Chapter 12

Summary of Significant Effects

SP ENERGY NETWORKS

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Chapter 12

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12.1 Introduction

1. **Chapters 6 to 11** of the EIAR present the findings of the assessments of the likely significant effects of the proposed development on a topic by topic basis. The significance of these effects has been assessed using criteria defined in the assessment chapters. Where appropriate, the significance of effects has been categorised as 'Major', 'Moderate', 'Minor' or 'None'. In the context of the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 ('the EIA Regulations'), effects assessed as being of Major or Moderate significance are considered to be significant effects.

2. In accordance with Schedule 4 of the EIA Regulations, PAN 1/2013, Circular 1/2017 and other relevant EIA guidance, the EIAR has focused on identifying likely significant environmental effects (both positive and negative) of the proposed development, during construction and operations (including cumulatively with other developments). Design changes made as a consequence of the key constraints to route design are considered to be mitigation which is 'embedded' in the design. Further details of the design strategy and the economic, technical and environmental constraints that have informed the design can be found in **Chapter 3: Routeing Process and Design Strategy**. The assessments have been undertaken taking account of the embedded and good practice construction measures to avoid and/or minimise effects and, where required, the application of committed additional mitigation measures to determine the level of significance of the residual effect.

12.2 Summary of Significant Effects

3. **Table 12.1** presents the predicted likely significant effects of the proposed development prior to the implementation of the additional mitigation measures, where relevant. Only effects which are considered to be significant prior to mitigation are presented in **Table 12.1**. All other effects are considered to be not significant prior to mitigation and are therefore not presented.

4. Prior to committed additional mitigation, significant effects are predicted in relation to:

- Landscape and Visual Amenity; and
- Cultural Heritage and Archaeology.

5. Prior to committed additional mitigation, significant effects are not predicted in relation to the following topics and these are therefore not discussed further in this Chapter:

- Geology, Hydrogeology and Hydrology;
- Ecology and Biodiversity;
- Ornithology; and
- Forestry.

12.3 Landscape and Visual Amenity

6. As outlined in **Chapter 3: Routeing Process and Design Strategy**, and within **Chapter 6: Landscape and Visual Amenity**, avoidance and/or minimisation of landscape and visual effects has been a key objective of the routeing and design process for the proposed development. The key mitigation strategy has been by design to ensure the minimal loss of landscape elements such as mature trees and hedgerows and, as far as feasible, to avoid the proposed development going too close to residential properties and, where feasible, to avoid high ridge lines in the landform.

7. Localised **moderate (adverse) significant effects** have been identified on the visual amenity for the following receptors:

- Receptors at the small village of Glespin, located between 100 and 500 m south-east of the proposed development between proposed OHL pole nos. 37 and 47;
- The Bungalow (200 m south-east of proposed OHL pole no. 33), a single property adjacent to Douglas Water slightly set back from the A70;
- Longhouse (120 m south-east of proposed OHL pole no. 37), a single property to the west of Glespin adjacent to the A70;
- CL/5891/1 (ACP) c.500 m east to west path oversailed by the proposed route between proposed OHL pole nos. 28 and 29;
- CL/3455/1 c.1.3 km east to west path, 45 m north of proposed OHL pole no. 36 at its closest point;
- CL/3454/1 c.180 m south-east to north-west path oversailed by the proposed route between proposed OHL pole nos. 37 and 38;CL/3453/1 c.2 km north-east to south-west path oversailed by the proposed route between proposed OHL pole nos. 39 and 40;
- CL/5729/1 (ACP) c.950 m north-east to south-west path oversailed by the proposed route between proposed OHL pole nos. 85 and 86;
- CL/5735/3 c.440 m south-east to north-west path oversailed by the proposed route between proposed OHL pole nos. 101 and 102;
- CL/5909/1 (ACP) c.300 m west to east path oversailed by the proposed route between proposed OHL pole nos. 122 and 123;
- CL/5736/1 (ACP) c.230 m north-west to south-east path running parallel for 50 m to the proposed route for its length and between proposed OHL pole nos. 122 and 126;
- CL/5737/1 (ACP) c.620 m east to west path oversailed by the proposed route between proposed OHL pole nos. 125 and 126;
- CL/5835/1 c.670 m north to south path 115 m east of proposed OHL pole no. 129 at its closest point;
- CL/3310/1 c.1.1 km east to west path oversailed by the proposed route between proposed OHL pole nos. 134 and 135; and
- CL/5190/1 c.620 m north-east to south-west path 20 m west of proposed OHL pole no. 142 at its closest point.

