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2 April 2024

Natasha Homsey
Energy Assessment
Department of Planning & Environment
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PARRAMATTA NSW 2124

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Dear Ms Homsey

Submission in response to EnergyCo Transmission Project - Submissions Report & Amendment Report (Application No SSI-48323210)

1. Introduction

Thank you for the opportunity for Warrumbungle Shire Council ('Council') to table this Submission in response to the EIS Submissions Report (SR) and subsequent Amendment Report (AR) for the proposed EnergyCo Central-West Orana Renewable Energy Zone Transmission Project. Council notes the proposed transmission line will occupy a land corridor approximately 220 kms long extending north to south from Cassilis to Wollar and east to west from Cassilis to Goolma.

The proposed project will be located partly within the Warrumbungle Local Government Area and has physical and socio-economic consequences for Council to manage. Council expressed its concerns in the EIS submission. Council appreciates that EnergyCo has endeavoured to address most of the matters previously raised, however more work is required. Those concerns remain, particularly regarding the following matters:

1. The need for EnergyCo to do more to comprehensively address the environmental, social and economic adverse impacts arising from the establishment of the REZ;
2. The need for EnergyCo to commit to and document, in collaboration with Council, specific pavement upgrades to approx. 50kms of local roads that will be traversed by its heavy vehicles during the construction of the transmission line and then subsequently the construction of generation projects. Upgrading certain intersections as proposed is welcomed but simply not sufficient. The current pavements on local roads are thin. Unless the pavements on said roads have a robust 'fit-for-purpose' pavement installed then the roads will literally disintegrate during the construction of the various REZ generation projects. There are 11 in the Warrumbungle LGA;

3. The need for EnergyCo's commitment to pay annual, ongoing financial contributions for road repairs and maintenance over the life of the REZ;
4. The need for EnergyCo to commit to and document specific, tangible and real actions that will ameliorate social impacts;
5. The need for EnergyCo to commit to and document specific, tangible and real actions that it will deliver actual local employment and training. Facts and figures please;
6. The need for EnergyCo to commit to and document specific, tangible and real actions to address the bushfire risk during periods of extremely hot weather. Including how workers will be evacuated and how temporary accommodation facilities will be protected during fire storm events;
7. Additional detail on the climate change adaptation or risk factors to be applied to the detailed design of projects;
8. The locking in of at least monthly action-focussed meetings between EnergyCo and Council to address all relevant topics;
9. The need for EnergyCo to table definitive, action-based plans for the provision of potable and non-potable water supplies and supplies of sand, gravel and concrete across all REZ projects; and
10. The need for EnergyCo to table definitive, action-based plans for how and when construction workers are to be moved via shuttle buses from their accommodation to the various construction locations and return. Use of shuttle buses must be a priority and rigorously adopted; not something on the 'maybe' list.

More commentary on some of the key issues is outlined below.

2. Roads and Traffic

Council estimates 50 kms of the pavements on its local roads will require major strengthening to survive REZ project development traffic. The current pavements on said roads are thin and minimalist, deemed adequate for the low demands placed on them by local traffic. That will dramatically and materially change with the influx of REZ-related heavy vehicle construction traffic, both for the transmission line and also the generation facilities.

Council's technical investigations have revealed that **the pavement on said roads must be upgraded to a 'fit-for-purpose' standard**. A patch-up job will not suffice. The reason being the current pavement base layers will simply disintegrate resulting in large-scale road failures.

Furthermore, it is simply unacceptable to Council that it may have to carry ongoing, additional financial burdens arising from it being left to fund substantial road rehabilitation work caused by REZ related projects. Council urges EnergyCo and the State Government to commit to funding full pavement upgrades to the roads to be impacted.

It is noted EnergyCo committed in December 2023 to meeting monthly with Council on roads and traffic matters. This now needs to be an urgent and ongoing priority.

Council requests that DHPI utilise the Draft Conditions of Consent provided in **Appendix A**.

3. Social

It is noted that EnergyCo proposes the following plans and initiatives to address the social impacts:

- Communication and Engagement Plan
- Mental Health Strategy
- Landowner Engagement Strategy
- MoU with Health NSW to co-fund health worker accommodation
- Mental health support telephone service
- Pre-construction and Construction Engagement Plan, including the appointment of a Land Acquisition Manager
- Mental health issues training of personnel who engage with landowners.

These Plans and initiatives are supported in principle however we **urgently need on-the-ground, practical actions now**. Any documents must state **specific actions/deliverables** and avoid general 'motherhood and apple pie' type commentary.

