

Submission
No 27

**INQUIRY INTO FEASIBILITY OF UNDERGROUNDING
THE TRANSMISSION INFRASTRUCTURE FOR
RENEWABLE ENERGY PROJECTS**

Organisation: CWO REZist Inc.
Date Received: 10 November 2023



CWO REZist Inc.
c/- PO Box 2
Coolah NSW 2843

CWOREZist@gmail.com

10 November 2023

To the Select Committee for the Inquiry into the Feasibility of Undergrounding the Transmission Infrastructure for Renewable Energy Projects

CWO REZist Inc. recently objected to the Central West Orana Renewable Energy Zone (CWO REZ) Transmission project by Energy Co in the Central West Orana Renewable Energy Zone (see objection below). This project is the first stage in Energy Co's plan to connect wind and solar generators to the grid by building transmission infrastructure, including above ground powerlines, over mostly private land.

Many of the landowners in this corridor are opposed to the project and feel threatened by Energy Co and the State Government by the process of compulsory acquisition which starts on 24 November. Negotiation by the landowners with Energy Co has been limited and unsuccessful. During the previous undergrounding inquiry, a request was made to Energy Co to suspend the acquisition process until that inquiry was complete, which was denied.

The environmental impact study (EIS), submitted to the Department of Planning by Energy Co is severely lacking and incomplete, by their own admission. Residents believe it is being rushed through, particularly given the lack of social licence that both the transmission project and multiple industrial wind and solar projects are receiving in the area.

The extreme cumulative impacts (social, environmental and economic) of multiple large scale energy projects focused within the CWO REZ, in addition to Energy Co's supporting transmission line project, which are all planned for construction within a similar timeframe, is devoid of CWO REZ level strategic planning and assessment of cumulative impacts.

Communities in the Central West Orana region were never engaged with, nor consulted upfront on whether they agreed with being forced to live and work within a modern day 'power station'. Many community members do not support this concept.

Sincerely

A. Piper
Co-Secretary
CWO REZist Inc.

Preliminary to the detailed submission which follows, the executive of the CWOREZist makes the following general comment and objection:

The social licence obligations which the NSW government has imposed on EnergyCo in its development of the CWO REZ are clearly set out in the volumes of strategy and planning documents relating to the project. They are not optional. They have been repeated over and over again. Failure to meet them transparently and with "best practice" serves only to undermine the goodwill and cooperation of impacted communities.

The following Management Plans or Strategies have not been provided in the EIS:

- Construction Environmental Management Plan;
- Construction Noise and Vibration Management Plan;
- Aboriginal Cultural Heritage Management Plan;
- Historical Heritage Management Plan;
- Soil and Water Management Plan;
- Social Impact Management Plan;
- Workforce Management Plan;
- Local Workforce Participation Strategy;
- Industry Participation Plan;
- Landowner Engagement Strategy;
- Pre-Construction and Construction Communications and Engagement Plan;
- First Nations Liaison Plan;
- Complains Management System;
- Operational Communications Plan;
- Property Management Plan;
- Community Wellbeing Strategy;
- Bush Fire and Emergency Management and Evacuation Plan;
- Landscape Character and Visual Impact Management Plan;
- Biosecurity Management Plan;
- Vegetation Management Plan;
- Operational Emergency Management Plan;
- Operational Environmental Management Plan;
- Traffic Management Plan;

- Vehicle Movement Plan;
- Driver Fatigue Management Plan;
- Construction Waste Management Plan;
- Biodiversity Management Plan.

The Plans listed above must be submitted and they must be submitted in detail to provide the community with an opportunity to respond. A plan to have a plan is not an acceptable plan. To fail to supply detailed plans in relation to all of the above matters is to prevent any possibility of compliance with the requirement of a social licence.

Purpose of the project

The purpose of the project is the need for additional transmission network capacity. The need for new and additional transmission capacity arises directly from the government policies driving emissions reduction targets. The object of the exercise is emissions reductions.

The EIS cites the NSW Transmission Infrastructure Strategy as the strategy driving the energy transformation. The existing network was *“not capable of transferring the scale of new electricity generation identified for the Central-West Orana REZ Development of new electricity generation and storage projects in the Central-West Orana REZ.”*

The EIS also cites the State Infrastructure Strategy 2018-2038. It asserts that *“The project is aligned with the strategic objective for the energy sector within the strategy as it would provide the increased transmission capacity that is required to encourage private sector investment in low-emission energy generation projects within the Central-West Orana REZ in NSW.”*

This may be the case. **But it does not mean that the project complies with the State Infrastructure Strategy and in fact, it does not.**

State Infrastructure Strategy – Failure to specifically address and comply

The applicable State Infrastructure Strategy is that of 2022-2042.

Chapter 6 sets out the electricity sector’s central role in achieving an orderly and efficient transition to net zero. 6.2 refers to the challenges associated with *“scaling up the clean energy sector.”* The Strategy asserts and recognizes **that infrastructure itself has “a key role to play in this transformation, due to the embodied, operating and enabled emissions generated throughout the infrastructure lifecycle.”**

The Strategy requires that new infrastructure measure and report in accordance with National Greenhouse Accounts. It requires that public infrastructure must measure and report how infrastructure-related decisions contribute to the State’s total emissions and remaining carbon budget. Proponents must *“adopt global best practice and embrace industry-standard approaches to carbon accounting, disclosure and management.”* Government agencies are charged with supporting the transition to low carbon infrastructure by **“quantifying, valuing and disclosing the carbon contribution of the infrastructure.”**

There has been no attempt made by the proponent to quantify, value, and disclose the carbon contribution of the project infrastructure. The proponent has not complied with the essential Strategy and the project should not be approved.

