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8 November 2023

Natasha Homsey Planning and Assessment Group Department of Planning and Environment, Locked Bag 5022, PARRAMATTA NSW 2124

natasha.homsey@planning.nsw.gov.au

Dear Ms Homsey

Submission on EnergyCo Transmission Project Environmental Impact Statement (Application No SSI-48323210)

1. Introduction

Thank you for the opportunity for Warrumbungle Shire Council (Council) to table this Submission in response to the Environmental Impact Statement (EIS) for the proposed Central-West Orana Renewable Energy Zone Transmission Project, generally the land which comprises a corridor approximately 220 kms long extending north to south from Cassilis to Wollar and east to west from Cassilis to Goolma NSW.

The project will be located partly within the Warrumbungle Local Government Area (LGA) and has physical and socio-economic consequences for Council to manage.

It is understood that the project involves the establishment and operation of new electricity transmission infrastructure, new energy hubs and switching stations and ancillary works required to connect new renewable energy generation and storage projects within the Central-West Orana Renewable Energy Zone (REZ) to the NSW transmission network. The project would include the following features:

- A Critical State Significant Infrastructure (CSSI) project with a capital investment value of \$3.2 Billion.
- around 90 kms of twin double circuit 500 kV transmission lines and associated infrastructure to connect two energy hubs to the existing NSW transmission network via the New Wollar Switching Station.
- around 150 kms of single circuit, double circuit, and twin double circuit 330 kV transmission lines, to connect renewable energy generation projects within the REZ to the two energy hubs.
- thirteen switching stations along the 330 kV network infrastructure at Cassilis, Coolah, Leadville, Merotherie, Tallawang, Dunedoo, Cobbora and Goolma, to transfer the energy generated from the renewable

- energy generation projects within the REZ onto the project's 330 kV network infrastructure.
- establishment of new, and upgrade of existing access tracks for transmission lines, energy hubs, switching stations and other ancillary works areas within the construction area (such as temporary waterway crossings, laydown and staging areas, earthwork material sites with crushing, grinding, and screening plants, concrete batching plants, brake/winch sites, site offices and two workforce accommodation camps).
- ancillary development including, but not limited to the following
 - i. the construction and operation of access roads,
 - ii. the installation and operation of construction accommodation, compounds, and power supplies.
 - iii. Three on-site concrete batching plants during construction.
 - iv. Un-specified number and size of quarries.
- Upgrading, relocating, or widening existing public roads.

The EnergyCo Transmission Line assessment of likely impacts on community assets and services requires a detailed assessment and commitments which are currently not adequately provided in the EIS.

Presently, while the overall potential economic benefits for the region are acknowledged and supported, based on the current level of information provided in the EIS, Council has significant concerns with the likely impacts the Proposal would have on community assets which Council manages, including:

- Infrastructure assets such as (but not limited to) roads, waterway/drainage structures, water supply networks, which are not designed to cater for the large peak demands likely to arise across the region due to the project (both individually and cumulatively with other projects).
- Social impacts including employment and training of locals, social unrest, and social cohesion.
- Cumulative impacts from traffic numbers, road impacts, road safety, construction workers, accommodation requirements, bushfire and visual impacts.

2. Overview Comments

Whilst Council acknowledges the concept of the REZ, the development of related projects must be transparent in identifying the environmental, social, and economic costs and benefits. Who is reaping the benefits and who is burdened with the costs?

Council is striving to seek informed, merit-based decisions on all renewable energy generation and transmission project proposals. Our residents and ratepayers deserve nothing less.

With regards to the EnergyCo proposed transmission project Council holds substantial concerns regarding the lack of detail and substance in the EIS pertaining to mitigation works, management measures and forward funding commitments.

The various concerns are outlined in this submission. It is because of these unresolved and significant concerns that the Council hereby lodges an **objection** to the project. We are objecting because of the salient matters listed below.

An objection may be withdrawn by Council upon satisfactory arrangements being made to address these concerns and those raised in **Attachment 1**, prior to CSSI determination.

The prospect of Council subsequently reviewing its objection is dependent on whether the Proponent and DPE actively and substantively engage with Council to address, to Council's written satisfaction, the concerns listed herein.

Council, its residents and ratepayers and community groupings, need to be satisfied beyond doubt that the environmental, social, and economic features and attributes of the Warrumbungle LGA in general, and the local communities, towns, and rural districts in particular, will be safeguarded. A priority consideration is that the Council needs to be able to feel confident that environmental, social, and economic costs will not be outsourced by the Developer onto the residents and ratepayers of the Shire.