For example, EnergyCo proposes training of staff on mental health matters and employment of a dedicated Land Acquisition Manager. What actual training will be provided, to how many, what qualifications will these people hold and how will the effectiveness of this training be measured?

Council notes and applauds the commitment by EnergyCo to provide 'two full time paramedics and one full time nurse' at each of the TWAs. What is the definition of 'paramedics'? Council urges DPHI to require same at all TWAs, including those established at the generation facilities.

4. Cumulative Impact

Council appreciates EnergyCo's efforts to address REZ-wide cumulative impacts in the Amendment Report, although the reference to different and varying numbers of projects is confusing and a little hard to follow.

Council strongly disagrees with the assertion that during the REZ project construction phase roads and traffic cumulative impacts will be 'minor', 'minimal' or negligible'. Quite the contrary, Council expects the likelihood of community outrage during this time as roads experience a significant increase in traffic, especially trucks, together with increased road damage risk, traffic stoppage for road construction works, increased road safety risks, etc.

Council agrees that:

- a) the REZ-wide construction workforce 'may exceed 9,059 at peak times';
- b) there will be 'substantial negative social impacts' (page L-27) during the construction of the transmission line and more broadly across the 35 or so generation projects in the REZ;
- c) there will be a 'diminished sense of place' (page L-96) and 'moderate detrimental effects on community cohesion'.
- d) there will be 'major cumulative impacts to diminished short term accommodation' thus adversely impacting tourism in the region (although Table 5-50 says 'minor' for tourist accommodation impacts, so rather confusing).

Council, as it has said from the outset, considers it most unlikely that 10% of the REZ project workforce will be local residents. Yet EnergyCo still anticipates 'around 10% of the construction workforce would be local'. What if the number is say 5%? Or less? What are EnergyCo's plans for resourcing and importantly the accommodating of the extra staff?

5. Water and Waste

Council notes that EnergyCo does not expect any of Council's groundwater bores to be used for water supply.

On the matter of wastewater management, Council does not have sufficient STP capacity to deal with additional wastewater.

On the matter of solid waste management, Council does not have sufficient facility capacity to deal with additional solid waste.

6. Bushfire Impacts

All parties need to clearly understand that during extreme fire hazard conditions, lives and property will be at significant risk. Major fires have occurred in the CWO REZ area before today. The risk will be elevated with up to 10,000 construction personnel in the zone at certain times. EnergyCo must heed the experiences of the past and implement robust fire emergency safeguards. How will construction workers be evacuated in a fire storm?

Council urges DPHI to ensure best practice fire emergency safeguards are included in conditions of consent for all REZ related projects, including evacuation procedures.

As part of the plans, all project personnel must be trained in extreme fire risk scenarios and understand their role in bushfire related emergency management.

In the Response to the EIS, Council stated concerns that climate change factors had not been applied and that the key bushfire protection for projects are Asset Protection Zones which were determined based on tolerable radiant heat thresholds (TRHT), determined by EnergyCo.

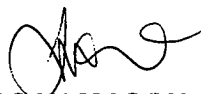
In the EIS response Council requested more transparency on the workings for the TRHT. WSC also requested that MM BF5 require fire-fighting tanks to be constructed from material that would not melt and that a trailer fire-fighting unit be provided at all workforce accommodation camps and energy hubs. What is the response of EnergyCo and DPHI on these matters?

7. Conclusion

Council looks forward to ongoing and substantial dialogue with EnergyCo and DPHI in addressing the matters herein.

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

Yours sincerely



**LINDSAY MASON
ACTING GENERAL MANAGER**

APPENDIX A:

SSI-48323210 Central West Orana REZ Transmission Project Warrumbungle Shire Council Response March 2024 Submissions and Amendment Reports Recommended Consent Conditions – Engineering

Introduction

If the consent authority is to grant approval to the SSI project, despite Council's significant concerns not being addressed, Council requests the following consent conditions be included.