Should the proponent assert that the “*low emission energy generation*” enabled by the project is offset against its own high emission transmission infrastructure, then the proponent must assess also, **the embedded emissions in the infrastructure generation, storage, and ancillary structures which the project enables.**

Section 3.4 – Land Requirements

This section of the EIS is light on detail. **More information is required** on many topics covered by this section, before DPE can even consider assessing this application.

3.4.3 states that access easements would need to be “*negotiated with landowners as necessary*”. Energy Co has already started the acquisition process for landowners for transmission infrastructure, Multiple landowners have told us that no real negotiation has taken place. Acquisition Managers have agreed with some landowners about moving the line then surveyors turn up and mark out the line that they had objections to. Given this experience, **how can we trust that negotiation will actually take place for operational access easements? Who is the future Network Operator? What guarantees do we have that they will abide by landowner wishes?**

Section 3.5 - Construction

Item 3.5.4 states that enabling works would include “*installation of fencing, gates, barricades, exclusion zones and other access controls*”, as well as “*property adjustment work, including adjustments to existing property fencing... in accordance with the Property Management Plan for that property*” **This is vague and does not say what will be fenced, does not explain what the Property Management Plan is, what it does, who formulates it and if the landowner has input.**

It also states enabling works include “*establishment of permanent and temporary environmental controls and monitoring equipment*”. **What are these and what size are they? More information is required.**

The section on Pre-commissioning states that key activities include “*earthing testing, high voltage testing and high voltage equipment operational checks.*” As these transmission towers are being erected on agricultural land, the safety of livestock and landowners is paramount. **More information is required on these activities and the safety precautions that will need to be taken, notice given to landowners and advice regarding the duration of such testing. Will there be compensation for landowners who have to move/remove stock, be off site etc. for any period?**

Under the heading of *Demobilisation and construction site rehabilitation* it states that “*land subject to a temporary lease agreement would be rehabilitated to its pre-existing condition where feasible and reasonable*”. It is concerning to use the words “feasible” and “reasonable” regarding rehabilitation. **If land is damaged or impacted, a return to its original state (prior to lease commencement) should be guaranteed to landowners.** Anything else is inadequate.

This section also states “*removal of any temporary site buildings and temporary environmental controls*” yet **does not state any rehabilitation of the site?** This is necessary and only fair to the

landowners impacted, particularly as so-called “hosts” (most, if not all of whom, have never had a CHOICE) have already had the easements forced upon them.

With regard to the Neeley’s Lane Accommodation Camp, potentially being subject to “*removal and/or handover of construction compounds and workforce accommodation camp sites to Energy Co*”. **What is the future of this site after construction is complete? More information is required.**

The section on Out of Hours Work states “*the requirement to accommodate a rostered fly-in fly-out and drive-in drive-out workforce, construction hours would occasionally be extended across a seven day work week between 7am and 7pm. To support construction activities during these extended hours, operation of the main construction compounds would also be required.*” And “*workforce accommodation camps would be operational 24 hours a day, seven days a week to provide accommodation for the workforce*”. There are several other situations where work would be required out of hours including “*large concrete pours*” and “*any works that do not exceed the applicable noise management levels*”. It appears from this extensive list, that work will proceed in most cases out of hours. **This will have an unacceptable level of impact on local residents and local traffic. How are local residents going to enjoy their properties and homes with seemingly no relief from the construction?** This cannot be allowed for a project that is expected to take approximately 3.5 years.

Of additional concern is the statement that the Construction Workforce is 1800 full time equivalent construction workers - which indicates there could be more traffic than estimated if part time workers are employed. The Neeley’s Lane workforce camp would accommodate 600 people. The Merotherie Workers Camp will accommodate 1200 people. We have been told this camp will also include things like a liquor store, general store and even a police presence. **Has the local population at Dunedoo (the nearest town) been asked how they feel about a worker’s camp that is bigger than their town?** (And not just by a drop-in session, this needs full consultation with multiple meetings and information provided to each household, then evidence that it has been carried out, with plans edited in line with the feedback of the public and then made available for further public comment (and adjustment with those comments).

Other projects are also suggesting their own workers accommodation. **This will place an unbearable strain on local communities, with satellite towns changing the landscape and impacting on our local communities.**

It is also of concern that some workers are expected to be accommodated by “*existing local hotel, motel and rental accommodation*” in an area that is already stretched to capacity with tourist and local needs, let alone the multiple other projects slated in the CWO REZ.

Section 3.5.6 states that “*vegetation clearance within the construction would be confirmed during finalisation of the project design*” and “*project design and construction methodology... would be developed with the aim of avoidance and minimisation of potential impacts to biodiversity, where practicable*”. “Where Practicable” relieves Energy Co of any responsibility towards minimising biodiversity impacts. **We request DPE ensures that Energy Co clearly states the biodiversity impacts and purposefully minimises them.**

Threats to biosecurity are revealed in 3.5.6 with the use of graders, excavators, dozers, dump trucks and rollers, on agricultural land. Also, Section 7.5.2 “*provide ‘right of way’ for operators to operate and maintain the structure*”. Biosecurity requirements need to be addressed clearly and fully by

Energy Co., it is only occasionally mentioned in the EIS and Section 21.4 is one of the few sections with detail, but it is still inadequate. It is already evident in existing power line transmission corridors of visible lines of St. John's Wort where vehicles checking the powerlines have been driving through. This indicates they have travelled from one property to another, without cleaning the vehicles. Without stringent controls the same, or worse, is going to happen with these additional transmission corridors.

