Draft Scoping Requirements Victoria to New South Wales Interconnector West EES

Environment Effects Act 1978

NOVEMBER 2024





Acknowledgement





The Victorian Government acknowledges Aboriginal and Torres Strait Islander people as the Traditional Custodians of the land and acknowledges and pays respect to their Elders, past and present.

Queries about the Victoria to New South Wales Interconnector West project should be directed to the proponent:

Transmission Company Victoria Telephone: 1800 824 221

Email: enquiries@transmissionvictoria.com.au Website: https://www.transmissionvictoria.com.au

Queries about the EES process and Scoping Requirements should be directed to the department:

Impact Assessment Unit Telephone: (03) 8622 7633

Email: environment.assessment@transport.vic.gov.au

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List of abbreviations

CHMP Cultural heritage management plan

DCCEEW Department of Climate Change, Energy, Environment and Water (Cwlth)

DTP Department of Transport and Planning

DEECA Department of Energy, Environment and Climate Action

EE Act Environment Effects Act 1978
EES Environment effects statement

EMF Environmental management framework
EP Act Environment Protection Act 2017 (Vic)

EPA Environment Protection Authority

EPBC Act Environment Protection and Biodiversity Conservation Act 1999

FFG Act Flora and Fauna Guarantee Act 1988

ha Hectares

MNES Matters of national environmental significance

P&E Act Planning and Environment Act 1987 (Vic)

RAP Registered Aboriginal Party
TRG Technical reference group



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1 Introduction

In light of the potential for significant environmental effects, on 13 April 2024 the Minister for Planning determined under the *Environment Effects Act 1978* that Transmission Company Victoria (TCV) (the proponent) is to prepare an environment effects statement (EES) for the proposed Victoria to New South Wales Interconnector West (VNI West) Project (the project). The purpose of the EES is to provide a sufficiently detailed description of the project, assess its potential effects on the environment¹ and assess alternative project layouts, designs and approaches to avoid and mitigate effects. The EES will inform and seek feedback from the public and stakeholders. The Minister for Planning (the Minister) will issue an assessment of the project's environmental effects under the Environment Effects Act to conclude the EES process. The Minister's assessment will then inform statutory decision-makers for the project.

These *Draft Scoping Requirements for the VNI West EES* set out the proposed specific matters to be investigated and documented in the EES. The draft scoping requirements presented here are for public review and comment. The Minister will issue the final scoping requirements for the EES following consideration of public comments received on this draft.

While the scoping requirements are intended to cover all relevant matters, the EES will also need to address other issues that emerge during the EES investigations, especially potential impacts and environmental issues relevant to statutory decisions that will be informed by the assessment.

1.1 The project and setting

The VNI West project, is proposed to provide a link in the electricity transmission system between the Murray River and Western Victoria Renewable Energy Zones (REZs) in both Victoria and New South Wales (NSW) and load centres in those jurisdictions to strengthen the connection between power grids in NSW and Victoria.

The proposed project for assessment in the EES comprises the Victorian component of VNI West. This includes the construction of a new 500 kV double-circuit electricity transmission line with associated infrastructure situated within Victoria. The transmission line is proposed to be located in the area between the proposed Western Renewables Link (WRL) switchyard (terminal station) in Bulgana (this terminal station is not part of the VNI West scope) and the Murray River north of Kerang (at the Victoria and NSW border), to connect to the NSW portion of VNI West. The proposed project comprises:

- Development, construction and operation of approximately 240 km of new 500 kV overhead double circuit transmission line with steel lattice towers of between 60 m to 80 m in height.
- Construction of a terminal station at Tragowel (Tragowel Terminal Station), including both 500 kV and 220 kV equipment.
- Modifications to the existing 220 kV transmission line that runs between Kerang and Bendigo at the proposed Tragowel Terminal Station.
- A number of temporary construction laydown areas along the route.
- A draft transmission corridor within the Option 5A area of interest which has been identified as having the potential to accommodate the project infrastructure.

The draft transmission corridor for the project is proposed to be located within the broader Option 5A area of interest. The draft corridor is considered to have the ability to accommodate project infrastructure including transmission lines and the proposed Tragowel Terminal Station. It is recognised that along the 240 km length of the proposed project, flexibility is required to allow for potential shifts to the proposed corridor. This flexibility will be maintained to accommodate inputs that may be received during the project's assessment process. Identification and investigation of potential corridors and alignments within the area of interest will be undertaken within the parameters of the EES.

^{1.} For assessment of environmental effects under the EE Act, the meaning of 'environment' includes physical, biological, heritage, cultural, social, health, safety and economic aspects (Ministerial Guidelines, p. 2).

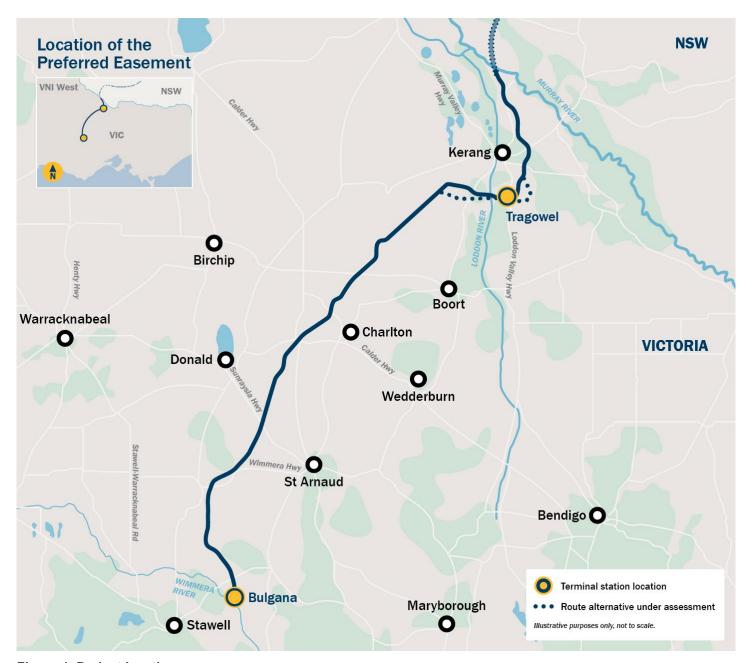


Figure 1. Project location.

