

Andrew Rode

From: Cornelis Duba <Cornelis.Duba@endeavourenergy.com.au>
Sent: Tuesday, 5 March 2019 12:48 PM
To: DPE CSE Information Planning Mailbox
Cc: Andrew Rode
Subject: NSW Planning & Environment NSW Planning & Environment Development Application SSD 8445 for the Tahmoor South Coal Project
Attachments: Endeavour Energy FPJ 6007 Technical Review Request July 2018.pdf; Work-near-overhead-power-lines-code-of-practice.pdf; Endeavour Energy Drawing No. 86232 (OH lines minimum clearances near str....pdf; Work_near_underground_assets_guide.pdf; Safety+on+the+job.pdf; FactSheet_Building_Construction+web.pdf

The Secretary
NSW Planning & Environment

ATTENTION: Andrew Rode, Resource Assessments, Planning Services

Dear Sir or Madam

I refer to the Department's letter of 16 January 2019 regarding Development Application SSD 8445 for the Tahmoor South Coal Project. Submissions need to be made to the Department by 5 March 2019.

Subject to the following recommendations and comments Endeavour Energy has no objection to the Development Application.

- Network Capacity / Connection

Endeavour Energy's Asset Strategy & Planning Branch have advised that in regard to the new electrical load required by the mine, they are currently addressing this via the Endeavour Energy's Network Connections application process. The three following applications relating to the mine are currently being assessed;

- ARP4022 – asset relocation of section of 11,000 volt / 11 kilovolt (kV) high voltage and 66,000 volt / 66 kV high voltage mains to make way for expansion Rejects Emplacement Area (required July 2021).
- DBL2346 – temporary 11 kV high voltage supply for mine shaft drill rig (required July 2021).
- NIL0287 – Permanent 66 kV high voltage supply to the mine for surface ventilation equipment (66kV / 11kV switchyard start July 2021 completed early 2022).

For any additional electricity requirements the applicant will need to submit an application for connection of load via Endeavour Energy's Network Connections Branch to carry out the final load assessment and the method of supply will be determined (also taking into consideration the potential further development / electricity load of the residue allotments). Further details are available by contacting Endeavour Energy's Network Connections Branch via Head Office enquiries on telephone: 133 718 or (02) 9853 6666 from 8am - 5:30pm or on Endeavour Energy's website under 'Home > Residential and business > Connecting to our network' via the following link:

<http://www.endeavourenergy.com.au/> .

Advice on the electricity infrastructure required to facilitate the proposed development (including asset relocations) can be obtained by submitting a Technical Review Request to Endeavour Energy's Network Connections Branch, the form for which FPJ6007 is attached and further details (including the applicable charges) are available from Endeavour Energy's website under 'Our connection services'. The response to these

enquiries is based upon a desktop review of corporate information systems, and as such does not involve the engagement of various internal stakeholders in order to develop a 'Connection Offer'. It does provide details of preliminary connection requirements which can be considered by the applicant prior to lodging a formal application for connection of load.

Alternatively the applicant should engage a Level 3 Accredited Service Provider (ASP) approved to design distribution network assets, including underground or overhead. The ASP scheme is administered by NSW Trade & Investment and details are available on their website via the following link or telephone 13 77 88:

<https://energysaver.nsw.gov.au/households/you-and-energy-providers/installing-or-altering-your-electricity-service> .

Endeavour Energy's contact for dealing with the operational matters related to the electrical infrastructure for the Project is :

Rod Joyce

Distribution Operation & High Voltage Customer Manager

D: 9853 6823

F: 9831 9059

M: 0409 665 001

E: Rod.Joyce@endeavourenergy.com.au

- Subsidence Management

Endeavour Energy has noted the following in the Subsidence Impact Assessment.

6.9.5. Management of potential impacts on the Electrical Infrastructure

Tahmoor Mine has developed a Subsidence Management Plan in consultation with Endeavour Energy to manage potential impacts on the existing longwalls at Tahmoor Mine to manage potential impacts on electrical infrastructure.

It is recommended that a similar Management Plan be developed in consultation with Endeavour Energy to manage potential impacts on the electrical infrastructure within the *Subsidence Study Area*. With the implementation of these management strategies, it would be expected that the electrical infrastructure be maintained in safe and serviceable conditions during and after the extraction of the proposed longwall.

With an appropriate management plan in place, it is considered that potential impacts on the electrical infrastructure can be managed for any orientation, extension, or shortening of longwalls within the *Existing Longwalls* boundary, even if actual subsidence movements are greater than the predictions or substantial non-conventional movements occur.

As this is an extension of the current mine into a new area below the village area of Bargo, the current Subsidence Management Plan should be updated or a new one drafted to include the additional assets that may be impacted by any mine subsidence. Endeavour Energy's contact for dealing with the potential impacts on its electrical infrastructure are:

Samuel Morris

Senior Engineer - Overhead Mains Assets

D: 9853 6164

E: Samuel.Morris@endeavourenergy.com.au

- Earthing

The construction of any building or structure (including fencing, signage, flag poles, hoardings etc.) whether temporary or permanent that is connected to or in close proximity to Endeavour Energy's electrical network is required to comply with Australian/New Zealand Standard AS/NZS 3000:2018 'Electrical installations' as updated from time to time. This Standard sets out requirements for the design, construction and verification of electrical

installations, including ensuring there is adequate connection to the earth. Inadequate connection to the earth to allow a leaking/fault current to flow into the grounding system and be properly dissipated places persons, equipment connected to the network and the electricity network itself at risk from electric shock, fire and physical injury.

