

REFERRAL OF A PROJECT FOR A DECISION ON THE NEED FOR ASSESSMENT UNDER THE *ENVIRONMENT EFFECTS ACT 1978*

REFERRAL FORM

The *Environment Effects Act 1978* provides that where proposed works may have a significant effect on the environment, either a proponent or a decision-maker may refer these works (or project) to the Minister for Planning for advice as to whether an Environment Effects Statement (EES) is required.

This Referral Form is designed to assist in the provision of relevant information in accordance with the *Ministerial Guidelines for assessment of environmental effects under the Environment Effects Act 1978* (Eighth Edition, 2023). Where a decision-maker is referring a project, they should complete a Referral Form to the best of their ability, recognising that further information may need to be obtained from the proponent.

It will generally be useful for a proponent to discuss the preparation of a Referral with the Impact Assessment Unit (IAU) at the Department of Environment, Land, Water and Planning (DELWP) before submitting the Referral.

If a proponent believes that effective measures to address environmental risks are available, sufficient information could be provided in the Referral to substantiate this view. In contrast, if a proponent considers that further detailed environmental studies will be needed as part of project investigations, a more general description of potential effects and possible mitigation measures in the Referral may suffice.

In completing a Referral Form, the following should occur:

- Mark relevant boxes by changing the font colour of the 'cross' to black and provide additional information and explanation where requested.
- As a minimum, a brief response should be provided for each item in the Referral Form, with a more detailed response provided where the item is of particular relevance. Cross-references to sections or pages in supporting documents should also be provided. Information need only be provided once in the Referral Form, although relevant cross-referencing should be included.
- Responses should honestly reflect the potential for adverse environmental effects. A Referral will only be accepted for processing once IAU is satisfied that it has been completed appropriately.
- Potentially significant effects should be described in sufficient detail for a reasonable conclusion to be drawn on whether the project could pose a significant risk to environmental assets. Responses should include:
 - a brief description of potential changes or risks to environmental assets resulting from the project;
 - available information on the likelihood and significance of such changes;
 - the sources and accuracy of this information, and associated uncertainties.
- Any attachments, maps and supporting reports should be provided in a secure folder with the Referral Form.
- A USB copy of all documents will be needed, especially if the size of electronic documents may cause email difficulties. **Individual documents should not exceed 10MB as they will be published on the Department's website.**

- A completed form would normally be between 15 and 30 pages in length. Responses should not be constrained by the size of the text boxes provided. Text boxes should be extended to allow for an appropriate level of detail.
- The form should be completed in MS Word and not handwritten.

The party referring a project should submit a covering letter to the Minister for Planning together with a completed Referral Form, attaching supporting reports and other information that may be relevant. This should be sent to:

Postal address

**Minister for Planning
PO Box 500
EAST MELBOURNE VIC 8002**

Couriers

**Minister for Planning
Level 16, 8 Nicholson Street
EAST MELBOURNE VIC 3002**

In addition to the submission of the hardcopy to the Minister, separate submission of an electronic copy of the Referral via email to ees.referrals@delwp.vic.gov.au is required. This will assist the timely processing of a referral.

PART 1 PROPONENT DETAILS, PROJECT DESCRIPTION & LOCATION

1. Information on proponent and person making Referral

| | |
|---|---|
| Name of Proponent: | Transmission Company Victoria Pty Ltd (TCV) (a wholly owned AEMO company) |
| Authorised person for proponent: Position: Postal address: Email address: Phone number: Facsimile number: | Merryn York Director – Transmission Company Victoria Level 22, 530 Collins Street, Melbourne VIC 3000 Merryn.York@aemo.com.au 1800 824 221 N/A |
| Person who prepared Referral: Position: Organisation: Postal address: Email address: Phone number: Facsimile number: | Jeff Smith Market Sector Leader, Environment ANZ AECOM Australia Pty Ltd ('AECOM') Level 11, Tower 2, 727 Collins Street, Docklands VIC 3008 jeffrey.m.smith@aecom.com +61419500925 N/A |
| Available industry & environmental expertise: (areas of 'in-house' expertise & consultancy firms engaged for project) | <u>Transmission Company Victoria Pty Ltd (TCV)</u> TCV a company created by AEMO Victorian Planning (AVP). As a wholly owned subsidiary of AEMO, TCV draws on considerable technical and engineering expertise and resources within AEMO and is being supported by AECOM for the project reference design. <u>AECOM Australia Pty Ltd</u> AECOM Australia Pty Ltd (AECOM) is a large, full-service consultancy and has been engaged as the lead consultant for preparation of the EES (if required) and all other approvals including an approval under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cth) (EPBC Act) (if required), Planning Scheme Amendment(s) under the <i>Planning and Environment Act 1987</i> (Vic) (PE Act) and Cultural Heritage Management Plans (CHMPs) under the <i>Aboriginal Heritage Act 2006</i> (Vic) (AH Act). AECOM has identified 17 specialist areas requiring assessment and has selected a number of specialist subconsultants to augment the consultant team. <u>Other consultants and expertise</u> <u>Aurecon</u> Aurecon is a design, engineering and advisory consultancy and has been appointed to manage the stakeholder engagement process. |

2. Project – brief outline

Project title:

Victoria to New South Wales Interconnector West (Victorian component).

Scope of this referral

The Victoria to New South Wales Interconnector West is a proposed new high-capacity 500 kiloVolt (kV) double-circuit overhead electricity transmission project, which will include components situated within both Victoria and New South Wales, referred to in this document as '**VNI West**'.

This EES referral relates only to the components of VNI West situated within Victoria, referred to in this document as '**the Project**'.

The processes to obtain the necessary State-level environmental approvals for the components of VNI West situated in NSW (**NSW Component**) are proposed to be undertaken in accordance with NSW environmental assessment and approvals processes.

Project location: (describe location with AMG coordinates and attach A4/A3 map(s) showing project site or investigation area, as well as its regional and local context)

The proposed Project is proposed to be located in the Option 5A area of interest adopted by TCV for development of the VNI West transmission infrastructure (refer dotted line in Figure 1 in Attachment A). The Project has transmission line connection point 'bookends' in the south at Bulgana and at a crossing point at the Murray River in the north to align with the NSW component of the project. The Option 5A area of interest was selected by TCV after assessment of several alternative corridors from a regulatory, cost, technical and environmental perspective. This process commenced in 2019 and culminated in the selection of the Option 5A area of interest in July 2023.

TCV conducted desktop studies to assess the environmental and cultural values within the Option 5A area of interest, as well as consulted with stakeholders in the area, and has nominated a draft corridor (refer to Figure 1 in Attachment A) where it believes a feasible easement for the transmission line could be located, as well as accommodating a proposed terminal station at 156 Tragowel Road, Tragowel (proposed Tragowel Terminal Station).. This referral has a focus on the draft corridor identified by TCV as potentially the least constrained in the Option 5A area of interest and which is nominated as a component of the Project description.

However, TCV acknowledges that there needs to be flexibility in finding an optimal alignment for the Project and that the engagement and approvals processes may necessitate the location of infrastructure in areas proximal to the draft corridor within the Option 5A area of interest. As such, the referral contemplates the possibility that the Project may be required to locate infrastructure within the draft corridor or in areas proximal to the draft corridor within the Option 5A area of interest based on ongoing landholder and community inputs, the outcomes of technical studies and the assessment process, and as further understanding of the characteristics of the draft corridor and surrounds is developed.

The terrain across most of the Option 5A area of interest, its surrounds and the draft corridor is generally flat with the exception of areas south of the Avon River. Several major rivers are intersected by the draft corridor, including the Avon River, Avoca River, Loddon River and the River Murray, at the border.

The AGM coordinates at the southernmost and northernmost points of the draft corridor proposed by TCV within the Option 5A area of interest are as follows:

- South end – 37 02'22"S, 142 59'31"E; and
- North end – 35 28'20"S, 143 52'26"E.

Short project description (few sentences):

The VNI West project involves the proposed construction of a new 500 kV double-circuit electricity transmission line (with associated infrastructure) to be located in the area between the proposed Western Renewables Link (**WRL**) switchyard (terminal station) in Bulgana in the south and the Murray River north of Kerang (at the Victoria and NSW border), to connect to the New South Wales portion of VNI West. (Refer to Figure 2 in Attachment A).

The Project (as a component of VNI West) will provide an integral link between the Murray River and Western Victoria Renewable Energy Zones (REZs) in both New South Wales and Victoria and load centres in those jurisdictions.

The proposed Bulgana switchyard is subject to the WRL EES process. The Minister's assessment to conclude the WRL EES process is presently not expected to be available for the consideration of the WRL proponent (AusNet) or statutory decision-makers until the latter half of 2025.

3. Project description

Aim/objectives of the project (what is its purpose / intended to achieve?):

As outlined in the previous section, the VNI West project involves the proposed construction of a new 500 kV double-circuit electricity transmission line to be located in the area between the proposed Western Renewables Link (**WRL**) switchyard (terminal station) in Bulgana in the south and the Murray River north of Kerang (at the Victoria and NSW border) and development of the proposed Tragowel Terminal Station. As outlined in more detail in following sections, the Project description which is the subject of this referral comprises:

- Development, construction and operation of approximately 240 km of new 500kV overhead double circuit transmission line with steel lattice towers of between 60-80 m in height;
- Theat proposed 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 (refer to Figure 3 in Attachment B) which has been identified as having the potential to accommodate the Project infrastructure but allows for the possibility that infrastructure may need to be located in the broader Option 5A area of interest as the project progresses.

The Option 5A area of interest was selected by TCV after assessment of several alternative corridors from a regulatory, cost, technical and environmental perspective. This process commenced in 2019 and culminated in the selection of the Option 5A area of interest in July 2023. The eastern boundary of the Option 5A area was influenced by a number of factors, in particular, the desire to avoid the ecologically important grassland habitat in and around the Terrick Terrick National Park which houses the critically endangered Pains-wanderer. This eastern boundary was also influenced by the presence of the ecologically sensitive Kara Kara National Park and Wychitella Nature Conservation Reserve (NCR), as well as the hilly topography in Landsborough Hill NCR. The western boundary of the area was influenced by factors including the need to maintain significant buffers from towns such as Boort and Charlton, avoidance of the Ramsar wetlands in the north close to Kerang and the requirement to align with the NSW component of the project which necessitated identifying potential routes between the Ramsar site and the intensively irrigated agriculture east of Kerang. The extent of this western border was also constrained by the upper Avoca River catchment located to the north of Charlton. A significant network of ecologically sensitive wetlands and floodplain as well as registered Aboriginal cultural heritage values are located in this area which abuts the Option 5A area of interest. The western extent of the Option 5A area of interest was also influenced by technical issues associated with existing transmission infrastructure including the existing Kerang terminal station.

TCV conducted environmental and technical desktop assessments within the Option 5A area of interest to arrive at the draft transmission corridor and the proposed Tragowel Terminal Station which are included in the Project description. Selection of the draft corridor and a suitable site for the new terminal station was based on the principle of avoiding as many areas of environmental, cultural and social value as possible within the Option 5A area of interest, as well as avoiding areas with technical constraints where feasible. Selection of the site for the proposed new terminal station was also informed by a variety of technical and environmental considerations which included:

- requirement for a location proximal to the existing 220 kV transmission line that runs between Bendigo and Kerang;
- the availability of sites in the required location displaying suitable attributes;
- maintaining an appropriate distance from the existing Kerang Terminal station on the Eastern line exit which is required for increased power flow;
- accessible from a major road;
- located within the proposed Murray River Renewable Energy Zone;

- requirement for a relatively level site;
- Preference for a site which has been historically disturbed through farming activities and displaying minimal environmental values.

Based on the environmental and technical studies conducted to date, it is evident that not all values and constraints can be avoided. However, the draft corridor and the proposed Tragowel Terminal Station site are considered generally less constrained than other areas in the Option 5A area of interest.

The draft corridor within the broader Option 5A area of interest is considered to have the potential to accommodate project infrastructure including transmission lines and the proposed Tragowel Terminal Station. However, it is recognised that along the 240 km length of the proposed Project, flexibility needs to be maintained for Project works to occur outside of the draft corridor to accommodate inputs that may be received during the further assessment process. These inputs could include specialist study findings, landholder and community inputs, land use changes in and around the draft corridor and advice from Government agencies as part of the Technical Reference Group (TRG) review process if an EES is required. As such, the referral contemplates the possibility that the Project may be required to locate infrastructure within the draft corridor or in areas proximal to the draft corridor within the Option 5A area of interest based on ongoing landholder and community inputs, the outcomes of technical studies and the assessment process, and as further understanding of the characteristics of the draft corridor and surrounds is developed.

The draft corridor proposed by TCV is included in this EES referral as a basis for further refinement and commencement of a reference design for the Project. The referral contemplates the possibility that the Project may be required to locate some infrastructure within the draft corridor or in areas proximal to the draft corridor within the Option 5A area of interest based on factors such as stakeholder inputs and the environmental assessment process. It is TCV's intention that the ultimate route and location of transmission infrastructure will be based on ongoing landholder and community inputs, the outcomes of technical studies and the assessment process, and as further understanding of the characteristics of the draft corridor and surrounds is developed.

As outlined in the [VNI West Project Assessment Conclusions Report \(PACR\)](#), the Project will harness renewable generation from the Murray River and Western Victorian REZs and deliver approximately \$1.4billion in net market benefits to energy consumers and has the potential to harness sufficient energy to power up to 2.3 million homes.

Background/rationale of project (describe the context / basis for the proposal, e.g. for siting):

Australia's ageing coal-fired power stations are progressively being decommissioned after decades of service as Australia transitions to renewable energy. The age of Australia's power stations and the economics of the electricity market are accelerating these closures.

The need for new transmission was identified in AEMO's [Integrated System Plan 2022 \(ISP\)](#) report. The ISP identified that there was a requirement to strengthen the connection between the power grids in New South Wales and Victoria, as well as linking future renewable energy zones with the National Electricity Market (NEM). The need has also been identified in the [Draft AEMO 2024 Integrated System Plan](#) which is currently in a consultation phase.

Analysis conducted by AEMO as National Transmission Planner, indicates that the lowest cost replacement for retiring coal-fired power generation is renewable energy from the sun and the wind – backed up by batteries, gas and hydro to smooth the intermittency of solar and wind generation, and connected by transmission to provide diversity of geographic generation resources and therefore greater reliability security.

One of the challenges presented by the energy transition in Australia is that projects like VNI West are required to connect these new and diverse sources of electricity with Australian homes and businesses. Existing transmission infrastructure cannot be relied upon because the new, renewable sources of energy are geographically spread out and not concentrated at the locations

where existing transmission currently runs, such as the coal generation regions of the coalfields in the Latrobe Valley in Victoria and the Hunter Valley in NSW.

VNI West (of which the Project forms a part) proposes to build a new electricity transmission line between Victoria and New South Wales, together with associated infrastructure. It will harness clean, low-cost electricity from REZs in both states and improve the reliability and security of electricity supply as ageing coal-fired power stations are retired.

AVP and Transgrid (the New South Wales transmission planner) are completing the early planning and regulatory investment process for VNI West.

A draft corridor for the Project has been identified following feedback from Traditional Owners, landholders, community members, local, State and Commonwealth government agencies and stakeholders, as well as data from ongoing technical, engineering and environmental assessments.

The Project (as a component of VNI West) will:

- collect and share clean, low-cost renewable power from the wind and solar-rich Murray River REZ and Western Victorian REZ with the potential to harness sufficient energy to power up to 2.3 million homes;
- strengthen the connection between the power grids in Victoria and New South Wales and provide access to renewable energy stored in the Snowy 2.0 pumped hydro scheme; and
- improve the security and reliability of the electricity network as coal-fired power stations are retired.

Main infrastructure components of the project (nature, siting & approx. dimensions; attach A4/A3 plan(s) of site layout if available):

The main infrastructure components of the Project are as follows:

- The development, construction and operation of approximately 190 km of new 500kV overhead double circuit transmission line (typically within an easement of approximately 70 – 120 metres minimum width) between the proposed Bulgana switchyard (terminal station) being developed as part of the separate WRL project and the proposed Tragowel Terminal Station;
- The development, construction and operation of approximately 50 km of new 500kV overhead double circuit transmission line between the proposed Tragowel Terminal Station and the Murray River (typically within an easement of approximately 70 – 120 metres in width) where the Project interfaces with the NSW Component, which is not part of this referral;
- The new 500kV overhead double circuit line will most likely be configured as steel lattice towers with the height, span and spacings of these towers to be determined during design, but tower spacings are expected to be in the order of 400 m with towers generally between 60 and 80 metres in height;
- The new proposed Tragowel Terminal Station which includes both 500 kV and 220 kV equipment. This will include infrastructure including transformers, circuit breakers, isolators, steel lattice sections, control buildings and other associated equipment. It is expected that this will be a single site with a fenced perimeter; and
- Modifications to the existing 220 kV transmission line that runs between Kerang and Bendigo will be required at the proposed Tragowel Terminal Station. These modifications are expected to follow the existing lattice steel tower design.
- A number of temporary construction laydown areas which have been identified and will be assessed as part of the environmental approvals process.

The Project infrastructure is proposed to be located within the draft corridor or in areas proximal to the draft corridor within the Option 5A area of interest based on factors such as stakeholder inputs and the environmental assessment process. Figure 3 in Attachment B shows a draft corridor within the Option 5A area of interest proposed by TCV as having the potential to house the transmission line and terminal station for the Project. The final location of Project infrastructure within the draft corridor or in areas proximal to the draft corridor within the Option

5A area of, will be confirmed as a result of inputs that may be received during the further assessment process, including findings of specialist studies, landholder and community inputs and advice from Government agencies as part of the TRG review process.

TCV has elected to lodge this EES referral for the Project description outlined earlier in this referral, including the draft corridor, without a proposed transmission line easement or reference design for the Project. TCV recognises that optimising the location of transmission towers and development of a reference design will benefit from detailed discussions with landowners in relation to farm management practices to enable micro-siting to minimise impacts. This process will also enable involvement by a Government appointed TRG if an EES is required to assist with consideration of potential alternative alignments for the transmission line if required. It will also allow further desktop evaluations and field studies to occur to inform selection of the most appropriate transmission line easement within the draft corridor or in areas proximal to the draft corridor within the Option 5A area of interest based on factors such as stakeholder inputs and the environmental assessment process.

Ancillary components of the project (eg. upgraded access roads, new high-pressure gas pipeline; off-site resource processing):

Access upgrades

Wherever possible, the Project would seek to use existing public roads, access points and intersections. These roads, access points and intersections would be upgraded where required to accommodate construction vehicles.

There may be a need for new site vehicular and pedestrian access arrangements (such as new driveway crossovers to existing public roads and potentially new access tracks) to be built where possible within the future transmission easement corridor, where suitable vehicular/pedestrian access arrangements from public roads do not exist. The extent and locations of these would be subject to detailed design of the Project, however the Project would seek to use and upgrade existing access points and access arrangements from public roads where practicable, to minimise disruptions to the road network and existing operations conducted on affected private land.

Laydown areas

The Project will also involve a number of temporary laydown areas for construction activities. Potential laydown area sites have been identified and will be assessed in the further assessment process or be the subject of secondary approvals in the event that the detailed design process results in alternative areas being identified. A number of potential temporary laydown areas have been identified within the draft corridor which will be further refined in consultation with the landholders and assessed as part of the environmental approvals process. The suitability of these potential laydown areas will be assessed during the further assessment process or alternative approval process and will also be subject to further landholder discussions.

