

VOLUME 2: CHAPTER 17 – CUMULATIVE ASSESSMENT

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Figures (Volume 3 of this EIA Report)

There are no figures associated with this chapter.

Appendices (Volume 5 of this EIA Report)

There are no appendices associated with this chapter.

17. CUMULATIVE ASSESSMENT

17.1 Introduction

17.1.1 This chapter considers the potential cumulative environmental effects as a result of the Proposed Development. The purpose of the assessment is to identify whether the combination of multiple effects upon a receptor would result in an effect of greater significance than the individual effects alone (as reported in **Chapters 7 to 16**).

17.1.2 As described in **Chapter 5: EIA Process and Methodology**, this EIA Report considers two types of cumulative effects:

- Intra and inter project in-combination effects: the combined effect of the Proposed Development with other reasonably foreseeable future developments. This type of cumulative effect is considered in the individual topic technical chapters (**Chapters 7 to 16**) and looks at both effects from the Proposed Development in combination with SSEN Transmission Accelerated Strategic Transmission Investment (ASTI) associated developments required to connect the Proposed Development to the network (referred to as intra-project) as well as other SSEN Transmission and third-party developments (referred to as inter-project). These developments are presented in **Chapter 5: EIA Process and Methodology, Table 5.2**. A figure showing all cumulative developments is presented in **Volume 3, Figure 5.1: Cumulative Developments**.
- Effects interactions: the combined or synergistic effects caused by the combination of a number of effects on a particular receptor, or group of receptors (taking into consideration effects during construction and operational phases) which may collectively cause a greater effect than individually. This type of cumulative effect is considered in this chapter.

17.2 Method

17.2.1 **Table 17.1** identifies the potential for interactions between EIA topics. The table distinguishes between effect interactions already assessed in topic specific chapters of this EIA Report and those that remain to be assessed in this chapter. Effect interactions between two or more topic areas are addressed in **Chapters 7 to 16** where there is a “cause and effect” or functional relationship between the topics. For example, the impact of the combination of habitat loss and noise disturbance on birds is assessed in **Chapter 9: Ornithology**.

Table 17.1: Potential for Effect Interactions by Topic

Topic/ Receptor	Landscape and Visual	Ecology and Nature Conservation	Ornithology	Water Environment (private water supply)	Geological Environment	Cultural Heritage	Forestry	Traffic and Transport	Noise and Vibration	Tourism and Recreation
Landscape and Visual										
Ecology and Nature Conservation										
Ornithology										
Water Environment (private water supply)										
Geological Environment										
Cultural Heritage										
Forestry										
Traffic and Transport										
Noise and Vibration										
Tourism and Recreation										

Key



Potential for effect interaction, considered in topic chapters

Potential for effect interaction, assessed in this chapter

17.2.2 Following analysis of the receptors identified in **Chapter 7 to 16**, and having regard to the interactions identified in this EIA Report and the assessment results presented, only receptors considered to have the potential to experience effect interactions not already assessed in **Chapters 7 to 16** are considered in this chapter. For example, the impact of a combination of noise, traffic, private water supply and visual effects on a residential receptor is not assessed in any of the topic specific chapters and is therefore presented in this chapter.

17.2.3 The potential effect interactions assessed in this chapter relate to the effects associated with:

- visual amenity during construction and operation as assessed in **Chapter 7**;
- effects on PWS during construction as assessed in **Chapter 10**;
- construction traffic disturbance as assessed in **Chapter 14**; and
- construction noise and vibration as assessed in **Chapter 15**.

17.2.4 The approach to the assessment of the effect interactions considers the changes in baseline conditions at sensitive residential receptors arising from the Proposed Development. The assessment is based upon professional judgement of the residual effects identified in **Chapters 7 to 16**.

17.2.5 The significance classification for effect interactions is provided in **Table 17.2**; 'Moderate' and 'Major' effects are considered to be significant in the context of the EIA Regulations.

