

Submission
No 44

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

Name: Miss Emma Bowman
Date Received: 9 November 2023

OBJECTION to CWO REZ Transmission Project (SSI-48323210)

I whole heartedly object to the CWO REZ Transmission Project.

I am a fifth generation farmer in the tightly held, “safe” Dunedoo district. My partner and I, with help and support from my retired but still very active parents, produce beef, lamb, wool and grain on part of my family’s original land. Whilst some of the farming land in the 20,000 square kilometre Central West Orana Renewable Energy Zone is not considered valuable, it all plays its part in producing the food and fibre Australia relies so heavily on. To see this land scarred by transmission lines and covered in wind turbines and solar panels will destroy our picturesque region and its communities, and decimate the agriculture sector in our magnificent country.

Although our property is not, at this stage, directly impacted by proposed transmission lines, it has been devastating to witness the disrespect and disregard shown to landholders throughout the Energy Corporation of NSW’s (EnergyCo) ‘consultation’ process. I use consultation loosely as it has been very poorly executed to date; community engagement should not be a meeting where proponents tell land holders what is going to happen, but an open discussion where community concerns and local knowledge are taken on board! The stress put on effected landholders owing to lack of communication and due diligence has been, and continues to be, colossal and unnecessary.

Legislation

The Electricity Infrastructure Investment Act 2020 was passed through the NSW Parliament, during the height of Covid 19. One of the objects of the Act is “to foster local community support for investment in new generation, storage, network and related infrastructure”. The Act also states that “a person or body exercising a function under this Act must do so in a way that is consistent with the objects of this Act.” I would suggest EnergyCo have not acted in any way to ‘foster local community support’ given the examples I will mention further in my submission.

The Act also states that “the Minister may make a declaration” of a renewable energy zone “only if the Minister has considered the following” – “the views of the local community in the renewable energy zone”. I was certainly never asked, so whose views were taken into consideration when the CWO REZ was declared?

I request a moratorium on all negotiations and works in the CWO REZ, and the other four REZ’s in NSW, until there has been significant consultation undertaken by the relevant authorities with the communities that will be affected.

Impacts on Agriculture

The EIS main report states that approximately 4000 hectares of agricultural land will be unavailable for use during construction, 2700 hectares during operation. Of the almost 4000ha of land needed for construction 92% is used for agricultural purposes, 72.5% for grazing and 19.5% for cropping. Taking this area out of production will have many consequences for the agricultural sector and the ability of farmers to produce food and fibre. The construction period will force a lot more than the above predicted area out of production. When fences are cut or removed to allow access to machinery and/or transmission towers be built and lines be strung livestock will have to be moved elsewhere (some properties will not be operational at all). Depending on the time of year construction may also result in crops not being sown. The cumulative impact, when you consider all the proposed wind and solar factories will be enormous. What measures has EnergyCo put in place to minimise the impact to the day to day management of properties (for example: fencing out the transmission line easement and only allowing construction access through that area so livestock

could still be contained, and providing watering points where paddocks are split due to the easement)?

According to the EIS main report 75 percent of the construction area consists of land having moderate to low capability, 16 percent of moderate, high and very high capability land, the remaining land being classed as low to very low capability. As I have previously stated, although studies may deem agricultural land of low capability most farmers have set their businesses up to use their land to its potential, or have changed their methods to suit their land. There are a lot of generational farmers in this district, and all of Australia, who have learnt from their forebears, and their own experiences, how to best utilise their land. For example, some farmers own grazing country and farming/fattening country – sheep and/or cattle are bred on the grazing country and then moved to the farming/fattening country to grow and ready for sale, and crops can be grown on the ‘better’ country to store and use as fodder during dry times. Limiting the use of agricultural land (some farm machinery will not fit under transmission lines therefore cutting off parts of properties for farming use) will drastically change some farming businesses, and possibly limit their viability.

The construction area is said to contain around 150ha of mapped BSAL (biophysical strategic agricultural land), which is defined as being “land with high quality soil and water resources capable of sustaining high levels of productivity.” The distribution of SSAL (state significant agricultural land) is supposedly similar to BSAL, 150ha. The NSW DPI states, “the biophysical attributes of SSAL represent the most capable, fertile and productive agricultural lands in the state, and support a variety of agricultural industries operating successfully.” The breakup of the use of BSAL in the construction area is as follows:- 15ha for access tracks, up to 2ha for the construction of the M7 switching station, 29ha for the construction of transmission line towers, and 108ha located within the transmission line easement. If Australia is to continue producing food and fibre for its population prioritising this land for industrial use rather than agriculture is absurd! I believe a more thorough investigation needs to be done into removing the infrastructure from this very valuable land.

