

Review of Environmental Factors (REF) Decision Statement Report

Endeavour Energy Berrima Junction New Permanent Zone Substation

17/09/2024

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1. Introduction

Endeavour Energy (EE) is proposing to establish a new permanent Berrima Junction Zone Substation (ZS) and removal of the temporary Berrima Junction ZS. The site is in the Wingecarribee local government area, between the towns of Berrima to the north and Moss Vale to the south. The works include installation of a new 33kV feeder from Moss Vale ZS and re-direction of two existing 33kV feeders from Moss Vale ZS, all within the existing easement.

The project involves:

- Removal of the temporary Berrima Junction ZS at Lot 11 Douglas Rd, Moss Vale
- All site preparation and construction works including site clearing, civil works, conduits and trenching, transformer bunds, concrete and footings at the Berrima ZS site
- Installation of a new 33kV feeder from Moss Vale ZS and re-direction of two existing 33kV feeders from Moss Vale ZS, all within the existing easement
- A new feeder bay at the Moss Vale ZS, installation of underground/overhead fibre optic cable from Berrima Junction ZS to Moss Vale ZS
- Replacement of approximately 34 poles within the existing feeder easement
- Associated distribution works from the new Berrima Junction ZS.
- Install security fencing and gates and establish landscaping

The proposed activity has been classed as Class 4 activity in accordance with the *NSW Code of Practice for Authorised Network Operators* (DPE, 2015) (the Code), and a Review of Environmental Factors (REF) *Endeavour Energy Berrima Junction New Permanent Zone Substation* was prepared by Niche Environment and Heritage (Niche) in September 2024 to assess the potential impacts of the proposed activity. The REF was prepared in accordance with Part 5 of the *Environmental Planning and Assessment Act 1979* (EP&A Act), Section 171 of the *Environmental Planning and Assessment Regulation 2021* and the *NSW Code of Practice for Authorised Network Operators* (DPE, 2015) which is an approved Code under Section 198 of the *Environmental Planning and Assessment Regulation 2021*.

The NSW Government has prescribed Endeavour Energy, an Authorised Network Operator, as a prescribed determining authority for the purpose of the *Environmental Planning and Assessment Act 1979*. To allow the proposed activity to proceed, Endeavour Energy must make a determination of the REF in accordance with Part 5 of the *EP&A Act*.

2. Consultation

Consultation was undertaken as below:

1. A public notice in relation to the draft REF was published in the *Southern Highland News* on 19 June 2024 and the draft REF was also published on the EE website. One response, in support of the proposal, was received.
2. Wingecarribee Shire Council were notified on 20 May 2024 and no response received.

3. Consideration of Environmental Impacts

The REF details the proposed activity, assesses the potential impacts on the environment and provides management measures to avoid, minimise, manage and/or offset those impacts. The key sensitive environmental aspects related to this proposed activity are biodiversity, noise and vibration.

Biodiversity

The project has the potential to affect native vegetation, threatened species habitat, drainage lines, and water quality during construction.

For the most part, the Project occurs within previously cleared areas such as road verges, and disturbed paddocks. Field surveys found one vegetation community; PCT 3338 Goulburn Tableland Frost Hollow Grassy Woodland (BC Act: CE; EPBC Act: CE) in close proximity to the Study Area. This PCT aligns with the critically endangered threatened ecological community (TEC), NSW Werriwa Tablelands Cool Temperate

Grassy Woodland under the BC Act. Considering no native vegetation is proposed to be removed further assessment wasn't required. The project includes the removal of non-native vegetation, a stand of 32 trees consisting of Radiata Pines as well as Quaking aspen trees, is required in the Project Footprint on Douglas Road near the Berrima Junction ZS. Furthermore, non-native vegetation removal is required near the corner of the Moss Vale ZS including Crab Apple, and Japanese Maple. No threatened flora or fauna species were recorded during the site assessment. There are eight threatened fauna species considered to have a High or Moderate likelihood of occurrence in the project footprint. These species are the Little Eagle, Dusky Woodswallow, Gang-gang Cockatoo, South-eastern Glossy Black-Cockatoo, Scarlet Robin, Koala, Grey-headed Flying-fox and Southern Myotis. One threatened plant species, *Eucalyptus macarthurii*, is known to occur in the vicinity. The project will implement the following safeguards to avoid and minimise impacts:

- Large trees, stags and fallen hollow logs would be avoided where practical.
- Disturbance would be restricted to the removal of shrubs and small trees, with the root ball of plants to be left intact where possible to aid in regeneration.
- The removal of hollow bearing trees is not anticipated to be required. However, if it is required it would be performed in the presence of a qualified ecologist to assist in detection and translocation of potentially displaced fauna.
- All creeks and drainage lines that contain flowing or still water are to be avoided.
- Soil disturbance is to be minimised with topsoil reinstated according to the natural profile.
- Silt fencing will be used at all locations where ground disturbance (i.e. removal or topsoil and subsoils) is undertaken and erosion and sediment run off may occur, particularly upslope of creeks or drainage lines.
- Soil disturbance would seek to avoid areas prone to erosion or sediment run off, such as steep slopes.

Noise and vibration

The project has the potential to generate noise and vibration from the movement and operation of machinery and vehicles during construction, affecting nearby residents and wildlife. The project will implement the following safeguards to avoid and minimise impacts:

- Limit construction hours,
- Switch off equipment when not in use,
- Limit concurrent use of machinery,
- Monitor weather conditions, and
- Use traffic control where needed.

4. Conclusion

In summary, the REF addresses the requirements of Section 5.5 of the *EP&A Act* by considering to the fullest extent possible, all matters affecting or likely to affect the environment from the proposed activity. The REF also considers factors prescribed under Section 171 of the *Environmental Planning and Assessment Regulation 2021*. The REF assesses and considers the likely significance of the environmental impacts of the proposed activity under Section 5.7 of the *EP&A Act*.

The REF also considers the requirements of the *Commonwealth Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act) and assesses all Matters of National Environmental Significance (MNES) and any impacts on Commonwealth land.

The REF concludes that the proposed activity is not likely to significantly affect the environment or threatened species, populations or ecological communities, or their habitats. The REF also considers that the proposed activity is not likely to have a significant impact on Matters of National Environmental Significance (MNES) or Commonwealth land, and therefore does not require a referral under the Commonwealth EPBC Act.

With consideration of the environmental impacts detailed in the REF, the key conclusions are accepted for the following reasons:

- The REF has been prepared by persons appropriately trained to consider and assess the impacts of the proposed activity

- It is considered that the REF provides a true and fair review of the proposed activity in relation to its potential effects on the environment
- The REF is comprehensive and examines and takes into account, to the fullest extent possible, all matters affecting or likely to affect the environment as a result of the proposed activity.

5. Determination

I, as an authorised person on behalf of Endeavour Energy, have examined and considered the REF for the *Endeavour Energy Berrima Junction New Permanent Zone Substation* in accordance with Section 5.5 of the *EP&A Act*.

In accordance with the requirements of Section 2.5.1 of the Code, I am an appropriately authorised person, and I am not the same person who conducted the assessment.

I determine, on behalf of Endeavour Energy, that:

The proposed activity is not likely to significantly affect the environment, and is not likely to significantly affect threatened species, ecological communities or their habitats and is not to be carried out on land that is or is part of a declared area of outstanding biodiversity value. No Environmental Impact Statement (EIS) or Species Impact Statement (SIS) is therefore required in respect of the subject Activity. Further:

This is not a conditional decision and no further conditions are required (other than the mitigation measures attached to this Decision Statement)

This is a conditional decision and the conditions are listed in Section 6 of this Decision Statement.

The proposed activity is likely to significantly affect the environment and an EIS or SIS or both is required in respect of the subject Activity.

there is insufficient information contained in REF and a supplementary EIA should be prepared.

