

Chapter 02:

Scope, Methodology

and Consultation

Environmental Impact Assessment
Report for:

Westfield Substation Extension

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2. Scope, Methodology and Consultation

2.1 Introduction

- 2.1.1 EIA is a process that considers how a development is predicted to change the existing environmental conditions and what the consequences of these changes will be.
- 2.1.2 This chapter sets out the regulatory context for undertaking an EIA and the assessment methodology applied, the approach to mitigation and the assessment of the significance of likely environmental effects. It also sets out the scope of the EIA and information on any consultation undertaken to inform the EIA.

2.2 Environmental Impact Assessment Regulations

- 2.2.1 The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 (the EIA Regulations), implement the requirements of the European Directive on EIA (2014/52/EU) into Scots law. These regulations include two schedules, those which specify the types of proposal that should be subject to mandatory EIA and those for which the need for EIA should be determined by the relevant competent authority. Further schedules also specify the criteria for determining the need for EIA and the information to be included within the resultant EIA Report.
- 2.2.2 The proposed extension to the Westfield Substation does not fall under Schedule 1 of the EIA Regulations, and therefore a mandatory EIA is not required, and does not fall within those categories listed in Schedule 2 of the EIA Regulations. However, on the basis that the EIA Directive has a wide scope and broad purpose, a voluntary EIA is being undertaken for the proposed extension to the Westfield Substation. SPEN considered it appropriate to undertake a proportionate level of environmental assessment having regard to SPT's statutory duties as a transmission licence holder under the Electricity Act 1989 and the guidance contained in Circular 1/2017 Environmental Impact Assessment Regulations.
- 2.2.3 Furthermore, Schedule 9, paragraph 3 of the Electricity Act 1989 states that in formulating any 'relevant proposals', a person authorised to participate in the transmission of electricity:
- *"shall have regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and of protecting sites, buildings and objects of architectural, historic or archaeological interest; and*
 - *shall do what he reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites, buildings or objects."*
- 2.2.4 And in exercising any relevant functions, a licence holder:
- *"shall avoid, so far as possible, causing injuries to fisheries or to the stock of fish in any waters."*
- 2.2.5 Therefore, this EIAR has been prepared in accordance with the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 (the EIA Regulations).

- 2.2.6 The EIAR also takes account of the relevant guidance set out in:
- Planning Advice Note (1/2013) Environmental Impact Assessment Revision 1.0 (Scottish Government, 2017), which emphasises the importance of achieving a proportionate EIA scope, focussed on the likely significant effects;
 - The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017, Planning Circular 1/2017 Scottish Government.; and
 - EIA Handbook v5 (Scottish Natural Heritage and Historic Environment Scotland, 2018).
- 2.2.7 Other environmental discipline specific guidance will be referred to in the relevant technical **Chapters 6-12**.

2.3 The EIA Process

- 2.3.1 EIA is the process of systematically compiling, evaluating and presenting all the likely significant environmental effects, both positive and negative, of a Proposed Development, to assist the determining authority in considering the application for planning permission, and reaching a reasoned conclusion in the decision notice.
- 2.3.2 The information compiled during the EIA is presented within an EIAR to accompany the application. The preparation of the EIAR enables the significance of these effects to be identified and the scope for reducing negative, or enhancing positive, effects to be clearly understood by the determining authority, as well as those consulted as part of the EIA process.
- 2.3.3 The assessment of effects is undertaken by first establishing a robust understanding of the relevant baseline and then predicting the potential impact of key development activities on that baseline. Predictions of effect is based on a combination of professional judgement, expert knowledge and modelling where appropriate, and the use of topic-specific methodologies. The definition of what constitutes a significant effect for each environmental aspect is determined by pre-defined assessment criteria, as discussed further below.
- 2.3.4 The EIAR preparation process contains the following key stages:
- Project inception and consideration of whether a development requires ‘Screening’ for EIA. A request for a screening opinion was not made in this instance, and a voluntary EIA has been prepared;
 - Preparation of a Scoping Report;
 - Consideration of the Scoping Response issued, and revision of the scheme in light of this response;
 - Baseline data collection, informed by the high-level data collection undertaken during the Scoping stage;
 - Assessment of likely significant environmental effects based on pre-determined methodologies and assessment criteria. This to be based upon site review and field work and documentary review;
 - Identification of mitigation measures in accordance with the mitigation hierarchy to reduce or minimise identified adverse effects;

- Identification of residual effects following the implementation of mitigation measures; and
- Identification of any required compensation or offsetting measures, where significant residual adverse effects remain and cannot be further mitigated, in accordance with the mitigation hierarchy.