Source: Transmission Company Victoria.



1.2 Minister's requirements for this EES

In light of the potential for significant environmental effects, the Minister for Planning decided that an EES is required to assess the potential environmental effects of the project. The Minister published procedures and requirements applicable to the preparation of the EES, in accordance with section 8B(5) of the Environment Effects Act (see Appendix A). The investigations and assessments are to include feasible project alternatives and design refinements (e.g., alternative alignments, siting of infrastructure, management measures, project staging) to avoid, minimise, and manage effects, particularly for:

- biodiversity and ecological values, including loss, degradation or fragmentation of native vegetation and habitat;
- Aboriginal and historic cultural heritage values;
- · visual and landscape values;
- water environments including waterways, wetlands and groundwater; and
- agriculture, other land uses and communities.

These draft scoping requirements provide further detail on the matters to be in investigated in the EES as required by the *Ministerial guidelines for assessment of environmental effects under the Environment Effects 1978* (Ministerial Guidelines).

2 Assessment process and approvals

2.1 What is an EES?

An EES describes a project, it's rationale/benefit and its potential environmental effects. It should enable stakeholders and decision-makers to understand how the project is proposed to be implemented and the likely environmental effects of doing so. An EES has two main components:

- The EES main report an integrated, plain English document that assesses the potential impacts of the project and
 examines avoidance, mitigation or other measures reduce the environmental effects and assesses residual effects.
 The main report draws on technical studies, data and statutory requirements for environmental segments such as
 surface water and groundwater quality and waste discharge to the environment and should clearly identify which
 components of the scope are being addressed throughout.
- The EES technical reports specialist studies, investigations and analyses that provide the basis for the EES main report. These reports will be exhibited in full, as appendices to the main report.

The documentation of potential effects in the EES main report and the necessary investigation of potential effects included within the technical reports, should be proportionate to the environmental risks posed by the project, as outlined in the Ministerial Guidelines (p. 23). Further explanation of this is covered in Section 4.

2.2 The EES process

The proponent is responsible for preparing an EES, including conducting technical studies and undertaking appropriate stakeholder consultation. The Department of Transport and Planning (DTP) is responsible for managing the EES process². The EES process has the following steps:

- preparation of a draft study program and draft schedule by the proponent;
- preparation and exhibition of draft scoping requirements by DTP on behalf of the Minister with public comments received during the advertised exhibition period (this document);
- finalisation and issuing of scoping requirements by the Minister;

^{2.} Further information on the EES process can be found at planning.vic.gov.au/environment-assessment/what-is-the-ees-process-in-victoria.



- review of the proponent's EES studies and draft documentation by DTP and a technical reference group;3
- completion of the EES by the proponent;
- review of the complete EES by DTP to establish its adequacy for public exhibition;
- exhibition of the proponent's EES and invitation for public comment by DTP on behalf of the Minister;
- appointment of an inquiry panel by the Minister to review the EES and public submissions received, conduct public hearings and provide a report to the Minister; and finally
- following receipt of the inquiry report, preparation of an assessment on whether the project's environmental effects are acceptable by the Minister for the consideration of statutory decision-makers.

It is the proponent's responsibility to ensure that adequate studies are undertaken and reported to support robust assessment of potential effects arising from the project and that it implements effective internal quality assurance to produce quality EES documentation.

2.2.1 Technical reference group

DTP has convened a technical reference group (TRG) of state and commonwealth government agencies, registered Aboriginal parties and local councils for this EES process to advise DTP and the proponent on:

- applicable policies, strategies and statutory provisions;
- · EES scoping requirements;
- the design and adequacy of EES technical studies;
- the proponent's public information and stakeholder consultation program for the EES process;
- · responses to issues arising from the EES investigations;
- the technical adequacy and completeness of draft EES documentation; and
- · coordination of statutory processes.

2.2.2 EES consultation

The proponent is responsible for informing and engaging the public and stakeholders during the EES process, to inform them about the project, the EES process and EES studies. The proponent's EES consultation should enable feedback to be inputted on the project and its potential environmental effects, as well as respond to issues raised. Stakeholders include potentially affected parties, Traditional Owner groups, any interested community organisations/groups and government bodies.

Through its EES consultation plan, the proponent is to undertake effective engagement that enables the public and stakeholders to understand where there are opportunities for engagement. The proponent needs to provide appropriate opportunities for input and feedback from different stakeholders on the project and EES investigations. The proponent is responsible for preparing and implementing an EES consultation plan that sets out the approach to engagement. This plan is reviewed and amended in consultation with DTP and the TRG before it is published on the Planning website.⁴ The consultation plan will:

- identify stakeholders;
- characterise public and stakeholders' interests, concerns and consultation needs, local knowledge and inputs;
- describe consultation methods and schedule; and
- outline how public and stakeholder inputs will be recorded, considered and/or addressed in the preparation of the EES.

^{3.} For critical components of the EES studies, peer review by an external, independent expert (or panel of experts) may be appropriate.

^{4. &}lt;u>Victoria to New South Wales Interconnector West (Victorian component) (planning.vic.gov.au)</u>



2.2.3 Traditional Owner engagement

The EES should be developed with acknowledgement of and respect for Traditional Owners' care for and connection to Country. Through the EES, the proponent should seek to understand the direct and indirect ways in which the project could affect these interests. To this end, the EES should be informed by engagement with Traditional Owners.