The salient matters that require satisfactory resolution include:

- 1. Numerical targets for local employment and training.
- 2. Development of appropriate mitigation measures for social impacts, community perception and fears linked to health risks and impacts to telecommunication.
- 3. Definitive actions to enhance positive social cohesion between the proposal and the local community.
- 4. Transparency on the population data which has been used for this EIS.
- 5. Substantial additional engagement by EnergyCo of Council and local residents.
- 6. Identification of the definitive details regarding accommodation for the construction workforce.
- 7. A detailed assessment of the likely impacts and implications to property prices.
- 8. Whether any biodiversity offsets will impact Warrumbungle LGA.
- 9. Council seeks greater transparency and robustness of information on the local community benefiting from lower electricity costs.
- Council requires consideration to be given to the Dark Sky Planning Guidelines to protect the observing conditions of Siding Spring Observatory.
- 11. Greater detail on what the Workforce Accommodation Strategy might address, due to only a general overview of the key management measures being included in the EIS.
- 12. Details on whether Council's Heritage Strategy was referred to during heritage investigations and considerations.
- 13. Additional detail on the climate change adaptation or risk factors to be applied to the detailed design phase.
- 14. Further development of the Bushfire Mitigation measures to ensure they address all ignition sources and the requirements and expectation on construction companies/personnel to assist in times of bushfire.
- 15. Council would like to see a more robust assessment of the fluvial geomorphology implications during construction including a quantitative assessment, as it pertains to potential impacts to local roads and Council owned land.
- 16. Whilst the visual assessment includes residents to a degree, there is no assessment of the impact on tourists and the overall visual appeal of the region. The cumulative impact assessment (management of impacts) does not include visual impacts as a priority issue, therefore

- Council requires further detailed information and consultation to address this matter.
- 17. Council seeks for cumulative impacts to be addressed by EnergyCo and DPE instead of being "fobbed off" to individual REZ developers.
- 18. Council requests EnergyCo representatives meet regularly with Council staff to discuss and resolve the issue of project generated substantial traffic increases, with a view to providing written confirmation as to the legal consequences for Council as the Roads Authority of the proposed dual approach of CSSI and REF approvals for the project.
- 19. Council also requests a meeting with EnergyCo's road specialist representatives as soon as practicable to work through the details, including whether the work would be consented under the current EIS process or via the separate *Environmental Planning & Assessment Act* 1979 Part 5 (EP&A Act) assessment by TfNSW.
- 20. The provision of annual, ongoing financial contributions for road repairs and maintenance over the life of the project, including any decommissioning phase.
- 21. Council seeks talks with EnergyCo regarding the planned source of potable and non-potable water in greater detail to determine the actual quantities required from different supplies and drought planning.
- 22. Demonstration prior to CSSI consent that existing surface and subsurface water sources will be adequate without being adversely affected, or new supply options are reasonably achievable without reliance on a third-party consent that has not yet been secured.
- 23. The scope and extent of construction activity and all relevant safeguards.
- 24. Firm commitments by the developer demonstrating commitment towards implementing and managing/limiting light vehicle movements to and from site with consideration being given to actually how useful a shuttlebus will be, when most construction workers/tradies are required to cart "tools of the trade" and thus require a ute/truck to cart their tools. Further to this, the EIS makes no mention of workers from Merotherie temporary workers camp travelling to Elong Elong to construct the project.
- 25. Confirmation by EnergyCo of the locations of facilities unconfirmed in the EIS as detailed in this submission.
- 26. Definitive quantification of and commitment to the number of construction and operational jobs that will be secured by locals, and training/upskilling to be provided.
- 27. Details of the source of sand and gravel required for the construction phase.

The above-mentioned items are further addressed below.

3. Social Impacts

Technical Paper 7 lists local business opportunities as a positive impact from the transmission line construction phase, however, also details the skills shortages in Table 4-6 for all trades and professionals required except mechanical technicians, electricians, and crane operators. Section 6.1.2 assumes that 10% of the workforce will be existing residents, comprising 180 workers but does not extend to proposing a target for local percentage of employment or project related spend. Council notes that the management of this discrepancy and the issue of lack of potential workforce numbers from local residents is not adequately addressed in the EIS, rather the further investigation and development of mitigation measures is proposed to be

pushed into the development of management plans post approval, which is not acceptable to Council.

The EIS mentions potential training and upskilling of local people to fill the project roles very briefly, as something which should be addressed in the management plan. Council seeks greater investigation and clarity on the actual mitigation measures which will be put in place or quantitative targets to be achieved, before any contemplation of project approval.

Council notes that the social paper presents a greater number of negative impacts versus positive ones for local communities. Stress-related impacts are described in detail throughout this paper. The perceptions inducing stress are detailed and, in most cases, discounted, however Council notes that there are no management specific to the stress of community members proposed. A failure to adequately address community and individual stress levels will result in widespread community impacts and issues as well as greater strain on medical services.

In Section 1.2.3 Limitations, it is acknowledged that the 2021 ABS Census data may have been impacted by the Covid-19 pandemic and may not be illustrative of typical statistics. This has been addressed by implementing a comprehensive engagement plan with Councils, landowners, and community representatives. Council seeks to understand specifically what figures have been relied upon in lieu of the census data.

In Section 3.4 the community and stakeholder engagement are detailed, with sections 6.8.1 stating a total of 74 meetings were held with the Councils. Council is of the opinion that inadequate consultation has occurred and queries this number. It is also highlighted that despite the large number of consultation sessions described, 49% of the community who responded to a 2022 survey reported a perception that they had less engagement with land agents and overall engagement with EnergyCo. Council supports this finding and agrees that additional productive engagement with EnergyCo is required.

Section 4.4.3 lists the New England Highway as a key transport network for Warrumbungle Shire Council LGA. This is incorrect information since the New England Highway does not enter the Warrumbungle LGA.

