



Appendix N

*Transmission line
environmental and social
sensitivity analysis*

Woodlawn Advanced Energy Recovery Centre

Transmission line environmental and social sensitivity assessment

Prepared for Veolia Environmental Services (Australia) Pty Ltd

October 2022

Woodlawn Advanced Energy Recovery Centre

Transmission line environmental and social sensitivity assessment

Veolia Environmental Services (Australia) Pty Ltd

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1 Introduction

Veolia Environmental Services (Australia) Pty Ltd (Veolia) owns and operates the Woodlawn Eco Precinct (the Eco Precinct), located on Collector Road, approximately 6 kilometres (km) west of Tarago, approximately 50 km south of Goulburn and 70 km north of Canberra. The Eco Precinct is located in the Goulburn Mulwaree local government area (LGA). The Eco Precinct has provided sustainable and innovative waste management services since 2004. The site is currently connected to the Essential Energy electrical distribution network with electricity generated at BioEnergy Power Station at the Eco Precinct exported to the grid via an existing substation and electrical infrastructure network.

Veolia proposes to develop and operate the Woodlawn Advanced Energy Recovery Centre (ARC) (the project), an energy recovery facility (ERF), at the Eco Precinct. This involves the development of an additional waste management technology at the Eco Precinct, treating a portion of the waste stream which is already approved to be received as part of integrated waste management operations, and recovering energy from the process. Energy recovered from the facility will be in the form of 'electricity generation' which will be exported to the grid. The project will generate up to 240,000 megawatt hours (MWh) of electricity per annum, of which up to approximately 220,000 MWh will be exported to the grid.

To support the project, Veolia has been liaising with Essential Energy to understand the potential modifications or upgrades that may be required with reference to their existing managed electrical infrastructure network for the export of electricity generated at the ARC. One option is upgrades and/or adjustments to the existing electrical infrastructure network, Line 850:GOU, a single circuit 66 kilovolt (kv) electrical sub-transmission connection (hereafter referred to as the 'existing transmission line') between Essential Energy's Goulburn substation and an existing substation at the Eco Precinct. The 66kV transmission line is 37.5 km from the existing substation at the Eco Precinct to the Goulburn Substation.

Veolia has submitted a Detailed Enquiry for Essential Energy to further understand the detailed design and other development requirements. This will ensure the necessary regulated requirements for connection will be met. All works shall be consistent with the existing planning, easements and other asset management parameters in existence and any activities have the benefit of a Part 5 assessment and determination under the *Environmental Planning and Assessment Act 1979* (EP&A Act). This report has had regard to the approach recommended by Essential Energy and is discussed in further detail below.

1.1 Secretary's Environmental Assessment Requirements

This environmental and social sensitivity assessment (hereafter referred to as 'this assessment' has been written to support the environmental impact statement (EIS) prepared to respond to the infrastructure requirements of the Secretary's Environmental Assessment Requirements (SEARs) provided to Veolia on 2 July 2021. The SEARs require the following matters to be considered in respect of infrastructure upgrades required for the project:

- identification of any infrastructure upgrades required off-site to facilitate the development and describe any arrangements to ensure that the upgrades will be implemented in a timely manner and maintained; and
- details of existing transmission infrastructure constraints and all required transmission infrastructure upgrades, including an assessment of any impacts of any upgrade works and details of management and mitigation measures.

In accordance with Part 5 of the *Environmental Planning and Assessment Act 1979* (EP&A Act), upgrades to the existing transmission line would be undertaken by or on behalf of Essential Energy and would constitute an 'activity' (within the meaning of the Act). Approval for the activity would be sought separate to the project and an environmental impact assessment will be prepared in accordance with the requirements of the EP&A Act, Environmental Planning and Assessment Regulation 2021 and relevant guidelines. The environmental impact assessment will evaluate the impacts of any upgrade works and detail any required mitigation measures.

The works required will be determined by Essential Energy. At this early stage of the Detailed Enquiry process, Veolia is working to have any modifications or upgrades that may be required to the 66 kV transmission line, made within the capacity of the existing line where possible. Restrtringing of the line could potentially be required, with the intention of working within the existing easements that facilitate the current infrastructure.

Regardless of the level of works determined to be required, a detailed environmental impact assessment and determination under the EP&A Act will be required. This process will involve engagement with stakeholders for any proposed works associated with the transmission and distribution network.

In terms of timing, the applicant confirms that it intends to complete these works as part of construction of the project.