As specified in the EIS main report it is expected there will be a loss of agricultural production of around \$4.04 million, or \$1.35 million per annum due to the transmission line project construction. It is stated that “this is equivalent to approximately 0.21 percent of the total gross value of agricultural production across the four impacted LGA’s over the same time period.” The percentage looks minute as it is taken as a percentage of the whole of the four LGA’s, not all of which are even within the CWO REZ boundaries. I request this be changed to a percentage of the construction area, or at the very least the study area to make the impact more realistic.

The main EIS report states that potential impacts to livestock enterprises, ie. livestock being disturbed by construction activities and vehicle movement, would be minimised through consultation with impacted owners. I expect this ‘consultation’ be much better conducted than EnergyCo’s attempts thus far. It is also said that “disruption may occur if water pipelines or fences are damaged, or gates left open”. In my opinion this is not good enough! The construction workers should be inducted to the highest standard of work ethic so if there is a pipe or fence damaged it is fixed in a timely manner and gates should never be left open without permission from the landowner. If stockyards or loading facilities would be impacted by construction this should be rectified prior to the works beginning.

The restrictions on landowners, workers, livestock and equipment are deemed to be insignificant once the transmission lines are operational. I find that hard to believe as the height of agricultural machinery is not to exceed 4.3 metres above ground level under transmission lines. There are many farmers in the project area who have equipment that does not meet the requirement to fit under the lines, one such farmer who normally transports his air seeder down a designated laneway which the proposed transmission line crosses several times, meaning he will have to take the machine onto the highway, requiring two escorts. Another whose property is cut in half by proposed transmission lines that will have no way to harvest half of his property due to lack of access.

GPS is relied on heavily by those with farming operations. The EIS states that “if the project causes nuisance interference, it would be investigated in consultation with the landowner, and may require signal boosting equipment or antenna enhancement to alleviate the problem.” This should not have to become a problem before it is investigated and resolved! There should be more thorough investigation done to establish if this will or will not be an issue and appropriate action taken prior to construction.

Aerial operations are often undertaken on farming properties, whether for pest control, weed control, fertilising or firefighting. There is becoming more reliance on drones for livestock monitoring and possible pesticide spraying. This project could severely impede options for farming enterprises and ultimately impact the businesses bottom line.

Biosecurity is a major issue for rural and regional NSW. It is acknowledged that this project has the potential to introduce or spread diseases, both animal and plant, weeds and feral pests if not properly managed. Such a large increase in traffic and construction equipment traversing all over the district, throughout many properties every day, is bound to move noxious and other weeds and livestock diseases. I note that the “landholders consulted confirmed that OJD is not a substantial problem as it is currently well managed.” OJD was diagnosed on my property about 5 years ago, and we had run a closed sheep flock (except for rams) for many years before that. The origin of the OJD infection on my property has not been investigated, nor found, which I conclude means there are other infected flocks in this area (my property is approx. 8km east of Dunedoo, so is not far from the project area). I know from personal experience how costly OJD is and the toll it takes financially, physically and mentally so would not like to see it spread. There would need to be very stringent measures taken, and regular checks carried out, to protect the project area, and greater district, from biosecurity risks.

Traffic & Transport

Technical Paper 13, Traffic and Transport, states that the “impact of the predicted increase in traffic volumes generated during construction to the road network’s capacity and efficiency are minor, attributed largely to already low traffic volumes on each construction route with respect to spare mid-block road capacity”. When highways in the project area are rated at having the capacity to handle 1800 vehicles per lane per hour, main roads 1400 vehicles per lane per hour and local roads 1000 vehicles per lane per hour the increase of 100 vehicles per hour during peak construction does seem minimal. However, this is a major overestimation of possible road capacity! Not to mention a lot of the roads rated as “bidirectional two-lane road (one lane in each direction), 100km/h (rural speed limit)” do not have the capability for two vehicles to pass each other, for example, Birriwa Bus Route South. To upgrade these roads to the aforementioned specification there would need to be a lot of trees removed, and major works to prevent future erosion. Safety, of construction workers and locals, is a major issue with these roads.

It is also stated that “the project has negligible impact on the active traffic network and accesses to affected properties”. Current property access traffic movement would be extremely low, in some cases lucky to be one vehicle per day. To say going from one vehicle per day to 32 per hour (20 of which are heavy vehicles) is ridiculous!

The Central West Cycle Trail has routes throughout the CWO REZ, some of which will be heavily impacted by the transmission project construction. The safety of cyclists will be risked by construction traffic, but to my knowledge the CWC committee have not had any contact from EnergyCo at this stage.