Council notes that Section 4.4.4 identifies that the locality has limited mobile reception and connectivity which will be impacted by the influx of construction personnel, as well as the impact to radio transmission by the transmission lines. It is noted that there are no specific mitigation measures proposed to ensure the local population doesn't suffer with further degrading of this service due to overloading. Does this interruption extend to emergency service radio frequencies for UHF?

The assessment of short and long stay accommodation availability in Section 6.1.2 doesn't include caravan parks or free camping sites, or an assessment of the likelihood these will be used. It is believed that this is a shortcoming of the assessment, since high levels of pressure on the existing accommodation options will result in short-term workers looking for alternative options.

Section 6.2.2 states that current mine workers could be reskilled to work on the transmission line project and become a local resource for other renewable energy projects. Council states its agreement with this approach and would like it extended to other industries and the unemployed, with targets put in place to improve the low IRSAD score of Warrumbungle LGA for being socio-economically disadvantaged.

Council notes that two construction workforce accommodation camps are included, one at Merotherie and one at Turill. Whilst the detail includes a list of facilities which will be provided at the camps such as gyms and medical facilities, it does not provide sufficient details on the aspects of security, wet-mess, rules, and restrictions on access to town, traffic count of vehicles travelling to/from the camps for roster start/finish (home to gate), social activities, or distance from town. It is also noted that Technical Paper 7 – Social places the second workforce accommodation camp at Cassilis, sometimes also described as being at Turill. This error is consistent throughout the Paper, and Council states its concern that the social impact of the camp has assessed the incorrect locality. Turill and Cassilis contain vastly different population sizes and demographics, rendering the social impact assessment obsolete.

Section 6.4.1 discusses the increased demand for service hubs due to construction personnel not residing in the camps detailed above. This statement is at odds with previous sections that discuss at length the very limited number of people who will reside in town. Council seeks greater transparency and robustness of information on the safeguards to be adopted to prevent social impacts caused by the operation of construction camps and the general influx of up to say 7,000 to 10,000 construction workers across the REZ, because of all renewable energy projects.

There is a brief discussion about the possibility of sections of the community benefiting from lower electricity costs. However, there is very limited detail and no information on the benefits being applied to the wider community. Council seeks greater transparency and robustness of information on what this will entail and why this is not a community-wide program.

Community concerns and perceptions of health risks are mentioned many times throughout this paper. In Section 7.5.1 there is no updated (post 2022) evidence regarding how the concerns over electromagnetic field have been addressed or if the perception has changed. The EIS states that while research has concluded there are no risks to human health associated with electromagnetic fields, this is inconsistent with the paragraph above. Which states that the current evidence does not confirm the existence of any health consequences from exposure to low level electromagnetic fields, but doesn't go as far as saying there are no health risks.

A major community concern is the effect of the transmission line on property prices. Council is seeking a more in-depth investigation from EnergyCo into the likelihood of property price fluctuations because the information provided in Section 7.5.2 of the technical paper states that the research remains inconclusive.

In Table 8-2 the residual impact assessment of construction impacts table moves impacts from high to medium and medium to low by listing 'Plans' as management measures. The detail provided of the content of these Plans and mitigation measures is in most cases vague and push the requirement for further investigation into the future. It appears that moving the impact measurement based on future plans is not sound environmental or social management. Council requires a clear definition, prior to the contemplation of any consent, of the specific mitigation and safeguard measures proposed by EnergyCo.

4. Employment of Locals and Construction Workforce Accommodation
The Proponent is likely to use an Engineering, Procurement and Construction (EPC) contractor to build the project. From experience, such service providers generally have limited appetite to employ and train locals. This is a major concern for Council, and it requires the Proponent to clearly articulate what percentage of local workers

will be employed, and trained as necessary, with that commitment to be taken on board by the contractor.

The EIS provides estimates for the percentages of local workforce which will be sourced locally, without a commitment to pursuing any specific quantum of local workforce. The Council's position is in support of providing opportunities for local employment first prior to migrating workers to the area, with an emphasis on the Proponent providing training and upskilling of the local workforce.

It is noted that the EIS provides only a general overview of the key management measures that a Workforce Accommodation Strategy might address. Council believes that worker accommodation camps have the potential for significant social impacts and require further information on the management, plans for liquor licenses, security, basic facilities and shops, medical facilities, worker transportation modes and vehicle numbers and decommissioning or repurposing.

The provision of new accommodation facilities is also expected to be closely tied to outcomes such as road safety, community perceptions of traffic increase, and rate of gravel loss (higher maintenance) on unsealed roads. Prior to CSSI determination, high-level commitments should be made considering:

- Location of such facilities to balance the need to minimise travel distances for road safety and economic development reasons, between accommodation and both the project and residential amenities (largely in towns), as the incidence rate of road injuries or fatalities can closely correspond to the distance travelled.
- What road infrastructure upgrades and management measures may be required to safely accommodate traffic to and from the proposed facility.

5. Economic Impacts

Technical Paper 8 states that there will be rising inflation associated with firms passing increased wage costs onto consumers and increased demands also resulting in rising costs for goods and services. The technical paper asserts that the overall regional economic impact will be positive, however does not look closely at the extrapolation of positive and negative benefit by LGA.