Signature Panel for Authorised Person who has made the Determination	
Signature	
Name in full	Roweena D'Souza
Role/Title	Environmental Services Manager
Date	17/09/2024

6. Conditions of Determination

Appendix A Mitigation Measures

Environmental Aspect	Mitigation Measures
Endeavour Energy (General requirements)	<p>The Project or Activity shall be carried out consistent with the REF</p> <p>Prior to any work commencing, the Endeavour Energy Project Manager and the Principal Construction Contractor must obtain the project Decision Statement and familiarise themselves with its conditions.</p> <p>A Construction Environmental Management Plan (CEMP), or equivalent, shall be prepared addressing the environmental safeguards identified in the REF and any appropriate industry standards. The CEMP shall be submitted to the Environmental Services Team for review and approval prior to on-ground works commencing.</p> <p>A copy of the project REF Decision statement and any other pertinent certificates/agreements, permits and documentation to be relied upon shall be always available to the project team/crews during construction.</p> <p>All works to be carried out in accordance with the approved project design.</p> <p>The Project Manager/Construction Contractor is to prepare a dilapidation report or photographic record as deemed necessary of any Council, private or Endeavour Energy assets which have the potential to be damaged by the proposed works.</p> <p>All works shall be consistent with Endeavour Energy's Environmental Management System (EMS).</p>
Land Use	<p>All impacted sensitive receivers and landowners within or adjacent to the works will be notified in writing 7 to 14 days prior to the commencement of construction works. Notification will include:</p> <ul style="list-style-type: none"> ▪ Proposed commencement date ▪ Brief of scope of works ▪ Anticipated duration of the works ▪ 24 hour contact details of the Project Manager or other appropriate contact person in the event of any complaints ▪ Details on proposed blocking or impairing access to driveways and/or residences/businesses (if any) <p>Evidence of this notification should be stored in the project file. This notification will be required in addition to any notification carried out during the preparation of this REF.</p> <p>On completion of the work, the existing easement associated with the replacement of fibre optic works, shall be stabilised and returned to as close to original condition or as otherwise agreed with the landowner.</p>
Geology and Soils	<p>An Erosion and Sediment Control Plan (ESCP) shall be prepared as part of the CEMP. All erosion and sediment control measures shall be designed, implemented and maintained in general accordance with <i>Managing Urban Stormwater: Soil and Construction Volume 1</i> (Landcom, 2004) ('the Blue Book') (particularly Section 2.2). The ESCP shall include stockpiles, stormwater run-off, trees, site boundaries, site access and storage areas. Exposed surfaces shall be kept to a minimum to limit the potential for erosion and dust generation.</p>

Environmental Aspect	Mitigation Measures
	<p>Inspections of the erosion and sediment controls will be on a periodic basis and at opportunistic times such as following rainfall events that cause run-off. The inspection program will record the following:</p> <ul style="list-style-type: none"> • Condition of rehabilitation areas (including records of any slumping) • Condition of sediment and erosion control structures • Whether sediment or other pollutants are leaving the site or have the potential to do so • Maintenance requirements Location(s) where sediment is disposed. • Pre-rainfall inspection to ensure that the controls are in place and working.
	<p>Vegetation disturbance is to be minimised. Activities will be preferentially undertaken in cleared or weedy areas or in areas that have been subject to previous disturbance or are themselves existing access tracks.</p>
	<p>Soil compaction will be minimised by utilising existing access tracks where possible and minimising vehicle movements along access tracks to only that required.</p>
	<p>Sites which are subject to levelling will be re-contoured to match the surrounding topography post development.</p>
	<p>All chemicals or other hazardous substances shall be stored in bunded and weatherproof facilities away from drainage lines. The capacity of the bunded area shall be at least 110% of the largest chemical volume contained within the bunded area.</p>
	<p>A spill kit will be located at each site to manage hydrocarbon spills (if there are any) and be used in the event of a spill.</p>
	<p>Any imported fill shall be certified at source location as pathogen and weed free Excavated Natural Material (ENM) or Virgin Excavated Natural Material (VENM) in accordance with the POEO Act and the <i>Protection of the Environment (Waste) Regulation 2014</i> (POEO Waste Regulation).</p>
	<p>Any sediment removed from the site that is potential acid sulphate soil is to be tested and treated to ensure compliance with waste classification guidelines for offsite disposal (EPA 2014).</p>
	<p>Any material or soil suspected of showing evidence of contamination shall be sampled and analysed by a NATA Registered laboratory and managed in accordance with the <i>Waste Classification Guidelines</i> (EPA, 2014), the <i>Guidelines on the Duty to Report Contamination</i> (EPA, 2015) and the <i>Contaminated Land Management Act 1997</i>.</p>
	<p>Spoil management and dewatering of worksites will be managed in accordance with the following EE Standards and the Environmental Guidelines Handbook:</p> <p>EMS 0007 – Waste Management EMS 0008 - Environmental Incidents Response and Management EMS 0013 - Spoil Management EMS 0014 – Dewatering worksites.</p>
	<p>Existing roads and, access tracks and rail corridor are to be used for vehicles and equipment to gain access to the sites.</p>
	<p>New access tracks shall be constructed with erosion and sediment controls.</p>