Upgrades to existing infrastructure

There may be the need for some upgrades to existing infrastructure at other locations such as earthing upgrades at existing towers which are not part of but are related to the Project. As these are minor upgrades to existing infrastructure, they are not considered to require an impact assessment as part of this referral for the Project. In the event that any material upgrade emerges as part of the detailed design process that may have a significant cumulative impact or significant adverse effects, it would either be incorporated into the Project as part of the further assessment process or made the subject of a secondary approval. Refer to section 5 (Proposed Exclusions) which also addresses these upgrades to other existing infrastructure.

Key construction activities:

Pre-construction preparatory works will be necessary to support the construction phase of the Project. This would include site preparation and possible vegetation clearance. Manufacturing of asset components will also commence prior to the construction phase to allow sufficient time for fabrication, testing, certification, and pre-assembly.

Construction of the Project is anticipated to involve the following activities:

- preparation of road access routes from public roads where required including new access points or upgrades to existing farm roads;
- establishment of temporary site offices, hard stand areas and laydown areas/construction compounds;
- transport and storage of construction materials such as cable drums and tower steel.
- where overhead construction is used (the majority of the Project):
 - the excavation, ground improvements and foundations for the towers;
 - installation of tower structures on top of foundations;
 - the removal or lopping of vegetation (if transmission infrastructure cannot avoid areas of vegetation); and
 - reinstatement works.
- for the development of the new terminal station site at 156 Tragowel Road, Tragowel:
 - the excavation, ground improvements and foundations for the equipment to be installed;
 - construction and assembly of the major terminal station equipment, including control buildings;
 - installation of cables and ancillary equipment;
 - cable/conductor connection and commissioning at terminal stations;
 - reinstatement works; and
 - transport, delivery and storage of transformers and other terminal station components.
- While overhead construction is the proposed method of construction, in limited situations where underground construction may be required to provide better technical or environmental outcomes;
 - removal or vegetation (if transmission infrastructure cannot avoid areas of vegetation);
 - excavation of cable trenches and temporary storage of excavated materials;
 - installation of cable ducts when trenchless method required i.e. under watercourses;
 - construction and installation of joint bays; and
 - cable connection and commissioning at each end of the cable.
- establishment of a number of temporary construction laydown areas along the transmission alignment;
- reinstatement works;
- progressive rehabilitation of the transmission lines and new terminal station site and landscaping; and
- other construction related activities to support the development of the Project, including but not limited to, the upgrade of existing roads and bridges (if found to be required during design), concrete batching, temporary fencing and gate installation, plant delivery, traffic control, erosion control, waste disposal, spoil treatment, disposal and stormwater management.

Key operational activities:

The transmission lines are designed for a service life of approximately 70 years. The terminal station is designed to have a minimum service life up to 45 years. During this period activities would include:

- maintenance of the land and vegetation within the easement to ensure the safe and reliable operation of the transmission lines as required under the *Electricity Safety Act 1998* (Vic);
- maintenance of the land and vegetation within the terminal station site to ensure the safe and reliable operation of the terminal station;

- inspections and maintenance of the transmission lines, terminal station and easements at scheduled intervals; and
- responding to faults and complaints.

Key decommissioning activities (if applicable):

Above-ground transmission infrastructure such as terminal station components, towers, overhead cables and conductors will be dismantled and repurposed wherever feasible. Tower foundations are generally left in the ground but can be demolished to a level below ground surface. Areas of hardstand at the terminal station site will be remediated or repurposed for other appropriate uses.

Underground cables (if relevant) would be decommissioned in accordance with relevant industry standards.

Is the project an element or stage in a larger project?

- No Yes If yes, please describe: the overall project strategy for delivery of all stages and components; the concept design for the overall project; and the intended scheduling of the design and development of project stages).

The National Electricity Market (NEM) encompasses both the wholesale electricity market and the physical transmission network and is designed to enable efficient and cost-effective scheduling and sharing of electricity within the national market. Victoria's power generation, transmission and storage assets are part of the NEM. The VNI West project is one of a number of development opportunities outlined in the AEMO Integrated System Plan (ISP) 2022 and the draft AEMO Integrated System Plan 2024 which aim to optimise future generation and transmission within the NEM and provide ongoing security, reliability and least cost electricity to consumers.

The Project (as a component of VNI West) is a standalone project but will connect to the:

- **NSW Component** - which is being assessed separately in NSW and managed by Transgrid as outlined above, at the NSW and Victorian border on the Murray River. The NSW Component is then proposed to link to Project EnergyConnect via a new terminal station at Dinawan, NSW; and
- **Western Renewables Link (WRL)** - which is the subject of EES referral 2023R-04 made by AusNet Transmission Group Pty Ltd, via a new switchyard (terminal station) at Bulgana, Victoria.

Is the project related to any other past, current or mooted proposals in the region?

- No Yes If yes, please identify related proposals.

As outlined in the box above, the Project (as a component of VNI West) is a standalone project but will connect to the NSW Component of VNI West and WRL. It is anticipated that the Project could harness more than 3.4 GW of renewable generation from projects in the Murray River and Western Victorian REZ and the Snowy Hydro 2.0 project.

What is the estimated capital expenditure for development of the project?

\$1.75 billion

4. Project alternatives

Brief description of key alternatives considered to date (e.g. locational, scale or design alternatives. If relevant, attach A4/A3 plans):

AEMO, and more recently TCV, has been progressing the Project (as a component of VNI West) for several years. The regulatory process for the transmission project has involved examination of a number of potential transmission corridors in central Victoria and included ongoing stakeholder engagement and a range of environmental and technical studies.

Preparatory works for VNI West began in December of 2019 with the Regulatory Investment Test for Transmission (RIT-T) process by AEMO. The RIT-T is an economic cost-benefit test to establish the business case for VNI West and to confirm that the investment, ultimately paid for by consumers, will deliver sizable economic benefits. This process included the production of four reports by AEMO, shown in **Table 1**;

Table 1

| | Description |
|---------------|---|
| December 2019 | <p><u>Project Specification Consultation Report (PSCR)</u></p> <p>Seeks feedback on the identified need for new transmission infrastructure and explores potential investment options to address this need.</p> |
| July 2022 | <p><u>Project Assessment Draft Report (PADR)</u></p> <p>Identifies and seeks feedback (through written submissions) on the draft preferred option</p> |
| February 2023 | <p><u>VNI West Consultation Report – Options Assessment</u></p> |
| May 2023 | <p><u>Project Assessment Conclusions Report (PACR)</u></p> <p>Informs on the final preferred option to deliver the highest net market benefits for consumers</p> |

The PSCR released by AEMO identified the potential for future transmission infrastructure across Victoria and NSW via several different corridor options. The options explored, shown in Figure 4 in Attachment C included potential upgrades to the existing network from South Morang to the Murray River, new transmission corridors via Bendigo, Shepparton and Kerang, and the capacity of those options to harness new renewable energy from the potential expansion of REZs in northern Victoria.

Following this, AEMO and Transgrid jointly published the VNI West *Project Assessment Draft Report* (PADR) in July 2022. This report assessed two additional options for VNI West, as seen in Figure 5 in Attachment C. The PADR identified ‘VNI West (via Kerang)’ as the preferred option, connecting WRL (at the proposed switchyard (terminal station) north of Ballarat) with EnergyConnect (at Dinawan) via new stations near Bendigo and Kerang.

In February 2023, AVP and Transgrid published an additional Consultation Report, beginning a supplementary consultation period engaging with key stakeholders in relation to the proposed ‘Option 5’ area of interest and the surrounding region. Members of the local community, Traditional Owners, industry members and consumer groups expressed some concerns to AVP in relation to the Option 5 area of interest.

In March 2023, AEMO engaged AECOM to undertake a constraints analysis and transmission corridor options assessment of the ‘Option 5’ area of interest (refer to Figure 6 in Attachment C). As a result of the analysis, significant environmental constraints were identified in the north-eastern section of the ‘Option 5’ area of interest, in particular, that transmission corridor options had the potential to intercept the ecologically important Patho Plains, which is an area of significant grassland habitat known to support the endangered Plains-wanderer, and Ghow Swamp, which is a place of national cultural significance.

In May 2023, AEMO publicly released its “VNI West Project Assessment Conclusions Report (PACR)” which selected Option 5A (see Figure 7 in Attachment C) as its preferred area of interest to be further refined, and to inform selection of a final transmission corridor. Engagement with stakeholders has been ongoing since the PACR release.

As presented in Figure 8 in Attachment C, Option 5A differs from Option 5 near the Victoria and New South Wales border. Option 5A would connect to Project EnergyConnect at Dinawan northwest of Gunbower National Park via the proposed Tragowel Terminal Station. Option 5A diverges from Option 5 just south of Cope Cope and traverses northeast towards Kerang, past Charlton and Boort.

Once AEMO selected the Option 5A area of interest as preferred, work commenced on identifying potential corridors within the area of interest which could potentially accommodate the transmission infrastructure.

The process of narrowing the Option 5A area of interest to potential corridors involved TCV undertaking a comprehensive environmental and planning constraints analysis and corridor assessment. In June 2023, TCV published the 'VNI West Area of Interest Environmental Constraints Summary Report' (see Attachment D). This report provided details on the environmental constraints identified within the Option 5A area and outlined the next steps in the process to narrow the Option 5A area of interest.

Environmental and technical constraints across the area of interest were identified based on detailed desktop analysis and expert workshops, along with information gathered through community and stakeholder engagement. Areas identified as those to be avoided include aerodromes, significant heritage sites, RAMSAR wetlands, conservation parks and recreation reserves and areas of high ecological value.

Desktop assessments of the area of interest were conducted by seventeen specialist environmental and technical consultant teams which resulted in the identification of important environmental and cultural heritage values and issues relating to ecology and biodiversity, Aboriginal cultural heritage, historic heritage, groundwater, bushfire, landscape and visual amenity, surface water, agriculture, land use and planning, aviation, traffic and transport, air quality, contaminated land, economics, electromagnetic fields (EMF), noise and vibration and greenhouse gas and climate change which could constrain the location of infrastructure.

Desktop assessments investigated environmental and technical constraints and cultural values including:

- Places of Aboriginal cultural heritage significance
- Biodiversity and threatened species
- Existing and future land use including agriculture and infrastructure
- Proximity to dwellings schools and hospitals
- Land uses such as transport networks and airports
- Geography and topography such as water bodies
- Overall length required and number of landowners impacted
- Reducing the number of transmission line angle deviations where possible
- Accessibility for renewable development

The constraints assessment was based on the principles of:

- avoiding environmental, cultural and social sensitivities wherever practicable; and
- minimising potential impacts.

Community members, Traditional Owner groups, landholders and stakeholders provided numerous valuable insights including environmental, social and economic factors for consideration.

TCV has undertaken a regional communications and engagement program to learn more about the communities and land in the area of interest. The TCV project team attended community sessions throughout the region, talking with farmers, other landholders and community members to seek input into the corridor refinement process. Members of the community shared vital details

about their farms and farming, about fragile ecosystems, endangered animals, special places and unique landmarks. People were encouraged to add constraints and opportunities to an online social pinpoint map, adding comments at specific geographic locations.

TCV's interactive map was visited more than 4,000 times and received more than 2,300 comments. These local issues and constraints were added to the information found in publicly available databases and other sources. Some examples of community inputs include:

- Avoidance of industries that are vital to local economies, for example, key tourism hot spots such as parks and reserves, the olive industry near Boort and the large feedlot near Charlton;
- Concerns around the visual impact of the project on the landscape;
- Features including local vantage points, lookouts, hiking trails and recreational areas; and
- Habitat and sightings for numerous endangered species.

Discussions including some On Country Days were held to seek the initial views of Traditional Owners within the area of interest and further our understanding and appreciation of cultural heritage sensitivity, particularly regarding the intangible aspects of cultural heritage. Sites of cultural and historic significance within the area include culturally modified trees, oven mounds, burial sites, and sites of local heritage importance. Traditional Owners have emphasised the importance of intangible cultural values such as spiritual connection with the land, waterways and vegetation, in addition to sites containing artefacts.

The specialist inputs, as well as sensitivities identified through community consultation (Refer to Section 20 for more detail), were used by the engineering design team to identify and assess a number of potential corridor options within the Option 5A area of interest. A potential draft corridor, which is included as an element of the Project description in this referral (Figure 3 in Attachment B) was selected as potentially the least constrained corridor amongst those assessed on the basis that it best met key project deliverables including:

- an efficient connection to the proposed WRL via a new switchyard (terminal station) at Bulgana;
- the least constrained and most technically suitable corridor from Bulgana to a proposed Tragowel Terminal Station located proximal to the existing 200 kV Bendigo-Kerang transmission line based on desktop assessments, site surveys and technical considerations; and
- providing flexibility for an appropriate connection point with Transgrid at the Victoria and NSW border, at the Murray River.

The proposed Tragowel Terminal Station was identified through a variety of environmental, technical and social desktop and field surveys. The site was identified by TCV to be the least constrained environmentally and also met the technical requirements of being located proximal to the existing 220 kV Bendigo-Kerang transmission line, having an appropriate separation from the existing Kerang terminal station and is also easily accessible from a major road.

Reflecting feedback received from the community as well as from ongoing technical, environmental, and engineering studies, the potential draft corridor was designed to avoid sensitive areas wherever possible. This included consideration of populated areas, farming operations and farmhouses, steep or hilly topography, scenic high points, sensitive wetlands, areas prone to flooding and a range of other factors as outlined in Attachment H 'Report on the Draft Corridor for VNI West' which was published in October 2023. Existing and planned infrastructure and bushfire risk were also factored in. The 'Report on the Draft Corridor for VNI West' provides detail on how analysis of land use (agricultural, environmental, and cultural) influenced the potential draft corridor. Analysis of key constraints and local considerations identified that the areas further west and north within the area of interest displayed the least environmental constraints relative to other possible areas in the central and eastern areas.

TCV acknowledges there has been significant community opposition to the Project, particularly from members of the community who have been directly affected. Several community members

have expressed concerns about the potential adverse impacts of the project and questioned the overall justification for the Project.

Examples of items of concern include:

- The need for VNI West and whether alternative options like nuclear, Plan B (an alternative plan put forward from outside of AEMO and currently being independently assessed by Government) and undergrounding have been considered;
- impacts on farming, particularly reduced productivity, restrictions to farming activity and how the infrastructure may impact day to day operations;
- the landholder engagement process and the fairness of the compensation;
- increased bushfire risk and limitations to firefighting near transmission;
- whether feedback received will genuinely inform the project, particularly regarding the final decision for the project to go ahead
- potential impacts of Electro Magnetic Fields (EMF) on both human health and livestock; and
- impact the Project may have on the mental and emotional wellbeing of community members and landholders.

While there has been negative feedback to the Project, there have also been parts of the community who recognise the important role that the Project plays in the energy transition in Australia and its role in assisting Australia to meet its emissions reduction targets.

TCV appreciates that the community has genuine concerns about the potential impacts of the project and is committed to listening to landholders and community members and providing ongoing opportunities for consultation. TCV will continue to provide further information on topics of interest and ensure people are able to access accurate information to alleviate concerns wherever possible.

TCV acknowledges that the draft corridor may be subject to modification as a result of landholder and community inputs, outcomes of technical studies and inputs during the environmental approvals process and this referral contemplates the possibility that the Project may be required to locate infrastructure within the draft corridor or in areas proximal to the draft corridor within the Option 5A area of interest based on factors such as stakeholder inputs and the environmental assessment process

Brief description of key alternatives to be further investigated (if known):

As described in the previous section, the draft corridor which has been identified by TCV as part of the Project description included in this referral was selected after a range of options were assessed within the preferred Option 5A area of interest and was informed by stakeholder engagement. As outlined previously, TCV has elected to lodge this EES referral for the Project description outlined earlier, including the draft corridor, but without a proposed transmission line easement or reference design for the Project.

TCV recognises that optimising the location of transmission towers and development of a reference design will benefit from detailed discussions with landowners in relation to farm management practices to enable micro-siting to minimise impacts, enable involvement by a Government appointed TRG if an EES is required and allow desktop evaluations and field studies to progress to inform selection of the most appropriate transmission line easement within the draft corridor or in areas proximal to the draft corridor within the Option 5A area of interest based on factors such as stakeholder inputs and the environmental assessment process. Acknowledging that there are areas within the draft corridor which have an overlap of constraints which need to be navigated, and areas where several options for location of a transmission easement exist, TCV has maintained a wider draft corridor than the average 2 km in several areas, namely:

- in the southern area of the draft corridor for connecting to the proposed new switchyard (terminal station) at Bulgana (to be developed as part of the WRL project), the location of which, will be determined through the EES for that project;

- in the northern section of the draft corridor to facilitate collaborative selection of the best Murray River crossing point in coordination with Transgrid by considering the constraints on both sides of the Murray River; and
- in the area surrounding the proposed Tragowel Terminal Station to facilitate the connection to the existing 220 kV transmission line that runs between Bendigo and Kerang.

It is proposed that alternative transmission line alignments within the draft corridor or in areas proximal to the draft corridor within the Option 5A area of interest based on factors such as stakeholder inputs and the environmental assessment process, will be assessed early in the EES process (if EES required) with inputs from landholders and the TRG with a final, preferred alignment and reference design selected once all feasible options have been considered. The final easement required for the proposed transmission infrastructure will typically be between 70 – 120 metres wide. Potential impacts of the preferred alignment within the draft corridor, or outside of the draft corridor in the event that landholder and community engagement, technical studies and other inputs identify preferable alternatives, would then be assessed in detail as part the EES process (if required) which would include detailed discussions with landholders, Traditional Owner groups and other stakeholders in relation to the siting of the infrastructure.

5. Proposed exclusions

Statement of reasons for the proposed exclusion of any ancillary activities or further project stages from the scope of the project for assessment:

Works excluded from this referral and that are considered not capable of having a significant effect on the environment and are not considered to be part of the Project include:

- works associated with investigating, testing and surveying land associated with designing and assessing the impacts of the Project;
- service proving to identify existing third-party assets;
- business as usual works at existing terminal stations in order to operate or maintain the network; and
- minor upgrade works at existing terminal stations, where the upgrade works are contained wholly within the existing terminal station footprint and security fence;

6. Project implementation

Implementing organisation (ultimately responsible for project, ie. not contractor):
TCV, a wholly owned AEMO company, is the organisation responsible for the Project and is currently progressing the arrangements to procure early works and services and long lead time equipment. Subject to program finalisation, it is anticipated that the contracts TCV enters will be novated to the transmission provider ultimately appointed to deliver the Project.

Implementation timeframe:
It is intended that construction would commence in the second half of 2026 and be completed in 2029.

Proposed staging (if applicable):
NA

7. Description of proposed site or area of investigation

Has a preferred site for the project been selected?

No Yes If no, please describe area for investigation.
If yes, please describe the preferred site in the next items (if practicable).

General description of preferred site, (including aspects such as topography/landform, soil types/degradation, drainage/ waterways, native/exotic vegetation cover, physical features, built structures, road frontages; attach ground-level photographs of site, as well as A4/A3 aerial/satellite image(s) and/or map(s) of site & surrounds, showing project footprint):

The draft corridor shown earlier in this referral and included in the Project description for this referral is put forward by the proponent as an area identified within the broader Option 5A area of interest as having the potential to accommodate project infrastructure including transmission lines and the proposed Tragowel Terminal Station. It is recognised that flexibility needs to be maintained for project works to occur outside but proximal to the draft corridor to accommodate inputs that may be received during the further assessment process, which could result from specialist studies, landholder and community inputs and advice from Government agencies as part of the TRG review process.