Council is concerned that Warrumbungle LGA will be burdened by rising costs but not greatly benefit from increased employment or demand for local goods and services due to the LGA having a much higher mean age and agriculture as the main industry.

Section 4.3 Agriculture states that impact to this industry regionally during construction will be less than 0.3%, much of this impact will be experienced by Warrumbungle LGA population. Council seeks further assessment of the economic implications by LGA to determine the true extent of impact.

6. Bushfire Impacts

Council notes that Chapter 8 of *Planning for Bushfire Protection 2019* (PBP) articulates the assessment framework for 'Other' developments in NSW (including infrastructure) along with a series of assessment considerations that are required before determination can be made regarding a project. It is also noted that Section 3.5.4 states that PBP assumes a credible worst-case fire burning under a 1:50 year

weather or fire event and that this design fire could under-represent the intensity and frequency of bushfires with Climate Change, yet no Climate Change factor has been added to the assessment. Even without any factoring of climate change variables the residual risk for both construction and operational actions assessed are High or Extreme.

It is concerning that climate change factors have not been applied especially considering that electrical distribution lines and associated infrastructure have been associated with the cause of many wildfires, as stated in Section 4.3 of Technical Paper 10. It is noted that Australia has a long history of numerous large-scale wildfire events attributed to the electricity distribution network with the majority occurring on days with extreme fire weather conditions. Over the past decade, Warrumbungle LGA has experienced catastrophic, severe and major fires such as Wambelong Fire in 2013, Sir Ivan Fire in 2017, and other scattered bushfires throughout the LGA. There needs to be adequate assessment and appropriate mitigation measures developed to address major fire events.

One of the key mitigation measures identified for both construction and operational phase of the project are asset protection zones (APZ) around key project assets. Council notes that these have been determined based on tolerable radiant heat thresholds (RHT) which were determined by EnergyCo. In turn these RHT's have dictated the associated APZ setback requirements. Council requests more transparency on the development of these thresholds considering that the landscape potential of fires impacting the construction area during construction are significant, and electricity infrastructure can ignite wildfires through a variety of sources.

Another of the mitigation measures is the installation of a minimum static water supply tank of 20,000L at the workers accommodation camp and at other locations along the transmission line and switch yards. Table 4 requires this tank to be non-combustible, yet it should also require it to be constructed from material that will not melt during a bushfire, and for a trailer fire-fighting unit at all accommodation camps and energy hubs.

It is noted that the restriction and/or prevention of certain activities that prevent bushfire risks on days with a fire danger rating of equal to or greater than 'high' must be risk assessed and endorsed by an appropriately qualified person and that the residual risk of all assessed actions during construction and operation is High or Extreme.

All the proposed mitigation measures are listed in Table 9. There is no mitigation measure proposed for preventing fires on-site. This mitigation measure should be included in the Construction Environmental Management Plan due to the bushfire risk posed by fires on-site including grass fires used to burn grassland for site preparation.

The use of watercarts and fire water tanks based within the construction site boundaries often places the onus on construction personnel and companies to assist in the firefighting efforts. Council notes that this is not detailed in the EIS, whereas it should be included as part of a mitigation measure to ensure that all parties (RFS and project) understand their role in bushfire related emergency management.

7. Hydrology and Water Quality Flooding

Temporary watercourse crossings may be required during construction. Whilst the impacts are mostly minor and localized, they would result in changes to erosion and

channel shape due to the poor to moderate geomorphic conditions in the Talbragar River and Upper Goulburn River Catchment.

Of particular concern is Merotherie Road between Golden Highway and the Leo Nott Bridge. This extent of road experiences regular flooding along a 1.7km stretch as part of mainstream flooding (flood plain), anecdotally and as shown in the EIS preconstruction flooding depths up to 10m occur during PMF events. Merotherie Road is the main access road to the proposed Energy Hub site; therefore, it is expected that detailed design will include upgrades such as culverts and other engineering solutions to Merotherie Road and other roads for nearby solar and wind farm developments.

Council is concerned that the implications of river migration due to these changes have not adequately been considered, especially regarding undercutting local roads, causeways, culverts, and bridges within the farther reaches of all rivers and streams. Council would like to see a more robust assessment of the fluvial geomorphology implications during construction including a quantitative assessment and details of concept design. These assessments also need to provide specific information regarding the climate change projections and intensity, duration, frequency (IFD) climate change factors that will be applied to detailed design.

It is noted that erosion and sediment controls will be designed and installed in accordance with the 'NSW Blue Book'. Due to the steep gradients, highly erodible soils, and potentially dispersive soils, it is recommended that all Plans be prepared and approved by a suitably qualified professional in erosion and sediment control.

8. Aviation Impacts

Council does not own or operate any commercial airport that will be impacted by the project, however there are three Aircraft Landing Areas (ALAs) within three nautical miles of the area of interest with at least two presumed to be within the Warrumbungle Shire. There are also three ALAs within 30 kms of the transmission line easement. The mapping provided within the EIS is not sufficient to determine exactly where the ALAs in close proximity are located. Have the owners of the ALAs been consulted in any capacity? Whilst the detailed design will inform these discussions Council requires further detailed information and consultation to satisfactorily address this matter.