The proponent should support and enable culturally appropriate, informed and meaningful engagement with Traditional Owners, including by:

- asking Traditional Owner groups about the engagement processes that would be suitable;
- endeavouring to develop good working relationships;
- taking into account and respecting the cultural and communication needs and protocols of communities;
- engaging early and providing appropriate timeframes to consider and respond to information; and
- genuinely seeking input and expertise.

The EES consultation plan should set out the mechanisms to be established by the proponent to support and enable Traditional Owner engagement as well as outline how the views and expertise offered by Traditional Owners will be integrated into the EES.

2.2.4 Statutory approvals and the EES process

The project will require a range of approvals under Victorian and Commonwealth legislation if they are to proceed. DTP coordinates the EES process as closely as practicable with the relevant approvals procedures, consultation and public notice requirements.

To facilitate informed and efficient decision-making on required key approvals following the EES process, it is recommended that the EES documentation address relevant information and requirements associated with those key approvals that will be informed by the EES and Minister's assessment.

Principal approvals required for the project are planning approval via a planning scheme amendment under the *Planning and Environment Act 1987*, approved cultural heritage management plan (CHMP) under the *Aboriginal Heritage Act 2006* and approval under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

Other key secondary approvals required under Victorian legislation, that are relevant to these scoping requirements include; works on waterways permits under the *Water Act 1989*; permit to take, keep or move protected flora and fauna (including fish) under the *Flora and Fauna Guarantee Act 1988*; consent to interfere with a heritage place or object under the *Heritage Act 2017*; permission to undertake proposed works in, on, under or over a road under the *Road Management Act 2004*, authorisation to handle, relocate or care for wildlife under the *Wildlife Act 1975*.

Other approvals are likely to be required and will be determined throughout the course of the EES.

Statutory decisions on approvals required for the project to proceed may not be made before the decision-makers have considered the Minister's assessment, which is the final output of the EES process.

2.3 Accreditation of the EES process under the EPBC Act

The project has been referred to the Commonwealth under the EPBC Act. A delegate for the Commonwealth Minister for the Environment and Water determined on 13 June 2024 that the project is a controlled action (EPBC 2024/09790), as it is likely to have a significant impact⁵ on the following matters of national environmental significance (MNES), which are protected under Part 3 of the EPBC Act:

- Ramsar wetlands (sections 16 and 17B);
- Listed threatened species and communities (section 18 and 18A); and

^{5.} Note that 'relevant impacts' defined in section 82 of the EPBC Act correspond to what are generally termed 'effects' under the EE Act and in the EES process.



Listed migratory species (sections 20 and 20A).

The EES process is accredited to assess impacts on MNES under the EPBC Act through the Bilateral (Assessment) Agreement between the Commonwealth and the State of Victoria. This removes duplication, enabling a single assessment process to examine the project's likely impacts and inform statutory decisions.

The Commonwealth Minister or delegate will decide whether the project is approved, approved with conditions or refused under the EPBC Act, after having considered the Minister for Planning's assessment under the *Environment Effects Act* 1978 at the conclusion of the EES process.



3 Preparing the EES

3.1 General approach

The EES should provide a clear, objective and well-integrated analysis of the potential effects of the proposed project, including proposed environmental management measures, as well as feasible alternatives. The description and assessment of effects must not be confined to the immediate area of the project but must also consider the potential of the project to impact on nearby environmental values, including areas potentially impacted by offsite components of the project.

The EES needs to document the analysis of the significance of the potential effects of the project, with consideration of the following approach which is to be applied for the specific environmental matters and issues set out in section 4 of this document:

- Characterise the existing environment and identify relevant environmental values to underpin impact assessments, having regard to the systems and risk-based approach.
 - Characterisation of the existing environment is to be informed by relevant databases and registers, literature (and published data), previous studies, land use history, overlays in relevant planning schemes, community observations (including citizen science and information from residents and landholders in or adjacent to the area of interest), appropriate targeted and/or seasonal surveys and modelling of the potential and actual presence of sensitivities (such as threatened species and communities, cultural heritage etc) consistent with Commonwealth and state guidelines, conservation advices and threatened species recovery plans or action statements. Where surveys do not identify a sensitivity, but past records and/or modelling analysis suggest that it may occur, a risk-based, precautionary approach to the further investigation and assessment of its occurrence should be adopted.
- Identify the potential effects of the project on the environment (pre-mitigation), including those caused indirectly as a
 result of proposed activities, considering aspects such as magnitude, extent, duration, and significance of change in
 the values of each asset.
- 3. Consider associated uncertainty of available predictions or estimates.
- 4. Present design refinement and environmental management measures that could achieve avoidance, substantial reduction and/or mitigation of the potential effects and in doing so, apply the mitigation hierarchy with justification of why higher order measures cannot be applied.
 - i. Avoidance: measures taken to avoid creating adverse effects from the outset, such as careful spatial or temporal placement of infrastructure or disturbance.
 - ii. Minimisation: measures taken to reduce the duration, intensity and extent of impacts that cannot be completely avoided.
 - iii. Rehabilitation/restoration⁶: measures taken to stabilise or restore an area after disturbance to achieve previous, improved or future land uses such as ecosystems following exposure to impacts that cannot be completely avoided or minimised.
 - iv. Offsets⁷: measures taken to compensate for any residual, adverse impacts after full implementation of the previous three steps of the mitigation hierarchy.
- 5. Assess the likely residual effects of the project on the environment and evaluate the significance of each effect taking into account the likely effectiveness of the design and environmental management measures. Significance of residual effects should consider local, regional, state and federal matters.
 - Residual environmental effects need to be clearly described for each project phase, including construction, operation and decommissioning considering magnitude, extent, duration and significance of change in the values of each asset/value. The description and assessment of effects must also consider the potential of the project to impact on

⁶ and 7 The proponent is encouraged to identify opportunities to engage with Traditional Owner groups to develop and deliver rehabilitation/restoration measures as well as environmental offsets.



nearby environmental values beyond the immediate project area, including areas downstream. In addition, the cumulative effects of the project in combination with other existing and planned activities in the broader area/region should be assessed for all residual adverse effects and considered in design of environmental management measures and monitoring programs.

