

High Voltage Transmission Line Setback Policy



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Service Unit	Major Developments
Directorate:	Community Planning and Development
Review Date:	2023 (or earlier based on a change in circumstances)

1. Purpose

The purpose of the High Voltage Transmission Line Setback Policy is to define the acceptable setback distance from high voltage transmission lines to dwellings and other sensitive receptors. The policy provides guidance and information for energy infrastructure proponents, operators, community members and other relevant stakeholders.

2. Definitions

MSC or Council	Moorabool Shire Council
AEIC	Australian Energy Infrastructure Commissioner
DELWP	Department of Environment, Land, Water and Planning
REZ	Renewable Energy Zone
kV	Kilovolt
EMF	Electro-Magnetic Field
Setback distance	Required minimum distance between renewable energy infrastructure and an established residence or sensitive use
High voltage	High voltage is defined as a voltage > 1000 volts for alternating current, or at least 1500 volts for direct current
Sensitive receptors	Places where people reside for extended periods, such as schools, hospitals and aged care facilities

3. Scope

Moorabool Shire currently houses three wind farms with almost 200 turbines between them. The renewable energy facilities were constructed between 2018 to 2021. Moorabool also forms part of the Department of Environment, Land, Water and Planning (DELWP's) Western Victoria Renewable Energy Zone (REZ). It is one of six zones in their REZ Development Plan (Directions Paper published February 2021), which earmarks potential projects across the state to achieve Victoria's renewable energy transformation. The existing and prospective renewable energy infrastructure projects highlight a requirement for Council to adopt a policy position on transmission infrastructure.

This policy has been developed using Victorian planning policy objectives and strategies for renewable energy, as well as the most recent energy infrastructure setback recommendations handed down in the Australian Energy Infrastructure Commissioner's 2021 Annual Report (published 21 July 2022). The Commissioner's recommendations have been referred to here for

their status as the foremost Australian standard for governments across all jurisdictions to consider when developing energy infrastructure policy.

4. Non-Compliance

It is important to note that this is the policy statement for Moorabool Shire area only.

This policy will be actively considered when determining and making submissions on projects that involve high voltage transmission lines. The consequential actions of Council in response to a non-compliance with this policy will be considered on a project-by-project basis.

5. Policy

While Moorabool Shire acknowledges the importance of renewable energy projects and is supportive of the transition to renewable energy, Council has justifiable concerns regarding the significant impacts of energy infrastructure on the community. There is increasing anecdotal evidence and autonomous research suggesting a potential connection between adverse health impacts and long-term radiation exposure from high voltage energy infrastructure.

Moorabool has a strong local identity associated with picturesque farmland and distinctive nature-based assets that hold significant landscape and community value. Unsightly transmission infrastructure traversing these landscapes directly conflicts with Moorabool's visual amenity and liveability. Likewise, private land impacts due to transmission line easements and access tracks may unnecessarily restrict current and future growth and land use; particularly for agricultural properties, which is an industry of local specialisation.

Council specifically seeks to limit the potential impacts on visual amenity, existing and future land uses, as well as adverse effects on human health resulting from EMF emissions characteristic of high voltage transmission infrastructure.

The current policy has been developed in response to the current lack of government sanctioned and peer reviewed research regarding appropriate setback distances from high voltage transmission lines.

The Australian Energy Infrastructure Commissioner (AEIC) has made a number of recommendations to address the differences in design and governance of renewable energy projects across Australian states and territories. They acknowledge and seek to mitigate potential adverse impacts of renewable energy infrastructure, including high voltage transmission lines, on human health, visual amenity and peaceful enjoyment of private property. The recommendations provide a framework for a consistent approach and expectations for governments, industry, and the community, towards achieving more equitable community outcomes and driving technological improvements across the energy market.

5.1. High Voltage Transmission Line Setback Policy

MSC adopts the following objective and strategies of the Victorian Planning Provisions' Renewable Energy Clause 19.01-2S.

Objective

To promote the provision of renewable energy in a manner that ensures appropriate siting and design considerations are met.

Strategies

- Facilitate renewable energy development in appropriate locations.
- Consider the economic and environmental benefits to the broader community of renewable energy generation while also considering the need to minimise the effects of a proposal on the local community and environment.

MSC adopts recommendations 5.2.9.5 and 5.2.15 of the Australian Energy Infrastructure Commissioner's 2021 Annual Report, which nominates the minimum setback distances listed below between residences and proposed overhead transmission lines. The recommendation states that the setback distance should be measured from the edge of the overhead transmission line easement to the residence.

- A transmission line that is 66kV or less than 220 kV should have a setback distance of 100 metres.
- A transmission line that is 220kV or greater and less than 500kV should have a setback distance of 200 metres.
- A transmission line that is 500kV or greater should have a setback distance of 300 metres.
- Transmission lines should also be set back from public roads, with the suggested setback distance measured as the tower height plus 20 metres.

6. Council Plan Reference

Objectives: Liveable and Thriving Environments
Context: Develop planning mechanisms to enhance liveability in the Shire

7. Review

As a minimum, this policy will be reviewed every second year or earlier based on a change in circumstances.