These conditions are mainly required on the grounds of ensuring road safety and road pavement maintenance. The approximately 50 km of Council-maintained local roads that will be required by the project for direct access to the transmission alignment (as shown in the Amendment Report Appendix B Updated Maps) are typically:

- Narrow winding rural laneways in unsealed or basic sealed condition, with less than the Austroads recommended safe travel widths for heavy vehicles, and other significant hazards. The very large increase in project traffic for a period of several years, and the significant increase over the remainder of the project's operating life, will likely give rise to an unacceptable increase in risk of fatalities, serious injuries and other preventable casualty crashes. This predicted outcome conflicts with the objectives of the NSW Government's 2026 Road Safety Action Plan.
- Deficient in terms of having pavements that are not likely to be capable of accommodating the proposed traffic volumes, both in terms of millions of tonnes and hundreds of thousands of heavy vehicle loads over the construction phase, and gravel loss caused by many hundreds of light vehicles commuting to the project site on a daily basis. If not upgraded, the pavements will rapidly deteriorate leading to widespread failures and a risk of road closures that may impact access for the project's haulage campaign and workforce.

If EnergyCo, the project proponent, does not address these concerns through a proactive and well funded road infrastructure upgrade program, there remain serious risks of harm, both in terms of the success of the Renewable Energy Zone, and longer-term sustainability outcomes for the broader community (socially and economically).

If EnergyCo intends to bypass Council's roadworks approval role using the Crown's powers under the legislation, then EnergyCo accepts sole responsibility for the consequences that occur, and the major expenses of reactively fixing them.

The best outcome for the project, the community and Council will be for EnergyCo to actively collaborate and stand shoulder-to-shoulder with Council in its role as roads authority and long term asset owner, to ensure that roads are suitably designed and upgraded as part of the construction phase, to be fit for purpose catering for existing and project traffic over the whole of the project's lifecycle.

Consent Conditions

Road Upgrades Schedules

1. Amend Appendix 6 (Schedule of Required Road Upgrades) by deleting the current Schedule and replacing with both the Schedules 6.1 and 6.2 as follows.

Schedule 6.1. Warrumbungle Shire Public Road Upgrades

Notes to this Schedule
<p>a. All public road works or traffic plans should first obtain detailed design approval from Warrumbungle Shire Council, e.g., under Sections 87, 115 and 138 of the <i>Roads Act 1993</i> and other laws.</p>
<p>b. Council consent is to be obtained before existing or specified bitumen seals may be interfered with, altered or temporarily removed or omitted during the construction phase. Consent may or may not be granted at Council's discretion, and subject to all of the following:</p>
<p>c.</p> <ul style="list-style-type: none"> i. Adequate community consultation and notification has occurred, ii. The impacts on local residents and their private access to property, and broader community impacts, are deemed by Council to be acceptable, are of limited duration and are adequately mitigated, and iii. The roads are restored to the pre-existing or better condition with the widths referenced in this Schedule, before the project construction phase is concluded.
<p>d. The works shall not reduce the standard of pre-existing Council road infrastructure (e.g. carriageway or seal width), unless with prior written agreement from Council in each individual case.</p>
<p>e. Council may agree to reduce or waive any of these requirements by giving notice in writing.</p>
<p>f. Ancillary public works arising from developer works may be required to meet current standards at the developer's cost including (but not limited to) vegetation clearing, drainage channels, culverts, batter slopes and retaining structures, delineation (line markings and signage), utility and pole relocations and road reserve widening land acquisition.</p> <p>Works are to be as per relevant specifications and guides including the Austroads Guide to Road Design (AGRD03 in particular), ARRB Unsealed Roads Best Practice Guide, Council specifications, TfNSW and RMS specifications and supplements, to the satisfaction of Council.</p>
<p>g. Refinement of the project traffic movements may result in reduced impacts and allow for reduction of the works required.</p>
Upgrades Required
<p>1. Staging areas for OSOM vehicles: if required as part of the approved Construction Traffic Management Plan (CTMP), designate or provide regular staging areas for Over Size Over Mass (OSOM) vehicles to hold outside of the road carriageway and form into platoons, to minimise delays. Council approval for the use of existing road layover areas may not be required except to the extent traffic management measures are needed on public roads and/or physical works are proposed.</p>
<p>2. OSOM swept path encroachments / obstacles: OSOM swept path studies are to be provided for all WSC-managed road segments. Vegetation clearing or pruning, widening cuttings, and providing hardstands under wheel paths are permissible subject to Council's prior approval. Windrows, boulders and/or other temporary or permanent but removable barriers shall be designed and installed to prevent public road users performing unsafe or</p>

undesirable movements or behaviours at areas where road facilities are widened, or obstacles cleared.

Council shall not be required to maintain these facilities as fit for the purpose of accommodating OSOM movements for the life of the development. They remain the responsibility of the consent holder to maintain, remove and reinstate after any OSOM movements, at its cost. Traffic management plans and design changes shall require Roads Act approval from Council.