Table 17.2: Effect Interactions Significance Criteria

Significance Category	Description of Effect
Major	Adverse or Beneficial effects that are a significant magnification of potentially wide-ranging effects on receptors/resources that are already predicted to occur.
Moderate	Adverse or Beneficial effects that are a significant magnification of localised effects on receptors/resources that are already predicted to occur.
Minor	Adverse or Beneficial effects that would only lead to a localised (not significant) magnification of effects on a receptor/resource.
Negligible	No effects or effects that are beneath the level of perception, within normal bounds of variation or within the margin of forecasting error.

17.3 Assessment of Effect Interactions

- 17.3.1 **Table 17.1** presents the assessment of effect interactions at receptors identified in topic specific chapters during construction and operation. The level of residual effect for each topic is extracted from the relevant topic specific assessment in **Chapters 7 to 16**. The potential for any effect interaction is then identified and assessed.
- 17.3.2 In the absence of traffic assessment specific to individual properties, a minor adverse effect is assumed.
- 17.3.3 Operational noise effects are assessed as negligible at all receptors and are scoped out of the assessment of effect interactions.

Table 17.3: Summary of Effects and Assessment of Effect Interactions

Property/Receptor	Visual Effects	Private water supply effects	Traffic Effects	Noise Effects	Vibration Effects	Potential for Effect Interactions
Landscape and Visual Receptors (see Chapter 7 for details)						
SA-01: Lanergill Farm	Major Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction noise, construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SA-02: Lydias House, Toftingall Farm	Major Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction noise, construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SA-03: Farmstead at Halsary	Major Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	n/a	n/a	Effects interaction due to the combination of construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SA-04: Farmsteads and cottages along the A9(T)	Major Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	n/a	n/a	Effects interaction due to the combination of construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SA-05: Single-storey cottage west of the A9(T) (Braehungie and Mountain View)	Major Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction noise, construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .

Property/Receptor	Visual Effects	Private water supply effects	Traffic Effects	Noise Effects	Vibration Effects	Potential for Effect Interactions
SA-06: Crofting township at Smerral	Major Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	n/a	n/a	Effects interaction due to the combination of construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SA-07: Scattered properties at Badnagie	Major Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	n/a	n/a	Effects interaction due to the combination of construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SA-08: Achorn House	Major Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction noise, construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SA-09: Borgue	Major-Moderate Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction noise, construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SA-10: Badrinsary (Rose Cottage and an unnamed house)	Moderate Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	n/a	n/a	Effects interaction due to the combination of construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SA-11: Langwell Gardens, Langwell Kennels, and Keepers House	Moderate Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	n/a	n/a	Effects interaction due to the combination of construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .

Property/Receptor	Visual Effects	Private water supply effects	Traffic Effects	Noise Effects	Vibration Effects	Potential for Effect Interactions
SA-12: The Bungalow, Ousdale, and Keepers Cottage	Moderate Adverse and Significant during construction and operation	Negligible effect, mitigation required	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction noise, construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SA-13: Marrel and scattered cottages along the A897	Major-Moderate Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	n/a	n/a	Effects interaction due to the combination of construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SB-02 Killin	Major Adverse effects (significant) during construction Moderate/ Major Adverse (significant) during operation	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction noise, construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SB-03 Carroll Cottage	Major Adverse effects (significant) during construction Moderate/ Major Adverse (significant) during operation	n/a	Minor, not significant during construction	Minor, not significant during construction	Minor, not significant during construction	Effects interaction due to the combination of construction noise and vibration, construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SB-05 Morvich	Major Adverse effects (significant) during construction Moderate Adverse (significant) during operation	n/a	Minor, not significant during construction	n/a	n/a	Effects interaction due to the combination of construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .

Property/Receptor	Visual Effects	Private water supply effects	Traffic Effects	Noise Effects	Vibration Effects	Potential for Effect Interactions
SB-06 East Kinnauld	Major Adverse effects (significant) during construction Moderate Adverse (significant) during operation	n/a	Minor, not significant during construction	n/a	n/a	Effects interaction due to the combination of construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SB-11 Eiden	Major Adverse effects (significant) during construction Moderate Adverse (significant) during operation	n/a	Minor, not significant during construction	n/a	n/a	Effects interaction due to the combination of construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SB-15 Dalnamain	Moderate-Major Adverse effects (significant) during construction Minor-Moderate Adverse effects (not significant) during operation	n/a	Minor, not significant during construction	n/a	n/a	Effects interaction due to the combination of construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SB-16 Brae Cottage	Moderate-Major Adverse effects (significant) during construction Moderate Adverse effects (significant) during operation	Negligible effect, mitigation required	Minor, not significant during construction	n/a	n/a	Effects interaction due to the combination of construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SC-01: Culrain	Moderate Adverse effects and Significant during construction and operation	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction noise, construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .

Property/Receptor	Visual Effects	Private water supply effects	Traffic Effects	Noise Effects	Vibration Effects	Potential for Effect Interactions
SC-06: Creide	Major-Moderate Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction noise, construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SC-07: Oak Bank	Major-Moderate Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction noise, construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SC-08: Invershin Farm	Major-Moderate Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction noise, construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SC-09: The Bungalow, Invershin	Moderate Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction noise, construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
OC-01: Carbisdale Castle	Major-Moderate Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	n/a	n/a	Effects interaction due to the combination of construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SD-01: Sonnycroft	Major Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	n/a	n/a	Effects interaction due to the combination of construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .

Property/Receptor	Visual Effects	Private water supply effects	Traffic Effects	Noise Effects	Vibration Effects	Potential for Effect Interactions
SD-02: West End	Major-Moderate Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	n/a	n/a	Effects interaction due to the combination of construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SD-03: Cnoc Cluaran	Major Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction noise, construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SD-04: Glaik Croft	Major Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	n/a	n/a	Effects interaction due to the combination of construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SD-05: Fannyfield	Major-Moderate Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction noise, construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SD-06: Tighnacriag	Major-Moderate Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	n/a	n/a	Effects interaction due to the combination of construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SD-07: Culeave Cottage	Major-Moderate Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction noise, construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .

Property/Receptor	Visual Effects	Private water supply effects	Traffic Effects	Noise Effects	Vibration Effects	Potential for Effect Interactions
SD-08: Cairn View	Major-Moderate Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction noise, construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SD-09: Leac Dubh Mor	Major-Moderate Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	n/a	n/a	Effects interaction due to the combination of construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SD-10: Strathpeffer	Moderate-Minor Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	n/a	n/a	Effects interaction due to the combination of construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SD-11: Swordale	Moderate-Minor Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	n/a	n/a	Effects interaction due to the combination of construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SD-12: Dingwall	Moderate-Minor Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	n/a	n/a	Effects interaction due to the combination of construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SD-13: Ardgay	Moderate-Minor Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	n/a	n/a	Effects interaction due to the combination of construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .

Property/Receptor	Visual Effects	Private water supply effects	Traffic Effects	Noise Effects	Vibration Effects	Potential for Effect Interactions
SD-14: Evanton	Moderate-Minor Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	n/a	n/a	Effects interaction due to the combination of construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SD-15: Jamestown	Moderate-Minor Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	n/a	n/a	Effects interaction due to the combination of construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SE-01: Bridge Park Cottage	Major Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction noise, construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SE-02: Mid Lodge	Major-Moderate Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction noise, construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SE-03: Heights of Kinnahaird	Major Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction noise, construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SE-04: Bruaich Cottages	Major Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction noise, construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .

Property/Receptor	Visual Effects	Private water supply effects	Traffic Effects	Noise Effects	Vibration Effects	Potential for Effect Interactions
SE-05: Ben View	Major Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	n/a	n/a	Effects interaction due to the combination of construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SE-06: Grieves Cottage	Major Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	n/a	n/a	Effects interaction due to the combination of construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SE-07: Broompark	Moderate Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction noise, construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SE-08: Wester Newton	Major-Moderate Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction noise, construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SE-09: Kinnahaird	Major-Moderate Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction noise, construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SE-10: Achnacoul	Moderate Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction noise, construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .

Property/Receptor	Visual Effects	Private water supply effects	Traffic Effects	Noise Effects	Vibration Effects	Potential for Effect Interactions
SE-11: Oakmor	Major-Moderate Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction noise, construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SE-12 Jacksons Cottage	Moderate Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction noise, construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SE-13 Orrin Cottage	Major-Moderate Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction noise, construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SE-14 Sawmill Cottage	Major-Moderate Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction noise, construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SE-15: Coul Garden Cottage	Moderate Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction noise, construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SE-16 Auchederson Farmhouse	Major-Moderate Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction noise, construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .

Property/Receptor	Visual Effects	Private water supply effects	Traffic Effects	Noise Effects	Vibration Effects	Potential for Effect Interactions
SE-17 Gas Street Cottage	Moderate Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	n/a	n/a	Effects interaction due to the combination of construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SE-18: Wester Kinellan	Major-Moderate Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	n/a	n/a	Effects interaction due to the combination of construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SE-19 Upper Weston Fanellan Croft	Moderate Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	n/a	n/a	Effects interaction due to the combination of construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SE-20 Jamestown	Moderate Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	n/a	n/a	Effects interaction due to the combination of construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SE-21 Contin	Moderate Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction noise, construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
SE-22: Strathpeffer	Moderate Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	n/a	n/a	Effects interaction due to the combination of construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .

Property/Receptor	Visual Effects	Private water supply effects	Traffic Effects	Noise Effects	Vibration Effects	Potential for Effect Interactions
SE-24 Marybank	Moderate Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	n/a	n/a	Effects interaction due to the combination of construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
OE-01 Coul House Hotel	Moderate Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	n/a	n/a	Effects interaction due to the combination of construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
OE-02 Falls of Orrin	Moderate Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	n/a	n/a	Effects interaction due to the combination of construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
OE-03 Fairburn Activity Centre	Moderate Adverse and Significant during construction and operation	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction noise, construction traffic and changes to visual amenity. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
Additional Private Water Supply (PWS) Receptors (see Chapter 10 for details)						
PWS Caen House and Croft 205	n/a	Negligible effect, mitigation required	Minor, not significant during construction	n/a	n/a	No
PWS 283 Torboll	n/a	Negligible effect, mitigation required	Minor, not significant during construction	n/a	n/a	No

Property/Receptor	Visual Effects	Private water supply effects	Traffic Effects	Noise Effects	Vibration Effects	Potential for Effect Interactions
PWS Carrol Farm	n/a	Negligible effect, mitigation required	Minor, not significant during construction	n/a	n/a	No
PWS Killen	n/a	Negligible effect, mitigation required	Minor, not significant during construction	n/a	n/a	No
PWS Kinloch Cottage	n/a	Negligible effect, mitigation required	Minor, not significant during construction	n/a	n/a	No
PWS Novar Tigh na Craig	n/a	Negligible effect, mitigation required	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction traffic and construction noise. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
PWS Ardochy	n/a	Negligible effect, mitigation required	Minor, not significant during construction	n/a	n/a	No
PWS Aigas Power Station	n/a	Negligible effect, mitigation required	Minor, not significant during construction	n/a	n/a	No
PWS Cruenassie	n/a	Negligible effect, mitigation required	Minor, not significant during construction	n/a	n/a	No

Property/Receptor	Visual Effects	Private water supply effects	Traffic Effects	Noise Effects	Vibration Effects	Potential for Effect Interactions
PWS Log House	n/a	Negligible effect, mitigation required	Minor, not significant during construction	n/a	n/a	No
Additional noise sensitive receptors, see Chapter 15 for details						
NSR 5 - Rangag Farm	n/a	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction traffic and construction noise. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
NSR 7 - Hill Of Rangag	n/a	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction traffic and construction noise. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
NSR 8 - Hill Croft, Rangag	n/a	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction traffic and construction noise. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
NSR 9 - Achavanich Farm	n/a	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction traffic and construction noise. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
NSR 10 - Schoolhouse Achavanich	n/a	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction traffic and construction noise. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .

Property/Receptor	Visual Effects	Private water supply effects	Traffic Effects	Noise Effects	Vibration Effects	Potential for Effect Interactions
NSR 11 - Lochend Cottage	n/a	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction traffic and construction noise. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
NSR 12 - Corrie View	n/a	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction traffic and construction noise. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
NSR 38 - Leac Dubh Mor	n/a	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction traffic and construction noise. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
NSR 40 - Cnoc Cluaran	n/a	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction traffic and construction noise. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
NSR 44 - Rechlu, Dounie	n/a	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction traffic and construction noise. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
NSR 45 - Glaick Croft, Boath	n/a	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction traffic and construction noise. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .

Property/Receptor	Visual Effects	Private water supply effects	Traffic Effects	Noise Effects	Vibration Effects	Potential for Effect Interactions
NSR 47 - West End	n/a	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction traffic and construction noise. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
NSR 49 - Fannyfield Cottage	n/a	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction traffic and construction noise. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
NSR 50	n/a	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction traffic and construction noise. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
NSR 51 - Cnoc Na Coull	n/a	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction traffic and construction noise. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
NSR 52 - Coul Cottage	n/a	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction traffic and construction noise. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
NSR 53 - Mid Lodge	n/a	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction traffic and construction noise. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .

Property/Receptor	Visual Effects	Private water supply effects	Traffic Effects	Noise Effects	Vibration Effects	Potential for Effect Interactions
NSR 54 - Achnacoul	n/a	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction traffic and construction noise. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
NSR 55 - Coul Garden Cottage	n/a	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction traffic and construction noise. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
NSR 59 - Benview, Contin Mains	n/a	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction traffic and construction noise. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
NSR 65 - Easter Newton, Fairburn	n/a	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction traffic and construction noise. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
NSR 66 - Lodge	n/a	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction traffic and construction noise. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
NSR 68 - Butlers Cottage	n/a	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction traffic and construction noise. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .

Property/Receptor	Visual Effects	Private water supply effects	Traffic Effects	Noise Effects	Vibration Effects	Potential for Effect Interactions
NSR 69 - The Cottage	n/a	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction traffic and construction noise. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
NSR 71 - Forest Lodge	n/a	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction traffic and construction noise. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
NSR 74 - Fergs Cottage, Bridgepark	n/a	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction traffic and construction noise. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .
NSR 77 - Dun Fionn	n/a	n/a	Minor, not significant during construction	Minor, not significant during construction	n/a	Effects interaction due to the combination of construction traffic and construction noise. The interaction would be temporary, intermittent and short-term. The predicted effect interaction would be minor adverse leading to a localised magnification of effects and is not significant .

17.4 Summary and Conclusion

- 17.4.1 As shown in **Table 17.1**, when considering the environmental effects identified, effect interactions have the potential to occur at receptors in the surrounding area in relation to visual impacts, construction traffic impacts, and construction noise and vibration impacts. As the effects on PWS during construction are assessed as negligible they are considered not to contribute to effect interactions.

Construction

- 17.4.2 Residents living close to the Site will experience an interaction of effects due to the combination of construction noise and vibration impacts, construction traffic impacts and changes to visual amenity. These effects would be temporary, intermittent and short-term. The predicted effect interactions would be **minor adverse** leading to a localised magnification of effects and are **not significant**.

Operation

- 17.4.3 No additional potential effect interactions were identified for the operational phase.