Environmental Aspect	Mitigation Measures
Hydrology and Water Quality	<p>The drainage lines and waterbodies would be avoided by the proposed works.</p>
	<p>Spoil shall be stockpiled in a manner so as to avoid the possibility of sediments entering watercourses (including stormwater drains) or migrating off-site.</p>
	<p>Any bulk fuel or hazardous material transport vehicles shall be parked on level ground a minimum of 40 m away from watercourses (including drainage lines).</p>
	<p>Any groundwater encountered would be dewatered, collected and disposed of appropriately. If minor dewatering is required, the management of discharge water shall be documented in the CEMP and be in accordance with EE procedure EMS0014. Discharge water should be limited to vegetated, grassed areas, away from waterways, and within the feeder line overhead alignment. If the discharge water is highly turbid, dewatering through a filter sock (or similar) shall be considered, where appropriate, to minimise sedimentation.</p>
Flora	<p>Disturbance would be restricted to the removal of non-native shrubs and trees, including the removal of radiata pines.</p>
	<p>Soil disturbance would be minimised and soil that is disturbed would be replaced according to the natural profile of the soil (i.e. topsoil reinstated as the top layer).</p>
	<p>Landscaping at substation site to be established in accordance with Site Landscape Plan (Annex 4), including site preparation, weed management and planting.</p>
	<p>All actions should be in accordance with EE's "Pests, Weeds and Diseases" section of the EE Environmental Guidelines Handbook.</p>
Fauna	<p>All large trees, stags and fallen hollow logs would be avoided where practical. The Radiata Pines are the exception, 32 are proposed for removal (Section 5.4.2).</p>
	<p>The removal of hollow bearing trees is not anticipated to be required. However, if it is required it would be performed in the presence of a qualified ecologist to assist in detection and translocation of potentially displaced fauna.</p>
	<p>All creeks and drainage lines that contain flowing or still water are to be avoided.</p>
Noise and Vibration	<p>Construction hours must be limited to standard construction working hours (Monday to Friday: 7 am to 6 pm, Saturday: 8 am to 1 pm, No work on Sundays or public holidays), unless otherwise approved. Any out-of-hours-works must be conducted in accordance with the requirements of EE's Environmental Guidelines Handbook.</p>
	<p>All vehicles and other equipment will be switched off when not in use. Vehicles must adhere to speed limits.</p>
	<p>Limit concurrent use of machinery where possible.</p>
	<p>Minimising noisy activities in proximity to the residential premises where feasible.</p>
<p>Where maximum vibration values in DEC (2006) cannot be met after all feasible and reasonable measures have been applied, any unacceptable impacts may be dealt with between the operator and the affected community. Negotiation should be made available to those people whose amenity is potentially affected by non-achievement of the relevant vibration criteria.</p>	