As such, the draft corridor has been proposed by the proponent as potentially the least constrained option with the Option 5A area, but this referral necessarily needs to provide for potential change in the Project to occur in areas outside but proximal to the draft corridor within the Option 5A area of interest based on factors such as stakeholder inputs and the environmental assessment process. The draft corridor is bordered in the south by the proposed switchyard (terminal station) at Bulgana which is being developed and approved as part of the WRL project, then traverses north towards Kerang bypassing Morri Morri Nature Conservation Reserve (NCR) to the west, Charlton to the west, Leaghur State Park to the north and east of Kerang, to connect to Project EnergyConnect at Dinawan in NSW.

Some of the larger townships within proximity of the draft corridor include Boort, St Arnaud, Charlton and Kerang with smaller settlements including Navarre, Dingwall, Durham Ox, Minmindie, Borung and Murrabit. The township of Tragowel is intersected by the draft corridor. The draft corridor has been located at least 5 km distant from the larger towns in the Option 5A area of interest.

Farming, including cropping, grazing and irrigation, is the most prevalent land use within the Option 5A area of interest, and in and around the draft corridor, as is typical for this region of Victoria. The area also contains a variety of intensive agricultural activities including horticulture, feedlots, piggeries, poultry farms and the like.

The existing terrain within the proposed area for investigation for the Project is generally flat, with several instances of floodplain located to the south and north of the draft corridor. There are several major rivers within the vicinity including the Wimmera River, Heifer Station Creek, Avon River, Avoca River, Loddon River, Bullock Creek, Bannagher Creek, Pyramid Creek, Barr Creek and the Murray River. The draft corridor is located approximately 750 m from the RAMSAR listed

Kerang Wetlands, including Johnson's Swamp, Hird Swamp, Fosters Swamp and Cemetery Swamp.

Site area (if known):

The total area of the Option 5A area of interest is approximately 845,550 ha and the total area of the draft corridor identified by TCV is approximately 49,212 ha.

Route length (for linear infrastructure): approximately 240 km.

Route width: The initial Option 5A area of interest is approximately 50 km wide with the width of the draft corridor identified by TCV as offering potential for the location of transmission infrastructure averaging approximately 2 km across but with wider areas particularly in the south to provide flexibility for the WRL connection point near Bulgana and in the north to provide flexibility for a Murray River crossing point to meet the NSW Component (Refer to Figure 3 in Attachment B). The width of the draft corridor identified by TCV ranges between 0.68 km near Charlton, up to 5.55 km near Bulgana.

Once a preferred alignment is selected within the draft corridor or in areas proximal to the draft corridor within the Option 5A area of interest based on factors such as stakeholder inputs and the environmental assessment process, an easement of approximately 70 – 120 metres width will be identified for the location of the transmission towers and lines.

Current land use and development:

Agriculture is the primary land use in the broader Option 5A area and within the draft corridor proposed by TCV, as is typical for this region of Victoria and includes cropping, grazing, horticulture, irrigation areas and animal husbandry. Desktop assessments of current land use data from the Department of Agriculture, Fisheries and Forestry (**DAFF**) identified the following secondary land use classifications as identified under the Australian Land Use and Management (**ALUM**) Classification system:

- irrigated seasonal horticulture;
- grazing irrigated modified pastures;
- irrigated cropping;
- cropping;
- grazing modified pastures; and
- intensive animal production (piggeries).

The northern portion of the Option 5A area of interest and the draft corridor proposed by TCV intersects the Goulburn Murray Irrigation District (**GMID**) and its associated irrigation channels, farms, infrastructure and equipment. The mid and southern sections of the Option 5A area of interest and the draft corridor are dominated by dryland cropping, which gives way to grazing (mostly sheep) in the south of the area of interest. The area of interest also contains instances of intensive animal production, identified by DAFF to be piggeries. Types of agricultural land uses in and surrounding the draft corridor are presented in Figure 9 in Attachment E.

Description of local setting (eg. adjoining land uses, road access, infrastructure, proximity to residences & urban centres):

The Option 5A area of interest and the draft corridor proposed by TCV as potentially the least constrained area for locating transmission infrastructure is located in north-western Victoria, extending from Bulgana to the Victoria-NSW border north of Kerang. The area largely supports agricultural uses, including an extensive network of farms located within the GMID north-west of Boort.

Towns located in proximity to the draft corridor proposed by TCV include Boort, St Arnaud, Charlton and Kerang with smaller settlements including Navarre, Dingwall, Durham Ox,

Minmindie, Borung and Murrabit. The township of Tragowel is intersected by the draft corridor. Townships located in the Option 5A area of interest and in proximity to the draft corridor as well as adjoining infrastructure and roads are shown in Figure 10 in Attachment E. The draft corridor intersects the Local Government Areas of, Northern Grampians, Buloke, Loddon and Gannawarra.

Significant Nature Conservation Reserves (NCR), State Parks and National Parks located in proximity to the proposed draft corridor include:

- Morri Morri NCR;
- Mount Bolangum NCR;
- Leaghur State Park;
- The Great Spectacle Lakes Complex Wildlife Reserve;
- Pyramid Creek NCR; and
- Tragowel Swamp NCR.

Several watercourses are intersected by the draft corridor including Six Mile Creek, the Wimmera River, Heifer Station Creek, Richardson Creek, Richardson River, Wallaloo Creek, Andersons Creek, Avon River, Avoca River, Loddon River, Bullock Creek, Bannagher Creek, Pyramid Creek, Barr Creek and the Murray River.

The draft corridor at its closest point is located approximately 750 m from the RAMSAR listed Kerang Wetlands, including Johnson's Swamp, Hird Swamp, Fosters Swamp and Cemetery Swamp. Other important wetlands located in the Option 5A area of interest and in proximity to the proposed draft corridor include:

- Tragowel Swamp located 7 km south of Kerang; and
- Bunguluke Wetlands, Tyrrell Creek & Lalbert Creek Floodplains located 12.5 km north of Charlton.

Planning context (e.g. strategic planning, zoning & overlays, management plans):

Strategic Planning

State significant planning policies which support the facilitation and development of renewable energy infrastructure include:

- *Amendments to the Planning and Environment Act 1987 resulting from the Climate Change and Energy Legislation Amendment (Renewable Energy and Storage Targets) Bill 2023 embedding climate change considerations at the top of the planning hierarchy requiring authorities to consider climate change when preparing or amending planning schemes;*
- *Policy and Planning Guidelines for Development of Wind Energy Facilities in Victoria* (Department of Environment, Land, Water and Planning, November 2021);
- *Solar Energy Facilities Design and Development Guideline* (Department of Environment, Land, Water and Planning, October 2022);
- *Victoria's Climate Change Strategy* (Department of Environment, Land, Water and Planning, May 2021);
- *Community Engagement and Benefit Sharing in Renewable Energy Development in Victoria* (Department of Environment, Land, Water and Planning, July 2021); and
- *Victorian Renewable Energy Zones Development Plan* (Department of Environment, Land, Water and Planning, February 2021).

There are several Victorian Planning Provisions which may relate to the Project. These include:

- **19.01-2S Renewable Energy.** A key strategy of this clause is to facilitate renewable energy development in appropriate locations;
- **12.01-1S Energy Supply.** The objective of this provision is to facilitate the appropriate development of energy supply infrastructure. Key strategies of this provision include:
 - Support the development of energy generation, storage, transmission and distribution infrastructure to transition to a low-carbon economy; and
 - Develop appropriate infrastructure to meet community demand for energy services.
- **53.13 Renewable Energy Facility (Other than Wind Energy Facility).** The purpose of this provision is to facilitate the establishment and expansion of renewable energy facilities;
- **11.02-2S Structure Planning.** A key strategy of this provision is to encourage renewable energy generation, storage and distribution; and
- **56.09-2 Electricity, telecommunications and gas objectives.** This clause encourages the reduction of greenhouse gas emissions by supporting the generation and use of electricity from renewable sources.

The Gannawarra Planning Scheme includes the following clause;

- **19.01-2R Renewable Energy – Loddon Mallee North strategy**

The Loddon Planning Scheme includes the following clause;

- **19.01-2R Renewable Energy – Loddon Mallee South.** This clause has the strategy to support and facilitate development in renewable energy, waste to energy, carbon sequestration and other new energy opportunities.

The Buloke Planning Scheme includes the following clause;

- **19.01-2L Renewable energy in Buloke.** This clause has the objective to facilitate the development of a more sustainable, renewable energy industry.

The Northern Grampians Planning Scheme includes the following clause;

- **19.01-2R Renewable Energy – Wimmera Southern Mallee.** The strategy of this clause is to support the development of locally generated renewable energy, including bioenergy clusters.

Zones and Overlays

Due to its linear nature, the Project traverses four municipal areas (refer to section below). As a result, there are a variety of zones and overlays encountered along the route, the main ones being:

Victorian Planning Scheme Zones

As presented in Figures 11- 14 in Attachment E, Victorian planning scheme zones within the proposed draft corridor are largely made up of Farming Zone (FZ), but also include:

- Public Conservation and Resource Zone (PCRZ);
- Public Use Zone (PUZ1);

- State Transport Infrastructure Zone (TRZ1);
- Principle Road Network Zone (TRZ2); and
- Significant Municipal Road Zone (TRZ3).

Victorian Planning Scheme Overlays

As presented in Figures 15-18 in Attachment E, Victorian planning scheme overlays within the proposed draft corridor include:

- Floodway Overlay (FO);
- Rural Floodway Overlay (RFO);
- Land Subject to Inundation Overlay (LSIO);
- Bushfire Management Overlay (BMO);
- Environmental Significance Overlay (ESO1, ESO2, ESO3 and ESO4);
- Vegetation Protection Overlay (VPO1 and VPO2); and
- Specific Controls Overlay (SCO2).

Once a preferred transmission alignment is selected within the draft corridor or in areas proximal to the draft corridor within the Option 5A area of interest based on factors such as stakeholder inputs and the environmental assessment process, each specific planning control will be assessed in relation to the proposed location of infrastructure, and the requirements of each control and overlay incorporated into the project design and approvals. Subject to approval by the Minister for Planning, TCV anticipates that a Ministerial Planning Scheme Amendment applying a Specific Controls Overlay and associated Incorporated Document would be the most appropriate means of providing consistent planning controls across the municipalities traversed by the Project.

Agency Requirements

As TCV has lodged this referral with the Minister for Planning to determine the requirement for an EES for the Project, no specific agency requirements have been sought at this point. In the event that an EES is required, the EES process will provide a vehicle for agency requirements to be identified and addressed through the TRG established for the EES.

The draft corridor is in proximity to Kerang Airport which is registered under the Civil Aviation Safety Authority (**CASA**). Any proposed transmission infrastructure will be required to comply with the locational requirements of the CASA and the related Obstacle Limitation Surface (**OLS**) protection buffer requirement of 4.8 km.

Local government area(s):

The Option 5A area of interest and the draft corridor proposed by TCV as a component of the Project description intersects the Local Government Areas of Pyrenees, Northern Grampians, Buloke, Loddon, Gannawarra and Swan Hill and is within 15 km of Yarriambiack and Campaspe as indicated in Figure 19 in Attachment E.

8. Existing environment

Overview of key environmental assets/sensitivities in project area and vicinity
(cf. general description of project site/study area under section 7):

Desktop assessments, community and Traditional Owner engagement, stakeholder consultation and preliminary site appraisals have identified the following environmental sensitivities within the Option 5A area of interest and the draft corridor identified by TCV as potentially being the least constrained to accommodate transmission infrastructure:

- terrestrial biodiversity;
- waterways and environs;
- Aboriginal cultural heritage; and
- sensitive land uses including agriculture, towns and residences, airfields.

Environmental Values

As shown Figure 20 in Attachment F, the Option 5A area of interest and the draft corridor encompass areas of environmental significance. Desktop assessments have identified six Victorian bioregions intersected by the proposed corridor, including the:

- Wimmera Bioregion (Wim);
- Goldfields Bioregion (Gold);
- Victorian Riverina Bioregion (VRiv);
- Murray Malley Bioregion (MuM); and
- Murray Fans Bioregion (MuF).

Common Ecological Vegetation Classes (**EVCs**) likely to be found within the Option 5A area of interest and the draft corridor include Chenopod Grassland, Lignum Swampy Woodlands, Plains Woodland, Grassy Woodland, Hillcrest Herb-rich Woodland, and Box Ironbark Forest. The most common Endangered EVC likely to be encountered in the proposed study area is Plains Grassland. Several ecological communities likely be found within the Option 5A area of interest and the draft corridor identified by TCV are listed as Threatened Ecological Communities (**TECs**) under the EPBC Act. This includes Grey Box (*Eucalyptus macrocarpa*) Grassy Woodlands and Derived Native Grasslands of South-eastern Australia, Natural Grasslands of the Murray Valley Plains White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland, Seasonal Herbaceous Wetlands (Freshwater) of the Temperate Lowland Plains and Grassy Eucalypt Woodland of the Victorian Volcanic Plain.

Significant Nature Conservation Reserves (NCR), State Parks and National Parks located in the area of interest include:

- Morrl Morrl NCR;
- Mount Bolangum NCR;
- Leaghur State Park;
- The Great Spectacle Lakes Complex Wildlife Reserve;
- Pyramid Creek NCR; and
- Tragowel Swamp NCR.

Waterway Environs

A number of watercourses are contained within the Option 5A area of interest and intersected by the draft corridor including Six Mile Creek, the Wimmera River, Heifer Station Creek, Richardson Creek, Richardson River, Wallaloo Creek, Andersons Creek, Avon River, Avoca River, Loddon River, Bullock Creek, Bannagher Creek, Pyramid Creek, Barr Creek and the Murray River.

The draft corridor proposed by TCV for consideration is located approximately 750 m at its closest point from the RAMSAR listed Kerang Wetlands, including Johnson's Swamp, Hird Swamp, Fosters Swamp and Cemetery Swamp. Other important wetlands located in proximity to the proposed draft corridor include:

- Tragowel Swamp located 7 km south of Kerang; and
- Bunguluke Wetlands, Tyrrell Creek & Lalbert Creek Floodplains located 12.5 km north of Charlton.

It is likely that the proposed transmission line would be at a greater distance than 750 m from the Ramsar site, however, it is proposed that an ecological assessment of the potential risk of avifauna collision with the lines will be conducted. In addition to assessing potential avifauna collision risks, there is opportunity through the reference design process to microsite towers to maximise separation distances from water bodies.

Aboriginal Cultural Heritage

The Option 5A area of interest and the draft corridor proposed by TCV contains areas with known and registered sites of Aboriginal cultural heritage. Registered places of Aboriginal cultural heritage significance are places where physical cultural material has been found in the past. These places may consist of singular artefacts or sites or may contain multiple individual items found at one location. At time of lodging this referral, there are 121 known Aboriginal Places within or within immediate proximity to the draft corridor. This consists of 230 components. This includes Low Density Artefact Distributions (LDAD) (94, 40.87%) Scarred Trees (51, 22.17%), Artefact Scatters (42, 18.26%), Earth Features (28, 12.17%), Quarries (6, 2.61%), Shell Midden (5, 2.17%) Aboriginal Ancestral Remains (Burial) (2, 0.87%), Stone Feature (1, 0.43%), and an Object Collection (1, 0.43%). These site types and their context are outlined in the table below.

Given the high archaeological sensitivity of the study area further sites are expected to be located as this study progresses. Based on landform assessments and known site types, lithic artefacts, scarred trees, and mounds are considered the most likely site types to be encountered within the study area.

Initial assessments sought to identify known areas of intangible and sacred sensitivity, areas identified were excised from the area of interest, and informed the draft corridor. Further Traditional Owner engagement is ongoing to ensure a comprehensive understanding of the cultural values of the area. To date, no birthing or mortuary trees have been identified within the study area.

Traditional Owner groups have provided preliminary input into the draft corridor refinement process by providing guidance on areas and sites of importance and will be further engaged as the reference design and micro siting of infrastructure progresses.

| Row Labels | Count | Context |
|-----------------------------------|------------|---|
| Low Density Artefact Distribution | 94, 40.87% | LDADs are stone artefact distributions consisting of fewer than 10 components within a 10m ² area. LDADs are the most common place type within the geographic region and are among the most common Aboriginal Place types located in Victoria. Lithic artefacts are most common in proximity to waterways, though they may be located anywhere within the activity area. Because stone artefacts do not rot or rust, they are often the only evidence of Aboriginal occupation in a particular area. Stone artefacts can provide information about where Aboriginal people lived, how they made other tools, hunted, and prepared food. Sometimes traces of wood, plant food, or animal blood can survive on the edges of flaked stone tools. |
| Scarred Tree | 51, 22.17% | Aboriginal people caused scars on trees by removing bark for various purposes. The scars, which vary in size, expose the sapwood on the trunk or branch of a tree. The removed |

| | | |
|---------------------------------------|------------|---|
| | | <p>bark was used to make canoes, containers, shields, or shelters.</p> <p>These Places are typically found in close proximity to water sources in areas where mature native trees are present. Tree species typical of bearing cultural scars are River Red Gum, Stringy Bark, Black Box, and Grey Box.</p> |
| Artefact Scatter | 42, 18.26% | Artefact scatters are stone artefact distributions consisting of greater than 10 components within a 10m ² area. These are also most commonly located within proximity to waterways, though they may be identified anywhere within the study area. |
| Earth Feature | 28, 12.17% | Earth features may include mounds, soil deposits, or hearths. Aboriginal mounds are places where Aboriginal people lived over long periods of time. Mounds often contain charcoal, burnt clay or stone heat retainers from cooking ovens, animal bones, shells, stone tools and, sometimes, Aboriginal burials. Hearths are remains of former cooking pits that may have been dug out areas lined with stone or clay balls acting as heat retainers. Due to extensive ploughing and disturbance across the region intact earth features are relatively uncommon |
| Quarry | 6, 2.61% | Aboriginal quarries are places where Aboriginal people took stone from rocky outcrops to make chipped or ground stone tools for many different purposes. Some quarries are small, consisting of just a single protruding boulder. Other quarries incorporate many outcrops and areas of broken stone that cover thousands of square metres. |
| Shell Midden | 5, 2.17% | Freshwater middens are accumulations of shell produced by Aboriginal people collecting, cooking and eating freshwater shellfish. Middens usually occur as fairly thin layers or small patches of shell. The shells usually come from both the freshwater mussel (<i>Velesunio ambiguus</i>) and river mussel (<i>Alathyria jacksoni</i>). The shells may be the remains of just one meal or hundreds of meals eaten over thousands of years. Shell middens often contain evidence of cooking such as charcoal, ash, fire-stones, burnt earth or burnt clay. Sometimes they also contain animal bones, fish bones, stone tools and Aboriginal burials. |
| Aboriginal Ancestral Remains (Burial) | 2, 0.87% | <p>Aboriginal burials are normally found as clusters of human bones eroding from the ground or exposed during ground disturbance. Aboriginal customs for honouring and disposing of the dead varied greatly across Victoria, but burial was common.</p> <p>Aboriginal burial places normally contain the remains of one or two people, although cemeteries that contain the remains of hundreds of people buried over thousands of years have been found.</p> <p>Sometimes the dead person was buried with personal ornaments and artefacts. Charcoal and ochre are also often found in burial places.</p> |
| Stone Feature | 1, 0.43% | Stone features in the region include rockwells. Rockwells are hollows excavated in living stone used to catch rainwater. |

| | | |
|-------------------|-------------------------|---|
| | | These hollows are often covered over with capstones to provide year-round access to potable water. |
| Object Collection | 1, 0.43% | Object collections are collections of Aboriginal Cultural Heritage that have been removed from Country and are held at another location. This may be a private collection, a collection being held for scientific study, or a museum collection held with the permission of Traditional Owners. |
| Total | 230, 100.00% | |