9. Visual Landscape Impacts

In most instances, daytime impacts to landscape character would be moderate-low or moderate as construction works would result in a low to moderate magnitude of change. The exception to this is landscape character zones RV-03, RV-04, URH-02 and URH-06, where the construction of the project would result in a high magnitude of change. This high magnitude of the change is due to the contrast between the construction activity and the more remote rural landscapes which currently do not contain large scale electricity infrastructure. Council is most interested in RV-03 and RV-04 and all landscape character zones since these are within the Warrumbungle area. The transmission line project will result in a minor – moderate change to the landscape character across the region, however Council is more concerned with the cumulative impacts from all renewable energy projects and considers it an oversight that many projects within the Appendix E – Cumulative Impact Assessment (Table A-3) do not include visual amenity as a potential cumulative impact.

Council notes that there is potential for increased lighting of the night sky, impacts to landscape character and visual impacts. The cumulative impacts of these visual impacts on residents and tourists are significant. Whilst the assessment includes

residents to a degree, there is no assessment of the impact on tourists and the overall visual appeal of the region. The cumulative impact assessment, management of impacts does not include visual impacts as a priority issue, therefore Council requires further detailed information and consultation to address this matter. Council also seeks for the Dark Sky Planning Guidelines to be considered and adhered too.

10. Waste Impacts

Council notes that local waste management facilities closest to the project may have limited or no capacity to accept construction waste from the project. If closer, but generally smaller, local facilities are unable to accept the waste quantities from the project, there may be a requirement to transport the waste generated by construction of the project to larger regional facilities located further away from the construction area. EnergyCo will explore further opportunities with Mid-Western Regional, Dubbo Regional, Warrumbungle Shire and Upper Hunter Shire Councils to reduce the demand placed on local waste management facilities because of the project.

The EIS states that Engagement with the relevant Councils has indicated the Mudgee Waste Facility is at capacity and would not be able to accept waste generated from the construction of the project, and commercial waste is not accepted at the Mid-Western Regional Council operated Gulgong Waste Facility. In addition, the Wellington Waste Transfer Station and Cassilis Waste Management Facility do not accept large volumes of waste.

There is no mention of Warrumbungle Shire Council within this assessment. Council is **not** able to accept and REZ related waste, from any REZ projects at any waste facility with the LGA, and this should be noted in the EIS.

11. Road and Traffic Impacts

Council is the Roads Authority generally for classified and local roads within Warrumbungle Shire (other than Crown roads). Under Sections 87, 122, 138 (and others) of the *Roads Act 1993*, before any traffic control or physical works can commence on these roads, the developer must provide details and obtain consent from Council. While detailed design applications can and should be deferred until after CSSI consent is obtained, it must be shown that the measures and works can be practically achieved prior to CSSI approval.

Note: The Golden Hwy is a State classified road and Transport for NSW has care and control. That authority may choose to exercise approval functions in relation to the Golden Hwy as the road's authority under Section 64.

The project relies on high-intensity use of, inter alia, Warrumbungle Shire Councilowned roads by heavy and light vehicles for a prolonged period of some years during construction. Key routes to be impacted are:

- Spring Ridge Road approximately 12 kms between the Golden Highway and the proposed Elong Elong Energy Hub, as well as the road south of this point (to a lesser extent). In addition to the transmission line construction traffic there will be cumulative road and traffic impacts arising from the development of Spicers Creek Wind Farm, Dapper Solar Farm, Sandy Creek Solar Farm, Cobbora Solar Farm and Orana Wind Farm.
- Merotherie Road around 2 kms of road between the Golden Highway and the proposed Merotherie Energy Hub, with cumulative traffic impacts arising from Narragamba Solar Farm, Barneys Reef Wind Farm, and possibly others.

 Other Warrumbungle Shire Council-controlled local roads which will or could likely be used for access to the transmission alignment footprint by either light or heavy vehicles, for which no specific measures have been identified in the EIS reports, including Bald Hill Road, Sandy Creek Road, Dapper Road, Tucklan Road and Barneys Reef Road.

In addition to construction - related impacts traffic along these roads during the entire project lifecycle, including the operational and possibly decommissioning phases (for the generation projects), will be substantially elevated above existing current background volumes.

These roads are historically low-traffic, fit-for-purpose rural roads/laneways catering for occasional/seasonal use by farm-related heavy vehicles and residents.

Said roads are not designed and built to cater for the proposed traffic volumes or vehicle types and Council has serious concerns regarding unacceptable and currently unmitigated impacts by the project, and the aggregated cumulative impacts arising for both electricity generation and transmission projects on (in summary):

- 1. Road safety for all users, project traffic, surrounding farms and industry, and the travelling public alike, both during construction and afterwards as traffic volumes return to lower but still significantly elevated volumes compared with existing use patterns. Both the construction workforce traffic and the large heavy haulage task during the construction phases will produce traffic volumes and peaks many orders of magnitude greater than the existing background traffic. The total aggregated cumulative impact of traffic types and vehicle numbers must be spelt out, so Council is informed of the consequences for ongoing road maintenance costings and budgeting.
- 2. Maintenance of service levels not limited to just Level of Service delays as per the TfNSW traffic impact assessment guide definition, but also including user experiences for which Council is accountable to its communities such as travel time, route reliability, road surface hazards, ride quality and wear on vehicles.