Before any approval can be granted, **Energy Co should fully demonstrate how they can implement and conduct a stringent biosecurity management program to protect the community and land from the damage that this project could do to the environment.** Oversight also needs to be in place from local government authorised biosecurity officers, Central West Local Land Services authorised officers and relevant officers from NSW Primary Industries.

Assembly of Transmission Line Towers in Section 3.5.6 states "*crane pads may be required for erecting each tower...at a typical site, this would include a temporary area of around 80m by 80m*". No rehabilitation of crane pads is mentioned. **We urge DPE to ensure Energy Co. commits to rehabilitation of ANY impacted site whether on "host" land or not.**

Section 3.5.9 Water Supply, states that around 700 megalitres of water per year would be required during construction (estimated in Table 3-6 to be around 3.5 years). Energy Co expects this water to be sourced from various sources including the Talbragar River, groundwater bores and potable water from Council supplies in Dunedoo, Coolah and Gulgong. Dunedoo town water is from the Talbragar River. Coolah town water is bore water. We are very concerned about the cumulative effects on the water table from multiple projects in the CWO REZ taking groundwater, negatively impacting the residents of Coolah and Dunedoo and the farmers in the Warrumbungle and Mid Western Regional LGAs who rely on bore water for stock water and residential water.

Chapter 20 cumulative impacts identifies at least two other projects that will occur concurrently that suggest taking water from the same sources. Water is the lifeblood of agriculture and our communities, and we can ill afford to have substantial water taken from our bores and river system.

If it is NOT a wet period, where will Energy Co obtain sufficient water from if not available from groundwater?

Regarding on-site waste water management, this section also states it would be collected and "*transported to a council wastewater treatment plant.*" We cannot see any evidence that the Warrumbungle or Mid Western Regional Councils agree with this? Has this been negotiated?

We would like to see evidence and details on sourcing water and wastewater disposal, prior to any agreement by DPE.

At one of the Dunedoo information sessions one of our members asked the Energy Co representative about traffic. That representative advised that **the easements themselves will be used as roads.** This is of great concern to our members as it will lead to cumulative compaction of the soil, ultimately affecting its productive capacity and will have long term repercussions for many years. Additionally, there are biosecurity risks with having vehicles traversing multiple properties. **This is NOT acceptable to the community.**

Section 4 - Statutory Context

Chapter 4 of the EIS is confusing and open to interpretation which will result in poor public planning, confused, angry citizens and shows a lack of respect for government processes particularly as it relates to the CWO REZ. Whilst declared CSSI in 2020 it also comes under the State Environmental Planning Policy. Under this contradiction, Energy Co has already acquired property and has started the acquisition process for 110 landholdings. Landowners are uncertain with an unapproved project as to what will happen, and the environmental aspects have not even been assessed.

Section 7 - Land Use and Property

Section 7.3.2 states that “around 72 per cent of the construction area consists of agricultural land used for the grazing of native and modified pasture. Around an additional 20 percent of the construction area consists of agricultural land used for cropping”. Given the restrictions on agricultural production activities imposed by the easement :

While there are some restrictions to the use of land within an easement for electrical transmission lines, livestock grazing can generally continue as normal. For other activities, such as operating farming equipment, fencing and irrigation, you may need to adhere to exclusion zones within a certain distance of transmission lines for safety reasons. You may also need to consult us about new proposals or developments within or near the easement.

(<https://www.energyco.nsw.gov.au/sites/default/files/2022-09/cwo-rez-fact-sheet-easement-acquisition.pdf>)

this will negatively affect landowner’s ability to crop, improve pasture, erect fencing and more. 775 hectares of cropping ground (table 7-3) will be taken out of production, affecting those landowner’s ability to produce food and earn an income from those 775 hectares for over 50 years.

Many farmers whilst they do not farm a paddock with machinery every year, often do this occasionally to improve the pasture for grazing – this will be curtailed by the easement conditions. After time, 1660 hectares of currently modified pasture (table 7-3) will become less productive without the ability to improve it (with machinery) for the life of the transmission towers. The landowner will therefore, over time, earn less from this land.

The “compensation” offered to hosts is inadequate considering this.

7.3.3 indicates that 110 landholdings have been issued opening letters for the acquisition process. **We question if the process of releasing an EIS is even valid considering a) landowners are not in agreement with being a host or b) the project should be approved in principle before the acquisition process starts.**

As stated earlier “negotiation” is in name only, but Energy Co continue to say it “Where possible, easements and land acquisition has been through negotiated agreement in consultation with the relevant landowners.” (Section 7.4) “Where possible” is obsolete. Either they will undertake negotiated agreement in consultation, or they won’t. **Our members advise us that they have felt**

threatened by the compulsory acquisition process and under coercive behaviour by Energy Co to sign before that process begins on 24 November.

