatively important part of the view when travelling west. The Onshore Substation would be seen in the context of Goldborough BESS, which would be closer and occupy a larger part of the view, although would be slightly lower in height. As with scenario 1 the Onshore Substation would be largely screened and represent a barely perceptible change from the viewpoint location and eastern parts of the PRoW. Overall, the proposed Project would represent a limited additional change and would generally appear less prominent than the cumulative schemes.

58. On balance the magnitude of cumulative impact would be **small** and when combined with the **medium** sensitivity is considered to result in a **minor adverse (not significant)** cumulative effect.

59. Over time, mitigation planting included as part of the proposed Project would help to partially screen and assimilate the Onshore Substation into the view.

**Viewpoint G: Goldborough Road (west)**

*Cumulative Scenario 1*

60. The consented Erebus Substation would be visible in relative close range, on the opposite side of the narrow valley and in the foreground of the existing Greenlink substation and adding to the concentration of electrical infrastructure in this part of the view. The PPS Synchronous Condenser would be screened from this location and as such would not contribute to the cumulative baseline.

61. The Onshore Substation would be largely screened by intervening topography and vegetation from this location and from nearby residential properties, with only the tops of taller structures visible. It would occupy a small part of the view and represent a minor additional element within the context of the more prominent Erebus and Greenlink substations and overhead lines.

62. On balance, although the Onshore Substation would add slightly to energy development in the view, the magnitude of cumulative impact would be **small** and when combined with the **high** sensitivity is considered to result in a **minor adverse (not significant)** cumulative effect.

63. Over time, mitigation planting included as part of the proposed Project would help to partially screen and assimilate the Onshore Substation into the view.

*Cumulative Scenario 2*

64. The tops of some of the structures of the Lambeeth BESS may be visible adjacent to Greenlink and Erebus substations to the north, with only a marginal additional influence on the view. Goldborough BESS would be slightly more visible on rising ground to the west, although partially screened by vegetation. PPS BESS and PPS Green Hydrogen would be screened from this location and as such would not contribute to the cumulative baseline.

65. The Onshore Substation would be located within the same part of the view, but slightly more distant than Goldborough BESS and would be predominantly screened by topography and vegetation. The limited nature of visibility, small part of the view affected and the location behind Goldborough BESS would reduce the impression of additional change.

66. On balance the magnitude of cumulative impact resulting from the addition of the proposed Project to this baseline scenario is assessed as **negligible**, and when combined with the **high** sensitivity is considered to result in a **negligible adverse (not significant)** cumulative effect.

67. Over time, mitigation planting included as part of the proposed Project would help to partially screen and assimilate the Onshore Substation into the view.

**Viewpoint H: Pennar**

*Cumulative Scenario 1*

68. The consented Erebus Substation would be visible adjacent to the existing Greenlink Substation to the southwest, slightly adding to the influence of existing development in that part of the view. The PPS Synchronous Condenser would also be partially visible, immediately adjacent to and appearing as a minor extension to the larger PPS complex

69. The Onshore Substation would be partially screened by intervening topography and would occupy a very small and distant part of the overall view. It would add a further built development within part of the view already influenced by existing development, electrical infrastructure and the cumulative projects. The Onshore Substation would generally appear as a minor element relative to the range of other more notable developments within the view, and as such would represent a slight additional change to the view.

70. The magnitude of cumulative impact would be **small** and when combined with the **high** sensitivity is considered to result in a **minor adverse (not significant)** cumulative effect.

71. Over time, mitigation planting included as part of the proposed Project would help to partially screen and assimilate the Onshore Substation into the view.

*Cumulative Scenario 2*

72. Each of the scoping stage cumulative projects would be at least partially visible from this location, adding to the influence of the existing and consented projects and other

developments within the views to the southwest and west. PPS BESS is likely to be the most notable of these with many of the others partially screened and or appearing immediately in front of other larger development.

73. Cumulative change resulting from the addition of the proposed Project would largely be similar to scenario 1 although with a slightly greater context of development within this scenario. The Onshore Substation would be partially screened by intervening topography, would occupy a very small and distant part of the overall view and generally appear as a minor element. It would therefore result in only a slight change, adding a further energy development into the view but not increasing the horizontal extent or overall prominence of development.

74. The magnitude of cumulative impact would be **small** and when combined with the **high** sensitivity is considered to result in a **minor adverse (not significant)** cumulative effect.

75. Over time, mitigation planting included as part of the proposed Project would help to partially screen and assimilate the Onshore Substation into the view.

**Viewpoint I: Goldborough Road (east)**

*Cumulative Scenario 1*

76. The consented Erebus Substation would be visible adjacent to the existing Greenlink Substation in the midground of views to the northwest, slightly adding to the considerable influence of existing development in that part of the view. The PPS Synchronous Condenser would also be partially visible, immediately adjacent to and appearing as a minor extension to the larger PPS complex.

77. The Onshore Substation would be visible towards the background of the view to the west, partially screened by intervening topography and occupying a small part of the overall view. It would add a further energy development into the view, within the same context as the range of existing and cumulative projects and other developments. The Onshore Substation would slightly increase the horizontal extent of the view influenced by energy development but would be a relatively minor element compared to other larger and more notable developments.

78. On balance the magnitude of cumulative impact would be **small** and when combined with the **high** sensitivity is considered to result in a **minor adverse (not significant)** cumulative effect.

79. Over time, mitigation planting included as part of the proposed Project would help to partially screen and assimilate the Onshore Substation into the view.

*Cumulative Scenario 2*

80. Each of the scoping stage cumulative projects would be at least partially visible from this location, adding to the considerable influence of the existing and consented projects and other developments within the views to the northwest. Goldborough BESS would be slightly separated from the other projects, but would still appear within the same context, adding a further energy development into the view and slightly increasing the horizontal extent.

81. The Onshore Substation would be located within a similar part of the view to Goldborough BESS, although would be slightly more distance and occupying a smaller horizontal extent. It would be slightly taller than the structures of the Goldborough BESS but would not appear out of scale within the context of the view. Overall, the Onshore Substation would add a further energy development into the view but would not increase the horizontal extent and would generally appear as a minor element relative to the range of other more notable developments within the view.

82. On balance the magnitude of cumulative impact would be **small** and when combined with the **high** sensitivity is considered to result in a **minor adverse (not significant)** cumulative effect.

83. Over time, mitigation planting included as part of the proposed Project would help to partially screen and assimilate the Onshore Substation into the view.