Maintenance of service levels on these roads under project traffic are a major concern including, critically, preventing deterioration of the condition of road pavements, wearing course and structures (bridges, etc.).

Council does not support the proposition that regular patching of potholes and failures of the road surface during construction and later resealing, will leave the road in a condition no worse than before the project.

The engineering reality is the underlying pavement structure can only tolerate a finite number of heavy vehicle movements before widespread failures are likely to regularly occur and the pavement requires a full depth rebuild (rehabilitation). This deterioration may take some years to fully materialise, yet the damage is activated during the heavy vehicle movement phase.

The haulage task outlined in the EIS appears to show greater than 1.5 million tonnes of water, concrete, gravel, steel, and other materials will be required, and based on the limited information provided in EIS Table 3-8 and elsewhere it is reasonable to expect this is a significant underestimate of what will be both the actual materials

requirements, and the distances they will be transported by road. Based on these numbers alone, project traffic will vastly exceed the effective lives of existing Council pavements directly causing premature widespread failures, even before considering traffic from other REZ projects. While it appears EnergyCo expects to repair and maintain the road surfaces during construction, this should be understood as a temporary cosmetic fix to enable haulage to continue, without repairing the full-depth underlying damage which will continue to cause widespread failures long after construction concludes.

 Increased and currently unfunded Council capital and operational expenditures to meet these future demands across the road network over the project lifecycle (upfront upgrades, long term maintenance, and renewal at end of life of road assets).

Council maintains that the likely traffic impacts of the project are reasonably ascertainable now, and that how the contractor(s) undertake the works is unlikely to materially reduce the massive transport task and thus the impacts on Council's roads.

Specific commitments are therefore required to be agreed by EnergyCo and Council in relation to Council's statutory role as Roads Authority and its assets prior to any contemplation of the issuing of consent to the transmission project.

Council requires predicted impacts to be mitigated and managed as part of this investment phase of the REZ, rather than being 'outsourced' and funded by the Shire ratepayers for decades to come.

Relevant standards are set by the nationally consistent Austroads Guides, ARRB Best Practice Guides for road network owners, and local Council standards and policies. Normally, Council ensures such standards are secured through the *Environmental Planning & Assessment Act 1979* processes for development assessment, with third parties including crown authorities such as EnergyCo, having to obtain consent from Council under the *Roads Act 1993*.

If Council as the local roads' authority is to support this transmission project, then it must be granted the authority to review in detail and approve adequate measures to ensure that all aspects of road planning, operations, and future funding during the life of the REZ are deemed satisfactory.

If the NSW Government disagrees with this proposition, and the project moves forward without providing for it, it is Council and its residents and ratepayers that will inherit the long-term risks of safety incidents and community expectations around road network service levels which are unfunded.

The EIS states (Section 1.4.2) that EnergyCo may determine local roadworks under a separate EP&A Act Part 5 Review of Environmental Factors (REF). Regardless of the removal of road upgrades from the CSSI project declaration, which is an administrative planning change, the CSSI project will generate substantial traffic and there is a direct nexus for the project proponent to mitigate these impacts.

Council requests EnergyCo representatives meet regularly with Council staff as often as required to discuss and resolve this issue, with a view to providing written confirmation as to the legal consequences for Council as the Road's Authority of the proposed dual approach of CSSI and REF approvals for the project. It is also unclear

what role Transport for NSW (TfNSW) is intending to play in matters affecting local roads beyond the State Road boundary which is its general remit under NSW law.

Council recognises the potential time efficiencies offered by the Part 5 approach; however, it is critical that Council's *Roads Act 1993* Section 138 responsibilities, and accordingly its approval powers, are not overridden or by-passed. If there is any prospect that decisions will be made regarding its road network without approval from Council, potentially leaving it with a large legacy of economic expenses and risks and no additional resourcing to fund them, Council objects to the project in the strongest terms.

Further details regarding some of the specific commitments sought by Council in regard to roads issues are set out in **Attachment 1** to this letter.

Council also requests a meeting with EnergyCo's road specialist representatives as soon as practicable to work through the details, including whether the work would be consented under the current EIS process or via the separate EP&A Act Part 5 assessment by TfNSW.

A response is requested also addressing the details in **Attachment 1**.

12. Water Management

The Proponent estimates 700ML/annum of water will be required for construction. It is unclear from the EIS as to the definitive source of water required for concrete batching and other construction activities.

The Proponent estimates 413ML of potable water from Council owned supplies in Dunedoo and Coolah will be required for construction over the 4-year construction period with a peak of 185ML in 2025, and the total for the combined Council areas of 1,140ML over the four-year period. This requirement for potable water exceeds the current Coolah township annual water requirements and is roughly 78% of the Dunedoo requirement. Council is not in a position to be supplying potable water for the project.

The minimal level of detail and numerical analysis provided in the water balance assessment is not acceptable for a project of this scale in a region with high water security uncertainty, given the forward climatic outlook and the likely cumulative impacts with other renewable projects. It is also noted that the assessment graph presented in Figure 19-3 doesn't include potable drinking water or an assessment of the local population and industry requirements for the available regulated and unregulated water sources.