Section 7.4.2 also states that construction of the project would require “*securing of temporary construction easements over freehold land....and securing permanent transmission line easements (including for towers) upon completion of construction*” confirming they DO NOT, in fact, have easements in place, yet they are applying for planning permission? Developers of wind/solar must prove they have signed agreements in place prior to releasing their EIS and seeking planning permission. This is unfair to landowners having been sent opening acquisition letters in May that have not been agreed to and being under threat of compulsory acquisition from November.

DPE should reject the application by Energy Co until ALL easements are signed willingly by hosts – not under the threat of compulsory acquisition.

This section also states “*During construction, temporary restrictions would be put in place within the construction area, which have the potential to restrict landowner access to sections of their properties.*” **This has never been laid out in detail in the easement documentation that we have viewed. What land can the landowner NOT access? For how long?**

Section 21.4 of the EIS mentions Property Management Plans, but there is no mention of these in the acquisition correspondence as these will only be discussed prior to construction – so **Energy Co expect landowners to agree to an easement without full disclosure.**

We call DPE to reject the EIS for being prematurely submitted and for not fully informing landowners of the full impacts to their land.

Section 8 - Agriculture

Table 5.1 estimates the cost of construction on gross agricultural production; however they do not appear to have taken into account the loss of livestock income with the need to remove livestock from the wider area during construction that may exceed an area of 10000ha.

In Chapter 20, Energy Co admits during construction that “*Agricultural operations may also be temporarily impacted due to increased construction traffic, vegetation removal, the generation of noise, vibration and dust, damages/changes to farm infrastructure and increased biosecurity risks*” and during operation “*solar farms would remove existing arable land within their project footprints from future crop production*”.

The cumulative impact therefore on this predominately agricultural area of the CWO REZ would affect our ability to produce food in the short and long term, and negatively affect the income of farmers in impacted areas, at the very least during the construction period.

Section 9 - Landscape Character and Visual Amenity

Section 9.2 states that private dwellings were only identified up to 2km from the project. With transmission towers up to 72m tall (taller than the Sydney Opera House which is 67.4m tall) they will be seen far further than 2km.

Hosts were not considered fully as they are considered to “have negotiated landholder agreements that would form compensation from the impacts of the project”. Yet the hosts are, for the major part, not hosts by choice, but rather hosts by force. The compensation they offer is

paltry is comparison to the loss of visual amenity and loss of property value by being forced to host the infrastructure. The compensation is inadequate, and hosts should still be considered for visual impact.

Technical Paper 3 states that the Neeleys Lane camp will be removed from the RV-4 rural valley character zone. **What impact will that have on property value for landowners in that area?**

It also states *“In the Talbragar River (RV-3) and Munmurra River (RV-4) rural valley landscape character zones, the project would be a new feature, introducing large-scale transmission towers into these rural valley landscapes. The transmission lines would cross the Talbragar River and several creeks, roads, and across rural properties. The character of these rural valleys is scenic, contributing to the landscape setting of towns such as Cassilis. Overall, there would be a high magnitude of change and a moderate landscape character impact in these landscape character zones during operation.”* **Therefore, the scenic value will be lowered and EVERY landowner, whether forced to host these monstrosities or not, will have their property values reduced. EVERY landowner that has even a portion of a tower visible should be compensated to the loss of property value.**

The CEO of the government’s Clean Energy Finance Corporation, Ian Learmonth, had to concede on ABC Radio National recently that the eastern Australian landscape will look radically different *“if we’re going to get to 82% renewables by 2030... We’re going to need the right infrastructure to capture that energy, and therefore, there will be an impact”*. Yet we, as residents of the CWO REZ are expected to just accept it?

Section 20.2.2, clearly states that the CWO REZ will be impacted by the multiple wind/solar/transmission projects that *“would introduce energy and electricity infrastructure, access tracks and upgraded roads into a landscape where there is currently limited built development This infrastructure would change the landscape character to one where the presence of energy and electricity infrastructure is more frequently encountered and prominent, resulting in a cumulative landscape character impact.”*

This confirms there will be a marked negative impact on visual amenity for rural residents of the REZ. This will lower resident’s quality of life and enjoyment of their home, and negatively affect their property values.

Section 10 - Biodiversity

This section omits reference to the EPBC Act status of ‘critically endangered’. With biodiversity in NSW under significant threat by multiple renewable energy projects, further lands cannot be lost to more projects.

In Chapter 20 Energy Co admits *“The direct cumulative impact on native vegetation as a result of this project, in combination with the relevant future projects, is estimated to be 9,859.21 hectares. The cumulative ecosystem credit requirement is 147,215.25 credits and the cumulative species credit requirement is 305,854 credits.”* Biodiversity credits of this volume are impossible to offset and appear to only be a money grab without seriously considering the environment.

Energy Co. also admits in Chapter 20 that current wildlife corridors will be removed/affected and state that 1032 ha of native vegetation (and habitat) will be directly impacted *“The relevant future projects are likely to reduce the integrity of current corridors and connectivity. The projects are likely to result in short term impacts due to species relocating outside of the development footprints during*

vegetation removal and other construction activities... Long term impacts could include permanent breaks in connectivity due to vegetation removal and the installation of fence lines and access roads across relatively large intact blocks of habitat. The wind farm projects would also result in some interruption of aerial habitat through the introduction of potential turbine strike and barotrauma (rapid or excessive air-pressure change near moving turbine blades that result in haemorrhaging of the lungs). This project would contribute to cumulative impacts to wildlife connectivity and habitat corridors and would potentially have one of the largest impacts to connectivity." This is unacceptable to the community.