2.3.5 The EIA Report satisfies the requirements of Regulation 5 and Schedule 4 of the EIA Regulations as set out in **Table 2.1** below.

Table 2.1: EIA Report Compliance

	EIA Regs Requirement (full quote)	Where Addressed in EIAR (Chapter / Section)
Reg 5(2)(a)	<i>“a description of the development comprising information on the site, design, size and other relevant features of the development”</i>	Chapter 3: Description of Development
Reg 5(2)(b)	<i>“a description of the likely significant effects of the development on the environment”</i>	Technical Chapters 6-12
Reg 5(2)(c)	<i>“a description of the features of the development and any measures envisaged in order to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment”</i>	Technical Chapters 6-12
Reg 5(2)(d)	<i>“a description of the reasonable alternatives studied by the developer, which are relevant to the development and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the development on the environment”</i>	Chapter 5: Need, Alternatives and Design Evolution
Reg 5(2)(e)	<i>“a non-technical summary of the information referred to in sub-paragraphs (a) to (d)”</i>	Non-Technical Summary
Reg 5(2)(f)	<i>“any other information specified in schedule 4 relevant to the specific characteristics of the development and to the environmental features likely to be affected”</i>	See rows below
Reg 5(5)	<i>“a statement outlining the relevant expertise or qualifications of the persons involved in the preparation of the EIA report”</i>	Chapter 1: Introduction
Schedule 4, para 1	<i>“a description of the development, including in particular: (a) a description of the location of the development”</i>	Chapter 3: Description of Development
Schedule 4, para 1	<i>“(b) a description of the physical characteristics of the whole development, including, where relevant, requisite demolition works, and the land-use requirements during the construction and operational phases”</i>	Chapter 3: Description of Development
Schedule 4, para 1	<i>“(c) a description of the main characteristics of the operational phase of the development (in particular any production process), for instance, energy demand and energy used, nature and quantity of the materials and natural resources (including water, land, soil and biodiversity) used”</i>	Chapter 3: Description of Development
Schedule 4, para 1	<i>“(d) an estimate, by type and quantity, of expected residues and emissions (such as water, air, soil and subsoil pollution, noise, vibration, light, heat, radiation) and quantities and types of waste produced during the construction and operation phases”</i>	Chapter 3; Technical chapters 6-11
Schedule 4, para 2	<i>“a description of the reasonable alternatives... studied by the developer ... and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects”</i>	Chapter 5: Need, Alternatives and Design Evolution
Schedule 4, para 3	<i>“a description of the relevant aspects of the current state of the environment (the ‘baseline scenario’) and an outline of the</i>	Technical chapters 6-11

	EIA Regs Requirement (full quote)	Where Addressed in EIAR (Chapter / Section)
	<i>likely evolution thereof without implementation of the development"</i>	
Schedule 4, para 4	<i>"a description of the factors specified in regulation 4(3) likely to be significantly affected by the development: population, human health, biodiversity (for example fauna and flora), land (for example land take), soil (for example organic matter, erosion, compaction, sealing), water (for example hydromorphological changes, quantity and quality), air, climate (for example greenhouse gas emissions, impacts relevant to adaptation), material assets, cultural heritage, including architectural and archaeological aspects, and landscape"</i>	Technical chapters: 6-11 (unless scoped out by the Scoping Opinion (Technical Appendix 2.1)).
Schedule 4, para 5	<i>"a description of the likely significant effects of the development on the environment resulting from, inter alia: (a) the construction and existence of the development..."</i>	Technical chapters 6-11
Schedule 4, para 5	<i>"(b) the use of natural resources, in particular land, soil, water and biodiversity..."</i>	Technical chapters 6-11
Schedule 4, para 5	<i>"(c) the emission of pollutants, noise, vibration, light, heat and radiation, the creation of nuisances, and the disposal and recovery of waste"</i>	Technical chapters 6-11
Schedule 4, para 5	<i>"(d) the risks to human health, cultural heritage or the environment (for example due to accidents or disasters)"</i>	Topic-specific risk pathways: Chapter 8 Transport; Chapter 9 Air Quality; Chapter 10 Noise; Chapter 11 Accidents and Risks; cumulative risks in Chapter 12. Cultural Heritage and Human Health were Scoped Out.
Schedule 4, para 5	<i>"(e) the cumulation of effects with other existing and/or approved projects..."</i>	Chapter 12: Cumulative and Interactive Effects
Schedule 4, para 5	<i>"(f) the impact of the project on climate (for example the nature and magnitude of greenhouse gas emissions) and the vulnerability of the project to climate change"</i>	Technical chapters 6-12
Schedule 4, para 5	<i>"(g) the technologies and the substances used"</i>	Chapter 3: Description of Development
Schedule 4, para 5	<i>"The description of the likely significant effects ... should cover the direct effects and any indirect, secondary, cumulative, transboundary, short-term, medium-term and long-term, permanent and temporary, positive and negative effects of the development."</i>	Technical chapters 6-12
Schedule 4, para 6	<i>"A description of the forecasting methods or evidence... and the main uncertainties involved."</i>	Chapter 2: Scope Methodology and Consultation; Technical chapters: 6-12
Schedule 4, para 7	<i>"A description of the measures envisaged to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects ... and any proposed monitoring arrangements"</i>	Technical chapters: 6-12; consolidated in Chapter 13
Schedule 4, para 8	<i>"A description of the expected significant adverse effects ... deriving from the vulnerability of the development to risks of major accidents and/or disasters ... and details of the preparedness for and proposed response to such emergencies."</i>	Chapter 11 Major Risks and Accidents
Schedule 4, para 9	<i>"A non-technical summary of the information provided under paragraphs 1 to 8."</i>	Non-Technical Summary