9. Land availability and control

| |
|---|
| <p>Is the proposal on, or partly on, Crown land?</p> <p><input type="checkbox"/> No <input checked="" type="checkbox"/> Yes If yes, please provide details.</p> <p>This referral for the Project relates to transmission infrastructure within the Option 5A area of interest and includes a draft corridor proposed by TCV for the location of transmission infrastructure and does not include a preferred alignment or the location of specific infrastructure at this point.</p> <p>Once potential alignment options within the draft corridor or in areas proximal to the draft corridor within the Option 5A area of interest based on factors such as stakeholder inputs and the environmental assessment process have been assessed, a preferred alignment and reference design, including the proposed location of infrastructure, will be selected for assessment during the environmental and planning approvals process. While the vast majority of infrastructure would be located on private land, there is potential for some infrastructure such as temporary construction laydown areas or towers to be located on Crown land or for transmission lines to pass above Crown land such as road and river reserves.</p> |
| <p>Current land tenure (provide plan, if practicable):</p> <p>The Option 5A area of interest and the draft corridor proposed by TCV as part of this referral reflect a combination of freehold land and public land including parks and reserves, road and river reserves and land assigned to other public agencies and authorities.</p> |
| <p>Intended land tenure (tenure over or access to project land):</p> <p>The final VNI West project will be located within an easement for the transmission towers and lines, freehold ownership of the proposed terminal station site and land leased for the temporary laydown areas proposed along the alignment.</p> |
| <p>Other interests in affected land (eg. easements, native title claims):</p> <p>There are areas of native title claim in the Option 5A area of interest and in the southern portion of the draft corridor proposed by TCV as potentially the least constrained to house transmission infrastructure. Areas along the Wimmera River, Anderson Creek, Heifer Station Creek and the Avon River, as well as within Bolganum Flora Reserve and Willaring S.S.R. are held under native title by the Wotjobaluk People. This includes the Wotjobaluk, Jaadwa, Jadawadjali, Wergaia and Jupagulk Peoples. The native title rights are held in trust by the Barengi Gadjin Land Council Aboriginal Corporation (BGLCAC).</p> <p>Native title matters associated with the Project will be governed by the Native Title Act 1993 (Cth.). TCV will comply with the requirements of the legislation and manage any risks to native title posed by the Project through engagement with Traditional Owners and other relevant stakeholders (including government).</p> |

10. Required approvals

| |
|---|
| <p>State and Commonwealth approvals required for project components (if known):</p> <p>The Project may require a number of approvals under both State and Commonwealth legislation. This includes the potential that the Victorian Minister for Planning will require an EES for the project under the <i>Environment Effects Act 1978</i> and that approval under the Commonwealth EPBC Act may also be required.</p> <p>If EPBC Act approval is required, it is expected that the Commonwealth Minister for Environment would assess the Project under the bilateral agreement between the Commonwealth and Victoria where the Victorian EES would inform the Minister's decision.</p> |
|---|

As the proposed project traverses four municipalities, it is anticipated that a Ministerial Planning Scheme Amendment and Incorporated Document would be the most effective means of providing consistent planning controls for the Project (subject to agreement from the Minister for Planning).

The Project will also require several CHMPs to be prepared and approved by the relevant Registered Aboriginal Party (**RAP**) or First Peoples State Relations under the AH Act.

Once a preferred transmission alignment has been selected, and a reference design prepared with the location of infrastructure determined, there is potential for other secondary approvals to be required. These could include approvals for vegetation removal on Crown land under the *Flora and Fauna Guarantee Act 1998 (Vic)* (**FFG Act**), works on or over waterways under the *Water Act 1989* and the like.

Have any applications for approval been lodged?

No Yes If yes, please provide details.

No applications for approvals have been lodged, with this EES referral being the first step in determining the level of environmental assessment required. TCV will also lodge a referral to the Commonwealth under the EPBC Act within a similar timeframe to the EES referral to enable the State and Commonwealth Government's to coordinate decisions and potentially utilise the bilateral agreement between the Governments to assess the project.

Approval agency consultation (agencies with whom the proposal has been discussed):

A number of State agencies and municipalities have been consulted and involved in the Project since 2019. These bodies have provided inputs to the various 'areas of interest' being evaluated for the Project.

On 28 July 2023, TCV convened a half day workshop with relevant state agencies, water authorities and local municipalities to provide a briefing on the Option 5A area of interest and the proposed draft corridor. Agencies provided initial feedback during the workshop and followed up with additional inputs in the weeks following the workshop.

Several follow up meetings were also conducted. Agencies consulted included:

- DTP;
- the Department of Energy, Environment and Climate Action (**DEECA**),
- Agriculture Victoria;
- the Department of Premier and Cabinet (**DPC**);
- VicGrid;
- Parks Victoria;
- Goulburn Murray Water (**GMW**);
- the North Central Catchment Management Authority (**NCCMA**);
- Grampians Wimmera Mallee Water (**GWM Water**);
- the Country Fire Authority (**CFA**); and
- the Northern Grampians, Buloke, Loddon and Gannawarra Councils.

Other agencies consulted:

See above.

PART 2 POTENTIAL ENVIRONMENTAL EFFECTS

11. Potentially significant environmental effects

Overview of potentially significant environmental effects (identify key potential effects and comment on their significance and likelihood, as well as key uncertainties):

The Option 5A area of interest selected by the proponent for the Project was the subject of desktop assessments by 17 technical specialists to identify environmental, planning, social, land use and known Aboriginal cultural heritage values in the area which were mapped and incorporated into a GIS. The values were used to inform selection of the draft corridor from within the area of interest and are shown in Figure 21 in Attachment G. Figures 22 to 25 in Attachment G provide a more detailed overview of the environmental, planning, social, land use and heritage values identified in the southern, south-central, north central, and northern areas of the draft corridor.

A summary of potentially significant environmental effects of the Project is provided below. Detailed constraints considerations are provided in the 'VNI West Area of Interest Environmental Constraints Summary Report' (see Attachment D) and the 'Report on the Draft Corridor for VNI West' (see Attachment H).

As indicated in Figures 21 -25 in Attachment G, there are areas and sites of environmental and cultural value throughout the Option 5A area of interest and the draft corridor, it will not be possible to avoid all areas of sensitivity over the length of the transmission line. Siting of linear infrastructure, such as transmission lines, does provide the opportunity to microsite towers to avoid areas of environmental and cultural sensitivity and avoidance will be the underlying principle applied to the VNI West reference design process. This also creates a need for maximum flexibility in relation to the final location of the Project infrastructure, which may be located within the draft corridor or in areas proximal to the draft corridor within the Option 5A area of interest, as outlined above.

Sensitive areas will be avoided where possible through design to avoid disturbance to these ecological values. If these areas cannot be avoided, mitigation measures will be incorporated into management documentation to minimise and manage potential impacts or further assessment of alternative locations for the location of infrastructure in the broader Option 5A area of interest would be considered. An integral component of developing a reference design for the project will be to identify the least sensitive areas for the crossing of rivers and roads where much of the important remnant vegetation is located. This would involve locating crossing points where the extent and diversity of vegetation enables a crossing with least impact.

The location of the proposed Tragowel Terminal Station was identified by TCv to be the least constrained environmentally when assessing options and also met the technical requirements of being located proximal to the existing 220 kV Bendigo-Kerang transmission line, having an appropriate separation from the existing Kerang terminal station and is also easily accessible from a major road. The selection of the site was further informed based on a variety of desktop assessments and site-based surveys including, ecology, hydrology, geotechnical, noise and vibration, Aboriginal cultural heritage, EMF, civil and transport assessments. The limited environmental sensitivities identified within the proposed Tragowel Terminal Station site should be able to be avoided through the strategic siting of infrastructure within the site.

Ecology constraints

- Southern region – streamside reserves which are home to remnant vegetation, scattered areas of high Strategic Biodiversity Values, EPBC Act listed Swift Parrot Habitat and parks and reserves with high Strategic Biodiversity Values and native flora and fauna have been identified within proximity to the draft corridor. The southernmost point of the draft corridor has two potential options to the west and east and this area does traverse some areas of ecological sensitivity along the Wimmera River. The draft corridor is located to the west of several conservation reserves. Consideration was given to the potential to impact on habitat connectivity through wildlife corridors between the parks

when selecting the draft corridor. North of the Avon River, the area of interest is primarily used for cropping and is relatively clear of significant tracts of vegetation;

- South-central region – The Wooroonook Lakes (Middle and East) Wildlife Reserve is located to the west of the draft corridor. North of Charlton, the area to the west of the draft corridor is characterised by a concentration of areas of high ecological value along the Avoca River and a contiguous grouping of ecologically sensitive wetlands. These areas will be avoided where possible through design to avoid disturbance to these ecological values. In instances where the draft corridor does intersect small parcels of remnant native vegetation, there is flexibility to locate transmission infrastructure around any sensitive values in the detailed design phase of the Project;
- North-central region – The Loddon River floodplain is within this area and within the floodplain, there are multiple series of wetlands, including those along Bannagher and Pennyroyal Creeks with native vegetation along streamside reserves. These areas will be avoided where possible through design to avoid disturbance to these ecological values;
- Northern region – The draft corridor traverses Plumpton Wildlife Reserve, however, selection of the final alignment during the detailed design phase will avoid this Reserve. The Kerang Wetlands Ramsar site is located approximately 750 m to the west of the draft corridor and will be avoided (refer to Figure 26 in Attachment G). The northernmost point of the draft corridor traverses some areas of ecological sensitivity (streamside reserves which support remnant native vegetation) along the Murray River. Potential impacts to these areas will need to be avoided where possible when selecting the final alignment within the draft corridor;
- Threatened EVCs in the northern region of the draft corridor are Lingnum Swampy Woodland (located in nature reserves and wetlands mainly to the east of Boort-Kerang Rd), Chenopod Grassland (located in small, sparse areas northeast of Lake Meran up to Kerang), Plains Woodland (located in Leaghur State Park), and Freshwater Lake Aggregate (Lake Meran). Vegetation Quality Assessments will be conducted by qualified ecologists to further assess these areas, and impacts will be avoided as much as possible; and
- Threatened flora and fauna species have the potential to occur within the draft corridor and surrounds. A detailed likelihood of occurrence assessment and VQA assessments of suitable habitat will be conducted to quantify impacts.

Significant areas within the Option 5A area of interest and in the draft corridor proposed by TCV have been cleared and used for grazing and crop production over many years and display limited ecological values. Detailed desktop assessments and field verification visits have been conducted within the draft corridor to identify areas of remnant vegetation which will require assessment. It is intended that spring/summer ecology surveys will be conducted throughout the draft corridor during the 2023 and 2024 seasons to inform the reference design and enable a full assessment of potential impacts. The surveys will focus on areas where remnant vegetation exists and will not be required in many areas along the route.

Despite the predominantly cleared nature of the Option 5A area of interest and the draft corridor, there are important ecological values present as indicated in Figures 21-25 in Attachment G and described earlier in this section. However, the type and location of transmission infrastructure provides considerable flexibility in terms of minimising potential impacts on ecology. Selection of the draft corridor for the transmission infrastructure was based on a thorough desktop assessment of the Option 5A area of interest and based on the principle of avoidance of significant ecological values, amongst others. Typically, the Project transmission towers will be spaced approximately 400 m apart and can be micro-sited to avoid impacts on vegetation such as grasslands, remanent vegetation and individual trees to the extent practicable. Specific siting to avoid significant ecological values where possible will take place as part of the reference design. There may be the need to clear or lop some vegetation at river crossing points although work to date suggests that there are less vegetated areas at key crossing points such as the Wimmera, Avoca and Avon Rivers. The proposed spring surveys which commenced in 2023 will inform the reference design process guided by the principle of avoidance of native vegetation wherever possible. Once a preferred reference design is developed, specific impacts can be assessed at each tower site, river and road crossing and the proposed terminal station location and further micro-siting conducted if impacts are considered unacceptable. If these areas cannot be avoided, mitigation measures will be incorporated into management documentation to minimise and

manage potential impacts or alternative locations either within or proximal to the draft corridor within the Option 5A area of interest would be assessed.

Surveys conducted for the presence of the EPBC Act listed Growling Grass Frog were conducted at the proposed Tragowel Terminal Station site and found that the species was not present.

Heritage

- Southern region – One heritage registered property, 'The Woolshed, Tottington Homestead and Stone Cottage', is located to the east of the draft corridor between two southern conservation reserves. The southernmost point of the draft corridor has two potential options to the west and east and this area does traverse some areas of cultural sensitivity along the Wimmera River and surrounding Greens Creek. Intrusive works in these areas has the potential to impact on Aboriginal cultural heritage. These areas and sensitive locations will be actively avoided where possible when assessing potential alignments within the draft corridor, or in the wider Option 5A area of interest if required, and during the detailed design phase of the Project;
- South-central region – There are a number of culturally sensitive locations located outside of the draft corridor to the south of Charlton along the Avoca River and in proximity to topographic high points at Mt Gowar, Yowang Hills, Mt Buckrabanyule and within Wychitella NCR. There are also several registered sites of Aboriginal cultural heritage proximal to Lake Terrappee and scattered between Boort and Lake Marmal and between Avoca River and Lake Marmal. These sensitive locations are located outside of the draft corridor and it is unlikely that the Project will impact on these heritage sites. In the event that stakeholder engagement, technical studies or the approvals assessment process results in consideration of areas outside of the corridor in the Option 5A area of interest, being required, further assessment of these areas would be conducted to avoid or minimise impacts. It is noted that meaningful engagement with Traditional Owners and landholders will be required to better understand these cultural values and sensitivities in this area as the reference design progresses to avoid or minimise potential impacts;
- North-central region – The draft corridor has been selected on the basis that it avoids highly sensitive cultural values surrounding Boort and the Loddon River. The identification of the crossing of Loddon River was informed by engagement with Traditional Owners who identified numerous areas of Aboriginal Cultural Heritage such as culturally modified trees and artefact scatters to avoid. These areas include:
 - Dry Lake;
 - Tragowel Swamp and Two Mile Swamp;
 - the region between Boort and Lake Meran;
 - the area of the Loddon River floodplain located to the east of Leaghur State Park; and
 - the Great Spectacle Lakes complex.

As with the south-central region, meaningful engagement with Traditional Owners will be required to better understand these cultural values as the reference design progresses to avoid and minimise potential impact wherever possible;

- Northern region – The draft corridor has been selected to avoid Aboriginal cultural heritage sensitivity adjacent to Pyramid Creek and registered areas of Aboriginal cultural heritage sensitivity adjacent to the Loddon River, the Little Murray River and at Pental Island. There are registered sites of Aboriginal cultural heritage present adjacent to Barr Creek within the draft corridor. These areas will be actively avoided where possible when assessing potential alignments within the draft corridor and during the detailed design phase of the project;
- Waterway environs pose a high risk of intersection with areas of archaeological significance and will be avoided wherever possible. In accordance with the Aboriginal Heritage Regulations 2018 (Vic), the Project will ensure, a 50 m radius buffer exists for a sensitive Aboriginal Place, and a 200 m buffer exists for either side of a waterway;
- A preliminary heritage assessment has been conducted which has identified several scattered areas of registered Aboriginal cultural heritage sensitivity and points of

archaeological significance as described above. Further Aboriginal cultural heritage assessments and consultations will continue to be undertaken to reduce the risk of impacts and to identify further values for avoidance through design; and

- Heritage Overlay areas identified in the relevant Planning Schemes have been identified throughout the area of interest and will be avoided wherever possible through design.

The entire Option 5A area of interest and the draft corridor proposed by TCV include a significant number of registered sites of Aboriginal cultural heritage and many areas of cultural heritage value to Traditional Owners. Desktop assessment has been conducted with registered sites of Aboriginal cultural heritage identified from database searches and mapped to inform selection of the corridor. In addition, TCV has had ongoing engagement with Traditional Owners, including a number of On Country days, to assist in identifying areas where there is Aboriginal cultural heritage which assisted in the corridor refinement process.

While there are important cultural values throughout the area, the type and location of transmission infrastructure required for the Project provides considerable flexibility in terms of avoiding where possible or minimising potential impacts. Selection of the draft corridor for the transmission infrastructure was based on a thorough desktop assessment and based on avoidance of significant values such as cultural values. Typically, transmission towers will be spaced approximately 400 m apart and can be micro-sited to avoid impacts on Aboriginal cultural heritage sites wherever possible during the reference design process. Engagement with Traditional Owners will continue through the reference design and approvals processes with the aim of minimising impacts on culturally sensitive areas. Four CHMPs will be prepared for the Project and Traditional Owners will be invited to participate in fieldwork to ensure that the Project's infrastructure is fully assessed to avoid or minimise impact on cultural heritage. Unexpected finds protocols will also be developed and implemented during the construction phase of the Project to avoid and minimise harm to unidentified Aboriginal cultural heritage wherever possible. In the event that potential impacts on cultural heritage values cannot be effectively mitigated, consideration would need to be given to identifying areas within the Option 5A area of interest which could house infrastructure with a no impact or a lower level of impact.

Landscape and Visual Impact

While the Option 5A area of interest and the draft corridor are generally flat to undulating, there are a number of high points within and adjacent to the draft corridor particularly in the southern section, and around Charlton in the central area:

- In the southern area, high points include Mt Bolangum Nature Conservation Reserve (NCR), Big Tottington NCR and Morri Morri NCR with Kara Kara National Park located proximal to the eastern boundary of the draft corridor; and
- In the vicinity of Charlton in the central area, high points include Mount Buckra Scenic Reserve, Charlton East Bushland Reserve and Howells Hill Scenic Reserve.

Potential visual impacts from transmission towers can occur when the infrastructure is visible from high points or when the infrastructure is located on high points and visible from the surrounding areas. Transmission towers for the Project will typically vary from 60 – 80 metres in height. As most of the high points within the draft corridor are also associated with recreation and other nature-based pursuits, there is potential for users to have a reduced experience from visiting these sites if transmission infrastructure is visible. Based on advice from landscape and visual impact assessment specialists, a 5 km buffer area from sensitive viewpoints is considered the distance where infrastructure should not be visible and have unacceptable impacts. As such, a siting criterion for location of the draft corridor was to apply a 5 km buffer from the topographic high points within the area wherever possible and this has generally been achieved throughout the entire draft corridor (refer to Figure 27 in Attachment G).

It is also recognised that the Project's transmission infrastructure has the potential to affect the visual amenity of residents in both townships and individual dwellings such as farmhouses in some locations. The draft corridor has been located at least 5 km from all townships within the area, with the exception of Tragowel, to minimise or avoid visual impacts wherever possible. Every effort has been made to maximise the separation distances between individual houses and transmission infrastructure where proximity is unavoidable. Where individual landholders may be affected by the proximity of infrastructure, TCV will work with those landholders during the design

process and attempt to microsite towers such that they are not visible from habitable room windows and the like. A detailed landscape and visual amenity assessment will be conducted by TCV to assist with the siting of infrastructure and to conduct a thorough assessment of residual impacts after mitigation measures are applied.