Section 11 - Aboriginal Heritage

Chapter 20, cumulative impacts states "This project, in combination with the relevant future projects, would result in a potential cumulative loss of between five to 16 per cent of the Aboriginal site types identified within the construction area of this project, which include rockshelters, grinding grooves, culturally modified trees and moderate or high significant stone artefact deposits."

It also includes a poor attempt at deflecting responsibility for this, by suggesting that whilst cultural materials would be lost, it's becoming "more holistic condition of heritage". **This is nothing more than an excuse to destroy Aboriginal heritage.** All Aboriginal sites should be preserved, we do not want a repeat of Rio Tinto's destruction of an aboriginal heritage site in Western Australia in 2020.

Section 12 - Non-Aboriginal Heritage

It appears that many places were not surveyed, relying on desk top modelling and potentially ignored community history studies that list places of historical interest. A number of sites are delicate and will be impacted by construction activities, such as vibration which may collapse and/or destroy the sites. **We have been advised by a professional historian/archaeologist that the report does not recommend sufficient protection for historical sites and has several inaccuracies in its methodologies.**

Section 13 - Social

The CWO REZ encompasses 9 different local government areas. Each of these LGAs vary but they have been considered, instead, as a single entity.

Whilst the CWO REZ has a population of 152,418:

- a) only 7 landowners were interviewed.
- b) only 44 interviews were undertaken in the social impact study including councils, landowner "hosts", neighbours and community (only 0.03% of the population).
- c) An online survey had 104 responses (0.06% of the population).
- d) A community survey in early 2023 had 290 responses (0.19 % of the population)

Engagement, we are told from our various members from across the CWO REZ, was purely Energy Co relating what will be happening, but does not show an honest attempt at understanding and addressing people's concerns in a real way and neither have they completed a comprehensive social impact study.

The limited surveys that were undertaken show no real support for the project. Only 1 person said that they could see benefits. Extrapolating that result, **it is clear that Energy Co do NOT have social**

licence to proceed.

Energy Co say they will “consider” feedback from the public but do not state they will act on that feedback. **A number of concerns were raised in the limited interviews/surveys, but these have not been adequately resolved.**

The conclusions made in the presented social impact assessment are faulty as the assessment itself was faulty. The social impact assessment is inadequate and not fit for purpose as a representative document. A comprehensive and targeted social impact study is required before DPE can consider assessing this application.

Chapter 20 outlines a number of cumulative negative social impacts are admitted being fuelled by Energy Co’s transmission infrastructure, including:

- a) detrimental effects to community cohesion,
- b) impacts to sense of safety,
- c) diminished sense of place,
- d) road delays and sense of safety,
- e) Aboriginal cultural values,
- f) capacity of health, food, and social services,
- g) the way people enjoy and connect with the environment,
- h) people’s ability to affect change in their local area,
- i) stress from bushfire risk,
- j) diminished sense of belonging,
- k) loss of aesthetic values,
- l) loss of biodiversity
- m) impact to agricultural land and food production for future generations, and more.

When these are taken as a whole, they are unacceptable to the community.

Even though several projects are now suggesting accommodation camps, the residents do not want satellite towns popping up in the middle of rural land. Some projects don’t have accommodation camps and there is bound to be excess requirements that will need to be filled by local accommodation and this increased demand is likely to result in an increase in housing prices and rents.

Section 14 - Economic

There will be little benefit to the region during construction apart from minimal flow-on effects from the 90% fly-in, fly-out workforce, living in accommodation camps. During operation there is a statement that it is assumed that 50 staff will reside in the region, however this is not guaranteed, and those personnel may indeed reside outside of the region with no flow on benefits, for even this small amount, to the local economy. Section 4.2, Technical Paper 8 suggests that the operation of the workers camp may benefit local businesses by the supply of goods, but then goes on to state

“there may be a limit to local procurement because of local unavailability of required inputs”.
Clearly, local businesses will not benefit.

On a wider state scale, the project does not create anything, it only provides an avenue for generators to connect to the grid to sell their product, to the taxpayers at high prices. It’s worth to the economy is therefore questionable, and definitely not “state significant”.

Conversely the costs to the local economy will be high.

Construction will reduce the land available for agriculture by an estimated \$1.35million for each year of construction (up to 4 years), a total of \$5.4 million. Once operational, lost agricultural income has been estimated at \$317550 per annum. When talking of a project of this size, this seems a small amount, yet **to those farmers impacted, this is a substantial reduction to their income**, which is not being covered adequately by the so-called compensation.

If you are to believe the hand waving Mike Young from Energy Co, he has stated to local landowners that there will not be any impact to farming practices in/near transmission towers/lines. Perhaps he should read his company’s literature that states

While there are some restrictions to the use of land within an easement for electrical transmission lines, livestock grazing can generally continue as normal. For other activities, such as operating farming equipment, fencing and irrigation, you may need to adhere to exclusion zones within a certain distance of transmission lines for safety reasons. You may also need to consult us about new proposals or developments within or near the easement.

Considering these restrictions, the estimates of lost production to farmers during construction and operation are underestimated if the only agricultural practice that can be undertaken within the easements is livestock grazing.

