

Transmission easement process – Nyngan Solar Plant

Knowledge type: Construction

Knowledge category: Technical

Technology: Solar photovoltaic

Key learning

Construction of a utility scale solar project in regional Australia will typically require the construction of a transmission line in order to connect the solar plant to the grid. Construction and operation of the transmission line will require the creation of an easement in order to provide a registered legal right that applies over the land. This process needs to consider the specific requirements of the Network Services Provider (NSP) – Essential Energy for the Nyngan Solar Plant and other landholders.

Implications for future projects

Key learnings from the process for securing the transmission line easement for the Nyngan Solar Plant that could be used on future projects:

- **NSP requirements** – Essential Energy like other NSPs have specific requirements and processes for formalising easements over a particular parcel of land in their favour. It is important that these requirements are captured in the agreement with landholder in order to avoid any delays in design approval and construction.
- **State road** – Road and Maritime Services (RMS) are responsible for state roads, such as the Barrier Highway, however, they typically do not have a title which prevents the registration of an easement. For Nyngan, the Bogan Shire Council is the controlling authority from whom we needed to seek a letter of consent.
- **Rail crossing** – Country Regional Network is the authority for the rail crossing required for the transmission line easement. They have specific requirements and a formal corridor access application process which is managed on their behalf by John Holland.
- **Crown lands** – Crown Lands within NSW Trade & Investment help with progressing easement creation requests over Crown land to ensure that environmental and cultural heritage aspects are appropriately addressed.

The creation and registration of an easement for the transmission line is a very specific process that will require the assistance of a knowledgeable surveyor and specialist legal advisor to ensure that it is navigated in a manner that does not delay design approval and construction.

Knowledge gap

There is no real knowledge gap concerning the creation of transmission line easements that are required for utility scale generation projects. However, it is a critical aspect in delivering a solar project and needs to be managed to avoid delay in connecting the solar plant to the grid. Creation

of an easement is based on state requirements which are relatively well understood by those familiar with the easement creation process.

Background

Objectives or project requirements

The Nyngan Solar Plant is connected to the grid via the connection works that included the new 132kV switchyard and approximately 3km of 132kV transmission line. The 132kV transmission line connects to the existing Nyngan – Cobar transmission line and required the creation of an easement in the favour of Essential Energy.

Process undertaken

Prior to creation of an easement AGL established option agreements with the relevant landholders to ensure that legal arrangements were in place as part of the project development. AGL engaged a specialist legal advisor in order to understand the framework and process for creating the easement for the 132kV transmission line. This included an early identification of any potential environmental and/or cultural heritage matters.

A local surveyor was used with previous experience in easement creation to ensure that survey plans were consistent with Land and Property Information NSW (LPI) requirements. The surveyor also pegged the easement for the contractor completing the construction works.

The easement documentation and plans were submitted to LPI through the legal advisor to ensure that information was submitted to LPI in the correct sequence to help the way through the registration process.

AGL liaised with Crown Lands in order to progress the section of transmission line with covers the crown land – a former stock route and engaged Essential Energy to complete the process of registration for this component given their statutory powers.

Supporting information

- Essential Energy – Creation of Easement: For Services (CEOF6496)
 - <https://www.essentialenergy.com.au/asset/cms/pdf/contestableWorks/CEFD6496.pdf>
- Essential Energy – Creation of Easement: Landowner Deed (CEOF6274c)
 - <https://www.essentialenergy.com.au/asset/cms/pdf/contestableWorks/CEOF6274c.pdf>
- Essential Energy – Design Information Transmission HV Connection Works: Section 3.7 includes transmission line easement requirements.
 - <http://www.essentialenergy.com.au/asset/cms/pdf/hv/GenericHVDesignRequirementsHVRequirements.pdf>
- Crown Lands – Lease and licences: http://www.lpma.nsw.gov.au/crown_lands/leases