	EIA Regs Requirement (full quote)	Where Addressed in EIAR (Chapter / Section)
Schedule 4, para 10	<i>"A reference list detailing the sources used for the descriptions and assessments included in the EIA report."</i>	Chapter 15 References

- 2.3.6 The assessment of the likely significant effects, using a range of appropriate methodologies, will take into account the construction and operation of the extension to the Westfield Substation in relation to the defined study areas and environs for each topic, as defined by the competent experts undertaking the assessment.

2.4 Scope and Consultation

- 2.4.1 A request for an EIA Scoping Opinion was submitted to Fife Council (FC) in July 2024 (planning reference 24/01927/SCO). An EIA Scoping Opinion was received from FC in September 2024. A copy of the Scoping Opinion is provided in **Technical Appendix 2.1**. The Scoping Opinion concluded that matters to be 'Scoped In' to the EIAR are:

- Landscape and Visual Amenity (day time only);
- Ecology and Biodiversity;
- Traffic and Transport (construction only);
- Air Quality (during the Construction Phase only, including Construction Traffic and Dust);
- Noise (Construction Traffic Noise and Operational Noise only); and
- Cumulative Effects.

- 2.4.2 Matters to be 'Scoped Out' of the EIA are:

- Landscape and Visual Amenity (night time);
- Traffic and Transport (operational);
- Air Quality (operational);
- Socio Economics and Tourism;
- Hydrology;
- Cultural Heritage;
- Ground Conditions and Contamination;
- Climate Change; and
- Risks to Human Health.

- 2.4.3 In addition, a pre-application consultation process was undertaken with FC (planning reference 24/01931/PREAPP) in 2024 and a written pre-application report provided in October 2024. Subsequent pre-application meetings were also held with FC in 2025. A copy of the Pre--Application Report is provided in **Technical Appendix 2.2**.

- 24.4 In addition to the matters identified above for inclusion in the EIA, an assessment of Major Accidents and Disasters has been undertaken and is set out in a standalone assessment in **Chapter 11**.
- 24.5 Where additional consultation with statutory consultees and others has been undertaken in relation to a particular environmental topic, information is provided in the relevant technical chapter and copies of correspondence provided in a technical appendix to the chapter.
- 24.6 To ensure that the EIA covers all elements required to facilitate the Proposed Development, this EIAR also considers the impacts of the proposed permanent undergrounding of the 33kV OHL which currently runs north-south through the site, and the temporary drainage scheme located immediately to the south-west of the red line boundary. Further details are provided in **Chapter 3**.

2.5 Baseline and Future Baseline

- 25.1 To identify the scale of likely significant effects as a result of the Proposed Development, it is necessary to establish the existing baseline environmental conditions.
- 25.2 The baseline scenario was established through desk-base studies, site visits and surveys, and modelling as appropriate to each environmental topic. Further information on the baseline scenarios for each environmental topic is set out in the relevant chapter and technical appendix.
- 25.3 A future baseline, which describes the evolution of the environment without the implementation of the Proposed Development is considered for each environmental topic. The future baseline date is set at 2030. This is the date at which the Proposed Development would be operational, alongside the other elements of TKUP, should it be implemented.