One landowner is having the major portion of his land dissected by twin 500kv lines with huge easements. The land is currently rotationally used for haymaking and grazing. He will not even be able to easily access the half of the property cut off without going on to a main road and around. The loss of production is high. He is an unwilling host, like most being forced into this situation with the threat of compulsory acquisition, and the proffered compensation which only considers direct land loss, is wholly inadequate.

If this ill-advised project proceeds, the compensation figures to landowners needs to be reassessed with these restrictions in mind.

Section 14.3.3 suggest that prices may be pushed higher from *“excess demands for resources for construction, such as quarry materials, concrete, and other construction materials”* resulting in *“rising costs for these resources and potentially shortages for other uses”*. In an economy already struggling with rising prices, the additional pressure from multiple projects planned for the CWO REZ, in addition to the Energy Co. proposal, will make these costs substantially higher for residents of the region.

Technical Paper 8 outlines that the IO method was used, which assumes that the regional economy has access to sufficient labour and capital resources, so that an individual project does not result in any regional price changes. Yet, it is quite clear at an even cursory look at the nearby towns (Cassilis, Coolah, Mudgee, Gulgong and Dunedoo) that we DO NOT have sufficient labour or capital resources nearby. **The method thereby is faulty.**

The impact on agriculture, does not consider the ripple effect on the CWO REZ with ALL its associated projects.

Whilst not mentioned as a separate topic, property value loss rates high on people's concerns. As well as dramatically reducing our potential enjoyment of our homes, by changing the landscape character, our property values will accordingly decrease. The transmission project enables multiple projects to proceed (once approved) moving the negative amenity impacts from an isolated project to a cumulative effect over hundreds of kilometres. **We urge DPE to consider property value loss as a real threat to the whole of the district designated as the CWO REZ.**

Section 15 - Noise and Vibration

This section highlights the fact that working hours are likely to be out of hours (7 days a week between 7am and 7pm) during construction and that the workers camp(s) will be operating 24/hr 7 days a week.

Of note, Table 15-15 states that **several residences will be subject to noise exceeding the limits during construction of transmission lines** - during standard hours up to 30 residences, out of hours, up to 58 residences and be at levels that give sleep disturbance levels at 44 residences.

The construction of the workers camp at Neeley's Lane will exceed noise limits by up to 10dB during standard hours at one residence, exceed limits up to 15dB at two residences and be at levels that give sleep disturbances at two residences.

Residences near switching stations will be subject to similar impacts as the Worker's Camp, but with **out of hours noises as high as 25dB above limits.**

Other NCAs provide similar data showing that multiple residences will be impacted by noise throughout construction and to a lesser degree during operation.

Section 15.6.1 details corona noise from transmission lines and identifies one residence that will be disturbed by corona noise during the evening and night time, it is estimated between 16 and 24% of the time. This is unacceptable for a residence to be susceptible to this noise up to a quarter of the time for the life of the project (50+ years). **The transmission line should be moved further away from this residence.**

There is also the issue of transmission line maintenance which, although sporadic, should be assessed. The report, however, does not detail the level of noise that will be expected.

Mitigation measures in Section 15.7.2 are inadequate and do not go in any way to protecting residences from the noise. For example, the proponent thinks that "advising" a residence of noise in advance is a mitigating factor? A more pro-active approach to ACTUAL mitigation should be taken before this project can be considered for approval.

No mention has been made of potential noise from the operating phase of the workers camps and its potential negative noise impact on the nearby residences.

This should be ascertained and advised, with the opportunity to comment to DPE on this matter.

Section 16 - Hazards/Risk

Bushfire

There is an increased risk of bushfire ignition with overhead transmission lines. The district has a history of bushfires but the EIS only covers 2006-2017, ignoring significant blazes that caused extensive damage.

Technical Paper 10 underestimates the needs and requirements for fighting bushfires which poses a danger to the surrounding landowners and communities. It states that static water supplies in construction compounds and workers camps would be 20,000litres. This is too low and should be raised to a minimum of 100,000l in compounds and 500,000l in worker's camps.

The Merotherie Workers Camp should have 2 x Cat1 units with 6 RFS trained personnel on call (not local volunteer RFS members). The Neeley's Lane Workers Camp would have similar needs, adjusted appropriately for its size.

We have been advised by experienced firefighters that in times of high fire danger, a slip on firefighting unit should be at every construction site, plus a Cat1 truck on standby.

The cumulative effect of bushfire risk in Chapter 20 states "*There would be an increased risk of bushfire ignition where construction activities and operation of this project would overlap with the relevant future projects on bushfire prone land*" and for the operational phase "*The relevant future projects and this project would increase the risk of bushfire in the four impacted LGAs through the introduction of potential sources of ignition and fuel sources in bushfire prone land.*"

This places an unacceptable risk on landowners and communities within the REZ and has the potential to overwork the RFS which is almost completely volunteer.

EMF

Energy Co forwarded information to one of our members about EMF which stated that 414 milligauss is predicted directly below the power lines and an AECOM study predicted 5A/m (63 mG) or 6.3 uT at the edge of an easement and at 80m from the HV lines, the radiation measurement is 0.5A/m or 6mG, or 0.6uT. There is universal acceptance that children under 15 should not be exposed to radiation levels of 0.4uT or greater for long periods as it can cause a substantial increase in risk for childhood leukaemia.

Livestock continually grazing underneath the easement are at risk as may be a farmer cropping the edge of an easement. A head veterinarian from Sydney University advised affected cattle (kept regularly under HV lines) should be sold before five years of age in case of early cancer diagnosis.