3. **Structures generally:** The consent holder shall inspect, report and upgrade all WSC-managed bridges, major and minor culverts, causeways and grids to accommodate all OSOM, and Higher Mass Limits (HML) truck combinations up to and including 26m B-doubles (and equivalent Performance Based Standards / PBS Level 2 combinations), to the prior written satisfaction of Council.

4. **Intersection and turning treatments:** Assess the following Council-controlled intersections (at minimum) to meet current safety standards, including turning treatment upgrades required in accordance with Austroads *Guide to Traffic Management Part 6 Figure 3.25*, based on construction phase traffic volumes. At minimum provide Basic Left (**BAL**) and Basic Right (**BAR**) treatments. Assessment is to assume a commuter peak vehicle rate of 1.1 persons per vehicle unless specific enforceable policies have been adopted justifying a higher occupancy rate (lower vehicle trips) by achieving minimum carpooling and/or bussing occupancy rates has been adopted.

Design and construct the intersection treatment upgrades to Austroads *Guide to Road Design Part 4 and Part 4A*. Realign minor leg approaches to perpendicular (so far as is practicable), reinforce major and minor leg priority by design, provide adequate Safe Intersection Sight Distances in all directions, improve delineation and signage to current standards, seal approaches and shoulders and rationalise redundant pavement to limit vehicles cutting corners unsafely, including:

- a. Spring Ridge Road at Dapper Road,
- b. Dapper Road crossing at Sandy Creek Road,
- c. Dapper Road at Bald Hill Road,
- d. Spring Ridge Road at Laheys Creek Road,
- e. Upper Laheys Creek Road at Brooklyn Road,
- f. Blue Springs Road at Ross Crossing Road, and
- g. Each site / Transmission Line track vehicular access where it intersects a public road.

5. **Upgrade road formations generally to meet minimum route standards specified below.** Widen on curves if required to accommodate swept paths for OSOM vehicles, 26m B-doubles and equivalent Performance Based Standards / PBS Level 2 combinations, mark centre and edge lines (if sealed and at least 5.5m wide) and install any make-up guideposts and pavement markers to meet TfNSW Delineation Specifications.

- a. Minimum 7.2m sealed width and 8.2m formation (3.6m sealed lanes and 0.5m unsealed shoulders) [Austroads AGRD03 150-500 average daily traffic (ADT) sealed road]:

- i. Merotherie Road, between Golden Highway and Talbragar River bridge (LGA boundary) – including transition beyond bridge if required for safety.
 - ii. Spring Ridge Road, between Golden Highway and Laheys Creek Road.
 - b. Minimum 8m unsealed width of carriageway (3.5m unsealed lanes / 0.5m shoulders) [ARRB Unsealed Roads Best Practice Guide Category 4A Road >150 ADT]:
 - i. Dapper Road, between Spring Ridge Road and Bald Hill Road.
 - ii. Bald Hill Road, short section from Dapper Road westwards to the LGA boundary.
 - iii. (Upper) Laheys Creek Road, between Spring Ridge Road and the Transmission Line alignment (north of Brooklyn Road).
 - iv. Brooklyn Road, between Laheys Creek Road and the LGA boundary to the east.
 - c. Minimum 7m unsealed gravel width of carriageway (3.5m unsealed lanes / shoulders) [ARRB Unsealed Roads Best Practice Guide Category 4B Road 50-150 ADT]:
 - i. Blue Springs Road, between Golden Highway and the LGA boundary to the south.

6. **Provide threshold treatments** generally at the end of all Council maintained road segments to be used by project traffic, and private road junctions with public roads. Threshold treatments may include delineation, gates, grids, signage, monuments and so on to reinforce the end of maintained public roads and entry to private roads, to prevent changes in road maintenance expectations over the project life. May include signs to the effect “End of Council Maintained Road” or “Private Road”.

7. **Renew road pavements by end of construction phase:** Prior to commissioning the project or any stage, renew and upgrade the pavement design life for all haulage and commuter road pavements, to offset the impacts of all project traffic incurred to date, ongoing and future traffic for the life of the development.

Designs for road upgrade / renewal of all WSC-managed road pavements providing access to each stage in accordance with this condition shall require approval by Council **prior to commencing haulage on that stage**, to ensure road works can be completed without delay following commissioning.