6. **Propose an approach to managing performance** that should include criteria, monitoring and evaluation to check that predicted outcomes are being achieved during project implementation, as well as contingency approaches if monitoring demonstrates adverse effects more than predicted or permitted.

In addition, the cumulative effect of the project in combination with other activities in the broader area/region needs to be assessed for all potentially significant adverse effects.

3.2 Content and format of the EES

Overall, the main report should include:

- an executive summary;
- a description of the project, including its objectives, rationale, key elements, resource use, associated requirements for new infrastructure and use of existing infrastructure;
- an overview of the proponent's environmental performance and track record, including experience in delivering similar projects, organisation health, safety, environmental and community engagement policies, ability to build trusted relationships with stakeholders and Traditional Owner groups and whether the proponent has been subject to any past or present proceedings under a Commonwealth, state or territory law for the protection of the environment or the conservation and sustainable use of natural resources:
- a description of the approvals required for the project to proceed, and their relationship to relevant laws, policies, strategies, guidelines and standards;
- a description of feasible alternatives capable of substantially meeting the project's objectives that may also offer environmental or other benefits including the basis for any nomination of a preferred alternative;
- a description of the scope, timing8 and method for studies or surveys used to provide information on the values of the project areas, as well as any records and other data from local sources gathered and considered as appropriate;
- descriptions of the existing environment and the predicted future environment (such as projected climate change scenarios), where this is relevant to the assessment of potential effects;
- appropriately detailed assessments of potential effects (direct and indirect) of the project (and feasible
 alternatives) on environmental assets and values, relative to the "no project" scenario, together with an estimation
 of degree of uncertainty associated with predictions;
- clear, active measures for avoiding, minimising, managing and monitoring effects, including a statement of commitment to implement these measures;
- predictions of residual effects of the project assuming implementation of proposed environmental management measures;
- any proposed offset measures where avoidance and other mitigation measures will not adequately address effects on environmental values, including for relevant MNES;
- assessment of cumulative impacts with other existing and proposed developments in the region;
- documentation of the process and results of the consultation undertaken by the proponent during the preparation
 of the EES, including the issues raised by stakeholders or the public and the proponent's responses to these
 issues, in the context of the EES studies and the associated consideration of mitigation measures;
- evaluation of the implications of legislation and policy for the project and feasible alternatives;
- evaluation against the principles and objectives of ecologically sustainable development9; and

⁸ Surveys of assets, values and potential effects must be timed to ensure they take account of seasonal weather patterns of the area and species detectability.

⁹ Ecologically sustainable development is defined within the Ministerial Guidelines, page 9.



• conclusions on the significance of impacts on local, regional and state matters.

The EES should also include an outline of a program for community consultation, stakeholder engagement and communications proposed for implementation during the construction and operation of the project, including opportunities for local stakeholders to engage with the proponent to seek responses to issues that might arise during project implementation. The EES should also outline an approach to furthering Traditional Owner engagement and partnerships during project implementation including, as appropriate, in the management of Country.

The proponent may choose to prepare a website with interactive functionality to provide an alternative way of accessing EES information, which may complement the conventional EES main report and technical reports. Such an approach should be discussed with DTP Impact Assessment Unit and DCCEEW and if integrated with the EES documentation, the digital information should be provided to the TRG for review.

The proponent must also prepare a concise, graphical-based non-technical summary document (hard copy A4, no more than 25 pages) for free distribution to interested parties. The EES summary document should also include details of the EES exhibition, public submission process and availability of the EES documentation and any digital information.

3.3 Applicable legislation, policies and strategies

In addition to the Environment Effects Act, the EES will need to identify relevant legislation, policies, guidelines and standards, and assess their specific requirements or implications for the project, particularly in relation to required approvals.

The proponent will also need to identify and address any other relevant policies, strategies, standards, subordinate legislation and related management or planning processes, including Traditional Owner Country Plans, that are relevant to the assessment of potential effects of the project.

3.4 Project description and rationale

The EES is to describe the project in sufficient detail both to allow an understanding of all components, processes and development stages, and to enable assessment of their likely potential environmental effects. The project description should canvass the following:

- contextual information on the project, including the proponent's objectives and rationale, their relationship to statutory policies, plans and strategies, including the basis for selecting the proposed project locations and implications of the project not proceeding;
- the project areas and vicinity, supported by plans and maps that show:
 - the location of relevant sensitive receivers;
 - the extent of Crown and private land, existing and planned land uses and waterways;
 - undisturbed areas of native vegetation and other biodiversity assets; and
 - the general layout of the proposed infrastructure and areas of disturbance, including access tracks, containment banks, laydown areas and quarries/borrow pits, proposed exclusion and buffer zones.
- the proposed operational life of the project and planned timing of project phases;
- other necessary works directly associated with the project, such as road upgrades and/or connections, and infrastructure and services relocation;
- risks associated with projected climate change and resilience to these risks including consideration of the principles
 of risk management and standards for risk assessment in the Climate Change Act 2017 e.g. AS/NZS ISO
 31000:2009;
- description of the project's components (supported by visuals and diagrams), including:



- applicable standards and adopted specifications for infrastructure (including transmission and terminal station infrastructure);
- location, footprint, layout and access arrangements during construction and operation;
- clearing or lopping of native vegetation for construction or operation;
- design and expected construction staging and scheduling;
- proposed construction methods and materials, and extent of areas to be disturbed during construction;
- solid waste, wastewater and hazardous material generation and management during construction and operation;
- rehabilitation of site works areas following construction;
- proposed tenure arrangements to provide access for maintenance or other operational purposes;
- lighting, safety, security, and noise requirements during construction and operation;
- hours of construction work and a description of the expected duration of project components, including which components are temporary and which are permanent;
- approach to incorporate sustainability principles and practices into project development and delivery;
- operational requirements including maintenance activities and decommissioning.