An Energy Co. representative at Dunedoo told a landowner that if you stand under twin 500kv powerlines for too long it "will boil your skin". However, the same representative could not advise safe distances for humans and animals or a maximum exposure time at a set distance.

If Energy Co know the risks, **these should be disclosed in full (in plain English)**. If they don't, the project should not go ahead due to the risk to human and animal life.

Technical Paper 12 shows scant consideration for people who may have to work under or near the powerlines over a period time.

Section 17 - Traffic & Transport

This section identifies there will be an additional 100 vehicles PER HOUR during peak construction on local roads. Whilst the road capacity for highways is high, some local roads will go from 1 vehicle per day to 32 per HOUR. Livestock movements on local roads will be heavily impacted. There are additional biosecurity threats from the large number of vehicles on roads and travelling through properties.

The cumulative traffic from this and other projects at the same time are extreme. Chapter 20 identifies an estimated 10 projects using the same road network as Energy Co. at a similar time. Yet numbers are only provided for 6 projects. For those projects alone (not including Energy Co's estimate of an additional 100 vehicle movement PER HOUR), during the construction period, there will be an additional 2307 vehicle movements per day on the local roads. If we add in Energy Co's estimate for a 12-hour day, there could be an additional 3500 vehicles per day on local road PLUS the FOUR other projects that no numbers were provided for. It is reasonable to estimate that these 10 projects and Energy Co will bring an additional 5000 vehicle movements per day during the construction period.

This will result in extensive road congestion on all affected roads, residents will face multiple delays, the risk of accidents will increase and transporting livestock and grain will become more costly with the added time delays.

Section 18 - Waste Management

Chapters 18 and 20 detail waste management including an estimated 265,000 cubic metres of green waste, 1,000t on excavation spoil, 12,500t of concrete waste, 2,100t of steel/metal, 200t of cabling waste, 85t of hazardous waste, 105t of road base/concrete/gravel waste, 33t of empty oil and other containers, 130t of oils, 1,200t of packaging waste, 2,500t camp/compound waste, 300,000,000litres of liquid waste (including sewage). Detail is scant on "on site" sorting and storage of waste and the impacts from this.

Mid Western Regional Council has advised that neither their Mudgee or Gulgong facilities have the capacity to deal with additional waste and other facilities are not detailed as to their agreement, within 150km of the site. There are no details on the transportation of the waste – how many additional trucks will be on the road to transport the waste to its destination? Were those trucks included in the traffic and transport calculations? If not, what are they, how many are they and what is the additional impact?

The cumulative impact on waste management is major with many local facilities already stating that they are at capacity. With no agreements in place, this is too much of a burden on our local facilities. Taking the waste further afield will add burdens to the road system which cannot be justified. This needs to be addressed before assessment by DPE.

Section 19 - Flooding

Merotherie Rd is the major access route for Merotherie Hub. Technical Paper 7 acknowledges this yet ignores the FACT that 1.7km of this road is located on a flood plain. At present, flood water rises, crosses the road and subsides with little lasting effect. However additional culverts and other man-made structures are likely to cause flooding upstream and concentrate flows downstream. These will cause significant erosion, new drainage lines, artificial water courses and have a negative effect on the available agricultural land.

During the surveys undertaken for this EIS, the new Wollar Switching Station, Merotherie Energy Hub and Elong Energy Hub sites were inundated by floodwaters. Twelve of the thirteen switching station sites are estimated to be inundated on occasion, yet Energy Co will not move their locations.

Construction activities will cause disruptions to contour banks and waterways on easements and a large rain event would cause significant damage.

Overall, there is potential for the project to cause extensive and irreparable damage.

Section 21 - Project Uncertainties

Section 21.4 plainly states the multiple project uncertainties. It lists impacts on utilities, final transmission tower locations, final layouts of construction compounds and workers camps, construction methods and staging, use of helicopters and drones, possible inclusion of a BESS, final volumes of water and confirmed water sources, final operational noise mitigation, further field investigations and research on Aboriginal heritage, further field surveys for biodiversity, further testing for soil contaminants and further assessments of cumulative impacts.

The EIS is obviously inadequate and was submitted prematurely. It should be rejected until these further identified items are addressed fully.

21.5.2 states that Energy Co responds to community and stakeholder feedback. We refute that completely. We are yet to see ANY evidence of Energy Co amending its plans in response to feedback, and they definitely do not “negotiate” with those under the acquisition process. We are yet to hear of ANY lines being moved to accommodate the affected landowners that will be unwilling hosts.

Section 22 – Environmental Risk Analysis

This section acknowledges multiple issues that would have a high or medium residual risk after the implementation of management and mitigation measures outlined in the EIS. **Saying that these will be investigated in the future is inadequate. We assert these need to be resolved BEFORE DPE can consider assessing the EIS.**

Section 20 - Cumulative Impacts

The section on cumulative impacts finally acknowledges, in print, the extensive negative impacts that will occur from the cumulative projects currently in some stage of the approval process in the CWO REZ.

The residents of the CWO REZ have realised that their visual amenity would be severely affected by being placed within a REZ. Visual amenity enables the residents to enjoy their surroundings and homes, looking out at currently peaceful rural vistas of farmland and rolling hills and wooded areas of the Great Dividing Range.