Within 12 months of commissioning any stage of the development and prior to Council refunding applicable bond securities, the consent holder shall overlay, reconstruct or rehabilitate the pavement to the agreed design, to renew the full design life lost due to construction traffic (using Austroads methods for Equivalent Standard Axles, **ESA**), and offset the future likely estimated design life that will be lost due to operational and decommissioning traffic, or provide at least the minimum design ESA values below (whichever method results in the higher design life), for the full length of the designated WSC-managed public haulage routes that provide access to that cluster or stage.

Road Segment	Location	Reconstruction or rehab specification (Note 1)
Classified Regional roads: • (Not applicable)	N/A	1,000,000 (1x10 ⁶) ESAs
Sealed local roads: • Spring Ridge Road • Merotherie Road	Segments as described at Schedule 1 Item 5 above.	1,000,000 (1x10 ⁶) ESAs
Unsealed local roads including: • Dapper Road • Bald Hill Road • (Upper) Laheys Creek Road • Brooklyn Road • Blue Springs Road	Segments as described at Schedule 1 Item 5 above.	Design traffic calculated in accordance with Austroads AGPT02 Pavement Design having regard to surveyed through traffic volumes, with no less than 200,000 (2x10 ⁵) ESAs and no more than 1,000,000 (2x10 ⁶) ESAs.

If subsequent construction stages have commenced or are soon to commence, and construction traffic is or will be using that road segment, Council may (at its discretion) agree in writing to defer the reconstruction of that road segment until completion of the subsequent stage(s), in recognition that reconstructing the road after project construction traffic has concluded may be desirable in order to maximise long term pavement life.

The developer and Council may negotiate payments to Council under a Deed or some other legal agreement expressly stating they are in lieu of performance of this condition.

Schedule 6.2. Warrumbungle Shire Public Road Upgrade Timing

2. The Warrumbungle Shire public road upgrades required by this consent shall be staged and completed in accordance with this Schedule.
2.1. Generally, significant haulage of soil, quarry products, water, over dimensional components, structural components, cable or other bulk materials for the project is not to occur on a given road segment until the public road upgrades specified by this consent along that segment are deemed practically complete.
2.2. Despite (2.1), early works can commence any time before public road works are deemed practically complete and include (without limitation): <ul style="list-style-type: none"> • Pre-construction minor works as defined in the consent (for example investigations, minor vegetation removal, site access and compound establishment, fencing and environmental activities),

- Heavy haulage required to complete the public road upgrades, and
- Any other haulage or works which Council agrees to on a temporary basis under Roads Act Sections 87 and/or 115 or others, for example under a Traffic Management Plan.

2.3. Temporary concession for speed zone reductions

Also despite (2.1), bulk haulage can commence on a short-term basis, before the relevant public road segment upgrades are practically completed, provided all of the following:

- The relevant road works on that segment are substantially commenced and are proceeding to Council's satisfaction,
- A temporary traffic management plan which will acceptably reduce speeds and other hazards along the segment has been approved by Council under the Roads Act, and
- The road works on that segment shall be practically completed, and the standard traffic conditions restored, within 6 months of commencement on that segment (unless otherwise agreed where a specific construction element requires additional program time).

2.4. If the works no longer comply with these requirements (e.g. at expiry of six months) and if Council so directs under the Roads Act, bulk haulage on that particular road segment must temporarily halt until the relevant road segment upgrades are deemed practically complete, on safety and road asset condition grounds.

Reasons for conditions: to ensure public road works construction timeframes at each location are minimised as much as reasonably practicable, and to minimise use of traffic management (administrative) controls such as speed zone reductions which may lead to poor safety outcomes if used over extended time periods or distances.

General Conditions

1. **Key Stakeholder:** For the life of the consent, the consent holder is to comply with the Warrumbungle Shire Council conditions specified in this Attachment 1, except to the extent that variations are agreed in writing by an authorised representative of Council.
2. **No cost to Council:** All works required under this consent are for the benefit of the developer and shall be at no cost to Council, except to the extent agreed otherwise in a Deed or similar legal agreement.
3. **Standards:** All public works and public land impacted, or to be constructed by the consent holder and dedicated to Council, shall be designed, constructed and maintained in accordance with the relevant Austroads and Council's adopted standards current at the time of application for each detailed design approval (e.g. under the Roads Act).
4. **Approved Council road routes:** All project traffic during the construction, operational, refurbishment and decommissioning phases shall only be permitted to use WSC-managed roads which are designated haulage and commuter routes in the latest approved SSI (Amendment Report), unless with the written agreement of Council, or in the event of a road closure by authorities or a temporary emergency.
5. **Route compliance:** The consent holder shall take all steps necessary to ensure and demonstrate compliance with the various road-related conditions and route restrictions, including, if required and to the satisfaction of Council, active management measures such as technology-based monitoring of individual vehicles

across the supply chain with GPS and geofences during the construction phase, physical works and signage to restrict movements (subject to Roads Act approval), active surveillance, incentivisation and disciplinary actions.

