

KWF Grid Connection EIA Report 2023

Volume C2: EIAR 2023 Main Report

Chapter 15: Interaction of the Foregoing



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No Figures associated with this chapter

Glossary of Terms

<u>Term</u>	<u>Definition</u>
Environmental Factors	The factors in the environment required to be identified, described and assessed during the EIA process. These are specified in Article 3 (1) of the EIA Directive as Population and Human Health; Biodiversity; Land; Soils; Water; Air; Climate; Material Assets; Cultural Heritage and Landscape.

15 Interaction of the Foregoing

15.1 Cross-factor effects between the Environmental Factors

Interaction between the environmental factors relates to cross-factor effects, which are indirect effects. A cross-factor effect occurs when the effect on one environmental factor causes an indirect effect on another environmental factor.

In Chapters 6 to 14, the potential for likely direct and indirect effects was evaluated. Potential cross-factor effects were identified and, where relevant are evaluated by the authors of the receiving environmental factor topic chapter. The likely cross-factor effects that were examined in the environmental factor topic chapters are identified and summarised in the sections below, presented by receiving environmental factor. The relevant topic chapters and chapter sections, where cross-factor effects are evaluated are also identified.

15.1.1 Potential Cross-Factor effects to Population & Human Health (Chapter 6)

- Potential cross-factor effects to **Population** (reduction in tourism revenue), caused by effects to **Air** (increased levels of ambient dust and ambient noise) and **Landscape** (visual impacts).
- Potential cross-factor effects to **Human Health** (impacts on gastrointestinal health), caused by effects to **Water** (water quality or quantity effects to local wells and springs)
- Potential cross-factor effects to **Human Health** (impact on health, gastrointestinal, respiratory, cardiovascular and mental health), caused by effects to **Water** (water quality or quantity effects to local wells and springs) or caused by effects to **Air** (increase in ambient dust, noise, EMF)
- Potential cross-factor effects to **Human Health** (risk of injury), caused by effects to **Material Assets – Roads** (increased risk of road traffic accidents).

These cross-factor effects are examined in Chapter 6: Population and Human Health. It was evaluated that negative impacts from these cross-factor effects range from **no potential/neutral to no greater than imperceptible**. (Chapter 6: Section 6.2 & 6.3)

15.1.2 Potential Cross-Factor effects to Biodiversity (Chapter 7)

- Potential cross-factor effects to **Biodiversity** (habitat loss, fragmentation or degradation, loss of flora species, physical injury), caused by effects to **Soils** (excavation, relocation, erosion and contamination effects to soils).
- Potential cross-factor effects to **Biodiversity** (aquatic habitat degradation), caused by effects to **Water** (decreases in water quality as a result of cross-factor soil effects).
- Potential cross-factor effects to **Biodiversity** (disturbance and displacement), caused by effects to **Air** (increased ambient noise levels).

These cross-factor effects are examined in Chapter 7: Biodiversity. It was evaluated that there is **no greater than imperceptible** potential negative impacts likely from these cross-factor effects. (Chapter 7: Section 7.2; 7.3; 7.4 & 7.5)

15.1.3 Potential Cross-Factor effects to Land & Soils (Chapter 8)

No cross-factor effects to **Land & Soils**, caused by effects to the other Environmental Factors, were identified by the EIA Team.

15.1.4 Potential Cross-Factor effects to Water (Chapter 9)

- Potential cross-factor effects to **Water** (decreases in water quality due to sedimentation or contamination), caused by effects to **Soils** (earthworks, groundworks, storage of overburden, erosion and contamination effects to soils from fuel, oil and cement).

This cross-factor effect is examined in Chapter 9: Water. It was evaluated that the cross effect will be no greater than **Slight effect (pre-mitigation) and Imperceptible (post – mitigation) residual effect**. (Chapter 9: Section 9.2 & 9.4)

15.1.5 Potential Cross-Factor effects to Air (Chapter 10)

- Potential cross-factor effects to **Air** (increased ambient levels of dust), caused by effects to **Soils** (earthworks, groundworks, storage of overburden, erosion).
- Potential cross-factor effects to **Air** (increased ambient levels of dust and noise), caused by effects to **Material Assets - Roads** (increase in traffic volumes).

These cross-factor effects are examined in Chapter 10: Air. It was evaluated that there is no greater than **Imperceptible** impacts from these cross-factor effects. (Chapter 10: Section 10.2)

15.1.6 Potential Cross-Factor effects to Climate (Chapter 11)

- Potential cross-factor effects to **Climate** (Increases in GHG emissions), caused by effects to **Soils** (release of embodied emissions due to excavations) and effects to **Material Assets - Roads** (increase in traffic volumes).

These cross-factor effects are examined in Chapter 11: Climate. It was evaluated that negative impact from this cross-factor effect is **minor adverse and non-significant**. (Chapter 11: Section 11.2)

15.1.7 Potential Cross-Factor effects to Material Assets - Roads (Chapter 12)

No cross-factor effects to **Material Assets**, caused by effects to the other Environmental Factors, were identified by the EIA Team.

15.1.8 Potential Cross-Factor effects to Cultural Heritage (Chapter 13)

- Potential cross-factor effects to **Cultural Heritage** (visual setting), caused by effects to **Landscape** (visual impact of above ground structures).

This cross-factor effect was examined in Chapter 13: Cultural Heritage. It was evaluated that any impact from this cross-factor effect is likely to be **Neutral**. (Chapter 13: Section 13.2)

15.1.9 Potential Cross-Factor effects to Landscape (Chapter 14)

- Potential cross-factor effects to **Landscape** (character), caused by effects to **Land & Soils** (change of land-cover, excavations and stockpiling of material) and **Biodiversity** (change of land cover).

These cross-factor effects are examined in Chapter 14: Landscape. It was evaluated that the likely impact from these cross-factor effects is **Imperceptible**. (Chapter 14: Section 14.2)

Reference

Chapters 6-14 and Appendices 6-1 to 14-1

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