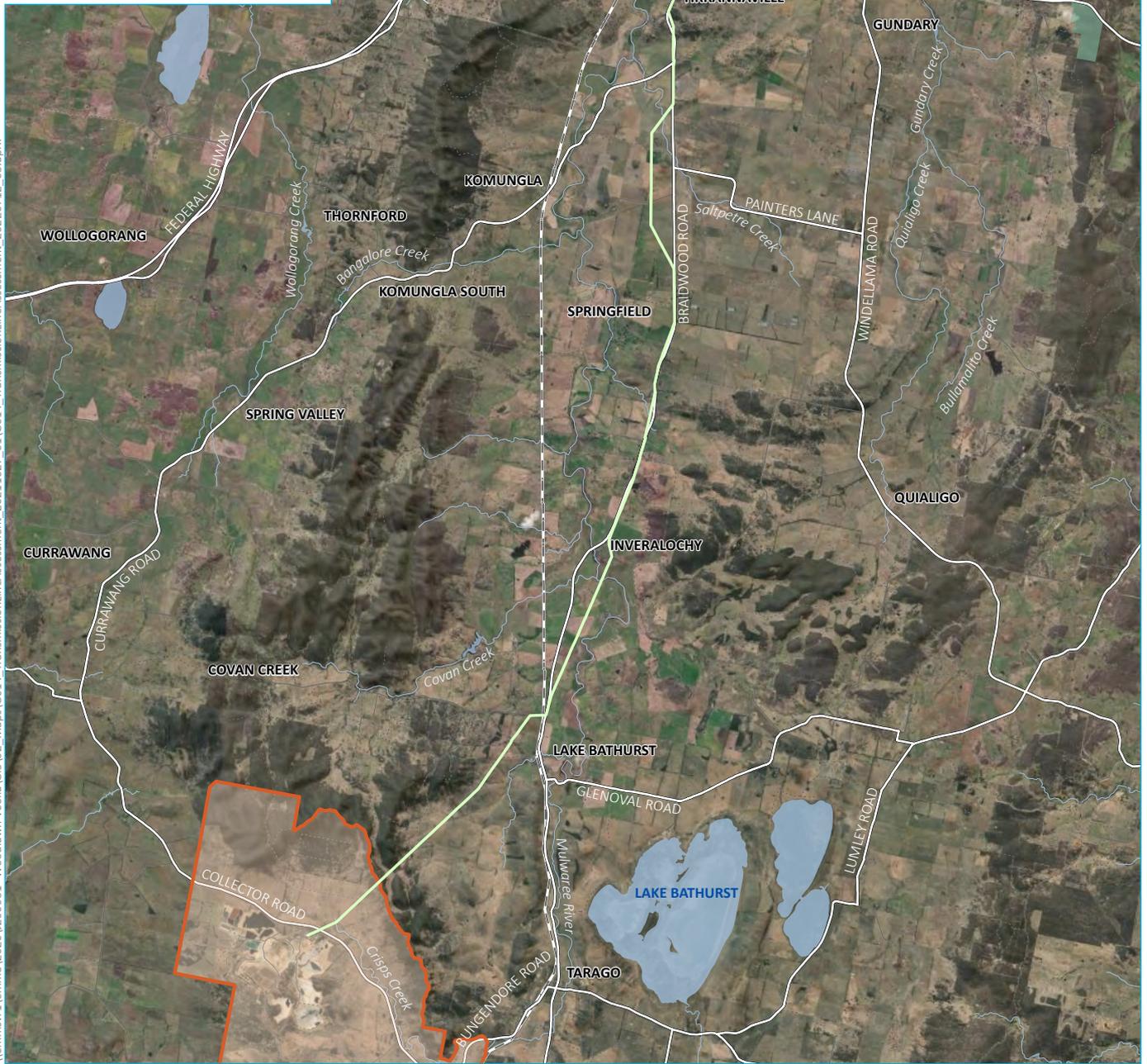
In terms of maintenance, the transmission line assets are to be owned and maintained by Essential Energy, a state owned corporation (see schedule 5 of the *State Owned Corporations Act 1989* (SOC Act)). The conduct and obligations of Essential Energy are tightly regulated by the SOC Act. Further, Essential Energy currently delivers electricity to 95% of NSW (including the Site) and is an 'Energy Distributor' pursuant to the provisions of the *Energy Services Corporations Act 1995*. The conduct and operations of Essential Energy are also regulated under the Act. Essential Energy has a long standing and impeccable track record in the maintenance of assets (including those listed under NSW heritage legislation).

Notwithstanding, there will be a separate Part 5 assessment undertaken seeking to authorise the transmission line upgrade activities, this assessment has been prepared in response to the above requirements of the SEARs. This assessment considers the sensitivities (risks and constraints) along the existing transmission line alignment that would be considered in an environmental impact assessment under Part 5 of the EP&A Act.