2.6 Determining Likely Significant Effects

- 26.1 The likely effects of the Proposed Development have been assessed and the significance of the effect determined. In doing so, the following are considered:
- Indirect Effects – those effects that are not a direct result of the Proposed Development;
 - Direct Effects – where the effect is a direct result of the Proposed Development;
 - Short-Term, Medium-Term and Long-Term Effects;
 - Temporary Effects – where the effect only occurs for a limited period of time and the change can be reversed;
 - Permanent Effects – where the effect is a long-lasting change;
 - Beneficial Effects – a positive effect considered beneficial to one or more environmental receptors; and
 - Adverse – a negative, or detrimental, effect on one or more environmental receptors.
- 26.2 There are no transboundary effects likely to arise from the Proposed Development.
- 26.3 In assessing the significance of effects, the magnitude of change likely to arise as a result of the Proposed Development is considered alongside the sensitivity of the affected environmental receptor. The geographical extent of the change is also taken into account. Where embedded or

additional mitigation measures (in accordance with the mitigation hierarchy) are identified, the assessment of residual effects reflects the implementation of those mitigation measures only. Enhancement measures are identified separately and are not relied upon in determining the significance of residual effects.

- 2.6.4 The criteria used for identifying magnitude of change, sensitivity and significance of effect specific to each environmental topic, based on the relevant technical guidance and best practice for that topic. Further information is set out in the relevant chapter and technical appendices. The criteria for determining significant effects for each environmental topic is summarised in **Table 2.2**.

Table 2.2: Determining Significance of Effect

Environmental Topic	Level of Effect Considered to be Significant
Landscape and Visual Amenity	Moderate or higher (In certain cases of moderate effects, where additional factors may arise, a further degree of professional judgement may be applied when determining whether the overall change will be significant or not)
Ecology and Biodiversity	At a geographical scale of Local, County/Regional or International or National ¹ (Minor or higher) <i>CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.3. Chartered Institute of Ecology and Environmental Management, Winchester (last updated September 2024).</i>
Traffic and Transport	Moderate or higher
Air Quality	Moderate or higher
Noise	Moderate or higher

2.7 Cumulative Effects

- 2.7.1 The assessment of cumulative effects is a requirement of the EIA Regulations. It is concerned with identifying circumstances in which a number of potential effects either from the project itself, or from separate existing or future approved development, could combine to cause a significant effect on a particular environmental receptor. Cumulative effects have been considered for each environmental topic and are reported and summarised in **Chapter 12**. Assessment methods for cumulative impacts and interactions can vary across each environmental topic, and specific methodologies are provided in each environmental technical appendices, as appropriate.
- 2.7.2 In the assessment of cumulative effects, consideration is given to both effects arising from different elements of a project on environmental receptors (interactive effects) and from projects combined with other activities (in-combination) effects.
- 2.7.3 Interactive effects may arise where several direct or indirect effects from the Proposed Development affect a single receptor. The combination of such effects may or may not be greater than each of the effects assessed individually. These combined effects consider the

¹ Ecology and Biodiversity assessment carried out in accordance with industry guidance (The CIEEM Ecological Impact Assessment Guidelines 2018; (last updated in September 2024)), opposed to the standard EIA methodology.

interrelationships between difference aspects of the Proposed Development. For example, effects on human receptors are considered in both the Landscape and Visual Amenity, Air Quality and Noise chapters.

- 27.4 The TKUP reinforcement project comprises a number of discrete elements, as described above, which are being progressed through separate consent applications. For the purposes of the cumulative assessment within this EIA, a structured approach has been applied to ensure that cumulative effects are appropriately identified and assessed.
- 27.5 This includes consideration of interactive effects arising from the Westfield Substation Extension itself, as well as the cumulative effects of the Westfield Substation Extension in combination with relevant elements of the TKUP and EGL4 projects. As a starting point, the TKUP and EGL4 projects have been considered, following which those individual elements of TKUP and EGL 4 with the potential to interact environmentally with the Westfield Substation Extension have been identified and assessed cumulatively with the Proposed Development.
- 27.6 In addition, the cumulative effects of the Westfield Substation Extension and the relevant interacting elements of the TKUP and EGL4 projects have been assessed with other existing, consented, or reasonably foreseeable developments in the surrounding area, as agreed with FC at the Scoping stage and subsequently updated. This staged approach ensures that cumulative effects associated with the Proposed Development are identified both in isolation and as part of the wider TKUP and EGL 4 projects, as well as cumulatively with other development. The methodology, assessment and conclusions arising from this cumulative assessment are presented in **Chapter 12** of this EIA Report.
- 27.7 EGL4 is a major electricity transmission project being developed by SPEN and National Grid, comprising a 2GW high-voltage direct current (HVDC) subsea link between Fife in Scotland and Norfolk in England. The project is designed to increase the capacity of the UK transmission network, enabling more renewable electricity generated in Scotland to be transported to areas of high demand across Great Britain. EGL4 will support the transition to a cleaner energy system while improving grid resilience, flexibility and long-term energy security.