6. **Material export:** Site-won quarried, or earthworks materials obtained onsite shall not be transported using public roads to land other than the project site, unless such development is in accordance with written approval from Council or a development consent (to ensure haulage impacts are managed).
7. **Defects Liability and Maintenance Period (DLMP):** For any infrastructure asset constructed or modified under this consent which is to be dedicated as an asset of the Council, the consent holder shall have a 24-month DLMP obligation commencing from the date the works are deemed 'practically complete' by Council's inspector. During the DLMP the consent holder is responsible for repair of any defects and maintenance of the asset in accordance with manufacturer's recommendations and any asset management plan, at no cost to Council.
8. **Bond securities:** In accordance with its adopted policies and Roads Act approval conditions, Council will, at its discretion, require the consent holder to lodge refundable bond securities to guarantee the consent holder's performance of any of the following:
 - 8.1. Outstanding or incomplete works;
 - 8.2. Defect liability and/or maintenance obligations;
 - 8.3. Vegetation or environmental management obligations; and
 - 8.4. Obligations under a Deed or some other legal agreement.
9. **Asset documentation:** For infrastructure assets dedicated to Council, the consent holder is to provide electronic copies of the relevant manufacturer's operation and maintenance documentation, inspection and test results, conformance surveys, non-conformance reports, a financial values asset return, and Works-As-Executed (WAE) drawings to Council's satisfaction.

WAE information is to be recorded on the original design drawings (so far as is practicable) using red line markups in native computer aided design file format and plotted or scanned to portable document format.

10. **No road dedication:** No new public roads shall be dedicated to Council as a result of the project, and Council shall not be required to maintain or contribute to the maintenance of any road for which it is not already responsible in the pre-development scenario. This includes the existing and proposed private roads to be used for access to each cluster.
11. **No easements over Council roads:** Easements or rights in title shall not be created to burden any public dedicated road reserves for which Council is or will become the roads authority, unless with Council's prior consent in writing.
12. **No encroachment:** All structures, including power line towers or poles, shall be sited outside of public dedicated road reserves and Council-managed public land.
13. **Crown roads:** It is understood that Crown Roads division policy may require any formed roads that are to be constructed or used within Crown Road reserves to first be transferred to Council ownership. Council opposes the transfer of project-required roads as they are not required for public traffic. If transfer is to occur unilaterally despite Council's objection, prior to transfer of the road to Council or commencement of use by project traffic (whichever occurs first), the roads shall be designed, constructed and maintained for life to the satisfaction of Council and at no on-going cost to Council.
14. **Flooding:** The project works shall not result in any adverse stormwater or flooding impacts or water flow behaviour in relation to any of Council's assets (including roads) or land, for all design storm events up to and including the 1% (1 in 100) Annual Exceedance Probability, in accordance with the adoption of the very latest climate change models and the Australian Rainfall and Runoff manual.

If adverse impacts arise, the consent holder shall design and construct improvements to the assets or land to flood-proof or achieve 'no worse than existing' serviceability and performance of that asset, to the written satisfaction of Council.