1.2 Location and context

The existing transmission line is north-south aligned and extends approximately 37.5 km in length between the Essential Energy Depot in Goulburn (north) and the Eco Precinct (south) (refer Figure 1.1).

The existing transmission line and associated corridor is mostly within rural zoned land associated with agricultural land uses. Approximately 16 km, or 42% of the transmission alignment has been identified to be within existing road reserves. Approximately 1.8 km of the alignment is within the forested areas associated with the Great Dividing Range.



Source: EMM (2022); Veolia (2022); DFSI (2017)



- KEY**
- Woodlawn Eco Precinct
 - Existing transmission line between Goulburn and the Eco Precinct
 - Rail line
 - Major road
 - Minor road
 - Vehicular track
 - Watercourse
 - Named waterbody
 - NPWS reserve

Existing transmission line between Goulburn and the Eco Precinct

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Transmission line environmental and social sensitivity assessment

Figure 1.1



2 Existing environment

The existing transmission line is approximately 37.5 km in length between the Eco Precinct and the Essential Energy Depot in Goulburn. The transmission line bypasses the township of Lake Bathurst and is located within existing road reserves for approximately 16 km of its length.

The transmission line is illustrated in Figures 2.1, Figure 2.2 and Figure 2.3. For descriptive purposes, chainages (measured in meters and denoted by 'CH') measured from the Essential Energy Depot in Goulburn are shown on the figures and referenced in the following sections.

The transmission line traverses predominantly rural and agricultural land uses. It is located primarily within a 10 m wide existing easement which has been previously cleared, and where vegetation is regularly maintained. At its northern extent, the transmission line crosses the Hume Highway before reaching Braidwood Road at chainage CH3000. It meets the Bombala Line Railway Corridor near chainage CH 28000. At its southern extent (chainage CH35000 – Figure 2.3), the transmission line traverses a forested area associated with the Great Dividing Range for approximately 1.7 km. Aerial photography indicates that the transmission line undergoes regular maintenance to keep clear of vegetation. However, there are some sporadic tree outcrops along the alignment associated with riparian corridors, wind-breaks, and landscaping.

The transmission line crosses four watercourses and several unnamed tributaries, including:

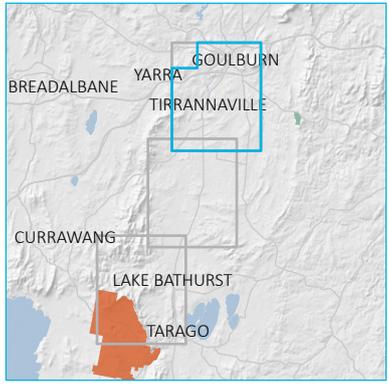
- Mulwaree River (CH2000 – Figure 2.1);
- Crisps Creek (CH37000 – Figure 2.3);
- Saltpetre Creek (CH10000 to CH 11000 – Figure 2.1); and
- Gundry Creek (CH1000 – Figure 2.1).

Utilisation of primary production land and road reserve for the transmission alignment has reduced interaction with more densely populated areas. There are 21 dwellings within 500 m of the transmission line. A majority of the dwellings are off Braidwood Road where the transmission line runs within or parallel to the road reserve, or near the Essential Energy Depot. Nine dwellings were identified as being within 50 m of the transmission line.

Other sensitive land uses include:

- Saint Andrew's Anglican Church near chainage CH7000, setback approximately 110 m (Figure 2.1);
- Tirranna Public School near chainage CH7000, setback approximately 10 m (Figure 2.1); and
- Holy Cross Seminary near chainage CH24000 (Figure 2.2).

The existing transmission line is within the Goulburn Mulwaree Council local government area.



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Source: EMM (2022); Veolia (2022); DFSI (2017)

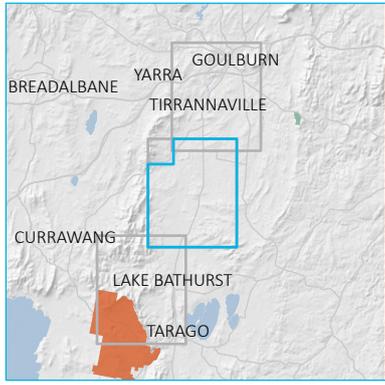
KEY

- Residence
- Transmission line chainage
- Existing transmission line between Goulburn and the Eco Precinct
- Heritage (LEP)
- - Rail line
- Major road
- Minor road
- Vehicular track
- Watercourse
- Named waterbody

Transmission line alignment (north)

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Transmission line environmental and social sensitivity assessment
Figure 2.1





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Source: EMM (2022); Veolia (2022); DFSI (2017)