- Safety Clearances

The construction of any building or structure (including fencing, signage, flag poles etc.) whether temporary or permanent must comply with the minimum safe distances / clearances for voltages up to and including 132,000 volts (132kV) as specified in:

- Australian/New Zealand Standard AS/NZS 7000 – 2016: ‘Overhead line design’ as updated from time to time.
- ‘Service and Installation Rules of NSW’ which can be accessed via the following link to the NSW Planning & Environment website:
<https://energy.nsw.gov.au/government-and-regulation/legislative-and-regulatory-requirements/service-installation-rules> .

As a guide please find attached a copy of Endeavour Energy Drawing ‘Overhead Lines Minimum Clearances Near Structures’.

- Vegetation Management

The planting of large trees in the vicinity of electricity infrastructure is not supported by Endeavour Energy. Suitable planting needs to be undertaken in proximity of electricity infrastructure. Only low growing shrubs not exceeding 3.0 metres in height, ground covers and smaller shrubs, with non-invasive root systems are the best plants to use. Larger trees should be planted well away from electricity infrastructure (at least the same distance from overhead power lines as their potential full grown height) and even with underground cables, be installed with a root barrier around the root ball of the plant. Landscaping that interferes with electricity infrastructure may become a potential safety risk, cause of bush fire, restrict access, reduce light levels from streetlights or result in the interruption of supply. Such landscaping may be subject to Endeavour Energy’s Vegetation Management program and/or the provisions of the Electricity Supply Act 1995 (NSW) Section 48 ‘Interference with electricity works by trees’ by which under certain circumstances the cost of carrying out such work may be recovered.

- Dial Before You Dig

Before commencing any underground activity the applicant is required to obtain advice from the **Dial Before You Dig 1100** service in accordance with the requirements of the Electricity Supply Act 1995 (NSW) and associated Regulations. This should be obtained by the applicant not only to identify the location of any underground electrical and other utility infrastructure across the site, but also to identify them as a hazard and to properly assess the risk.

- Excavation

The applicant should be advised of the following object of Section 49A ‘Excavation work affecting electricity works’ of the Electricity Supply Act 1995 (NSW) covering the carrying out or proposed carrying out of excavation work in, on or near Endeavour Energy’s electrical infrastructure.

Electricity Supply Act 1995 No 94

Current version for 1 August 2018 to date (accessed 4 September 2018 at 08:54)

Part 5 > Division 2 > Section 49A

49A Excavation work affecting electricity works

- (1) This section applies if a network operator has reasonable cause to believe that the carrying out of electricity works:
 - (a) could destroy, damage or interfere with those works, or
 - (b) could make those works become a potential cause of bush fire or a potential risk to public safety.
- (2) In those circumstances, a network operator may serve a written notice on the person carrying out the work:
 - (a) to modify the excavation work, or
 - (b) not to carry out the excavation work, but only if the network operator is of the opinion that the destruction or damage of, or interference with, the electricity works concerned or in preventing the carrying out of the work, poses a potential risk to public safety.

If any excavation work affects Endeavour Energy's electricity infrastructure, prior contact must be made to Endeavour Energy's Regional Service North via Head Office enquiries on telephone: 133 718 or (02) 9853 6666 from 8am - 5:30pm or alternately email Regional.ServicesCentral@endeavourenergy.com.au.

- Public Safety

Workers involved in work near electricity infrastructure run the risk of receiving an electric shock and causing substantial damage to plant and equipment. I have attached Endeavour Energy's public safety training resources, which were developed to help general public / workers to understand why you may be at risk and what you can do to work safely. The public safety training resources are also available via Endeavour Energy's website via the following link:

<http://www.endeavourenergy.com.au/wps/wcm/connect/ee/nsw/nsw+homepage/communitynav/safety/safety+brochures>.

If the applicant has any concerns over the proposed works in proximity of the Endeavour Energy's electricity infrastructure to the road verge / roadway, as part of a public safety initiative Endeavour Energy has set up an email account that is accessible by a range of multiple stakeholders across the company in order to provide more effective lines of communication with the general public who may be undertaking construction activities in proximity of electricity infrastructure such as builders, construction industry workers etc. The email address is Construction.Works@endeavourenergy.com.au.

- Emergency Contact

In case of an emergency relating to Endeavour Energy's electrical network, the applicant should note the Emergencies Telephone is 131 003 which can be contacted 24 hours/7 days.

I appreciate that not all the foregoing issues may be directly relevant or significant to the Development Application. However, Endeavour Energy's preference is to alert proponents / applicants of the potential matters that may arise should development within closer proximity of the existing and/or required electricity infrastructure needed to facilitate the proposed development on or in the vicinity of the site occur.

Could you please pass on a copy of this submission and the attached resources to the applicant? Should you wish to discuss this matter, or have any questions, please do not hesitate to contact me or the contacts identified above in relation to the various matters. Due to the high number of development application / planning proposal notifications submitted to Endeavour Energy, to ensure a response contact by email to property.development@endeavourenergy.com.au is preferred.

Yours faithfully

Cornelis Duba

Development Application Specialist

Network Environment & Assessment

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