3.5 Project development and alternatives

The EES is to document the proponent's design and development process for the project leading to the proponent's preferred form of the project as presented in the EES. This is to include methods for the identification and evaluation of alternatives, and the basis for selecting the preferred alternative(s) examined in detail within the EES¹⁰. The EES needs to describe the process for identification and evaluation of project alternatives, including:

- alternatives considered in the project development and design process;
- methods and environmental criteria for identifying and comparing feasible alternatives, and for selecting preferred alternatives;
- assessment and comparison of the technical feasibility and environmental implications of alternatives, including alternative construction methods;
- the basis for selecting the preferred project layout and design, particularly where the project footprint/alignments are located in proximity to environmentally sensitive areas; and
- how information gathered during the EES process, including from consultation with stakeholders and Traditional Owner groups, was used to consider alternatives and refine the project.

The referral of the project under the EE Act presented the project in terms of an area of interest rather than a proposed alignment corridor. Alignment selection can be a very important way of avoiding or minimising adverse impacts for linear infrastructure projects.

The EES is to document the assessment of environmental effects of feasible alternatives, particularly where these offer a potential to avoid and/or minimise significant environmental effects whilst meeting the objectives of the project. Key aspects of the project for which the EES will need to demonstrate consideration of assessment of feasible alternatives, include (but is not limited to):

¹⁰ The assessment of alternatives does not include evaluating alternatives *to* the project, but rather alternatives *for* the project which would allow project objectives to be met.



- potential corridors and alignments within the Option 5A area of interest, including criteria for excluding corridors and alignments from further consideration;
- siting of the new terminal station at Tragowel and the extent to which selection of that site influences the choice of preferred alignment in either direction;
- comprehensive comparative assessment of overhead construction versus underground construction, including the
 potential for partial underground construction;
- selection of construction methods and proposed technology.

The assessment of environmental effects of relevant feasible alternatives (e.g. alignments, construction methods and designs) needs to address the matters set out in section 5 of these scoping requirements, as appropriate. The depth of investigation of alternatives should be proportionate to their potential to avoid or minimise potentially significant adverse effects and to meet project objectives.

3.6 Environmental management framework

Competent management of environmental performance during project design, construction and operation is required to meet statutory requirements, achieve environmental outcomes, protect environmental values and sustain stakeholder confidence. Hence, the proposed environmental management framework (EMF) in the EES should describe a transparent governance framework with clear accountabilities for complying with approvals and managing and monitoring the environmental effects and risks associated with the construction and operational phases.

The EMF will set the scope for later development and review of environmental management plans for all project phases, including decommissioning where relevant. The entities responsible for development, approval, implementation and review of environmental management plans should be specified, including relevant consultation requirements.

The EMF should reference or address the source baseline environmental conditions against which the evaluation of the residual environmental effects of the project will occur, as well as the efficacy of applied environmental management and contingency measures. The framework should include:

- regulatory context and required approvals and consents, including any anticipated requirements for related environmental management plans, whether for project phases or elements;
- environmental management system to be adopted;
- organisational responsibilities and accountabilities for environmental management;
- environmental risks register to be maintained during project implementation;
- change management process;
- environmental management measures proposed in the EES to address specific issues, including commitments to mitigate adverse effects and enhance environmental outcomes;
- arrangements for management of, and access to, baseline and monitoring data, to ensure transparency and accountability and to contribute to the improvement of environmental knowledge;
- a proposed monitoring program including monitoring objectives, indicators and requirements (e.g. parameters, standards, methods, locations and frequency), and justification for any aspects where monitoring is not proposed;
- complaints recording and resolution;
- environmental incident management;
- · emergency preparedness and response planning;
- auditing and public reporting of performance, including compliance with relevant statutory conditions and standards; and
- review of the effectiveness of environmental management measures and continuous improvement.

The EMF will propose a program for community consultation, stakeholder engagement and communications for all stages of the project, including outlining relevant roles and responsibilities. This will include opportunities for local stakeholders to engage with the proponent to seek responses to issues that might arise during project implementation and a process for complaints recording and resolution.



4 Assessment of specific environmental effects

4.1 Risk-based approach

Preparation of the EES and the necessary investigation of potential effects should be proportionate to the environmental risks posed by the project, as outlined in the Ministerial Guidelines (p. 23). Adopting a systems and risk-based approach to the design and depth of each of the EES studies ensures that a greater level of effort is focused on investigating and managing issues posing higher risk of adverse environmental effects, whereas approaches to examining potential impacts and issues that pose a lower level of environmental risk should involve less depth and effort. Some matters with minimal risk won't need to be analysed and can be addressed in the EES through environmental management. The EES needs to put forward a sound rationale for the level of assessment and analysis undertaken for potential environmental effects or combination of effects arising from the project. The EES should also address any other significant issues that emerge during the investigations.

Scoping requirements do not set the specific approaches or effort to be adopted by a proponent for investigating different effects for their EES. These scoping requirements do, however, provide clarity on the risk-based approach to environmental assessment for the EES, and what the potentially significant effects and priority themes for investigations are. This helps the proponent (in consultation with the department and TRG) tailor their approach to EES studies, investigations and integration, to concentrate primarily on the potentially significant effects and priority themes, which are most important for an adequate EES and subsequent decision-making. This scope identifies the issues for each theme for investigation to be assessed through the application of the general approach for assessment outlined in Section 3.1.