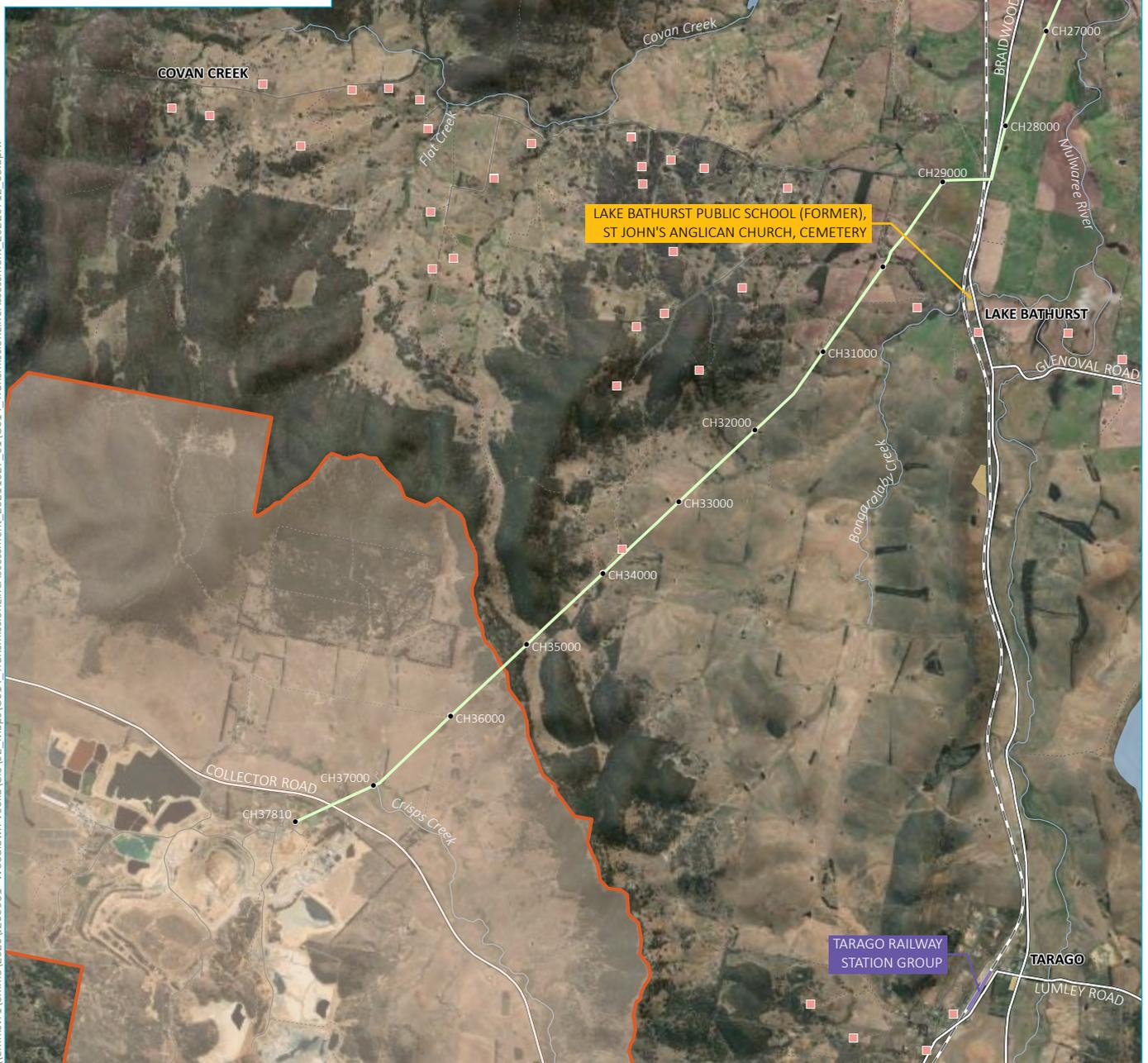
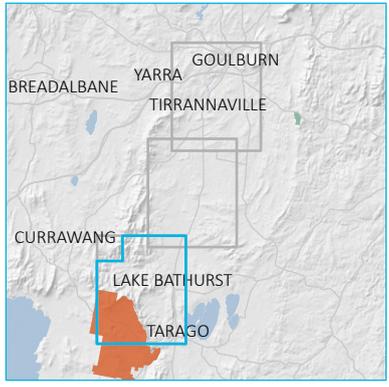
KEY

- Residence
- Transmission line chainage
- Existing transmission line between Goulburn and the Eco Precinct
- Heritage (LEP)
- - Rail line
- == Major road
- Minor road
- Vehicular track
- Watercourse
- Named waterbody