The developers (both wind and solar) continually state that their projects will have minimal impact on the landscape and try to avoid responsibility for any cumulative negative impact with other projects (even though required to by DPE). This might ALMOST be the case for a project in isolation, but being in a REZ situation, we were aware it would change to an industrial landscape.

DPE have stated in the solar guidelines that a REZ is a “modern day power station” and this is something that the residents of the REZ NEVER agreed to. We were never asked. We were never consulted. The State Govt. declared the Electricity Infrastructure Investment Bill in November 2020, passing it in 17 days whilst most of the residents were under COVID restrictions. How is that acceptable?

Energy Co has at last put in writing that our visual amenity WILL be negatively impacted both during construction and operational periods.

Energy Co states ***“If approved, there would likely be cumulative landscape and visual impacts associated with this project and the relevant future projects, due to the proximity and associated potential for the projects to be seen together and change the character of the surrounding landscape”***.

And

“Construction periods of relevant future projects near the north eastern, central and western sections of this project are likely to overlap with this project over several years. Construction activities for the relevant future projects and this project would extend across large areas of the landscape, and would contrast with the rural amenity and scenic quality of the existing rural landscape. These activities would be seen from several dwellings and local roads, including at night where construction lighting is required.

The most substantial cumulative landscape character and visual impacts would be experienced

- *in the landscapes between Gulgong and Dunedoo*

- *between Tallawang and Spicers Creek (the central and western sections of the project), where multiple renewable energy projects are proposed in combination with this project*
- *in the landscapes between Cassilis and Leadville (the northeastern section of the project), where two large wind farm projects are proposed in combination with this project.*

Views of these projects would be prominent and contrast with the undulating rural and forested hills of the surrounding landscape, including at night, when some private dwellings would have views of operational lighting at switching stations, energy hubs and operations and maintenance buildings”.

And

“This infrastructure would change the landscape character to one where the presence of energy and electricity infrastructure is more frequently encountered and prominent, resulting in a cumulative landscape character impact”

And there it is, admitted in black and white, that it WILL change the character of the landscape from rural to one of multiple types of electricity generators and infrastructure.

To detail (operational – long term) visual impacts:

- *Liverpool Range Wind project - This project and the Liverpool Range wind farm would introduce energy and electricity infrastructure, access tracks and upgraded roads into a landscape where there is currently limited built development and a prevailing undulating rural landscape character. This infrastructure would change the landscape character to one where the presence of energy and electricity infrastructure is more frequently encountered and prominent, resulting in a cumulative landscape character impact Views of these projects would be prominent and contrast with the rural amenity and scenic quality of the existing rural landscape.*
- *Valley of the Winds project – “This project and the Valley of the Winds wind farm would introduce energy and electricity infrastructure, access tracks and upgraded roads into a landscape where there is currently limited built development and a prevailing undulating rural landscape character. This infrastructure would change the landscape character to one where the presence of energy and electricity infrastructure is more frequently encountered and prominent, resulting in cumulative landscape character impact..... Views of these projects would be prominent and contrast with the rural amenity and scenic quality of the surrounding landscape, resulting in potential cumulative visual impacts”.*
- *Birriwa Solar, Barneys Reef Wind, Stubbo Solar, Tallawang Solar - This project, in combination with the relevant future projects, would transform the Narragamba to Blue Springs and Birriwa to Tallawang undulating rural hills LCZs from predominantly rural to having a prevailing character of renewable energy infrastructure, due to the introduction of solar panel arrays, switching and substations, BESS facilities, workshops maintenance and operations buildings, maintenance access tracks and upgraded roads into the landscape. The contribution of this project to this change in character would be greater in the vicinity of the Merotherie Energy Hub and in areas to the west of the energy hub. Cumulative landscape character impacts are also expected in a small area of the Barneys Reef forested hills LCZ, due to the introduction of energy and electricity infrastructure for the Barneys Reef wind farm and this project Cumulative visual impacts may occur as the scale, proximity and extent of this project and the relevant future projects would contrast with the rural amenity and scenic*

quality of existing views, which do not currently contain large-scale built features or infrastructure.

- Orana Wind, Sandy Creek Solar, Cobbora Solar, Dapper Solar, Spicers Creek wind - *This project, in combination with the relevant future projects, would transform the Narragamba to Blue Springs and Birriwa to Tallawang undulating rural hills LCZs from predominantly rural to having a prevailing character of renewable energy infrastructure, due to the introduction of solar panel arrays, switching and substations, BESS facilities, workshops, maintenance and operations buildings, maintenance access tracks and upgraded roads into the landscape.... This project, in combination with the relevant future projects, would transform the Narragamba to Blue Springs and Birriwa to Tallawang undulating rural hills LCZs from predominantly rural to having a prevailing character of renewable energy infrastructure, due to the introduction of solar panel arrays, switching and substations, BESS facilities, workshops, maintenance and operations buildings, maintenance access tracks and upgraded roads into the landscape.*

Whilst Energy Co states “*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 Energy Co, renewable energy developers, councils and government agencies*”, **we assert that the cumulative impacts are too great on the residents of the REZ, and these are insurmountable.** The REZ was ill-conceived and the reality of a REZ was not thought through by the obviously urban dweller who dreamt the idea up.

We call on DPE to acknowledge that the cumulative impacts are far too great for residents of the REZ and that the application for the transmission infrastructure by Energy Co for the CWO REZ should be wholly and fully rejected.

CWO REZist Inc. reserves the right to add to this submission at a later date.

CWO REZist Inc.