VNI West

Electric and magnetic field

Electric and magnetic fields are generated by energised transmission infrastructure but are only relevant during operation, as the Project would not be energised during construction. The main consideration is potential exposure levels at houses near the Proposed Easement and possible impacts on human health. There are also concerns about possible impacts on agricultural activities, including the operation of GPS units or communications equipment in the vicinity of the Project.

All EES documents, chapters, technical appendices, and attachments are available to view and download on the VNI West website at **vniwproject.com.au/EES**

EES Chapter 8 and ***Technical Appendix A*** outline the potential impacts to human and animal health, and electronic equipment and signals associated with electric and magnetic fields generated by the Project.

READ MORE ↗

Chapter 8: Electric and magnetic field ↗

Technical Appendix A: Electric and magnetic field ↗

Electric and magnetic field exposure is regulated through both Commonwealth and State legislation. The potential electric and magnetic field exposure of the Project has been assessed to check that electric and magnetic field levels are compliant with the relevant reference levels and would not result in impacts to human health and the environment.

This assessment identified and assessed the potential risks to human health due to electric and magnetic field emissions and the potential interference with communication or infrastructure systems.

Electric and magnetic field levels dissipate over short distances from transmission infrastructure. When developing the Proposed Easement, a 5 km buffer from townships, and a 300 m buffer from individual dwellings has generally been applied to locate the transmission infrastructure. This ensures electric and magnetic field levels are well within compliance requirements at these dwellings. International studies have concluded that electric and magnetic fields generated by transmission infrastructure do not have adverse effects on livestock.

Predicted electric and magnetic field levels from the transmission line, the Tragowel Terminal Station and the Bulgana Reactor Station are all below relevant public and occupational exposure reference levels. As such, the Project complies with applicable guidelines, and no additional mitigation is required to achieve compliance.

Electromagnetic interference is not expected, including to GPS systems, due to different operating frequency ranges. Potential low-frequency induction effects and impacts to metallic infrastructure such as fences and services would be confirmed during detailed design in accordance with Australian Standard 2344:2016, supported by testing prior to and following energisation.

Overall, with standard design verification and controls in place, residual electric and magnetic field impacts are expected to be negligible.