The Minister's decision requiring the EES (Appendix A) and published reasons articulates the rationale for the EES, including primary matters and potentially significant effects that need to be examined. This in combination with key statutory decision-making known for the project, establishes a framework that informs the necessary scope, depth, and desired outcomes of the assessment of environmental effects via the EES. The scope of specific environmental matters needing to be investigated and documented within the EES are set out below in the subsequent sections.

The table below is informed by the Minister's decision and reasons for an EES, organized by investigation theme. Importantly, it also points to pertinent legislation associated with the key statutory decision-making known for the project and the effects and matters that relate to each of those. Further to this, the themes have been categorised into three priority levels. Prioritisation of themes has been informed by information provided by the proponent through the EES referral and proposed study program. This risk screening considers the potential interactions between the proposed project activities and key environmental assets, values and uses and the predicted magnitude, extent, duration, and significance of change in the values of each asset.

Table 1 Investigation themes, potentially significant effects and key statutory decision-making known for the project

Theme	Minister's reasons and decision	Relevant statutory decisions (and associated legislation)				
High priority						
Biodiversity and habitat	Potential effects on biodiversity and ecological values, including loss, degradation or fragmentation of native vegetation and habitat	Planning approval under the <i>Planning and Environment Act 1987</i> . Approval under <i>Environment Protection and Biodiversity Conservation Act 1999</i> . Permits/consents under the <i>Flora and Fauna Guarantee Act 1988</i> and <i>Wildlife Act 1975</i> .				

Aboriginal cultural heritage	Potential effects on Aboriginal cultural heritage values	Approval of Cultural Heritage Management Plans under the <i>Aboriginal Heritage Act 2006</i> . Permit and/or consent under <i>Heritage Act 2017</i> .				
Land use and socioeconomic	Potential effects on agriculture, other land uses and communities	Planning approval under the <i>Planning and Environment Act 1987</i> .				
Medium priority						
Historic heritage	Potential effects on historic cultural heritage values	Permit and/or consent under <i>Heritage Act 2017</i> .				
Landscape and visual	Potential effects on visual and landscape values	Planning approval under the <i>Planning and Environment Act 1987</i> .				
Greenhouse gas emissions and climate change		Planning approval under the <i>Planning and Environment Act 1987</i> . Reporting targets and emission reduction under <i>Climate Change Act 2017</i> .				
Medium to low priority						
Catchment values and hydrology	Potential effects on water environments including waterways, wetlands and groundwater	Works on waterway permit under the <i>Water Act</i> 1987.				
Roads and transport, aviation, community amenity, human health		Consents or agreements under <i>Road</i> Management Act 2004 to undertake works in, on or under a road. Planning approval under the Planning and Environment Act 1987.				

4.2 Biodiversity and habitat

The preliminary risk screening has found biodiversity to be a high priority for technical investigation of potential impacts. Desktop assessments to date have identified a range of threatened and listed species and communities under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and state *Flora and Fauna Guarantee Act 1999* (FFG Act) which may be or are likely to be present within the Option 5A area of interest, along with a range of parks and reserves which provide important habitat for a range of native species. Many significant reserves and wetlands are located within or adjacent to the project area of interest including the Ramsar listed Kerang Wetlands, Great Spectacle Lakes Complex Wildlife Reserve, the Kara Kara Conservation Management Network (which includes the Kara Kara National Park, Morrl Morrl Nature Conservation Reserve and Mount Bolangum Nature Conservation Reserves), Tragowel Swamp, and Bunguluke Wetlands.



4.2.1 Issues

- Direct or indirect loss, disturbance and/or degradation of terrestrial and aquatic biodiversity values, including native vegetation, listed or other protected flora and fauna species under the EPBC Act and FFG Act and nearby habitat that may support listed or other protected flora, fauna or ecological communities.
- Potential for significant effects on native vegetation, listed threatened ecological communities, key threatened flora species and key threatened fauna species.
- Potential initiation or exacerbation of listed potentially threatening processes under the FFG Act.
- Potential impact on the ecological character and limits of acceptable change of the Kerang Wetlands Ramsar site.
- Potential impact on groundwater dependent ecosystems caused by groundwater drawdown or surface hydrological changes.
- Disruption to the movement of fauna (both day and night) between areas of habitat across the broader landscape, including risk of collisions with transmission line infrastructure.
- Potential cumulative effects on listed threatened flora and fauna species, from the project in combination with other projects.
- The availability of suitable offsets for the loss of native vegetation and habitat for listed threatened species under the EPBC Act and/or FFG Act.

4.3 Aboriginal cultural heritage

The preliminary risk assessment has identified Aboriginal Cultural Heritage as a high priority for technical investigation of potential impacts. This prioritisation is due to the significant length of the transmission corridor and the extensive history of Aboriginal occupation in the area. Numerous Aboriginal cultural heritage sites and values have been identified within the draft corridor. Despite efforts to avoid these areas during the design phase, there remains a potential for physical disturbance and impact, particularly at proposed tower locations and the terminal station, as well as potential impacts to intangible cultural values. At the time of lodging the EES referral, there were 121 known Aboriginal Places within or near the draft corridor, comprising 230 individual components.

4.3.1 Issues

- Identification of areas of known Aboriginal cultural heritage and model areas with the potential to contain Aboriginal cultural heritage and any known or previously unidentified intangible Aboriginal cultural heritage values associated with the project area, including values associated with biodiversity, landscape or other elements.
- Meaningful engagement with registered Aboriginal parties and other Traditional Owner groups or representatives
 having regard to Aboriginal Heritage Regulations 2018 to determine extent, nature and significance of any
 Aboriginal cultural heritage places, both tangible and intangible, or areas of sensitivity.
- Supporting ongoing Traditional Owner participation in project development and implementation.
- Destruction or disturbance of Aboriginal places.
- Potential for indirect impacts on Aboriginal cultural heritage places close to the project area.
- Potential direct or indirect impacts on or loss of intangible Aboriginal cultural heritage values associated with the project area and surrounds.
- Protection and preservation of tangible and intangible cultural heritage, where opportunities are available, in partnership with Traditional Owners.
- Implementation of management and contingency measures, in accordance with the requirements for a Cultural Heritage Management Plan (CHMP) under the *Aboriginal Heritage Act 2006.*
- Plan(s) or partnerships with RAPs and Traditional Owners to protect intangible and tangible cultural heritage.