15. **Access and servicing:** the access licences or easements granted in favour of the project shall be maintained by the consent holder for the life of the development (until decommissioned), and shall not be sold off in separate parts, so that the project remains a unitary development and no part of the project becomes alienated from the approved access roads or services alignments (which could result in traffic impacts substantially different from those approved).
16. **Prior to and During Each of the Construction, Refurbishment and Decommissioning Phases**
 - 16.1. **Haulage estimation:** Public road pavement designs under the Roads Act, or cash contributions in lieu of developer works, are to be supported by a comprehensive manifest of all materials to be hauled along Council roads, to the satisfaction of Council. The manifest and pavement design calculations shall include (but may not be limited to): breakdown of whole-project materials classes and quantities, likely truck axle and maximum load configurations, average (per load) and total cumulative Equivalent Standard Axles, average km haulage distance by category of road, and background traffic volumes to be added including the number of background heavy vehicles.
 - 16.2. **Light vehicle estimation:** For roads which are to be kept in unsealed condition under project traffic going forward (temporarily or ongoing), any pavement and wearing course shall be designed and upgraded to cater for all project movements for the life of the development, with the design to be approved by Council informed by a comprehensive forecast of workforce vehicle movements.
 - 16.3. **Roads condition assessment:** The consent holder shall undertake comprehensive condition assessment reports to Council's satisfaction, for all its infrastructure assets along the identified Council-managed commuter and haulage routes, prior to the consent holder commencing significant activity along that route in the construction or future refurbishment or decommissioning phases, and again within four months after the conclusion of construction, refurbishment or decommissioning.
 - 16.4. **Road Safety Audit (RSA):** Prior to Roads Act design approvals, the developer must provide an RSA prepared by an independent accredited RSA auditor for all the designated WSC-managed commuter and haulage roads, considering the construction, operation, refurbishment and decommissioning stages of the project. Any specific hazards or infrastructure treatments identified may be required to be included in the scope of works, depending on the risk assessment and to the satisfaction of Council.
 - 16.5. **Road geometric and functional upgrades prior to construction:** Prior to construction haulage, complete the Warrumbungle Shire public road upgrades specified at Schedule 1, before the milestones specified at Schedule 2.
 - 16.6. **Maintain roads during construction:** The consent holder shall maintain the WSC-managed public roads comprising the designated haulage and commuter routes at no cost to Council for the entire duration from commencement of the construction, until completion of the Defects and Maintenance Liability Period (DLMP), to Council's satisfaction.

Maintenance shall include regular patrols, grading (for unsealed roads) and rectification of any apparent hazards, failures or defects within a reasonable timeframe, to provide for safe and serviceable travel by all road users to a standard no worse than in the pre-development scenario. Rectification methods for significant or non-standard issues shall first be notified to and approved by Council before said work is undertaken.

As part of any Roads Act approval Council may order the consent holder to take action, or (with sufficient notice to the consent holder except in emergencies) Council may undertake the work and recover the costs from the consent holder. Note the developer and Council may negotiate payments to Council under a Deed or some other legal agreement expressly stating they are in lieu of performance of this condition for specific road segments.

17. **Vehicle management:** The construction, refurbishment and decommissioning Traffic Management Plans (CTMP) must minimise delays and temporary traffic impacts along WSC-managed roads in connection with transport of Over Size Over Mass (OSOM) loads, so far as is reasonably practicable, through the use of a combination of measures such as (but not limited to):

- a) Public notification along affected roads, with advance notice given in the local media and by signage posted along the route;
- b) Use of night or off-peak transport periods;
- c) Platooning of multiple OSOM loads at the same time;
- d) Selection of lay-by areas for OSOM loads at regular distances so that the duration and number of each traffic stoppage in a given day on Warrumbungle Shire roads is minimised;
- e) Other measures identified in consultation with Council. The draft CTMP must be submitted to Council for review at least three months prior to the planned movement of heavy and oversized vehicles. The CTMP must be approved by Council before any movement of heavy or oversized vehicles.
- f) As part of the CTMP measures, the consent holder shall maximise the use of buses and minibuses between accommodation centres, project sites and towns, and shall ensure car-pooling quotas are developed and enforced, to ensure that project private vehicle-kilometres are minimised. Any proposed park and ride stops in the Council area, and associated management measures or works, shall be to the satisfaction of Council.
- g) Project bus planning shall also provide for regular workforce access to town services and amenities while minimising negative social impacts on surrounding communities. The Plans must also mitigate and minimise the impacts of development traffic on school bus routes during their operating times, and on stock and crop haul routes during high-traffic seasons.

18. **Decommissioning:** As part of decommissioning the project, all the following shall be completed by the consent holder (if decommissioning a part or stage of the project, then these requirements shall apply to that part or stage):

- a) Remove all structures to ground surface level, and transport all components offsite to approved waste disposal, processing or reuse sites.
- b) Remove all private structures and services that cross or traverse along or encroach into WSC-managed public dedicated road reserves, including all subsurface cables and plant (but pits and conduits may be retained with Council approval).
- c) Extinguish any easements (if applicable) which burden public land or dedicated roads in favour of the project.
- d) Reinststate and make good public land after removal of structures to no worse than its pre-development condition.
- e) Repair all defects in public land or infrastructure that arose from the decommissioning activities, within 24 months of completion and prior to refund of bond securities held by Council.