Environmental Aspect	Mitigation Measures
	<p>Where minimum distances outlined in BS 7385 (1993) cannot be maintained, a dilapidation assessment will be required to manage the risk of cosmetic damages within the Project Footprint.</p>
	<p>Compliance with the amenity criteria identified in Environmental Noise Impact Assessment (29 August 2023) prepared by Day Design Pty Ltd (Annex 5).</p>
Air Quality	<p>Minimise soil disturbance. Water carts to be used if necessary.</p>
	<p>Weather conditions to be monitored. Works are not to take place in extreme wind conditions (> 40km/h).</p>
	<p>All vehicles, plant and equipment are modern, well maintained and fit for purpose. Emissions from these items will be regulated by their standard exhaust systems.</p>
	<p>All vehicles and other equipment will be switched off when not in use. Vehicles must adhere to speed limits.</p>
	<p>Limit concurrent use of machinery where possible.</p>
	<p>Where minimum distances outlined in BS 7385 (1993) cannot be maintained, a dilapidation assessment will be required to manage the risk of cosmetic damages within the Project Footprint.</p>
Traffic and Accessibility	<p>Ensure that a Traffic Management Plan is prepared and followed.</p>
	<p>Traffic control is to be used to maintain continued traffic access where feasible.</p>
	<p>The temporary modification to traffic will be as minimal as possible.</p>
	<p>Any Transport for NSW (TfNSW) Permits required for the lane closures will be obtained prior to the commencements of the works.</p>
	<p>Emergency services and public transport methods will be notified.</p>
	<p>Ensure that the works to be done in the rail corridor are conducted during planned rail line outages or further consultation is required.</p>
	<p>After significant rainfall of < 10 mm/24 hrs, undertake inspection of the access track to determine if use of the track at this time would potentially result in a detrimental effect, and if required allow for the road to sufficiently dry out.</p>
	<p>Traffic, transportation and access mitigation and management strategies shall be documented and implemented in accordance with the CEMP and updated as required.</p>
Visual Amenity	<p>The canopy trees within the TEC will be avoided.</p>
	<p>All actions should be in accordance with the best Practice weed management guidelines (DPI 2021).</p>
	<p>All construction plant, equipment, waste and excess materials shall be contained within the designated boundaries of the work site and shall be removed from the site following the completion of construction.</p>

Environmental Aspect	Mitigation Measures
	<p>Disturbed areas would be rehabilitated to previous conditions if feasible.</p> <p>Materials used for the Project would be consistent the existing materials where possible.</p> <p>Appropriate site security fencing and landscaping to be installed as required around the new permanent Berrima Junction ZS site to provide visual screening and ensure the site is safe and secure.</p>
Aboriginal cultural heritage and archaeology	<p>All site workers and contractors should be inducted to the area and informed of their obligations under the <i>National Parks and Wildlife Act 1974</i>.</p> <p>In the event that previously unknown Aboriginal object(s) and/or sites are discovered during the proposed activity, work must stop. A temporary fence is to be erected around the Aboriginal cultural heritage site, with a buffer zone of at least 10 metres around the known edge. Contact an EE Environmental Specialist as further assessment may be required. The EE Environmental Specialist will be responsible for notifying Heritage NSW and Aboriginal Stakeholders. A qualified archaeologist may also be required to assess the find. Works should not proceed without advice from Heritage NSW or an appropriately qualified archaeologist.</p> <p>In the unlikely event that suspected human remains are encountered during the proposed activity, all work in the area that may cause further impact, must cease immediately and:</p> <ul style="list-style-type: none"> • The location, including a 10 m curtilage, should be secured using barrier fencing to avoid further harm. • The NSW Police must be contacted immediately. • No further action is to be undertaken until the NSW Police provide written notification to the Proponent. • If the skeletal remains are identified as Aboriginal, the Proponent or their agent must contact Heritage NSW, previously known as the Office of Environment and Heritage (OEH) Enviroline on 131 555; and representatives of the Gandangara Local Aboriginal Land Council (ILALC). • No works are to continue until Heritage NSW provides notification to the Proponent or their Agent.
Historic Heritage	<p>If potential archaeological deposits are found in areas that have not been identified in this assessment, work should stop immediately, and a qualified heritage specialist contacted. Heritage NSW should be notified, and their advice followed as per Heritage NSW guidelines.</p>
Electromagnetic Fields	<p>All designs are to comply with ARPANSA Radio Protection Standard 3 exposure limits (ARPANSA, 2002).</p>
Generation of waste and hazardous materials	<p>Avoid the generation of waste and recycle and reuse whenever possible.</p> <p>Waste mitigation and management strategies shall be documented in the Work Instructions.</p> <p>All waste, including surplus soils, which cannot be reused shall be classified in accordance with the <i>Waste Classification Guidelines</i> (EPA, 2014), removed from the site and disposed of at a facility that can lawfully accept the waste in accordance with the POEO Act and POEO Waste Regulation.</p> <p>Invasive weed material to be disposed of or treated appropriately as per EE's "Pests, Weeds and Diseases" section of the EE Environmental Guidelines Handbook and EMS0004.</p>