4.4 Land use and socioeconomic

Land use and social aspects have been identified as high priority technical investigations of potential impacts, due to the extensive length of the proposed transmission corridor, which traverses a variety of land uses such as agricultural areas, townships and settlements, airstrips, parks, reserves, and significant environmental assets. The potential for social impacts, whether real or perceived, can influence the wellbeing of individuals, communities, and businesses, as well as social cohesion, with possible long-term consequences and lasting changes.

Bushfire risk has also been identified as a high-priority technical investigation due to concerns regarding the ability to effectively manage and fight fires in proximity to transmission lines and associated infrastructure.



Agriculture has been considered a high priority for assessment of potential impacts, as the draft corridor is predominantly located in agricultural areas that are of considerable importance to the community.

4.4.1 Issues

Land use and socioeconomic

- Potential significant disruption, both long and short-term, to existing and/or proposed land uses, public
 infrastructure and fire and emergency management, with associated economic and social effects.
- Potential for impacts on reasonably foreseeable upgrades to public infrastructure.
- Potential impact on tourism and tourist attractions within and around the project area of interest
- Potential adverse economic effects, including both direct and indirect effects on employment and local economy.
- Potential effects on the community and social setting of the project area of interest.

Agriculture

 Potential adverse impacts on agriculture or other forms of farming, including direct and indirect effects on productivity, constraints on cropping or grazing and restrictions on farming practices.

Bushfire

• Implications of the project for fire risk management or bushfire suppression on surrounding land, including fire ignition risks arising from the project.

4.5 Historic heritage

Historic heritage has been assigned a medium priority for investigation of potential impacts, due to the ability to identify listed sites in relevant registers and avoid them during the placement of permanent infrastructure. However, impacts on both known and potential historical heritage are anticipated during construction, including those related to temporary works, with all impacts being permanent. Any potential impacts on unknown heritage sites would most likely arise during construction and would need to be understood and managed accordingly.

4.5.1 Issues

- Identification and documentation of any known and previously unidentified places, objects and sites of historic
 heritage significance within the project area and its vicinity in accordance with the *Heritage Act 2017* and Heritage
 Victoria's Guidelines for Conducting Archaeological Surveys (2024) or updates.
- Potential direct and indirect effects of the project on sites and places of historical cultural heritage significance, having regard to the *Guidelines for Investigating Historical Archaeological Artefacts and Sites* (Heritage Victoria, 2015) or updates.
- Management of historic heritage investigation/excavation during construction and operation through an unexpected find protocol, consistent with the Heritage Act 2017 and relevant protocols.

4.6 Landscape and visual

A medium priority level for technical investigation of potential landscape and visual impacts is based on the infrastructure associated with the project having the potential to affect the visual amenity of residents located along the route, in both townships and individual dwellings. There are also areas along the project area of interest where there are high points in the landscape, such as the Mt Bolangum Nature Conservation Reserve (NCR), Big Tottington NCR and Morri Morri NCR in the southern area, and Mount Buckra Scenic Reserve, Charlton East Bushland Reserve and Howells Hill Scenic Reserve in the vicinity of Charlton.

4.6.1 Issues

- Potential effects on significant landscape values (such as landscape character and features) and landforms in the
 vicinity of the project area of interest, especially national parks, other reserves and areas identified for their
 landscape values.
- Potential for nearby landowners, residents and communities to be exposed to significant visual effects, both in public and private viewsheds, from project infrastructure.
- Potential cumulative impacts of the project in combination with other visually conspicuous developments on landscape values of the region.



4.7 Greenhouse gas emissions and climate change

Climate change considers the project's contribution to greenhouse gas emissions and climate change, and the implications of climate change on the project. These aspects of technical assessments have been identified as medium priority. This prioritization reflects significant level of interest in these issues. Additionally, the project must account for climate change implications to enhance the resilience and durability of infrastructure and minimize potential failures.

4.7.1 Issues

- Potential for emissions of greenhouse gases to result from the project during its construction and operations, and the implications of these emissions in the context of the targets outlined in the *Climate Change Act 2017*.
- Potential risks to the project's ongoing sustainability including susceptibility to extreme weather events in the context of modelled climate change scenarios.

4.8 Catchment values and hydrology

The preliminary risk screening has resulted in surface water being considered as a medium priority and groundwater and geology and contaminated land as a low priority for technical investigation of potential impacts, reflecting the varying levels of potential for project-related impacts on these environmental resources and values.

The medium priority assigned to surface water is due to the moderate likelihood of interaction between the project and surface water environments. Key areas of concern include transmission line crossings over a number of significant waterways including the Murray River, Avoca River, Wimmera River, Loddon River and Six Mile Creek, and infrastructure installation within floodplain areas, which could lead to potential alterations in surface water flow, water quality, or flood risk.

In contrast, groundwater has been assigned a low priority based on the limited potential for interaction. The foundations for the transmission structures are expected to be relatively shallow and are anticipated to have minimal impact on groundwater, as the depth of excavation is unlikely to intersect with significant groundwater levels. As a result, the risk of groundwater contamination or depletion from construction activities is considered low.

A low priority to geology and contaminated land aspects reflects the predominant historical agricultural land use across most of the project area. Although there is some potential for historical contaminating activities, these are generally well-documented and can be effectively avoided. Similarly, the likelihood of encountering acid sulphate soils is limited, and any areas where these soils might be present can also be avoided.