8. There are no significant visual construction effects predicted.

9. There are no significant landscape construction or operational effects predicted.

10. There are no significant cumulative effects predicted.

12.4 Cultural Heritage and Archaeology

12.4.1 RSK14 Carmacoup, Mill / Douglas Water Water Mill

11. No significant direct physical or indirect effects are predicted through construction or operation of the proposed development.

12. A moderate physical direct effect is predicted on RSK14 Carmacoup, Mill / Douglas Water Water Mill. A moderate permanent direct physical and slight indirect effects are predicted on RSK31 Caledonian Railway Muirkirk Branch. Slight direct physical effects are predicted on: RSK19 North Braehead Farmstead; RSK22 Blackwood Hill Rifle Range: RSK43 Alder Burn Overbridge; RSK46 Glespin Overbridge; RSK47 Hazelside Overbridge; and RSK48 Windrow Footbridge.

13. Following the implementation of additional mitigation measures set out in **Chapter 10: Archaeology and Cultural Heritage**, no significant adverse residual physical or indirect effects are predicted. Mitigation of physical impacts would fully offset identified impacts. Slight residual effects are predicted on the setting of two non-designated assets: RSK14 Carmacoup, Mill/Douglas Water Water Mill and RSK31 Caledonian Railway Muirkirk Branch.

12.5 Interrelated Effects

14. The EIA Regulations (Schedule 4, Paragraph 5) require that an EIA Report considers the interrelationships between aspects of the environment likely to be significantly affected by a development. it is considered that the following effects are interrelated:

- There is some correlation between likely effects on hydrology and on ecology given that changes to hydrology resulting from the proposed development could result in indirect effect on ecological receptors. These are assessed in **Chapter 7: Geology, Hydrogeology and Hydrology** and **Chapter 8: Ecology and Biodiversity**. No significant effects on hydrology and ecology are considered likely.
- There is some correlation between likely effects on forestry and on hydrology given that changes to forestry felling resulting from the proposed development could result in effects on the water quality and sedimentation. These effects are discussed in **Chapter 7: Geology, Hydrogeology and Hydrology**. No significant effects on hydrology and forestry are considered likely.

12.6 Summary Table

Predicted Effect	Significance of Effect	Mitigation	Significance of Residual Effect
Landscape and Visual Amenity			
Visual Operational Effects			
Glespin (viewpoints 2 and 3)	**Moderate adverse (significant)**	Mitigation embedded in the design of the proposed development.	**Moderate adverse (significant)**
The Bungalow – a property on the south bank of Douglas Water (viewpoint 1)			
Longhouse - a property to the west of Glespin adjacent to the eastbound carriageway of the A70 (viewpoint 3)			
Aspirational core path CL/5891/1 (viewpoint 1)			
Core path CL/3454/1 (viewpoint 3)			
Core path CL/3453/1 (viewpoint 3)			
Aspirational core path CL/5729/1 (viewpoints 4 and 5)			
Core path CL/5735/3			
Aspirational core path CL/5909/1			
Aspirational core path CL/5737/1			
Core path CL/3310/1 (viewpoint 11)			
Core path CL/3455/1 (viewpoint 1 and 3)			
Aspirational core path CL/5736/1			
Core path CL/5835/1			
Core path CL/5190/1			
Cultural Heritage an Archaeology			
Carmacoup, Mill / Douglas Water Water Mill	**Moderate adverse (significant)**	During the detailed design stage, if possible the location of the woodpole within 30 m of the asset will be micro-sited further away from the extant remains of the asset to reduce setting impacts. To mitigate the direct physical effects, if physical impacts have not been avoided by micro-siting, a programme of appropriate excavation, recording, analysis, publication and archiving of elements of the mill affected by the construction of the proposed development will be undertaken. This will take the form of a standing building survey (if any standing elements of the asset might be affected) followed by targeted excavation and recording of the asset where it is subject to direct, physical effects.	Slight residual effect on the setting of the asset (not significant)
Caledonian Railway Muirkirk Branch	**Moderate adverse (significant)**	During the detailed design stage, if possible the location of the woodpoles within 30 m of the asset will be micro-sited further away from the asset to reduce setting impacts, and if possible the extent of ground-breaking works required to upgrade the existing walking path along it for vehicular use as part of the proposed development will be minimised. To mitigate the physical direct and indirect effects, a programme of appropriate excavation, recording, analysis, publication and archiving of elements of the railway affected by the construction of the proposed development will be undertaken. This will take the form of an earthworks survey, followed by targeted excavation and recording where it is subject to direct, physical effects.	Slight residual effect on the setting of the asset (not significant)

Table 12.1: Summary of Likely Significant Effects