19. **Subdivision:** This consent does not approve subdivision of land, other than subdivision which meets the definition of 'exempt development' or is for the purpose of excising public infrastructure (e.g. substations) onto separate titles. Any subdivision creating a lot which may potentially be sold off shall be created subject to a Conveyancing Act covenant or restriction as to user to the effect that the land has no dwelling entitlement.

Discussion / Notes

EnergyCo has identified road upgrades will be needed for key State Road intersections and bridges. The major project documents also discuss how the Transmission Line project will require very large quantities transported by local roads, totalling millions of tonnes or hundreds of thousands of truck movements, even before considering other REZ developments. These include (*Amendment Report, Appendix A, Table A-9*):

- Quarry crushed rock and quality gravels for road base and hardstands, and sands (some 500,000 tonnes, an amount which apparently makes no allowance for significantly larger volumes of local road gravels needed, as discussed below),
- Water (greater than 2.5 million tonnes, likely by road) and wastewater / sludge,
- Cement and finished concrete (at least 250,000 tonnes which although mostly batched onsite will need to be transported by public roads to access the alignment),
- Structural steel, reinforcement bar, and cable (at least 80,000 tonnes),
- Almost 10,000 prefab buildings, electrical plant modules, site sheds, accommodation, and storage modules by truck.

A workforce size of 1,800 persons at peak is also identified. This is two or three times larger than the workforces proposed by the largest wind and solar farms that plan to form part of the REZ.

In line with regional project experience in NSW, most of these people are expected to require their own utility vehicles for 'tools of trade'. It is unclear how, or how much, quotas for bussing or carpooling can be practically achieved or enforced and this may explain why no firm commitments or transparent assumptions have been offered by the project.

The number of peak hourly vehicle trips on the road network occurring every day is likely to approach 1 person to 1 vehicle (i.e., closer to 1,800 hourly movements between accommodation and the various site access points), unless clear, accountable schemes for trip sharing by buses and pool vehicles are developed and enforced.

These light vehicle traffic volumes will have a very large impact on safety for all road users along the narrow rural laneways that make up most of the local road network around the project, as well as massively accelerate the rate of gravel loss on these roads, which are predominantly unsealed.

Although the haulage and commuter routes on local roads are mapped (*Amendment Report, Appendix B*), the public documents stop short of recognising these major impacts by the heavy project traffic on approximately 50 km of Warrumbungle Shire Council-maintained public roads that provide the only access to most of the Transmission Line alignment. These roads include (broadly):

- Golden Hwy – Spring Ridge Rd – Dapper Rd (at Elong Elong Energy Hub) – Bald Hill Rd (some 25 km)
- Spring Ridge Rd – Upper Laheys Creek Rd (8 km)
- Laheys Creek Rd – Brooklyn Rd – Shire boundary (6 km)

- Golden Hwy – Merotherie Rd – Shire boundary (near Merotherie Energy Hub) (2 km)
- Blue Springs Rd – Shire boundary (6 km)
- Golden Hwy – Uarbry village roads – Moorefield Rd (east) (4 km)

These roads have historically been designed, constructed and maintained to cater for a very low level of rural traffic, with very few heavy vehicles. Whether or not it has been identified in published documents by the project developer, the roads can be expected to rapidly fail under the project loading which is several orders of magnitude higher than what they were designed for. The result will be an expensive, reactive road maintenance campaign, including potentially hundreds of thousands of tonnes of additional road base quality gravels needing to be trucked in, which is unlikely to be avoidable simply to ensure the roads remain open in all-weather to allow the main project materials to be brought in.

Instead, Council proposes that the normal, proactive front-end planning and development assessment process should take place, whereby the likely impacts on road safety and pavement life of these large volumes of vehicles should be engineered and designs put forward to mitigate them, to the satisfaction of Council. This is expected to represent the lowest-cost and lowest-risk option for the project developer, also avoiding major project risks such as delays or incidents, so far as is practicable.

- i. Also insert new subclause ‘- maximise daily uptake quotas of managed car-pooling and project minibus / coach transit services between main accommodation centres and the project site, to minimise sole-occupant private vehicle trips and improve safety per kilometre of travel for all road users.’
- ii. And insert new subclause ‘- minimise road closure durations and travel time delays arising from the high quantity of Over-Dimensional components to be transported along single carriageway Regional and local roads, by using regular layover areas, platooning and other reasonable measures.’

(End of Appendix A)