Transmission line alignment (central)

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Transmission line environmental and social sensitivity assessment
Figure 2.2





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Source: EMM (2022); Veolia (2022); DFSI (2017)



KEY

- ▭ Woodlawn Eco Precinct
- Transmission line chainage
- Existing transmission line between Goulburn and the Eco Precinct
- Heritage (LEP)
- State heritage register
- Rail line
- Major road
- Minor road
- Vehicular track
- Watercourse
- Named waterbody

Transmission line alignment (south)

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Figure 2.3

3 Sensitivity assessment

Adopting a precautionary approach, environmental and social constraints along the existing transmission line have been identified through desktop searches and available mapping. The corridor and key constraints are illustrated in Figures 2.1 to Figure 2.3. The constraints and their potential implications to the project from an environmental and social impact perspective are detailed in Table 3.1. Additionally, considerations relevant to further assessment, works and practices in a subsequent environmental impact assessment under Part 5 of the EP&A Act are presented. The activity will be subject to Essential Energy's standards, assessment, design and easement requirements.

Table 3.1 Identified constraints along the transmission line

Constraint	Implications	Considerations	
<p>Aboriginal heritage</p> <p>Landscape features can be used to predict the spatial distribution, preservation and likelihood of encountering Aboriginal archaeological material occurring within an area.</p> <p>Land associated with the existing transmission line is defined by the geographical and topographical elements of the Great Dividing Range and the Lachlan Fold Belt. The surrounding subregion features shallow lakes and swamps, although many are closed basins (eg Lake George).</p> <p>A majority of the corridor is vegetated and has been subject to historical vegetation clearance for activities such as grazing of livestock.</p> <p>Landscapes along the corridor are wide ranging comprising the Mulwaree Chain of Ponds and Gundary Plains where the alignment follows Braidwood Road and Allianoyonyiga, Kalbili variant b, Duckfield Hut, and Sight Hill associated with the Great Dividing Range.</p> <p>The existing transmission line traverses and is in proximity to a number of watercourses including Mulwaree River.</p> <p>The Native Title Vision website was searched on 21 October 2021. No registered or determined native title claims or Indigenous Land Use Agreements apply to the project area.</p>	<p>Intrusive construction works have the potential to impact recorded/undiscovered Aboriginal objects.</p>	<ul style="list-style-type: none"> • An aboriginal due diligence assessment or similar be undertaken in accordance with the <i>Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales</i> (DECCW) to determine the potential for encountering Aboriginal objects in the course of any intrusive works. • A search of the Office of Environment and Heritage (OEH) administered Aboriginal Heritage Information Management System (AHIMS) to identify any previously recorded Aboriginal heritage in proximity to the transmission line. • In the event of unexpected Aboriginal objects, sites or places (or potential Aboriginal objects, sites or places) being discovered during construction, all works in the vicinity should cease and the proponent should determine the subsequent course of action in consultation with a heritage professional and/or the relevant State government agency as appropriate. 	
<p>Acid sulfate soils</p>	<p>According to the Department of Planning, Industry and Environment’s (DPIE) Acid Sulfate Soils mapping, there is either no known occurrence of acid sulfate soils occurring on land associated with the transmission line or a low probability of encountering acid sulfate soils. This risk may be greater at works near watercourses.</p>	<p>Intrusive construction works at depth could expose acid sulfate soils.</p>	<p>Potential acid sulfate soils could be managed through appropriate construction environmental management practices.</p>