Noise, Vibration and Air Quality

- The proposed Tragowel Terminal Station is likely to be a primary source of noise associated with the Project and is situated in a rural area where regulatory noise limits are likely to be low. Noise due to the substations must comply with EPA Publication 1826 (*Noise limit and assessment protocol for the control of noise from commercial, industrial and trade premises and entertainment venues*) and the General Environment Duty (**GED**) under the *Environment Protection Act 2017* (Vic) (**EP Act**);
- Care will be taken to locate the proposed new terminal station as far away from existing residential dwellings as possible with an absolute minimum allowable offset of 500 metres;
- Construction activities would ideally be as far as possible from sensitive receptors (residences, townships, areas of high ecological significance) to effectively limit dust impacts without major mitigation measures. Maximising the distance between construction activities and receptors is preferable to reduce the need for mitigation measures: and
- During construction there is a potential for adverse effects on the amenity of nearby residents due to the emission of noise during construction. Construction noise would be managed in accordance with EPA Victoria Publication 1834. This includes the development of a plan to manage noise during construction in consultation with the EPA Victoria. Standard controls and management practices are expected to mitigate the effects to an acceptable level. In some instances, nighttime works may not be undertaken due to proximity to sensitive receptors.

Geology and Contaminated Soils

- Construction activities could lead to the activation of potential acid sulphate soils and subsequently to the generation of acidic waters / leachate that can runoff to water environments if it is not managed properly. This has implications on construction costs, as material (if exposed) will require treatment before reuse or disposal. Based on the information presented in the Australian Soil Resource Information System (**ASRIS**), the likelihood of encountering acid sulfate soils (**ASS**) is generally low to extremely low probability throughout most of the draft corridor area, however, there are some areas around rivers or swamps with a high probability of encountering ASS. These areas will be avoided through design where possible. If these areas cannot be avoided, mitigation measures will be incorporated into management documentation to avoid, minimise and manage potential impacts, consider alternative locations within the corridor, or alternative locations in areas proximal to the corridor in the Option 5A area of interest if required; and
- Intrusive construction activities could lead to the disturbance of potentially contaminated soil. Inappropriate management of potentially contaminated soil could result in the exposure of contaminated materials to the surrounding community and environment. The potential for contamination of soil is associated with former and current land use. Fire stations, poultry farms, airfields and townships that may have some industrial activities occurring on the outskirts of the draft corridor area have potential contamination risks. Contamination risks will be assessed in greater detail through the design process.

Surface Water

- As shown in Figure 28 in Attachment G the draft corridor intersects areas of Floodway Overlay (**FO**), which is land that is likely to carry water flows during a flooding event. Location of the final transmission easement and micro-siting may reduce the frequency of intersection with areas of FO. Development in areas identified as FO in the planning scheme will need to meet development conditions which may restrict the siting of infrastructure in these areas;
- Areas adjacent to the Avoca River are at risk of flooding. Extensive areas of Land Subject to Inundation (**LSIO**) and FO overlay up to 12 km wide north of Charlton. Extensive areas

to the northeast, east and southeast of Charlton are subject to FO and LSIO overlay. Areas up to 6 km south of Charlton have experienced extended periods of inundation;

- The Option 5A area of interest and the draft corridor traverses the Loddon River Floodplain located to the north and south of Kerang, extending the width of the draft corridor past Boort. Generally, areas to the east of Boort-Kerang Rd are subject to inundation, with FO and LSIO overlays spanning over 20km wide from west-east in some areas;
- The area northwest of Murrabit was subject to severe flooding in January 2011 and again in November 2022. The aftermath of the floods caused extended road closures due to remnant flood waters for several months. The possibility of floods may limit access; and
- The North Central Catchment Management Authority (**NCCMA**) has conditions for development and works on a floodplain and around designated waterways. A permit is generally required for waterway crossings, infrastructure on a floodplain, and vegetation removal. Typical permit conditions include constructing infrastructure above the 1%AEP flood elevation (e.g., 300 mm where known or 400 mm above existing ground surface where not known).

12. Native vegetation, flora and fauna

Native vegetation

Is any native vegetation likely to be cleared or otherwise affected by the project?

NYD No Yes If yes, answer the following questions and attach details.

What investigation of native vegetation in the project area has been done? (briefly describe)

To date, an overall desktop assessment of vegetation with the Option 5A area of interest has been conducted with a more comprehensive desktop assessment of vegetation conducted within the draft corridor proposed by TCV. Detailed field surveys of roadside reserves within the draft corridor have also been undertaken and it is anticipated that field surveys on freehold properties and other public land will commence in early 2024 as land access agreements with landholders are put in place. As this referral does not include a reference design for the Project, the extent of vegetation required to be removed or lopped cannot be quantified as tower locations and river and road crossing points are not yet known. The reference design process will endeavour to avoid areas of remnant vegetation wherever possible and the micrositing of towers is a preferred approach, particularly as extensive areas of both the Option 5A area of interest and the draft corridor are largely cleared and free of vegetation.

What is the maximum area of native vegetation that may need to be cleared?

NYD Estimated area(hectares)

Unable to be determined at this point.

How much of this clearing would be authorised under a Forest Management Plan or Fire Protection Plan?

N/A approx. percent (if applicable)

Unable to be determined at this point.

Which Ecological Vegetation Classes may be affected? (if not authorised as above)

NYD Preliminary/detailed assessment completed. If assessed, please list.

Figures 29 to 35 in Attachment I show modelled EVCs within the draft corridor proposed by TCV, however this is based on modelled 2005 DEECA data only and no on-ground EVC assessments or mapping have been conducted.

Have potential vegetation offsets been identified as yet?

NYD Yes If yes, please briefly describe.

Other information/comments? (eg. accuracy of information)

N/A

NYD = not yet determined as extent of clearance not yet determined.

Flora and fauna

What investigations of flora and fauna in the project area have been done?

(provide overview here and attach details of method and results of any surveys for the project & describe their accuracy)

As outlined earlier in Section 12 of this referral, an overall desktop assessment of vegetation with the Option 5A area of interest has been conducted with a more comprehensive desktop assessment of vegetation conducted within the draft corridor proposed by TCV. Detailed field surveys of roadside reserves within the draft corridor have also been undertaken. Growing Grass Frog surveys have been conducted at the proposed Tragowel Terminal Station site and found that the species is not present on the site. To date, no fauna surveys have been conducted as the final location of transmission towers and other infrastructure has not yet been determined, however, potential areas of habitat have been identified and will be surveyed as required when a reference design is developed.

Have any threatened or migratory species or listed communities been recorded from the local area?

NYD No Yes If yes, please:

- List species/communities recorded in recent surveys and/or past observations.
- Indicate which of these have been recorded from the project site or nearby.

A desktop search for EPBC Act listed flora and fauna within 5 km of the draft corridor proposed by TCV identified the following species. A likelihood of occurrence assessment or specific database search for species records within the draft corridor has not yet been conducted:

EPBC Act Listed Fauna within 5km

Terrestrial

- Plains Wanderer *Pedionomus torquatus* - Records predominantly east of the Loddon River;
- Eastern Curlew *Numenius madagascariensis* - typically associated with riparian or wetland areas;
- Curlew Sandpiper *Calidris ferruginea* - typically associated with riparian or wetland areas
- Grey Falcon *Falco hypoleucos* - occur in woodlands and utilise scattered trees in open cleared areas;
- Major Mitchell's Cockatoo *Lophochroa leadbeateri* - occur in woodlands and utilise scattered trees in open cleared areas;
- Swift Parrot *Lathamus discolor* - occur in woodlands and utilise scattered trees in open cleared areas;
- Hooded Robin *Melanodryas cucullate* - occur in woodlands and utilise scattered trees in open cleared areas;
- Diamond Firetail *Stagonopleura guttata* - occur in woodlands and utilise scattered trees in open cleared areas; and
- Golden Sun Moth *Synemon plana* – occur in native grasslands and grassy woodlands.

Aquatic Fauna

- Murray Cod *Maccullochella peelii*;
- Macquarie Perch *Macquaria australasica*; and
- Silver Perch *Bidyanus bidyanus*.

The above species are typically found in river systems and waterways as opposed to wetlands. Lakes which have connectivity to river systems may also support the species.

- Growling Grass Frog *Litoria raniformis* - can be found in all aquatic habitats including; Artificial dams, artificial drainage (with pools), rivers, waterways, and wetlands.

EPBC Act Listed Flora within 5km

- Matted Flax-lily *Dianella amoena* - can be found in grassland and woodland environments. The species has a generalised distribution across Victoria.

If known, what threatening processes affecting these species or communities may be exacerbated by the project? (eg. loss or fragmentation of habitats) Please describe briefly.

Given the linear extent of the project and the fact that a final reference design indicating the location of specific transmission towers and the terminal station location has not been developed, it is not possible to determine with any certainty whether there will be an impact on Threatened Species and Ecological Communities. While a preliminary likelihood of occurrence assessment has yet to be conducted and field-based assessments are still ongoing to assess species and community presence within the draft corridor, it is anticipated that some mitigation measures may be required to minimise impacts. Potential impacts to fauna may include loss or fragmentation of habitat, potential for bird and/or bat collisions with infrastructure, predation of native wildlife, and incursion of weeds and/or pathogens.

Potential threatening processes will be identified following a database search and likelihood of occurrence assessment for threatened flora and fauna (EPBC and FFG Act listed) for the draft corridor.

Are any threatened or migratory species, other species of conservation significance or listed communities potentially affected by the project?

NYD No Yes If yes, please:

- List these species/communities:
- Indicate which species or communities could be subject to a major or extensive impact (including the loss of a genetically important population of a species listed or nominated for listing) Comment on likelihood of effects and associated uncertainties, if practicable.

To date, work completed includes a high-level ecological due diligence assessments (desktop) within the Option 5A area of interest and draft corridor, a rapid assessment of potential habitat areas and ecological surveys of public road reserves have been conducted across the draft corridor. Ecological surveys of freehold properties in the corridor have not yet commenced as TCV is currently negotiating access agreements with landholders but priority properties for surveys have been identified and will commence as access becomes available. Detailed investigations including Vegetation Quality Assessments in patches of native vegetation will be conducted at later stages of the project. Threatened flora and fauna species have the potential to occur within the draft corridor and in the wider Option 5A area of interest. A detailed likelihood of occurrence assessment and VQA assessments of suitable habitat will be conducted to quantify and minimise risk of impacts.

A desktop search for EPBC Act listed flora and fauna within 5 km of the draft corridor identified the following species. Additional species potentially occurring within the vicinity were also identified through the PMST search. These species will be considered further through the detailed ecology investigations including a likelihood of occurrence assessment for all species and communities identified by the PMST.

• EPBC Act Listed Fauna within 5 km

Terrestrial

- Plains Wanderer *Pedionomus torquatus* - Records predominantly east of the Loddon River
- Eastern Curlew *Numenius madagascariensis* - typically associated with riparian or wetland areas
- Curlew Sandpiper *Calidris ferruginea* - typically associated with riparian or wetland areas
- Grey Falcon *Falco hypoleucos* - occur in woodlands and utilise scattered trees in open cleared areas
- Major Mitchell's Cockatoo *Lophochroa leadbeateri* - occur in woodlands and utilise scattered trees in open cleared areas
- Swift Parrot *Lathamus discolor* - occur in woodlands and utilise scattered trees in open cleared areas
- Hooded Robin *Melanodryas cucullate* - occur in woodlands and utilise scattered trees in open cleared areas
- Diamond Firetail *Stagonopleura guttata* - occur in woodlands and utilise scattered trees in open cleared areas
- Golden Sun Moth *Synemon plana* – occur in native grasslands and grassy woodlands.

Aquatic Fauna

- Murray Cod *Maccullochella peelii*
- Macquarie Perch *Macquaria australasica*
- Silver Perch *Bidyanus bidyanus*.

The above species are typically found in river systems and waterways as opposed to wetlands. Lakes which have connectivity to river systems may also support the species.

- Growling Grass Frog *Litoria raniformis* - can be found in all aquatic habitats including; Artificial dams, artificial drainage (with pools), rivers, waterways, and wetlands.

- **EPBC Act Listed Flora within 5 km**

- Matted Flax-lily *Dianella amoena* - can be found in grassland and woodland environments. The species has a generalised distribution across Victoria.

- **EPBC Act Listed Threatened Ecological Communities within 5 km**

- Seasonal Herbaceous Wetlands (Freshwater) of the Temperate Lowland Plains (Critically Endangered) - likely to occur within search area
- Natural Grasslands of the Murray Valley Plains (Critically Endangered) - likely to occur within search area
- Grey Box (*Eucalyptus microcarpa*) Grassy Woodlands and Derived Native Grasslands (Endangered) - likely to occur within search area
- Buloke Woodlands of the Riverina and Murray-Darling Depression Bioregions (Endangered) - known to occur within search area
- Weeping Myall Woodlands (endangered) - may occur within search area
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (Critically Endangered) - likely to occur within search area
- Plains mallee box woodlands of the Murray Darling Depression, Riverina and Naracoorte Coastal Plain Bioregions (Critically Endangered) - likely to occur within search area
- Mallee Bird Community of the Murray Darling Depression Bioregion (Endangered) - likely to occur within search area

A desktop search for *Flora and Fauna Guarantee Act 1988* (FFG Act) listed flora and fauna within 5 km of the draft corridor identified the following species.

- **FFG Act Listed Flora within 5 km**

- Buloke (Critically Endangered)
- Tawny Spider-orchid (Endangered)
- Tiny Bog-sedge (Endangered)
- Common Beard-heath (Endangered)
- Pale-flower Crane's-bill (Endangered)
- Hairy Tails (Critically Endangered)
- Orange Bell-climber (Endangered)
- Grampians Goodenia (Vulnerable)
- Broom Bitter-pea (Endangered)
- Blue Mallee (Endangered)
- Fringed Sun-orchid (Vulnerable)
- Crimson Sun-orchid (Vulnerable)
- Broad-lip Diuris (Endangered)
- Small-flower Wallaby-grass (Endangered)
- Veined Spider-orchid (Endangered)
- Red-cross Spider-orchid (Endangered)
- Golden Cowslips (Endangered)
- Brilliant Sun-orchid (Critically Endangered)
- Bow-lip Spider-orchid (Critically Endangered)
- Smooth Minuria (Vulnerable)

- Compact Sneezeweed (Endangered)
- Brown Beetle-grass (Endangered)
- Swamp Sheoak (Critically Endangered)
- Turnip Copperburr (Critically Endangered)
- Marbled Marshwort (Endangered)
- Slender Water-ribbons (Endangered)
- Bramble Wattle (Endangered)
- Spiny Lignum (Critically Endangered)
- Goldfield Boronia (Endangered)
- Inland Pomaderris (Endangered)
- Giant New Holland Daisy (Endangered)
- Winged Water-starwort (Endangered)
- Scaly Mantle (Endangered)
- Slender Club-sedge (Endangered)
- Fuzzy New Holland Daisy (Endangered)
- Silky Swainson-pea (Endangered)
- Mt Jeffcott Mallee-box (Critically Endangered)
- Northern Golden Moths (Critically Endangered)
- Arching Flax-lily (Threatened)
- Downy Swainson-pea (Endangered)
- Umbrella Wattle (Critically Endangered)
- Buloke Mistletoe (Critically Endangered)
- Small Monkey-flower (Endangered)
- Mallee Annual-bluebell (Endangered)
- Silky Glycine (Critically Endangered)
- Riverine Flax-lily (Critically Endangered)
- Silky Umbrella-grass (Endangered)
- Jericho Wire-grass (Critically Endangered)
- Umbrella Grass (Endangered)
- Fuzzy New Holland Daisy (Endangered)
- Tough Scurf-pea (Endangered)
- Southern Swainson-pea (Endangered)
- Late-flower Flax-lily (Critically Endangered)
- Bent-leaf Wattle (Endangered)
- Common White Sunray (Endangered)
- Purple Love-grass (Endangered)
- Cane Spear-grass (Endangered)
- Twin-leaf Bedstraw (Endangered)
- Grey Podolepis (Endangered)
- Long Eryngium (Endangered)
- Swamp Buttercup (Endangered)

- Club-hair New Holland Daisy (Endangered)
- Yarran (Critically Endangered)
- Winged New Holland Daisy
- Sarcozona (Endangered)
- Pin Sida (Endangered)
- Coast Hollyhock (Endangered)
- Sweet Fenugreek (Endangered)
- Floodplain Fireweed (Endangered)
- Bush Minuria (Vulnerable)
- Hoary Scurf-pea (Endangered)
- Blackseed Glasswort (Endangered)
- Riverina Bitter-cress (Endangered)
- Yakka Grass (Endangered)
- Bristly Love-grass (Endangered)
- Frosted Goosefoot (Endangered)
- Waterbush (Endangered)
- Dwarf Amaranth (Endangered)
- Plains Spurge (Endangered)
- Spreading Emu-bush (Vulnerable)
- Button Immortelle (Endangered)
- Woolly Waterlily (Endangered)
- Riverina Groundsel (Endangered)
- Cane Grass (Critically Endangered)
- Blue Burr-daisy (Endangered)
- Purple Diuris (Endangered)
- Round Templetonia (Endangered)
- Branching Groundsel (Endangered)
- Fine-hairy Spear-grass (Endangered)
- Spotted Emu-bush (Critically Endangered)
- Shining Glasswort (Endangered)
- Flat Spike-sedge (Critically Endangered)
- Stiff Goodenia (Critically Endangered)
- Chariot Wheels (Endangered)
- Mallee Cucumber (Endangered)
- Desert Sneezeweed (Endangered)
- Twiggy Sida (Endangered)
- Paddle Saltbush (Critically Endangered)

- **FFG Act Listed Fauna within 5 km**
 - Bearded Dragon (Vulnerable)
 - Little Eagle (Vulnerable)

- Common Dunnart (Vulnerable)
- White-throated Needletail (Vulnerable)
- Growling Grass Frog (Vulnerable)
- Swift Parrot (Critically Endangered)
- Powerful Owl (Vulnerable)
- Speckled Warbler (Endangered)
- Hooded Robin (Vulnerable)
- Diamond Firetail (Vulnerable)
- Fat-tailed Dunnart (Vulnerable)
- Brolga (Endangered)
- Squirrel Glider (Vulnerable)
- Bush Stone-curlew (Critically Endangered)
- Hardhead (Vulnerable)
- Australasian Shoveler (Vulnerable)
- Lace Monitor (Endangered)
- Brown Toadlet (Endangered)
- Musk Duck (Vulnerable)
- Grey-crowned Babbler (Vulnerable)
- Freckled Duck (Endangered)
- Blue-billed Duck (Vulnerable)
- Curlew Sandpiper (Critically Endangered)
- Spot-tailed Quoll (Endangered)
- Australian Bustard (Critically Endangered)
- Black Falcon (Critically Endangered)
- Murray Cod (Endangered)
- White-bellied Sea-Eagle (Endangered)
- Plumed Egret (Critically Endangered)
- Diamond Dove (Vulnerable)
- Eastern Great Egret (Vulnerable)
- Major Mitchell's Cockatoo (Critically Endangered)
- Striped Legless Lizard (Endangered)
- Murray River Turtle (Critically Endangered)
- Broad-shelled Turtle (Endangered)
- Red-chested Button-quail (Endangered)
- Plains-wanderer (Critically Endangered)
- Silver Perch (Endangered)
- Caspian Tern (Vulnerable)
- Common Greenshank (Endangered)
- Saphire Skink (Endangered)
- Inland Dotterel (Vulnerable)
- Eastern Curlew (Critically Endangered)

- Australian Little Bittern (Endangered)
- Australian Gull-billed Tern (Endangered)
- Little Egret (Endangered)
- Marsh Sandpiper (Endangered)
- Black-tailed Godwit (Critically Endangered)
- Wood Sandpiper (Endangered)
- Australasian Bittern (Critically Endangered)
- Ruddy Turnstone (Endangered)
- Red Knot (Endangered)
- Grey-headed Flying-fox (Vulnerable)
- Carpet Python (Endangered)
- Murray Spiny Crayfish (Threatened)
- Elegant Parrot (Vulnerable)
- Large River Damselfly (Vulnerable)
- Flat-headed Galaxias (Vulnerable)
- Freshwater Catfish (Endangered)
- Macquarie Perch (Endangered)
- Grey Falcon (Vulnerable)
- Southern Purple-spotted Gudgeon (Critically Endangered)
- Spotted Bowerbird (Extinct)
- Murray-Darling Rainbowfish (Endangered)
- Platypus (Vulnerable)
- Barking Owl (Critically Endangered)

Is mitigation of potential effects on indigenous flora and fauna proposed?