2.8 Approach to Mitigation

- 28.1 Embedded mitigation measures have been incorporated throughout the EIA assessment to ensure that the Project's design and operational practices minimise environmental effects wherever possible. These measures, which are included within the baseline assessment and assumed throughout the evaluation of likely significant effects, address potential impacts from the outset and form an integral part of the Project design and assessment process. Their inclusion ensures that the assessment reflects realistic environmental outcomes based on the Project as proposed. Each technical chapter has identified embedded mitigation relevant to that topic.
- 28.2 Schedule 4, paragraph 7 of the EIA Regulations requires information to be provided on measures to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects of the Proposed Development on the receiving environment, as well as, where appropriate, any proposed monitoring arrangements. The impact assessment process is used to identify where additional mitigation is required to address likely significant effects, which it has not been possible to avoid through design. Mitigation has been considered following a hierarchy of first seeking to avoid effects, then seeking a reduction in effects to a level not considered significant, and where necessary offsetting or providing

- compensatory measures or enhancement measures. The EIA will report on the residual effects that remain following the implementation of mitigation.
- 28.3 SPT's approach to biodiversity enhancement and compensatory planting is based on delivering meaningful ecological enhancement at suitable off-site locations rather than within the operational substation site, where space and functional constraints limit opportunities for on-site measures.
- 28.4 To meet the requirements of NPF4 for developments to provide positive effects for biodiversity, SPT provide on-site mitigation in addition to off-site compensation and enhancement. SPT has a proven track record of off-site biodiversity delivery within the same local authority area as their development projects. The off-site delivery model is based on collaboration with landowners and delivery partners such as Fishery Trusts, environmental organisations, or community organisations to identify local biodiversity opportunities. This approach allows SPT to support enhancement schemes that compliment Nature Networks and wider landscape-scale restoration ambitions in the local area. SPT assesses the biodiversity impacts from our developments using the SSEN-T biodiversity metric. The same metric is used by delivery partners to identify suitable biodiversity schemes to compensate for losses and provide appropriate levels of enhancement. In order to secure the biodiversity enhancements, SPT enter into a contractual agreement with the supplier of the biodiversity enhancement works. SPT fund the full cost of all associated capital works together with 5 years establishment costs. For the avoidance of doubt, SPT do not purchase biodiversity units or land. A Biodiversity Enhancement Plan (BEP) is developed which sets out the required compensation and enhancement along with details of habitat management and monitoring required to ensure the created habitats reach the expected condition.
- 28.5 For the proposed infrastructure works at Westfield substation, SPT are in ongoing discussions with the Forth Rivers Trust who are a prospective partner of biodiversity enhancement delivery. Thus far, two sites have been identified as potentially suitable schemes to be matched to the substation site for off-site biodiversity enhancement. The first potential site is at Stenhouse Reservoir near Burntisland and would see the creation of woodland, species-rich grassland, and wetland. The second site is a farm near Cowdenbeath which is a potential site for woodland creation and species-rich grassland creation.
- 28.6 This approach is reflected in the EIAR, which outlines that biodiversity enhancement will be delivered off-site in collaboration with landowners and relevant stakeholders. The EIAR confirms that this strategy aligns with SPEN's established environmental commitments and ensures that biodiversity enhancement objectives can be met in a practical and ecologically beneficial manner. Significant biodiversity enhancement will be provided in accordance with policy 3 Biodiversity of NPF4, with a minimum of 10% net gain to accord with SPEN's T3 business plan goals.
- 28.7 A Schedule of Environmental Mitigation is provided in **Chapter 13**, which summarises the mitigation measures identified in **Chapters 6–12**.