While deferral of a detailed water sourcing strategy to the post-consent phase may be appropriate, it must be demonstrated prior to CSSI consent that existing surface and subsurface water sources will be adequate without being adversely affected, or new supply options are reasonably achievable without reliance on a third-party consent that has not yet been secured.

For a critical resource like water which the local environment, economy and community of farmers, businesses and residents relies on, it is not sufficient to leave resolution of these concerns up to market forces post-consent, especially in the context of the multiple renewable projects in the pipeline. If unmanaged, any shortfall in water available in the environment is likely to put significant cumulative strain on limited water resource capacities.

Council is also concerned about water usage and sourcing during drought, Technical Paper 10, Section 7.3 – Mitigation measures does not provide for alternative water supply or addresses the issue of water supply during drought. Council seeks commentary on the safeguards to be adopted to ensure water security for local residents and agricultural practices during drought.

The project water demand analysis is not comprehensive. Notably, the EIS does not mention water required for gravel conditioning.

Council operates numerous town and village-scale water supply and sewerage systems. The EIS states that some water may need to be sourced from local potable supplies, while wastewater would be collected and treated onsite before being disposed offsite to a licensed facility which are expected to be Council sewerage treatment plants. Supply for up to 1,800 headcount is not insignificant for the small-scale systems locally available. While the proponent may have few economical options due to its geographic location between population centers, no quantitative assessment has been provided (either individually or cumulatively), and no commitments made to ensure that municipal services will both have the capacity to provide/treat the quantities required.

Due to the relative inefficiency of bulk transport of water by road (high number of vehicle movements), the results of the project's water analysis will also likely have significant effects on the key traffic generation assumptions connected with the project, which need to be assessed prior to CSSI determination.

Groundwater in-flows are listed as a source of non-potable water. Is this limited to Council owned groundwater bores and which ones will be providing the water for construction? Council's bore water allocations will not extend to the water requirements of the construction phase. Alternative supplies will need to be sourced by EnergyCo. It is noted that extraction of groundwater for dust suppression, of up to 88ML annually could impact on other users of the groundwater source, using the resource for stock and domestic and agricultural purposes.

13. Cumulative Impacts

Approximately 35 renewable energy projects are currently planned for location within the REZ. Council is concerned about the myriad of impacts this will generate on its residents and ratepayers. Thus, it seeks substantive information from both the Proponent and the NSW Government – on the likely cumulative impacts in the Warrumbungle Shire and what benefits will be forthcoming to both Council and the region generally to compensate for these imposts.

Council notes that the economic cumulative impact assessment for the construction period is predominantly positive, however the assessment within the EIS is qualitative and doesn't provide enough information in the form of a risk analysis to fully assess the impacts. The operational assessment summary in the EIS is lacking, stating no cumulative economic impacts expected. This is difficult to believe due to the sheer number of new developments likely within the REZ.

Council requests specific details regarding the scheduling of the construction phase of this project in relation to all other renewable energy projects within the REZ. This should include the start date and planned duration.

It is noted that the Social Impact Assessment ranked the cumulative impact of all potential impacts between Minor and Moderate. Yet, Technical Paper 7 – Social has one residual impact ranked as High. This impact is categorized as;

4. Unequal distribution of impacts and benefits.

Council requests specific details on how this impact will be addressed and consistency between the technical paper and cumulative impact assessments. Due to this small but not insignificant error, Council recommends a consistency assessment be carried out on the Cumulative Impact Assessment to ensure it has adequately captured and addressed all aspects.

Council notes that the approach taken to the assessment of cumulative impacts acknowledges that each project will be required to mitigate its own impacts to acceptable levels, minimising the overall contribution to cumulative impacts.

However, it is also recognised that not all REZ related cumulative impacts can be addressed through a project level approach alone, requiring a more strategic and collaborative approach between EnergyCo, renewable energy developers, councils, and government agencies.

The next stage involves the establishment of working groups involving representatives from councils, agencies and EnergyCo to assess and prioritise recommendations, including the identification of funding sources and lead agency responsibilities and implementation timeframes. The outcomes of this next stage will be documented in an Implementation Plan by the end of 2023.

14. Conclusion

Whilst Council is generally supportive of renewable energy initiatives, it has significant concerns about the project, arising in part from the inadequacy of the information contained in the EIS. Thus, Council is not able to make an informed judgement as to the relative benefits and costs of the project, and **objects** to the project.

However, Council does look forward to more substantive dialogue with EnergyCo and DPE. If that is to occur and matters of material concern are satisfactorily addressed, then Council may be able to review its position in relation to the project.

If you have any queries regarding the abovementioned matters, please don't hesitate to contact the undersigned.

Yours sincerely

ROGER BAILEY
GENERAL MANAGER

WSC Attachment 1

CSSI-48323210 CWO REZ EnergyCo Transmission Line (EIS Phase)
Warrumbungle Shire Council
Requests for Information
8 November 2023

Warrumbungle Shire Council (WSC) requests further meetings with EnergyCo's road specialist team to resolve the following queries as soon as practicable to avoid risk of delays to the project.