NYD No Yes If yes, please briefly describe.

The draft corridor has been identified as potentially the least constrained area within the broader Option 5A area of interest. TCV adopted the following general siting principles to avoid potential impacts as part of the corridor selection process:

- Maximise separation distances wherever possible to the following parks and reserves:
 - Leaghur State Park;
 - Tragowel Swamp NCR (McPhails Swamp) (Shrub wetland);
 - Kerang Wildlife Reserve (WR);
 - Great Spectacle Lakes Complex WR; and
 - RAMSAR listed Kerang Wetlands.
- Maximise separation distances wherever possible to the following aquatic, estuarine or wetland habitats:
 - Lake Terrappee;
 - Two Mile Swamp;
 - Wetlands along Bannagher Creek; and
 - Lake Meran.
- Avoid streamside reserves wherever possible along the:

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| <ul style="list-style-type: none"> ○ Wimmera River; ○ Avon River; ○ Avoca River; ○ Loddon River; ○ Wandella Creek; ○ Bannagher Creek; ○ Barr Creek; ○ Pyramid Creek; and ○ Murray River. <ul style="list-style-type: none"> ● Avoid areas of High Strategic Biodiversity Value wherever possible located: <ul style="list-style-type: none"> ○ east of Tragowel Swamp; ○ along the Loddon River and Bannagher Creek; ○ north of Kerang to the Murray River; and ○ 3.5 km west of Leaghur SP. ● Threatened EVCs in the northern region of the draft corridor are Lingnum Swampy Woodland (located in nature reserves and wetlands mainly to the east of Boort-Kerang Rd), Chenopod Grassland (located in small, sparse areas northeast of Lake Meran up to Kerang), Plains Woodland (located in Leaghur State Park), and Freshwater Lake Aggregate (Lake Meran). <p>If these areas cannot be avoided, mitigation measures will be incorporated into management documentation to minimise and manage potential impacts. For example, micro siting of the towers allows for avoidance of vegetation and habitats. However, where avoidance is not possible such as at road and river crossings, crossing points with the least impact based on vegetation extent and density will be identified. There is also an ability to avoid vegetation clearance by locating towers away from riverbanks and road reserves. It may also be possible to identify crossing points which allow for lopping of vegetation rather than clearance. In the event that it is determined that impacts on flora and fauna are not able to be mitigated by relocation of infrastructure within the draft corridor, consideration would be given to identifying areas proximal to the draft corridor within the broader Option 5A area of interest for assessment.</p> |
| <p>Other information/comments? (eg. accuracy of information)</p> <p>N/A</p> |

13. Water environments

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| <p>Will the project require significant volumes of fresh water (eg. > 1 GI/yr)? <input type="checkbox"/> NYD <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If yes, indicate approximate volume and likely source.</p> |
| <p>Will the project discharge waste water or runoff to water environments? <input type="checkbox"/> NYD <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If yes, specify types of discharges and which environments.</p> |
| <p>Are any waterways, wetlands, estuaries or marine environments likely to be affected? <input type="checkbox"/> NYD <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes If yes, specify which water environments, answer the following questions and attach any relevant details.</p> <p>The Option 5A area of interest, and the draft corridor, intersect with waterways and wetlands at the following identified locations:</p> <ul style="list-style-type: none"> • The draft corridor intersects a current wetland near Charlton Channel north of the Avon River (see Figure 36 in Attachment J). • The draft corridor intersects a cluster of current wetlands just south of the Wooroonook Lakes (see Figure 37 in Attachment J) • Draft corridor crosses some extent of floodplain across the Wandella Creek and Loddon River, including areas of LSIO, FO and some mapped current wetlands (see Figure 38 in Attachment J) |
| <p>Are any of these water environments likely to support threatened or migratory species? <input type="checkbox"/> NYD <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes If yes, specify which water environments.</p> <p>Wetlands may support threatened or migratory wetland species including migratory birds. Desktop surveys of water environments have commenced to assist in informing the reference design and detailed impact assessment will be undertaken when the specific locations of proposed infrastructure have been identified.</p> |
| <p>Are any potentially affected wetlands listed under the Ramsar Convention or in 'A Directory of Important Wetlands in Australia'? <input type="checkbox"/> NYD <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If yes, please specify.</p> <p>The corridor does not intersect any Ramsar wetland sites noting that there are Ramsar wetlands located approximately 750 m west of the corridor in the Kerang vicinity.</p> |
| <p>Could the project affect streamflows? <input type="checkbox"/> NYD <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes If yes, briefly describe implications for streamflows.</p> <p>The proposed Tragowel Terminal Station site, comprises a significant area of floodplain, floodway and some existing channels. Traversing areas of floodplain is unavoidable in the northern end of the corridor and is an issue requiring detailed consideration in future technical studies to support the reference design and impact assessment processes. The general intent of the reference design is to span watercourses so as not to interrupt stream flows. It is considered that transmission towers located approximately 400 m apart will not have significant impacts on overland flows during times of flooding. Temporary changes to flow could occur during construction, however, these risks can be managed. As the proposed terminal station will be located in the general vicinity of Kerang, which is within the Loddon River floodplain, detailed investigations of impacts on surface water will be conducted once the preferred site is identified.</p> |
| <p>Could regional groundwater resources be affected by the project? <input type="checkbox"/> NYD <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes If yes, describe in what way.</p> <p>It is unlikely that the Project will have any material impacts on groundwater flows, volumes and quality as the foundations of each transmission tower are localised and approximately 400 m apart. A desktop assessment of geology and groundwater conditions along the alignment will be conducted once tower locations have been determined as part of the project reference design. In the event that tower infrastructure or the proposed terminal station may encounter the water table, a more detailed assessment of issues such as the need for temporary dewatering would be</p> |

conducted. There may be some potential for the proposed Tragowel Terminal Station site to have localised impacts on groundwater as a result of the foundations, but this would be unlikely to have impacts on the regional water table. More detailed investigations into other risks to groundwater resources from the Project are the potential for associated impacts to groundwater quality arising from:

- construction activities – i.e. with the release of fuels/oils; and
- potential acid sulfate soils – i.e. excavation and exposure of these soils to air.

These impacts are likely to be localised and will be managed and mitigated through a Construction Environmental Management Plan (CEMP).

Could environmental values (beneficial uses) of water environments be affected?

NYD No Yes If yes, identify waterways/water bodies and beneficial uses (as recognised by State Environment Protection Policies)

It is considered unlikely that beneficial uses of water would be affected by the Project. The proposed infrastructure would not preclude uses such as agriculture and the small footprint of each transmission tower would not interrupt surface water flows to the extent that beneficial uses such as ecological values would be affected. A detailed assessment of the proposed terminal station site in the vicinity of Kerang, including hydrological modelling if required, would assess potential impacts and mitigation measures proposed if relevant. A more detailed assessment would be conducted when the Project reference design has determined the specific locations of infrastructure. There could be potential for some impacts on beneficial uses during construction such as sedimentation impacting water quality, however, these are readily manageable through industry standard measures adopted in a CEMP.

Could aquatic, estuarine or marine ecosystems be affected by the project?

NYD No Yes If yes, describe in what way.

As outlined above, it is unlikely that changes to surface water flows could impact water dependent habitat/ecosystems based on the small and dispersed nature of the transmission tower footprints. The potential impacts associated with the proposed terminal station would be assessed as described in the previous section. The Project could also impact water quality during the construction and operational phases if not managed effectively.

Is there a potential for extensive or major effects on the health or biodiversity of aquatic, estuarine or marine ecosystems over the long-term?

No Yes If yes, please describe. Comment on likelihood of effects and associated uncertainties, if practicable.

As outlined in the previous sections, it is considered very unlikely that any long term and significant impacts would result from the Project based on the nature of the infrastructure involved and the ability to microsite transmission towers to minimise impacts on areas of sensitivity. Where it is not possible to avoid areas of sensitivity, mitigation measures would be proposed to reduce impacts to the extent practicable noting that there may still be some residual impacts. Detailed assessments would be undertaken once the Project reference design is developed and, if required, consideration of alternative locations both within the draft corridor or in areas proximal to the draft corridor within the Option 5A area of interest based on factors such as stakeholder inputs and the environmental assessment process would be undertaken.

Is mitigation of potential effects on water environments proposed?

NYD No Yes If yes, please briefly describe.

Potential mitigation measures have not yet been developed and will be proposed during a detailed assessment of impacts associated with the Project reference design when developed.

Other information/comments? (eg. accuracy of information)

14. Landscape and soils

Landscape

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| <p>Has a preliminary landscape assessment been prepared? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If yes, please attach.</p> |
| <p>Is the project to be located either within or near an area that is:</p> <ul style="list-style-type: none"> Subject to a Landscape Significance Overlay or Environmental Significance Overlay? <input checked="" type="checkbox"/> NYD <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> Yes If yes, provide plan showing footprint relative to overlay. <p>The following overlays related to environment and landscape protection have been identified in the general vicinity of the draft corridor and the Option 5A area of interest.</p> <p><u>Buloke Shire:</u></p> <ul style="list-style-type: none"> ESO1 along the Avoca River to protect the environmental values of the waterway proximal to the draft corridor. The siting of infrastructure should avoid ESO1 wherever possible. <p><u>Loddon Shire:</u></p> <ul style="list-style-type: none"> The draft corridor is proximal to Leaghur State Park (which is surrounded by VPO1 and VPO2 in Loddon Shire; and VPO1 and ESO3 in Gannawarra Shire); VPO1 Significant Remnant Vegetation patches throughout the transmission corridor; and VPO2 Significant Roadside and Corridor Vegetation to be protected and enhanced around Barraport West. The siting of infrastructure should avoid these overlays wherever possible. <p><u>Gannawarra Shire:</u></p> <ul style="list-style-type: none"> ESO3 over Lake Mehran (north of Leaghur State Park), Tragowel Swamp Nature Conservation reserve (south of Kerang), Lake Murphy, Johnson Swamp and Hird Swamp Wildlife Reserves along Pyramid Creek, Lake Wandella and Kerang Wildlife Reserve; VPO1 roadside and corridor protection of indigenous vegetation and maintain high landscape quality on roadsides. Various patches along Boort-Kerang Road and around Leaghur State Park; VPO2 protection of remnant vegetation. Remaining vegetation is significant for its diversity and environmental value in providing habitat areas of State and National significance. Pockets can be found west of the Loddon Valley Highway, west and along Boort-Kerang Road, along the Loddon River and within the Tragowel Swamp Nature Conservation Reserve south of Kerang; ESO2 along Boort-Kerang Road, Loddon Valley Highway and Murray Valley Highway, Kerang-Koondrook Road and northern section of Kerang-Macorna Road to preserve and enhance tree lined character of roadsides along the approaches to towns and along main roads; and ESO1 along the Avoca River, Mosquito Creek, Loddon River, Bannagher Creek, Pyramid Creek, Sheep Wash Creek and Barr Creek to protect and enhance the natural environment of the Murray River and its tributaries. <ul style="list-style-type: none"> Identified as of regional or State significance in a reputable study of landscape values? <input checked="" type="checkbox"/> NYD <input type="checkbox"/> No <input type="checkbox"/> Yes If yes, please specify. Within or adjoining land reserved under the <i>National Parks Act 1975</i> ? <input type="checkbox"/> NYD <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes If yes, please specify. <p>The Option 5A area of interest contains several areas of land reserved under the <i>National Parks Act 1975</i>, including Leaghur State Park, Tragowel Swamp NCR, Kara Kara National Park, Mount Bolangum NCR, Morri Morri NCR and Big Tottington NCR among others and the draft corridor proposed by TCV for further assessment is adjacent to some of these (see Figure 39 in Attachment K). However, selection of the draft corridor within the Option 5A area of interest has endeavoured to maintain significant buffer distances of approximately 5 km from significant parks and reserves.</p> <ul style="list-style-type: none"> Within or adjoining other public land used for conservation or recreational purposes ? |

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| <input type="checkbox"/> NYD <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes If yes, please specify. Several areas of public land used for conservation or recreational purposes occur within or adjacent to the draft corridor, however the alignment of the transmission line has been designed strategically to avoid intersecting with these areas. |
| Is any clearing vegetation or alteration of landforms likely to affect landscape values? <input checked="" type="checkbox"/> NYD <input type="checkbox"/> No <input type="checkbox"/> Yes If yes, please briefly describe. There is ability to microsite towers to avoid the clearance of vegetation. However, limited clearance or lopping may be required but not yet determined. |
| Is there a potential for effects on landscape values of regional or State importance? <input checked="" type="checkbox"/> NYD <input type="checkbox"/> No <input type="checkbox"/> Yes Please briefly explain response. |
| Is mitigation of potential landscape effects proposed? <input type="checkbox"/> NYD <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes If yes, please briefly describe. An assessment of landscape values within the Option 5A area of interest conducted for the draft corridor constraints analysis recommended the following mitigations which were used to inform selection of the draft corridor described in this referral: <ul style="list-style-type: none"> • The alignment of the transmission line should be sited at least 5 km away from Kara Kara NP to minimise potential landscape and visual amenity impacts; • Avoid placing infrastructure adjacent to high points at St Arnaud Regional Park, Yowang Hill Geological Reserve, Charlton East Bushland Reserve, Howells Hill SR, Mount Buckra Scenic Reserve and Mount Gowar Scenic Reserve; • Avoid the siting of infrastructure within close proximity to populated areas including the townships of Navarre, Charlton and Boort to minimise potential visual impacts. It is recommended that the alignment of the transmission line is sited at least 5 km from these townships to minimise potential impacts; • Avoid siting infrastructure in proximity to lakes, rivers or creeks - minimise crossings where possible to protect and maintain the visual landscape quality of the waterway environs; and • Avoid Environmental significance overlays over Lake Boort and Lake Lyndger Wilder Reserves. Overlay includes ESO1 - Objective of ESO1 includes protection of the visual and environmental quality and character of the lakes and their environs. |
| Other information/comments? (eg. accuracy of information) N/A |

Note: A preliminary landscape assessment is a specific requirement for a referral of a wind energy facility. This should provide a description of:

- The landscape character of the site and surrounding areas including landform, vegetation types and coverage, water features, any other notable features and current land use;
- The location of nearby dwellings, townships, recreation areas, major roads, above-ground utilities, tourist routes and walking tracks;
- Views to the site and to the proposed location of wind turbines from key vantage points (including views showing existing nearby dwellings and views from major roads, walking tracks and tourist routes) sufficient to give a sense of the overall site in its setting.

Soils

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| Is there a potential for effects on land stability, acid sulphate soils or highly erodible soils? <input type="checkbox"/> NYD <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes If yes, please briefly describe. Based on desktop reviews undertaken to date, the risk of acid sulphate soils (ASS) being present in the corridor is considered to be a low to extremely low probability. There are some areas of high potential but these are around rivers or swamps and will likely be avoided in the reference |
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design or can be managed. Areas with potential for ASS should be avoided for foundations towers and buildings. If these areas cannot be avoided, mitigation measures will be incorporated into the design and management documentation to minimise and manage potential impacts.

Are there geotechnical hazards that may either affect the project or be affected by it?

NYD No Yes If yes, please briefly describe.

Detailed geotechnical investigation has been scoped and will be undertaken.

Other information/comments? (eg. accuracy of information)

A high-level review of potential contamination and ASS risks for the Project's draft corridor has been conducted. This has identified very limited areas of potential concern with regard to contamination and ASS that will need to be considered as part of the reference design process.

Potential contamination risks include airfields, landfills, mines and townships that may have some industrial activities occurring on the outskirts. This is based solely upon current land use and a desktop review of ASS maps. Potential issues such as use of pesticides, agricultural based fuel storage or small-scale historic activities such as old sheep dips cannot be identified at this point, however these examples are not considered likely to impact the Project.

ASS risk is considered to be generally low to extremely low probability of occurrence. There are some pockets identified as being of high probability around rivers or swamp areas but these areas will likely be avoided or can be managed. Depending on the specific location of infrastructure, some localised sampling could be undertaken to characterise these areas.

Overall, the risk of contamination and ASS impacting the Project is considered low.

15. Social environments

Is the project likely to generate significant volumes of road traffic, during construction or operation?

NYD No Yes If yes, provide estimate of traffic volume(s) if practicable.

At this stage, it is expected that the construction phase will generate a noticeable level of heavy vehicle traffic, with additional light vehicle movements of workers at construction sites. Traffic concentrations will be highest at the proposed construction laydown areas with ingress and egress of trucks carrying materials. Potential traffic impacts at each transmission tower location will be of a temporary nature as construction vehicles will move progressively along the transmission alignment. Traffic volumes during the operation phase are likely to be lower (e.g. maintenance activities), but some higher concentrations of traffic are likely near the terminal station site during construction. Construction stage traffic volumes cannot currently be estimated as they are heavily dependent on the construction program, methodology and staging, which will impact on how significant the traffic volumes are on the road network. Detailed assessment of volumes and potential impacts will be considered during the impact assessment and approvals process when a construction methodology has been formalised.

Is there a potential for significant effects on the amenity of residents, due to emissions of dust or odours or changes in visual, noise or traffic conditions?

NYD No Yes If yes, briefly describe the nature of the changes in amenity conditions and the possible areas affected.

Depending upon the final alignment of overhead transmission lines and associated towers, there is the potential for visual amenity impacts on residents, particularly for dwellings proximal to physical infrastructure works. Road closures and associated traffic management restrictions are possible in the vicinity of construction sites, which could potentially impact the amenity of residents although these would most likely be of limited duration as construction progresses along the linear corridor.

Construction noise levels would be required to comply with the EPA's *Noise Limit and Assessment Protocol for the Control of Noise from Commercial, Industrial and Trade Premises and Entertainment Venues* (Publication 1826.4) (as amended) (**Noise Protocol**). It is noted, however, that compliance with Noise Protocol will not eliminate all noise, rather, noise levels will be maintained below required thresholds but construction noise from the Project may be audible to residents at least some of the time during construction.

Air quality impacts are expected to be limited to construction dust. Negligible impacts are expected from mobile equipment (cars, trucks, cranes etc) combustion gases and no significant air emissions are expected during operation phase. Common mitigation methods during construction are expected to minimise potential air quality impacts.

Is there a potential for exposure of a human community to health or safety hazards, due to emissions to air or water or noise or chemical hazards or associated transport?

NYD No Yes If yes, briefly describe the hazards and possible implications.

While there is some conjecture regarding the potential impacts of Electro Magnetic Fields (**EMF**) on human health, it is generally accepted that maintaining a buffer between transmission infrastructure and sensitive uses such as houses, schools, businesses and the like as a precautionary measure is desirable. Maintaining appropriate buffer distances would be one of the design criteria adopted when determining an appropriate alignment for the Project within the draft corridor.