4.8.1 Issues

Surface water

- Potential for adverse effects on waterways, floodplains and wetland systems (including permanent and ephemeral waterways and Ramsar listed wetlands).
- Consideration of the potential for the project to impact on water and catchment values in NSW.

Groundwater

• Potential for adverse effects on the functions, values and environmental values of groundwater due to the project's activities, including water extraction/dewatering, intersection and impeding flows.

Geology and contaminated land

- Potential for disturbance of contaminated, saline, dispersive or acid sulphate soils.
- Potential for erosion resulting from construction and operation due to vegetation loss or other factors.



4.9 Roads and transport, aviation, community amenity and human health

Roads, transport, community amenity, and human health aspects have been assigned varying levels of priority for investigation of potential impacts through preliminary risk screening. Roads and transport have been identified as a medium priority for technical investigation of impacts, due to factors such as the use of local roads for accessing the construction corridor, potential safety issues related to property access and egress, the use of roads that overlap with school bus routes, and the risk of road deterioration from construction traffic.

The preliminary risk assessment has identified aviation as a low priority investigation of potential impacts. While the draft corridor is proposed in the vicinity of both certified and non-certified aerodromes, proper design and planning, along with adherence to the Obstacle Limitation Surfaces for significant aerodromes, can reduce and mitigate these risks.

Community amenity aspects range from medium (noise and vibration) to low (air quality) priority for technical assessment of potential impacts. Noise and vibration are considered medium priority because of the noise generated during construction and the potential for aeolian and corona noise from transmission lines. However, construction noise and vibration impacts are expected to be temporary, and aeolian and corona noise can be managed with appropriate separation distances. Air quality is a low-priority aspect, as the issue is well understood and dust emission impacts from the project can be effectively managed through the implementation of standard industry practices for dust and air emission control.

Electromagnetic fields has been identified as low priority due to community concerns regarding the potential impacts of transmission infrastructure on human health and livestock. These concerns are valid and warrant attention; however they can be effectively managed through strategic location and design of the infrastructure.

4.9.1 Issues

Roads and transport

- Managing traffic disruptions for residents, businesses and travellers during the construction of the project.
- Potential damage to local and regional road surfaces along transport routes and increased risk to road safety on transport routes.
- Evaluation of proposed traffic management and safety principles to address changed traffic conditions during construction of the project.
- Outline dilapidation assessment and road maintenance/rectification regime to address adverse impacts from project construction.

Aviation

 Potential adverse effects on aerial safety, especially with respect to use of aircraft for farming work and firefighting.

Community amenity

- Potential for adverse effects to local air quality on amenity and at sensitive receptors and on other sensitive land uses during construction of the project.
- Potential for adverse effects resulting from project-related noise or vibration on amenity and at sensitive receptors (residential, farming, commercial and open space areas) during construction and operation, including addressing EPA Victoria's publication 1826: Noise limit and assessment protocol for the control of noise from commercial, industrial and trade premises and entertainment venues.
- Potential environmental effects resulting from the generation, storage, treatment, transport and disposal of solid and liquid wastes, including soil, from project construction and operation.

Electromagnetic fields

- Risks to human health, including due to electromagnetic or other radiation emissions from project construction or operations.
- Potential electromagnetic interference with communication or infrastructure systems.



Appendix A – Procedures and Requirements for this EES

Procedures and requirements under section 88(5) of the Environment Effects Act 1978

The procedures and requirements applying to the EES process, in accordance with both section 8B(5) of the Act and the *Ministerial guidelines for assessment of environmental effects under the Environment Effects Act 1978* (Ministerial Guidelines), are as follows:

- (i) The EES is to document investigations of potential environmental effects of the proposed project, including the feasibility of associated environmental mitigation and management measures, including:
 - a. alternative corridors, alignments, site locations, designs or other options for the planning, construction or operation of the project;
 - b. potential effects on biodiversity and ecological values, including loss, degradation or fragmentation of native vegetation and habitat;
 - c. potential effects on Aboriginal and historic cultural heritage values;
 - d. potential effects on visual and landscape values;
 - e. potential effects on water environments including waterways, wetlands and groundwater; and
 - f. potential effects on agriculture, other land uses and communities.
- (ii) The matters to be investigated and documented in the EES will be set out more fully in scoping requirements. Draft scoping requirements will be exhibited for public comment for 15 business days, before final scoping requirements are issued by the Minister for Planning.
- (iii) The proponent is to prepare and submit to the Department of Transport and Planning (DTP) an adequate draft EES study program to inform the preparation of scoping requirements.
- (iv) The level of detail of investigation for the EES studies should be consistent with the approach set out in the scoping requirements and be adequate to inform an assessment of the significance and acceptability of potential environmental effects, in the context of the Ministerial Guidelines.
- (v) DTP will convene an inter-agency technical reference group (TRG) to advise DTP and the proponent on the scoping requirements, the design and adequacy of the EES studies and coordination with statutory approval processes.
- (vi) The proponent is to prepare and submit to DTP its proposed EES consultation plan for engaging with the public and stakeholders during the preparation of the EES. Once completed to the satisfaction of DTP, the EES consultation plan is to be implemented by the proponent, having regard to advice from DTP and the TRG.
- (vii) The proponent is to prepare and submit to DTP its proposed schedule for the completion of studies, preparation and exhibition of the EES, following preparation of the scoping requirements. This schedule will be finalised in consultation with DTP and is intended to facilitate the alignment of the proponent's and DTP's timeframes, including for TRG review of technical studies and main report.
- (viii) The proponent is to apply appropriate peer review and quality management procedures to enable the completion of EES studies and documentation to a satisfactory standard.
- (ix) The EES is to be exhibited for a period of 30 business days for public comment, unless the exhibition period spans the Christmas-New Year period, in which case 40 business days will apply.
- (x) An inquiry will be appointed under the Environment Effects Act 1978 to consider environmental effects of the proposal.