Table 3.1 Identified constraints along the transmission line

Constraint		Implications	Considerations
Biodiversity	<p>Land associated with the existing transmission line has been highly modified, having been cleared for agricultural grazing and cropping activities and the initial construction of the transmission line. Consequently, it is dominated by a mixture of non-native and derived native grassland and mostly is devoid of shrubs or trees. Isolated trees and trees associated with landscaping and windbreaks are present particularly at the boundary of private landholdings, along watercourses, and along the road corridor of Braidwood Road.</p> <p>Approximately 1.8 km of the transmission corridor traverses a forested areas of the Great Dividing Range. This area is classified on DPIE’s Southeast NSW Native Vegetation Mapping as primarily Tableland Ridge Forest and Eastern Tablelands Dry Forest.</p> <p>The traversed watercourses, and their associated riparian corridors, are mapped on the Department of Planning, Industry and Environment’s Biodiversity Values Map.</p> <p>A majority of the alignment route, with the exception of the Eco Precinct and township of Goulburn is identified on Council’s Terrestrial Biodiversity Map.</p>	<p>An activity along the alignment corridor has the potential to require additional clearance to facilitate infrastructure.</p> <p>A majority of transmission line easement is within cleared agricultural land or the Braidwood Road reserve; accordingly the potential for impacts to biodiversity values is mostly low. There is greater potential for biodiversity impacts where the transmission line traverses the forested area of the Great Dividing Range. However, additional clearing to facilitate any additional infrastructure would not be significant.</p> <p>Fauna has the potential to be affected either directly through habitat destruction or indirectly (such as noise, lighting, weed propagation, etc). However, such indirect effects would only be experienced during construction works. Potential impacts will be assessed in the separate part 5 assessment and determination for the proposed transmission line upgrade activities.</p> <p>During operation there would be no significant additional impacts on biodiversity.</p>	<ul style="list-style-type: none"> • An assessment of biodiversity impacts including field survey to ground-truth database searches and mapping information and to assess impacts to biodiversity values. • Where possible retain existing corridors. If duplication of alignment is required, consider biodiversity values to reduce the potential for undue impacts (ie additional vegetation clearance). • Implementation of weed control strategies. • Where clearing is undertaken, that the vegetation for removal be checked for potential fauna habitat and relocated as appropriate.
Bushfire risk	<p>Land associated with the existing transmission line is identified as being Bushfire Prone Land.</p>	<p>The upgrade/adjustment may require hot works during construction, potentially introducing fire safety risks.</p>	<ul style="list-style-type: none"> • Where hot works are carried out, such works should be undertaken in accordance with relevant Essential Energy procedures.

Table 3.1 Identified constraints along the transmission line

Constraint		Implications	Considerations
Contamination	<p>Whilst unlikely, current and former land uses within and adjacent to the transmission line may have resulted in the contamination of soils. Potential on-site sources of contamination include the use of pesticides, herbicides and fertilisers. Other sources of contamination with the potential to occur include:</p> <ul style="list-style-type: none"> • former livestock dip sites; • improper disposal of waste from rural properties; and • buried or illegal dumping of waste. <p>A search of the NSW Environment Protection Authority’s Contaminated Land Record was undertaken on 21 October 2021. The Tarago Railway Siding was recorded and is approximately 5.3 km south-east of the transmission line. Two other sites were recorded in the township of Goulburn including the former Goulburn Gasworks and a Mobil Service Station, approximately 1.9 km north-north-west and 2.6 km north, respectively.</p>	<p>Intrusive construction works (particularly works involving soil disturbance) have the potential to create exposure pathways between contamination sources and sensitive receptors (eg construction personnel, the public, waterways, and the environment).</p> <p>Potential impacts will be assessed in the separate part 5 assessment and determination for the proposed transmission line upgrade activities.</p>	<ul style="list-style-type: none"> • Any material or soil suspected or showing evidence of contamination be sampled and analysed by a National Association of Testing Authorities registered laboratory and managed in accordance with the <i>Waste Classification Guidelines</i> (EPA 2014), the <i>Guidelines on the Duty to Report Contamination under the Contaminated Land Management Act 1997</i> (EPA 2015) and the <i>NSW Contaminated Land Management Act 1997</i>. • Any imported fill be certified at source location as pathogen and weed free Excavated Natural Material (ENM) or Virgin Excavated Natural Material (VENM) in accordance with the NSW <i>Protection of the Environment Operations Act 1997</i> and the <i>Protection of the Environment (Waste) Regulation 2014</i>. • Environmental spill kits containing spill response materials suitable for the works being undertaken be kept on site at all times and be used in the event of a spill.
Erosion	<p>Modelled sheet and rill soil erosion potential for the project site area are based on bare soil and natural topography, expressed in tonnes per hectare per year of soil loss (t/ha/year) and is indicated within the eSPADE database. This modelled data indicates that erosion potential is variable across the transmission line ranging from <20 t/ha/y to 500 – <1,000 t/ha/yr. Modelled data was higher in areas associated with the Great Dividing Range.</p>	<p>Intensive construction works have the potential for erosion and sedimentation. If uncontrolled, works could have the potential to result in sediment migration.</p>	<ul style="list-style-type: none"> • Erosion and sediment controls designed, implemented and maintained in accordance with the <i>Managing Urban Stormwater – Soil and Construction Volume 1</i> (Blue Book) (Landcom 2004).