Is there a potential for displacement of residences or severance of residential access to community resources due to the proposed development?

NYD No Yes If yes, briefly describe potential effects.

Once a preferred alignment is selected within the draft corridor, there is a possibility that locating some infrastructure close to individual dwellings is unavoidable despite the design objective of minimising proximity to houses. The proposed infrastructure would not result in displacement or severance of individual dwellings from community resources as transmission towers would be spaced approximately 400 metres apart and access beneath the transmission lines would not be

restricted. During the design process, individual landholders would be actively consulted with a view to micro-siting infrastructure on properties to minimise impacts on access, use of farm equipment, visual impact and the like.

Are non-residential land use activities likely to be displaced as a result of the project?

NYD No Yes If yes, briefly describe the likely effects.

It is likely that some farming/agricultural land use activities will be affected but not displaced due to the transmission line. Grazing and some cropping is compatible with transmission line easements, however more intensive farming practices may be impacted if these areas cannot be avoided in the reference design. It is noted that there are some other infrastructure projects such as wind and solar farms and private airfields emerging within the Option 5A area of interest and the draft corridor (refer to Figures 40 and 41 in Attachment L). TCV has commenced active engagement with these developers to discuss measures to ensure that the projects can co-exist.

Do any expected changes in non-residential land use activities have a potential to cause adverse effects on local residents/communities, social groups or industries?

NYD No Yes If yes, briefly describe the potential effects.

Impacts on farming practices could result in some loss of income for farming businesses and the agricultural industry during construction and operation although the individual footprints of transmission towers are localised and have minimal impact on the ability to use the land for many agricultural activities. TCV intends to conduct a detailed assessment of potential impacts on agriculture, including detailed consultation with farmers and there is a well-defined compensation process in place, including under the *Land Acquisition and Compensation Act 1986 (Vic)*.

Is mitigation of potential social effects proposed?

NYD No Yes If yes, please briefly describe.

The Project has the potential to have both negative and positive social impacts. It is proposed that a Social Impact Assessment (SIA) be conducted as part of the EES (if an EES is required).

As some potential social impacts relate to impacts on existing uses of agricultural land, it is proposed to conduct a separate Agriculture Study and a Business Impact Assessment.

A primary objective of the Project is to minimise disruption to the community, farming, other agricultural businesses and rural and other businesses generally throughout the draft corridor.

Micrositing of transmission infrastructure on individual properties in consultation with landholders is an important means of reducing social impacts, including potential for disruption to farming activities.

It is noted that potential social impacts are, to some extent, offset by the compensation regime being offered as part of the Project and the Community Benefit Scheme being developed by the Victorian Government which is aimed at providing benefits to the wider community and not just to individual landholders through compensation.

Noise mitigation will be required for the terminal station to comply with the Noise Protocol and the GED under the EP Act. The scope of the mitigation will depend on the background noise levels on site and the final location, arrangement and equipment selected and the outcomes of detailed acoustic assessments. At present, these factors are yet to be determined.

Similarly, traffic management requirements will be subject to the final alignment and materials, which are also not yet determined. Construction mitigation methods to limit dust generation and the implementation of sufficient buffer distances between construction work and sensitive receptors (residences, towns, areas of high ecological sensitivity) will be required to mitigate air quality impacts. Study scopes have been developed for the detailed investigations required to assess all potential impacts on the community as part of the EES (if an EES is required).

Other information/comments? (eg. accuracy of information)

N/A

Cultural heritage

Have relevant Indigenous organisations been consulted on the occurrence of Aboriginal cultural heritage within the project area?

- No If no, list any organisations that it is proposed to consult.
 Yes If yes, list the organisations so far consulted.

There has been ongoing engagement with Traditional Owners within the Option 5A area of interest and the draft corridor which is outlined in more detail in Section 20 of this referral. In summary:

- TCV will be preparing CHMP's for the project:
 - This is a legislative and mandated process requiring quite specific and milestone-based engagement with traditional owners;
 - To date, TCV has lodged Notices of Intent to undertake a CHMP with First People State Relations for all three sections of the area of interest. Where required these have been forwarded on to relevant traditional Owner Groups, including the Barengi Gadjin Land Council (BGLC) and Dja Dja Wurrung Clans Aboriginal Corporation (Djaara);
 - Inception meetings have been held with both BGLC and Djaara to discuss the Project, its intended outcomes, the nature of the archaeology and heritage material within the interest area, and the methods of future communication on this project;
 - The northern section of the project to be undertaken on Barapa Wemba Country, will be evaluated by the Secretary for Aboriginal Affairs as there is not a formal RAP in place. An informal meeting has been held with the manager of the Loddon Mallee Region of First People - State Relations, who will likely be representing the Secretary; and
 - At this stage, there is no direct CHMP engagement planned until the reference design is developed in 2024, at which point fieldwork would commence.
- TCV has been actively engaging with Traditional Owners within the Option 5A area of interest and the draft corridor and this process will be ongoing throughout the design and approvals process.
 - This engagement process is separate from the legally mandated CHMP process and has more relevance to unregistered Aboriginal cultural heritage, and contemporary Traditional Owner Group insights;
 - An On Country day with TCV, RMCG, Greenshoot and Barapa Barapa and Wamba Wemba Traditional Owners has been held to provide Traditional Owners with further insight into the CHMP process;
 - Two Djaara cultural competency training days have been held in Bendigo, attended by TCV and RMCG;
 - A three-day BGLC - Djaara On Country event on 16-18th August 2023 and attended by TCV and RMCG at the request of the BGLC CEO; and
 - Greenshoot and technical specialists have also undertaken a number of meetings and workshops with Traditional Owners to feed into the Project.

What investigations of cultural heritage in the project area have been done?

(attach details of method and results of any surveys for the project & describe their accuracy)

A desktop-assessment of the Option 5A area of interest and the draft corridor has been undertaken. The methodology included a complete appraisal of all known cultural heritage places within the interest area in addition to an assessment of geomorphology, vegetation, hydrology, and geology with a view to creating an archaeological predictive model indicating likelihood of identifying further archaeological material within the area of interest.

No field-based assessments related to the CHMP process have been conducted to date. A number of On Country days with Traditional Owners have taken place with a view to identifying cultural values (rather than specific sites of significance) and the outputs were used to inform

selection of the draft corridor included in the Project description for this referral. A similar process will be used to inform the reference design.

Once the CHMPs progress, further Aboriginal Places/Values may be identified. These will be subject to impact assessment as part of each CHMP. When finalised, the CHMPs will identify the potential impacts of the Project on Aboriginal cultural heritage places and outline site-specific measures that will be taken to manage and protect this heritage.

The Project is required to follow the management conditions contained in the CHMPs, with compliance overseen by the Registered Aboriginal Parties and First Peoples – State Relations.

Is any Aboriginal cultural heritage known from the project area?

NYD No Yes If yes, briefly describe:

- Any sites listed on the AAV Site Register
- Sites or areas of sensitivity recorded in recent surveys from the project site or nearby
- Sites or areas of sensitivity identified by representatives of Indigenous organisations

As shown in Figure 42 in Attachment M, and outlined in detail in Section 8 of this referral, numerous areas throughout the draft corridor have areas of Aboriginal cultural heritage significance including registered places under the AH Act. Areas of Aboriginal cultural heritage significance the Option 5A area of interest are also identified in Attachment D 'VNI West Area of Interest Environmental Constraints Summary Report' and Attachment H 'Report on the Draft Corridor for VNI West'.

The southern region of the draft corridor intersects areas of cultural heritage sensitivity surrounding Joel Joel and adjacent to a number of waterways, including along the Wimmera River. The central region of the draft corridor intersects some additional areas of cultural heritage sensitivity east of Charlton.

In the Option 5A area of interest, the land around Boort was identified as a highly sensitive area with a high frequency of registered Aboriginal cultural heritage places and was avoided when selecting the draft corridor proposed for the Project.

Additional areas of registered Aboriginal cultural heritage sensitivity exist to the far north of the draft corridor. This includes areas 200 m from the banks of the Murray River and the Little Murray River, as well as a high density of registered Aboriginal cultural heritage places of recommended avoidance and no-go surrounding Pental Island. The draft corridor avoids most of these identified sensitive areas, however intersection with the Murray River is unavoidable given the essential connection to the NSW Component (and Project EnergyConnect in NSW beyond this, as outlined above).

Aboriginal heritage sites and areas of cultural value will be avoided wherever possible during the ongoing process of identifying the optimal transmission line easement. Input from Traditional Owners has been sought to date to assist with refining the initial area of interest down to a draft corridor and will continue with a focus on assisting to identify cultural heritage values within the area of interest and draft corridor to inform the reference design. If areas of sensitivity cannot be avoided, the CHMPs will identify the potential impacts of the Project on Aboriginal cultural heritage places and outline site-specific measures that will be taken to manage and protect this heritage.

The Project is required to follow the management conditions contained in the CHMPs, with compliance overseen by the Registered Aboriginal Parties and First Peoples – State Relations.

Are there any cultural heritage places listed on the Heritage Register or the Archaeological Inventory under the *Heritage Act 1995* within the project area?

NYD No Yes If yes, please list.

Refer to Section 8 of this referral.

Is mitigation of potential cultural heritage effects proposed?

NYD No Yes If yes, please briefly describe.

As part of the Option 5A desktop assessment, the following general principles were recommended and have been used to inform selection of the draft corridor proposed as part of the Project description for this referral:

- Avoid the banks of the Wimmera River, Heifer Station Creek and Wattle Creek, all of which are flagged as culturally sensitive with instances of low-density scattered artifacts, earth mounds and scarred trees;
- Areas surrounding Joel Joel NCR and Greens Creek have a high density of locations with archaeological significance which are localised along the banks of waterways. Avoidance is recommended;
- Potential intersection with areas of Aboriginal cultural heritage sensitivity and an extremely high density of points of archaeological significance around, and adjacent to, Boort and Boort NCR, extending 8-9 km to the north of Boort's town centre;
- Between Boort and Lark Marmal (located 18.5 km west of Boort) there are scattered areas of registered Aboriginal cultural heritage and points of archaeological significance. Avoidance is highly recommended;
- High frequency of locations of recommended avoidance and Aboriginal cultural heritage significance encompassing Leaghur State Park. Avoidance is recommended;
- As per the Aboriginal Heritage Regulations 2018 (Vic), a 50 m radius buffer exists for a sensitive Aboriginal Place, and a 200 m buffer exists for either side of a waterway;
- Waterway environs contain areas of Aboriginal cultural sensitivity and a high density of locations archaeological significance and recommended no-go zones. Recommended to avoid earthmoving works in the following areas:
 - Avoca River;
 - Tragowel Swamp;
 - The Great Spectacle Lakes Complex WR;
 - Loddon River;
 - Bannagher Creek;
 - Lake Murphy;
 - Pyramid Creek;
 - Barr Creek;
 - The Murray River; and
 - The Little Murray River.
- Avoid placing towers in areas where rivers converge or may have converged historically, these areas are likely to hold significant sensitivity as such landmarks were used as historic meeting places; and
- Aboriginal cultural heritage will be avoided wherever possible during the ongoing process of identifying the optimal transmission line easement. Input from Traditional Owners has been sought to date to assist with refining the initial area of interest down to a draft corridor and will continue with a focus on assisting to identify cultural heritage values within the area of interest and draft corridor to inform the reference design. If areas of sensitivity cannot be avoided, the CHMPs will identify the potential impacts of the Project on Aboriginal cultural heritage places and outline site-specific measures that will be taken to manage and protect this heritage. The Project is required to follow the management conditions contained in the CHMPs, with compliance overseen by the Registered Aboriginal Parties and First Peoples – State Relations.

Other information/comments? (eg. accuracy of information)
N/A

16. Energy, wastes & greenhouse gas emissions

What are the main sources of energy that the project facility would consume/generate?

- Electricity network. If possible, estimate power requirement/output Not yet determined.....
- Natural gas network. If possible, estimate gas requirement/output NA
- Generated on-site. If possible, estimate power capacity/output
- Other. Please describe.

Please add any relevant additional information.

Energy and Greenhouse Gas emissions associated with construction and operation of the project will be the subject of a technical study in the EES (if an EES is required) and will be developed once a Reference Design for the project has been completed.

What are the main forms of waste that would be generated by the project facility?

- Wastewater. Describe briefly.
- Solid chemical wastes. Describe briefly.
- Excavated material. Describe briefly.
- Other. Describe briefly.

Please provide relevant further information, including proposed management of wastes.

Waste management practices for the project would be outlined in detail in the Environmental Management Framework (EMF) in the EES (if an EES is required) and incorporated into a Construction Environment Management Plan (CEMP) to ensure that all practices comply with regulatory requirements.

- Other construction waste - beyond excavation, e.g. steel/concrete/metal and other materials wasted during construction phases. Inert wastes will be recycled where practicable and other wastes such as fuel, oil, grease, paints, detergents, disinfectants and the like would be disposed of at an approved facility with requirements outlined in the Project CEMP;
- Waste soils from excavation – waste soils resulting from excavation would be reused on the Project, recycled or disposed of in accordance with EPA soil characterisation guidelines. While the presence of contaminated soils is considered unlikely due to the rural nature of the land on which transmission infrastructure will be located, soil testing would be conducted if there was evidence of prior contamination;
- Asset replacement - once assets reach end of life, general depreciation, damage or failure of assets (from climate hazards or other causes);
- Redundant assets - redundant assets and replaced assets would be disposed of in accordance with regulatory requirements; and
- Wastewater – the main forms of wastewater which would be generated by the Project would be surface water runoff from construction areas and sewage generated by the construction workforce. Surface water runoff would be managed in accordance with standard industry practices with the objectives of ensuring that there is no potential for sedimentation or contaminants from leaks and spills impacting land areas or entering local watercourses. Practices for management of sewage would be adopted by the construction contractor and documented in the Project CEMP. It is likely that this would include portable toilets at work sites and other potential sewage collection, pump out and disposal facilities to ensure disposal at an approved facility.

Waste generated by the Project that cannot be recycled or reused on-site will be removed from all construction work areas and disposed off-site at an approved facility. Waste disposal will be based on the classification of waste material in the EPA's *Publication 1827: Waste classification assessment protocol* and *Publication 1828: Waste disposal categories – characteristics and thresholds*. All wastes generated during construction of the Project will be transported, managed and disposed of in accordance with the EP Act and relevant EPA requirements.

Wastes generated by the Project will primarily relate to the construction phase of the project with operation of the transmission infrastructure generating very little waste. An assessment of likely

waste types, volumes and disposal will be developed and assessed once a Reference Design for the project has been completed.

What level of greenhouse gas emissions is expected to result directly from operation of the project facility?

- Less than 50,000 tonnes of CO₂ equivalent per annum
- Between 50,000 and 100,000 tonnes of CO₂ equivalent per annum
- Between 100,000 and 200,000 tonnes of CO₂ equivalent per annum
- More than 200,000 tonnes of CO₂ equivalent per annum

Please add any relevant additional information, including any identified mitigation options.

The greenhouse gas (**GHG**) impact of the Project (as a component of VNI West) is likely to be dominated by the embodied emissions in the materials used and energy used for transport of materials, people, and equipment on site. Transmission losses through electricity and heat would also contribute to GHG emissions. GHG emissions from operation are likely to be predominantly linked to maintenance (inspection, repair, replacement – particularly embodied emissions and transport of materials), and lighting. Transmission and distribution losses will be a significant consideration for this project in terms of emissions (dependent on the methods of generation). Identified mitigation measures for reducing greenhouse gas emissions of the project include:

- **minimise length of line and number of towers** – to reduce materials in the towers/ lines;
- **consider foundations** – consider places we can use fewer materials and reinforcement – esp. terminal station concrete slab and tower foundations;
- **minimise construction of access roads** – consider access requirements, e.g. locate line/ terminal station close to existing access points;
- **minimise earthworks along route** – take the route through flatter ground, including the route of access roads;
- **consider material transport** – consider access to locally sourced materials (e.g. aggregates), trains are much more fuel efficient than trucks so consider access to train lines for material transport; and
- **consider Vegetation losses/ land clearance** – avoid clearance of carbon sequestering/ storing vegetation/ land (esp. forests, trees, wetlands and bogs).

In the event that an EES is required, a detailed GHG assessment of the project would be undertaken.

It should be noted that the Project, as a component of VNI West, has a key role to play in facilitating the reliable and secure transition away from coal-fired to renewable energy generation. The Project will assist in meeting the Federal Government's commitments to GHG emissions reduction targets pursuant to the *Climate Change Act 2022* (Cth) and the Victorian Government's renewable energy targets set as per the *Renewable Energy (Jobs and Investment) Act 2017* (Vic) and associated government policies.

17. Other environmental issues

Are there any other environmental issues arising from the proposed project?

- No Yes If yes, briefly describe.

18. Environmental management

What measures are currently proposed to avoid, minimise or manage the main potential adverse environmental effects? (if not already described above)

- Siting: Please describe briefly
- Design: Please describe briefly
- Environmental management: Please describe briefly.
- Other: Please describe briefly

Add any relevant additional information.

As outlined earlier in this referral, the primary objective of the project is to avoid and minimise potential environmental impacts through the strategic location of infrastructure in locations of lower environmental, heritage, social and land-use sensitivity.

Linear electricity transmission infrastructure provides an opportunity to microsite tower locations so as to avoid or minimise impacts to sensitive environmental receptors such as vegetation, heritage places, objects and areas, amenity and operational and other impacts on residential, agricultural and other rural and urban land uses and the like. The reference design process will utilise existing conditions data from all proposed technical studies as well as inputs from landholders and other stakeholders to optimise location of infrastructure to avoid and minimise impacts. Where it is not possible to avoid areas of sensitivity, mitigation measures would be proposed to reduce impacts to the extent practicable.

Detailed mitigation measures to avoid or minimise impacts will be developed as part of the further assessment process and incorporated into the Project EMF.

19. Other activities

Are there any other activities in the vicinity of the proposed project that have a potential for cumulative effects?

NYD No Yes If yes, briefly describe.

There are a number of proposed wind farms and solar farms in various stages of planning in the Option 5A area of interest and the draft corridor as indicated in Figures 40 and 41 in Attachment L. Most are in the early stages of planning and TCV has been and will continue to engage with proponents to further examine the inter-relationships between infrastructure and the potential for cumulative impacts. In addition to those shown in Figures 40 and 41, there is a proposed wind farm in the planning stage in the vicinity of Meering West. However, the extent of this proposal is not yet known.

While the Project is primarily an interconnector to strengthen connectivity of the national electricity market, facilitate the ongoing development of REZ's and provide a link to Snowy Hydro 2.0, the project may offer potential for some renewables projects in the region to connect into the transmission line subject to constraints on terminal stations and the like.

More clarity on the status of the various renewable energy projects shown in Figures 40 and 41 will become available as the further assessment process for the Project progresses enabling further consideration of potential cumulative impacts as well as benefits associated with the possibility of connections to the grid.

20. Investigation program

Study program

Have any environmental studies not referred to above been conducted for the project?

No Yes If yes, please list here and attach if relevant.

A summary of potentially significant environmental effects of the Project is provided in Part 2 of this referral. Detailed constraints considerations are provided in the 'VNI West Area of Interest Environmental Constraints Summary Report' (see Attachment D) and the 'Report on the Draft Corridor for VNI West' (see Attachment H).

Field surveys on public land in the VNI West draft corridor commenced in October 2023. Data gathered from these surveys will add to TCV's understanding of the flora and fauna across the draft corridor and support the work underway to find the best location for the VNI West line with the least impact on farms, the environment and local communities.