Can the project proponent please confirm directly in correspondence with WSC:

- 1. What are the assumptions underpinning the materials quantities given at EIS Table 3-8? For illustrative purposes these queries refer to the 90 km of 500 kV and 150 km of 330 kV transmission lines (EIS Section 5.1.4).
 - a. Does the estimated road gravel quantity of 356,000 tonnes (some 11,000 loaded truck and dog movements) underrepresent the likely quantity? For example, this could be seen to equate to 0.67 m3 per lineal metre of transmission line, or a pavement thickness of only 100mm for an average 6m wide access track along the entire alignment.
 - b. Concrete is given as only 600 m3, however pile diameter is given in the EIS is <900mm and depth between 5 and 20m. At approximately 6 to 12 m3 per pile, does this imply some 100 piles or 25 transmission towers across the 90 km 500kV alignment (average spacing of 3.6km between towers), and ignoring concrete for the 330 kV alignment?
 - c. What are the average spacings of the proposed transmission towers which may significantly influence these quantities?
- 2. Will the earthworks quantities (cut/fill balance transport by road) of some 85,000 cubic metres (approx. 200,000 tonnes) shown at EIS Table 3-7 be included in the local road's pavement impact assessment? Does this quantity represent only some 0.35 m3 of site won material to be disposed offsite per lineal metre of transmission line, and is this likely to reflect the actual project contingency required?
- 3. As details of specific water bore hole yield rates have not been made public, it is uncertain the project will manage to source the required 686 ML (Technical Paper 14) from bores alone. A significant water quantity is likely to go via the full length of main WSC haul routes identified in this letter, i.e. between the Golden Hwy / Talbragar River and the respective energy hubs. Given bore yields are uncertain, does the material quantity manifest reasonably account for likely water cartage?
- 4. Will the proponent provide to WSC a more detailed materials quantity manifest for the sections of project having potential impacts on its roads?
- 5. As the project material quantities to be hauled via WSC roads appear likely to significantly exceed 1.5 million tonnes, has the proponent calculated the total

haulage task via WSC roads in terms of Equivalent Standard Axles (**ESA**) in accordance with *Austroads Guide to Pavement Technology Part 2* (*AGPT02*)? Each ESA can be visualised as a standard heavy vehicle axle repetition or movement over the pavement and represents a standard unit of damage. It appears the project will account for in excess of 5 x 10⁵ ESAs and likely above 1 x 10⁶ ESAs.

6. WSC suggests design pavement ESA specifications for **pre-project** (low rural traffic) volumes may be:

Unsealed local roads (no through traffic) 2 x 10⁵ ESAs Sealed local roads (not classified roads) 1 x 10⁶ ESAs

Accordingly, as the project traffic will vastly consume or even exceed the majority of these design ESA values, will the project commit to upgrading the WSC-controlled sections of Spring Ridge Road and Merotherie Road, between the Golden Hwy and the respective energy hubs, with full depth pavement to a higher design ESA specification to account for the long-term traffic intensification due to the REZ?

- 7. To equitably achieve this, Council prefers the following mechanisms or is another mechanism proposed?
 - a. EnergyCo to upgrade the pavements to cater for the higher design ESA values accounting for all cumulative forecast REZ traffic, and then either EnergyCo or Council recover cash contributions from the other REZ developers for their proportionate use / consumption of the pavement life (e.g. through the REZ access charges or individual Voluntary Planning Agreements), and these funds could be applied by Council as required for future maintenance and renewals.
- 8. When are the major haul route full-depth pavement (design life) upgrades proposed to be undertaken, and if they are to occur at the end of the construction phase, what would the maintenance regime by the proponent on these roads look like during the construction phase?
- 9. Will the proponent provide the individual assessments of relevant turning treatment upgrades at each of WSC's road intersections, assessed in accordance with *Austroads Guide to Traffic Management Part 6 (AGTM06)*Figure 3.25 and having regard to any site-specific safety constraints, such as limited sight distances? These are not identified as 'key intersections' at EIS Section 4.2 however require attention due to their rural laneway configuration, given the large increase due to project traffic.
- 10. The traffic Technical Paper 13 appears to refer to peak-hourly light vehicle movements which imply vehicle occupancy rates of 2 persons per vehicle or more. Experience with similar developments suggests the rate is far more likely to approach only 1 person per vehicle if private vehicle use is relied on. What measures does the project propose to minimise the absolute number of vehicles on the road and vehicle-km travelled, to improve safety for the workforce and all road users, as well as minimising wear and tear on Council's gravel roads? Does the project propose commitments to implement quotas for bus / coach use, and/or in conjunction with mandatory car-pooling quotas?

- 11. Has construction of any roads or tracks been identified as required within Crown Road reserves? It is understood if formed roads are to be constructed in these areas, Crown Lands policy is to require transfer of such road reserves to Council ownership. If this is to occur the tracks shall be constructed to WSC's specifications, with Roads Act S.138 approval.
- 12. The flood impact maps at Technical Paper 15 Flooding (e.g. Figure D.9b) suggest local flooding / ponding as a result of construction of the Elong Elong Energy Hub may impact the Dapper Road formation. Will the formation need to be locally reconstructed (raised) and to achieve what flood-free standard?

Council welcomes the opportunity to discuss further.

(End of Attachment 1)