Table 3.1 Identified constraints along the transmission line

Constraint	Implications	Considerations
<p>Historic heritage</p> <p>There are several locally listed items adjacent or near to the existing transmission line. The closest item is Tirranna Public School, which is located near CH5000 on Braidwood Road (Figure 2.1) and setback approximately 10 m from the transmission line. This item is locally listed as I341 on the Goulburn Mulwaree Local Environmental Plan 2009.</p> <p>The transmission line is also near to:</p> <ul style="list-style-type: none"> the Springfield Homestead (incorporating outbuildings and gardens), located near CH4000 on Braidwood Road and setback approximately 550 m from the transmission line; the Allfarthing dwelling, located at 2 Brisbane Grove Road and setback approximately 200 m from the transmission line; and Thorne's Bridge at the overbridge of Mulwaree River along Braidwood Road and setback approximately 100 m from the transmission line. <p>The Lansdowne homestead is listed on the State Heritage Register (Item 00132). The item is also listed on the Register of the National Estate and is locality listed on the <i>Goulburn Local Environmental Plan 2009</i>. The item is located at 33 Bungonia Road in the township of Goulburn and is setback approximately 100 m from the transmission line.</p>	<p>Non-aboriginal heritage items are sufficiently distanced from the transmission line, and are considered unlikely to experience construction impacts (eg dust, vibration) arising from an upgrade/adjustment to the transmission line.</p> <p>There is greater potential for impacts at the Tirranna Public School, particularly if construction works are intensive. However measures are available to minimise/avoid impacts arising from construction works.</p>	<ul style="list-style-type: none"> If duplication of alignment is required, consider historic heritage items during detailed design to avoid undue encroachment and unnecessary impacts to the Tirranna Public School. This could include scheduling work outside of school terms if practicable. In the event of unexpected artefacts (as defined under the <i>NSW National Parks and Wildlife Act 1974</i> or <i>NSW Heritage Act 1977</i>) are discovered during construction, all works in the vicinity should cease and the proponent should determine the subsequent course of action in consultation with a heritage professional and/or the relevant State government agency as appropriate

Table 3.1 Identified constraints along the transmission line

Constraint		Implications	Considerations
Nearby dwellings and sensitive uses – amenity impacts	An upgrade of the existing transmission line infrastructure would generally occur within the existing easement. The dominant surrounding land use is agriculture, including grazing and cropping is which is reflective of the land use zoning (RU1 Primary Production and RU2 Landscape). However, there are 21 dwellings near the existing transmission line with nine of those dwellings identified as being within 50 m. Additionally there are also other sensitive uses including that Holy Cross Seminary, Tirranna Public School and Saint Andrew’s Anglican Church which are either near to or transected by the existing transmission line.	Nearby dwellings and sensitive uses may be subject to disruption during construction works, particularly if the upgrade works incorporate more intrusive activities (eg erection of new transmission structures). Impacts to local amenity may result during construction works arising from noise and vibration, traffic, impacts to access, air quality impacts (dust), and visual impacts. However such impacts would be experienced only in the short-term.	<ul style="list-style-type: none"> • All landholders within the study area be notified regarding the nature of the upgrade work and that a schedule of works be provided at least 7 days prior to the commencement of works at or near their property. This would allow landholders to plan activities on their land which may conflict with the construction works. • That upon completion of the upgrade works, disturbed areas be stabilised, and returned to as close to original condition or as otherwise agreed with the landowner. • If duplication or intensification is required, detailed design should consider micro-siting to ensure required infrastructure does not unduly impact the affected dwellings.
Nearby dwellings and sensitive uses – noise impacts	The existing transmission line is within a rural setting. Key sources of noise along the transmission line include vehicles travelling on Braidwood Road and the Hume Highway, the Bombala Line Railway Corridor and substation.	Nearby dwellings and sensitive uses may be subject to noise and vibration where upgrades/adjustments involve intensive construction works. Nearby residents and sensitive uses may experience elevated noise levels, particularly those within 50 m of the transmission line. Construction noise is not anticipated to be significant and would only be experienced in the short-term. Noise from the ongoing operation of the transmission line is expected to remain unchanged from current operations.	<ul style="list-style-type: none"> • That works be substantially undertaken in accordance with the <i>Interim Construction Noise Guideline</i> (DECC 2009).