Has a program for future environmental studies been developed?

No Yes If yes, briefly describe.

An initial scope has been developed for all anticipated technical studies required to support an EES (if an EES is deemed to be required by the Minister). These study scopes would be refined once the EES Scoping Requirements have been finalised by the Minister for Planning and would be incorporated into a Study Program for endorsement by the EES TRG.

It is proposed the following technical disciplines will assess the impacts of the Project:

| Technical assessments | |
|-----------------------------|-----------------------|
| Cultural heritage | Agriculture |
| Air quality | Aviation |
| Bushfire | Contaminated land |
| Ecology and biodiversity | Economics |
| Electromagnetic field (EMF) | Greenhouse gas |
| Climate change | Groundwater |
| Historic heritage | Land use and planning |
| Noise and vibration | Surface water |
| Traffic and transport | |

Consultation program

Has a consultation program conducted to date for the project?

No Yes If yes, outline the consultation activities and the stakeholder groups or organisations consulted.

TCV understands the importance of consultation and is committed to working closely with stakeholders, Traditional Owners, community members and landholders. Since the Project Option 5A area of interest was identified in May 2023, TCV has undertaken a comprehensive regional communications and engagement program to learn more about the local communities and land in the area. Community events and meetings have provided opportunities for people to learn more about the project, ask questions and provide feedback to the project team. Discussions with local Councils, Traditional Owners and community stakeholders commenced during the early stages of the Project, and since then TCV has focused on building connections with the communities that could be impacted by this critical infrastructure.

TCV would like to acknowledge that major transmission projects such as VNI West represent a significant change for regional and rural communities that have not previously hosted energy infrastructure, and that community members will understandably have concerns about the potential impacts of the Project.

Through the consultation undertaken to date, stakeholders and community members have expressed a wide range of views towards the project. TCV recognises that many participants in our engagement program have expressed opposition to the Project and raised a variety of concerns about potential project impacts. Since the release of the Project area of interest, several local community action groups have been established in opposition to the Project. These groups

have undertaken various activities including protest action, media and social media campaigns, protest signage, political lobbying and legal action.

Concerns raised by community members include the justification for the project, increased bushfire risk, impacts to farm operations and production levels, visual impacts, cumulative impacts of renewable energy and transmission developments, mental health impacts and health impacts related to Electro-Magnetic Fields (EMF).

TCV appreciates that this project will have impacts for landholders and local communities where the infrastructure is located and respects the right for stakeholders to oppose the project. TCV is committed to ongoing community engagement and working closely with stakeholders to build project understanding, provide answers to questions and address concerns.

Direct engagement with Landholders within the draft corridor began in August 2023, with ongoing discussions aimed at understanding local constraints and land-use on individual properties to inform the reference design and identify a least-impact final easement. TCV and the technical team have commenced a program of visits to individual properties at the request of landholders with a view to discussing micro-siting of infrastructure.

Local feedback is essential to identifying constraints and locating the transmission infrastructure. This feedback provides local knowledge and experience in relation to environmental, cultural, social and land use considerations that are taken into account through the route refinement process.

The following engagement activities have helped to inform the route refinement process to date:

- interactive online map open to community comments;
- constraints workshops with key stakeholders;
- community events, webinars and information sessions;
- council and stakeholder briefings and workshops;
- discussions with Traditional Owners and On Country Days; and
- feedback received through the project hotline and inbox.

Submissions received during the additional Consultation Report period prior to the release of the PACR were also considered throughout this process.

Figure 43 in Attachment M provides an overview of the engagement activities undertaken.

Stakeholder engagement

TCV has engaged early and consistently throughout the project with a range of agencies and stakeholders including:

- government (including regulators, policy makers and Local Government Areas);
- regional partnership associations;
- industry associations;
- special interest groups; and
- consumer representatives.

The purpose of this engagement was to keep stakeholders informed of key project milestones, capture stakeholder feedback and respond to enquiries. Regular meetings with Councils and stakeholders provided important insights and an opportunity to address issues and questions about community impacts.

Landholder engagement

TCV has been working since August 2023 to contact landholders in the draft corridor. Every landholder in the draft corridor has a dedicated Landholder Liaison, a key contact to help answer questions on important issues, including farming with transmission lines, biosecurity arrangements, access agreements, and any eventual easement compensation. In addition to answering questions, the key role of the Landholder Liaison is to work with property owners to learn about how they use their land and identify important property features which should be considered in the route refinement process.

TCV's aim was to contact all landholders prior to publishing the corridor. Contact with landholders continues, with the Landholder Liaison team speaking with landholders via phone calls, face-to-face meetings, email, and cold calls to properties. Where contact could not be established prior to publishing corridor, the landholder introduction pack was posted to their registered address or left at the property (which requested landholders to get in touch with their assigned Landholder Liaison).

TCV is committed to continuing to work with landholders to find the best practicable location for the transmission alignment to minimise impacts to farming operations and agriculture as far as practicable.

Traditional Owner engagement

As a part of the consultation process for the Project, the Project team continues to hold discussions with Traditional Owner groups to improve understanding of relevant local sites or intangible cultural values sensitivities which need to be considered. The discussions also consider how the Project may be able to provide positive outcomes and opportunities for all impacted Traditional Owner groups.

TCV acknowledges the ever-increasing demands placed on Traditional Owners to engage in a range of projects and the impacts these projects have on their capacity to provide meaningful input. The level of Traditional Owner participation on the Project to date has been guided by these groups regarding their ability to engage as the route refinement process has progressed. Some groups have been constrained in their capacity to feed into the process, with only preliminary discussions held to date. Ongoing meaningful engagement with all Traditional Owners is planned in future to enhance inputs. The route refinement process is ongoing, and TCV will continue to work with all Traditional Owners to ensure meaningful input into the process.

Early inputs

The Project commenced meeting with Traditional Owner groups in late 2022. Meetings and consultation sessions have been facilitated with a number of impacted Traditional Owners throughout the RIT-T options assessment process and since the release of the PACR. The preferred option identified in the PACR, known as Option 5A crosses the lands of a number of Traditional Owner groups, including two Registered Aboriginal Parties, Barengi Gadjin Land Council and Djaara, as well as the lands of two other Traditional Owner groups, Wamba Wamba and Barapa Barapa.

Since the publication of the PACR, TCV has held discussions with four Traditional Owners groups and 69 individuals across 12 engagement activities. For Barapa Barapa and Wamba Wamba Traditional Owners, this has meant a number of small group workshops with Elders and family representatives, as well as a series of On Country Days. Barengi Gadjin staff and members have also contributed via small group workshops, On Country Days and targeted meetings with TCV's planning team to work collaboratively on corridor identification. Engagement with Djaara has involved initial meetings with staff and representatives and a preliminary On Country Day. It is acknowledged that Land Councils and Registered Aboriginal Parties must engage with their broader groups and that this process takes time.

The route refinement process is ongoing, and TCV will continue to work with all Traditional Owners to ensure meaningful input into the process.

Meetings and workshops with Traditional Owners immediately after the release of the preferred area of interest focussed on how the project can minimise its impact on both tangible and

intangible cultural values, as well as maximising opportunities for Traditional Owners to be part of the process of route refinement.

On Country Days

All Traditional Owner groups within the area of interest identified the importance of holding On Country Days for Traditional Owners to meet the project team and visit specific areas of cultural significance to the Traditional Owners.

On Country Days were held between May and August 2023 with all groups. These activities provided an opportunity for the project to build its understanding of the cultural significance of the Country within the area of interest and identify specific areas of cultural significance where impacts should be avoided or mitigated.

TCV will continue to work with all Traditional Owner groups to further refine the route and to ensure that potential impacts on areas of cultural significance are avoided or minimised. It is anticipated that this will include further On Country Days as well as planning meetings and site visits with Traditional Owners throughout the route refinement process.

Community engagement

Stakeholder workshops

In June 2023, six workshops were held to seek inputs from local community stakeholders to help inform the route refinement process. Sessions were held in Stawell, St Arnaud, Wycheproof, Boort and Kerang, and a further session was held online via webinar.

The workshops brought together over 50 key community stakeholders to provide in-depth feedback on the project area of interest. Workshop participants shared considerable local knowledge and insights around social, environmental, agricultural, and cultural factors and identified opportunities for the consideration of the Project team.

Some workshops were also attended by community members opposed to the project who did not wish to take part in the constraints mapping process and raised concerns about potential adverse impacts.

Community Reference Group

TCV has established a Community Reference Group (CRG) comprising 17 local representatives across a broad spread of geographic locations in the project area. The CRG has met twice in 2023 and will continue to meet every few months over the course of the Project. To date, engagement with the CRG has focussed on agreeing the Terms of Reference and discussing the planning and approvals process. The group brings together a range of opinions and views on the Project, including directly impacted landholders, community group representatives and industry body representatives. Several members of the CRG have voiced their opposition towards the Project and advocate on behalf of established community action groups.

Community events

Over the past six months, TCV has hosted several community events in the project region to provide in-person opportunities for community members to engage with the project. Events have been well attended and provided important insights into community sentiment, key areas of interest and concern about the Project.

Across all events, attendees expressed a wide range of views towards the project. Several events were attended by community members strongly opposed to the Project and, in some cases, subject to organised protest activity.

July 2023 events

TCV hosted five community events in July 2023, attended by over 390 community members. The events were held in Kerang, Boort, Charlton, St Arnaud and Navarre.

The purpose of these community events was to:

- continue to raise awareness of the Project and Project need;
- inform community members of the project timeline and upcoming activities;
- seek community feedback on constraints/opportunities within the area of interest to inform the route refinement process;
- provide information on key topics of interest; and
- identify and address community concerns and questions.

Community events were held in a market hall style format, consisting of a series of booths providing information on different topics including landholder engagement, environmental impacts and the route refinement process.

Each event was attended by senior representatives from the project team, VicGrid, technical specialists and subject matter experts. Project team members were available to attendees for Q&A and general discussion.

October 2023 events

A further round of engagement events was held in October 2023. Close to 500 people in total attended sessions either in person in Charlton, Stawell, Boort and Kerang or via an online webinar. An additional event planned for St Arnaud was cancelled on advice from local police due to protest activity and safety concerns.

The purpose of the October events was to inform and raise awareness of the draft corridor that had recently been announced, including the process behind the corridor development and how community feedback had been considered. Additionally, the events were designed to engage with landholders and other stakeholders in the draft corridor with a view to further identifying sensitivities, constraints and individual farm management issues to assist with the reference design process.

The format included a town hall session with a panel comprising the project team and subject matter experts giving presentations and responding to questions from the audience. This was followed by a drop-in session that allowed for community members and landholders to have one-on-one conversations with the Project team.

A range of questions were addressed by the Project team and VicGrid attendees, including on the need for transmission, bushfire risk, farming impacts, important ecological and Aboriginal cultural heritage values and compensation.

Tragowel Community Session

Over 50 Tragowel community members attended a community roundtable in November. This meeting was organised in response to feedback received from locals at the October Kerang event. The majority of attendees at this session were concerned about the prospect of hosting transmission infrastructure on their properties, however, TCV was able to answer the majority of questions and alleviate some concerns for the community.

Interactive map

An interactive map on the TCV website was open for public comment between 26 May to 2 August 2023. The purpose of the interactive map was to seek community insight on key constraints and opportunities in the area of interest for consideration in the route refinement process. Participants were able to submit comments through this online tool or call the Project team to add comments.

In total, stakeholders and community members visited the map 4,009 times. 201 users provided a total of 2,326 comments. Community awareness of the interactive map was promoted through project updates, social media, local newspapers and at community events.

Users were able to provide feedback on any subject, with pre-defined comment options for issues of land use & agriculture, environment, social & cultural values, existing infrastructure and “general” matters. Several community members utilised the interactive map to state their opposition to the Project and that they did not want transmission infrastructure on their property. Refer to Figure 44 in Attachment M.

Key themes

Community members, Traditional Owner groups, landholders and stakeholders provided numerous valuable insights for consideration in the route refinement process. These local environmental issues and constraints were added to the information found from publicly available databases and other sources. Some examples of community inputs are outlined below.

Land use and agriculture

The engagement process highlighted important considerations relating to land use and agriculture. Feedback primarily noted the importance of minimising impacts to prime agricultural land. Constraints identified included:

- areas of irrigated agriculture;
- properties with strict biosecurity requirements;
- existing farming infrastructure such as sheds, silos, paddocks and stock yards;
- properties utilising aerial technology (including drones and planes);
- agricultural industries that could be negatively impacted by the Project; and
- feedback also noted concerns on land devaluation, compensation, decreased productivity, easement restrictions, division of land, fire safety, land access and impact during construction.

Examples of specific issues raised by the community which assisted with selection of the draft corridor included:

- particular areas within the GMID with irrigation infrastructure which may be incompatible with transmission lines; and
- the intensive agricultural activities such as a high technology feedlots, for example, near Charlton.

Environment

Areas of ecological value were identified across the area of interest using known data and with community input identifying areas of localised habitat values and revegetation not identified on publicly available databases. These included:

- locations that support populations of rare or threatened native plants and animals or old growth trees;
- remnant patches of vegetation such as native grasslands in areas largely cleared for agriculture;
- local roads and streams with important remnant vegetation;
- potential disruption of natural water flows across the floodplain; and
- significant wetland and floodplain areas.

Important native flora and fauna species within the area were also identified through community input. Examples from the wide range of species identified include:

- Swift Parrot;
- Lace Monitor;

- Growling Grass Frog;
- Grey Crowned Babbler;
- Australasian Bittern;
- Brolga;
- Magpie Goose;
- Downy Swainson-Pea;
- Grey Billy Button;
- Fat Tailed Dunnart;
- Brush-Tailed Phascogale;
- Powerful Owl;
- Tree Goanna Varanus (sic);
- Barking Owl;
- Rakali;
- Brown Falcon;
- Tawny Frogmouth;
- Cuckooshrike;
- Kestrels;
- Golden Sun Moth;
- Diamond Firetail;
- Wedge Tailed Eagle;
- Plains Wanderer;
- Southern Boobook; and
- Bush Stone-curlew.

Examples of specific issues raised by the community which assisted with selection of the draft corridor included:

- areas where significant amounts of private and public investment have been made to improve natural values such as shelterbelts, corridor planting and large-scale revegetation and private land protected or maintained for conservation including sites north of St Arnaud, west of Mysia and other locations throughout the corridor;
- areas of protected vegetation particularly in areas surrounding Lakes Meran, Leaghur and Minmindie;
- areas throughout the corridor containing Buloke trees, Box trees and endangered orchids;
- areas of vegetation where species such as Wedge Tailed Eagles have been sighted; and
- areas prone to flooding which were not shown in flood maps including areas to the south of Charlton, along the Avon River, east of Tragowel and along the Waranga Western Channel to the west of Mysia.

Aboriginal Cultural and Historic Heritage

Areas significant to Traditional Owners were identified through discussions with Traditional Owner groups and through the input into the interactive map. Historic heritage, including local heritage sites were also identified. These were added to data on known sites of cultural significance, other cultural sites and locations of artefacts.

Sites of Aboriginal cultural significance include:

- culturally modified trees;
- oven mounds; and
- burial sites.

Traditional Owners emphasised the importance of intangible cultural values such as spiritual connection with the land, waterways and vegetation, in addition to sites containing artefacts. The Traditional Owners passed on knowledge of important areas including around the wetlands south of Kerang, areas around Boort, Leaghur State Park in the centre of the corridor and sections of the Wimmera River in the south.

Sites of historic heritage within the area of interest include:

- War memorials;
- sites of local heritage importance; and
- European heritage sites including original settlements, school sites, old home steads and historic hotels.

Sites of tourism were also noted, with some comments expressing concerns that transmission lines may impact visual amenity and thereby negatively affect tourism, including hilly areas south of Charlton and around Morri Morri NCR, Mount Bolangum NCR, Big Tottington NCR and Kara Kara National Park.

Infrastructure

Community feedback also identified existing or planned infrastructure which could act as a constraint to the location of transmission infrastructure. Examples include:

- buildings;
- mobile phone towers;
- pipelines and underground cables;
- social infrastructure;
- train lines and roads;
- residential areas and residences;
- agricultural infrastructure;
- fire breaks, water points and fire stations;
- tourism infrastructure;
- weather stations;
- underground artesian wells;
- gun clubs; and
- quarries and mines.

Feedback highlighted the importance of minimising impacts to existing infrastructure, particularly townships, residences and existing agricultural infrastructure such as sheds and silos.

Examples of specific issues raised by the community which assisted with selection of the draft corridor included:

- maximising the distance between transmission infrastructure and townships and individual residences;
- several private aerodromes in the Kerang area not shown on maps which require defined clearances to transmission infrastructure to ensure safety; and

- existing and potential renewable energy developments where the Project provides opportunities for connection points, particularly in the areas around Kerang, which could enhance local employment.

Social

Feedback highlighted numerous social considerations, including impacts to the broader community as opposed to individual landholders. Examples of feedback received include:

- avoidance of industries that are vital to local economies, for example, key tourism hot spots such as parks and reserves, the olive industry near Boort and the large feedlot near Charlton;
- concerns around the visual impact of the project on the landscape including localised impacts on residents;
- other features identified across the landscape that may constrain the project route included local vantage points, lookouts, hiking trails and recreational areas such as campsites;
- concerns around the impaired ability to fight bushfires; and
- potential impact of EMF on farm equipment and human health.

Community opposition

TCV acknowledges there has been significant community opposition to the Project, particularly from members of the community who have been directly affected. Several community members have expressed concerns about the potential adverse impacts of the project and questioned the overall justification for the Project.

Examples of items of concern include:

- The need for VNI West and whether alternative options like nuclear, Plan B (an alternative plan put forward from outside of AEMO and currently being independently assessed by Government) and undergrounding have been considered;
- impacts on farming, particularly reduced productivity, restrictions to farming activity and how the infrastructure may impact day to day operations;
- the landholder engagement process and the fairness of the compensation;
- increased bushfire risk and limitations to firefighting near transmission;
- whether feedback received will genuinely inform the project, particularly regarding the final decision for the project to go ahead
- potential impacts of Electro Magnetic Fields (EMF) on both human health and livestock; and
- impact the Project may have on the mental and emotional wellbeing of community members and landholders.

While there has been negative feedback to the Project, there have also been parts of the community who recognise the important role that the Project plays in the energy transition in Australia and its role in assisting Australia to meet its emissions reduction targets.

TCV appreciates that the community has genuine concerns about the potential impacts of the project and is committed to listening to landholders and community members and providing ongoing opportunities for consultation. TCV will continue to provide further information on topics of interest and ensure people are able to access accurate information to alleviate concerns wherever possible.

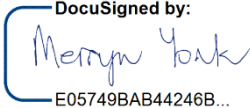
Has a program for future consultation been developed?

NYD No Yes If yes, briefly describe.

TCV has identified an ongoing program of engagement with key stakeholders and have prepared a draft Consultation Plan (CP) for the further assessment process.

Authorised person for proponent:

I, Merryn York.....(full name),
Director Transmission Company Victoria.....(position), confirm that the information
contained in this form is, to my knowledge, true and not misleading.

Signature 

Date 21/12/2023 | 16:36 AEDT

Person who prepared this referral:

I, Jeff Smith.....(full name),
Market Sector Leader, Environment ANZ AECOM.....(position), confirm that the information
contained in this form is, to my knowledge, true and not misleading.

Signature 

Date 20/12/2023 | 20:10 PST