Table 3.1 **Identified constraints along the transmission line**

Constraint		Implications	Considerations
Nearby dwellings and sensitive uses – dust impacts	Air quality within the region is consistent with a rural setting. Likely sources of air quality pollution would include the Eco Precinct, hazard reduction burning, dust, car emissions, and bushfires.	Nearby dwellings and sensitive uses may be subject to dust primarily from excavators and dust generated from vehicular movements on disturbed or unsealed surfaces during the construction period. Impacts arising from an upgrade/adjustment to air quality in the surrounding environment are considered to be minor and transient.	<ul style="list-style-type: none"> • If necessary, dust suppression techniques shall be implemented (such as water spraying of surfaces, covering stockpiles, and covering surplus soils and materials during transportation).
Traffic and access	The transmission line generally follows the Braidwood Road corridor and traverses private property accesses at points.	<p>Access to the transmission line would be provided mostly via Braidwood Road. The line intersects numerous private access tracks.</p> <p>Where works are intensive, there may be a noticeable increase in construction traffic utilising the local road network during construction. However, it is not anticipated that an increase in traffic volume would affect the safety and function of the surrounding road network.</p> <p>There may be some temporary disruptions to traffic movements along Braidwood Road during construction. However, such disruptions would move progressively along the transmission line and be temporary.</p> <p>After the completion of upgrade/adjustment, vehicle movements would return to existing conditions. This generally involves the intermittent access by Essential Energy and its contractors to the transmission line easement for maintenance purposes.</p>	<ul style="list-style-type: none"> • Traffic, transportation, and access management strategies be implemented to avoid unnecessary traffic and access impacts.

Table 3.1 Identified constraints along the transmission line

Constraint		Implications	Considerations
Visual sensitive receivers	<p>Land cover and land use are generally consistent along land surrounding the transmission line with predominantly pasture forming the main visual context and backdrop views to the Great Dividing Range to the west.</p> <p>The landform is generally undulating landscape with steep slopes associated with the Great Dividing Range.</p>	<p>During construction, there would be minor visual impacts associated with construction activities. In particular, the presence of work sites, vehicles, equipment, and plant. Construction works may be visible from some residential dwellings, and from Braidwood Road. Construction works would move progressively along the transmission line and be temporary.</p> <p>Any upgrade/adjustment is unlikely to represent a radical change given the existing transmission line is an established visual feature.</p>	<ul style="list-style-type: none"> • All construction plant, equipment, waste and excess materials shall be contained within the designated boundaries of any work site and be removed from the site following the completion of construction. • That any disturbance required to facilitate the upgrade/adjustment be remediated to existing conditions.
Watercourses	<p>The existing transmission line traverses the watercourse of Crisps Creek, Mulwaree River, Saltpetre Creek, and Gundry Creek. It traverses the catchments of Crisps Creek, Mulwaree River, and Shoalhaven River.</p> <p>The catchments of the Mulwaree River and Shoalhaven River and their tributaries support many elements of the region’s economy and support aquatic and terrestrial flora and fauna. They also supply’s the water needed to support the residents, businesses and industries within Goulburn Mulwaree and are part of the water supply catchment for the greater Sydney metropolitan area (Goulburn Mulwaree Council 2014).</p> <p>Mulwaree River is subject to infrequent flooding (WMAwater 2016) and the transmission line is substantially inundated during 10% annual exceedance probability flood events.</p>	<p>Intensive construction works have the potential for erosion and sedimentation. If uncontrolled, works could have the potential to increase turbidity and result in a decline in the water quality of these watercourses. Water quality impacts also have the potential to occur during construction if fuel or chemical spills from construction vehicles and equipment.</p>	<ul style="list-style-type: none"> • Erosion and sediment controls designed, implemented and maintained in accordance with the <i>Managing Urban Stormwater- Soil and Construction Volume 1</i> (Blue Book) (Landcom 2004).

4 Conclusion

Veolia proposes to develop and operate the Woodlawn ARC project, an ERF, at the Eco Precinct. The project will generate up to 240,000 MWh of electricity per annum, of which up to approximately 220,000 MWh will be exported to the grid. Export to the grid is proposed via Essential Energy's existing managed electrical infrastructure network, namely Line 850:GOU, a 66 kV transmission line from a substation at the Eco Precinct to Essential Energy's Goulburn substation, 37.5 km to the north of the Eco Precinct.

To support the project, Veolia has been and is currently liaising with Essential Energy to understand the potential modifications or upgrades that may be required to the existing electrical infrastructure network to facilitate export of electricity generated at the ARC to the grid. Veolia is currently preparing a Detailed Enquiry for Essential Energy to further understand the detailed design and other development requirements. This will ensure the necessary regulated requirements for connection will be met.

This assessment has considered environmental risks and constraints within or near the existing transmission line. It is considered that these constraints do not pose a significant risk to upgrading the existing electrical infrastructure network, or the project, but warrant further consideration in a separate environmental impact assessment to be undertaken under Part 5 of the EP&A Act.

Veolia intends to complete required modifications or upgrades to the existing Essential Energy electrical infrastructure network required for the project as part of the project's construction phase. Transmission line assets are to be owned and maintained by Essential Energy. All works shall be consistent with the existing planning, easements and other asset management parameters in existence. Any activity to upgrade Essential Energy's existing electrical infrastructure network will be subject to Essential Energy's standards, assessment, design and easement requirements.

References

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