The Golden Highway is a major thoroughfare for freight to and from the Port of Newcastle. The whole road acts as a funnel for getting commodities to and from Western NSW, often needing to happen in a timely fashion. The impact of the traffic from not only the CWO REZ Transmission

project, but the cumulative impact from all of the other proposed wind and solar projects in the CWO REZ, will be astronomical and could cost the agricultural sector dearly.

The OSOM transport route for this project from the Port of Newcastle is said to be via the Hunter Expressway and Golden Highway. Not only is there a major issue with the Denman Bridge not being suitable for this traffic, there is also the issue of all loads going through the main street of Merriwa and a significant amount through the main street of Dunedoo. This will put the safety of our local communities under threat, and affect the peaceful nature of our rural towns!

The crash statistics were taken between 2016 and 2020 (2020 being a Covid lockdown year). The traffic on the Golden & Castlereagh Highways increases dramatically every year. The number of accidents will surely rise with the increase in traffic from the transmission project construction. The last accident that occurred on the Golden Highway near Cassilis closed the highway for nine hours. Local community volunteers are often the first responders to these accidents (through roles in SES, VRA and RFS), how does EnergyCo propose to support these organisations with extra staff to cater for the possible increase in traffic accidents?

There are numerous properties that are split by the Golden and Castlereagh Highways, and regional, main and local roads. This means it is necessary for farmers to walk sheep and cattle across, and in some cases along, the road corridor. These crossings are not made at certain times of day or on the same day every week, but when the need arises, and sometimes at very short notice. Stopping vehicles is already an arduous task even though the road rules dictate drivers must give way to farm animals on the road. The major increase in traffic, especially drivers not used to travelling in rural areas, will make these crossings much more difficult and dangerous.

“Merotherie Road was inaccessible during the time of survey due to a major flooding event, which resulted in no traffic volumes recorded on the road”. To upgrade a road, of which 1.7km is a flood plain, to be used as a major access route is absurd. The effect any upgrades will have on the Talbragar River system will be extensive; from the change in flow rate to the probable new drainage lines as a result of flood water not being able to spread out over the whole area. The cost to the taxpayer of a new bridge over the Talbragar River on the Merotherie Road, to cater for the OSOM loads, will be colossal. Both of the above reasons lead to the conclusion that the proposed site for the Merotherie Energy Hub is unsuitable!

Rural and regional roads are in a desperate state of disrepair after the flooding, and continuous wet weather, that followed the last drought. Local councils have not been able to get on top of these problems for many reasons including funding and staff shortages. Whilst I assume EnergyCo will repair any pavement damage caused by the increases of traffic due to the transmission project the major destruction done to the foundations of our local roads may not become evident until the construction period is well and truly over; then who will be responsible for the repairs?

Technical Paper 13 states, “upgrades to relevant intersections on Merotherie Road, Spring Ridge Road and other intersections would be required to ensure safe construction access. It is to be noted that these upgrade works would be completed as part of a separate works package and Review of Environmental Factor (REF) process carried out by EnergyCo. EnergyCo intends to assess and determine the road and intersection upgrades under Division 5.1 of the *Environmental Planning and Assessment Act 1979* to allow these time critical works to be determined and commence construction prior to the determination of the CSSI application. However, the road and intersection upgrades are also included in the EIS so that in the event they are not determined under Division 5.1, they can be approved under the CSSI application.”

This statement refers to the replacement bridge over the Talbragar River on the Merotherie Road and the following roads and intersections:-

- Merotherie Road
- Spring Ridge Road

- Spring Ridge Road/Dapper Road intersection
- Golden Highway/Spring Ridge Road intersection
- Neeleys Lane/Ulan Road intersection
- Golden Highway/Ulan Road intersection
- Merotherie Energy Hub Access Road/Merotherie Road intersection
- Merotherie Road/Golden Highway intersection

I would like to request this process is made public via advertisement in the Dunedoo and Coolah Diaries and through EnergyCo's CWO REZ newsletters to give the affected communities the opportunity to comment on these works prior to approval.

The EIS main report states "it is noted however that the need for additional road upgrades may also be identified as part of ongoing design development." I would also request these potential upgrades be made public through the above means. I find it unacceptable that the EIS can be released and perhaps approved without all of the possible road upgrades listed and thoroughly investigated. The traffic and transport studies are not complete and should be treated as such by the NSW Department of Planning and Environment.

Flooding

Throughout Technical Paper 15. Flooding, the phrases 'detailed design' and 'further refinement' are regularly repeated. How can such a major proposal be put forward for planning approval without the knowledge of how to overcome significant issues and how is the general public expected to comment without all the facts? This project could have devastating effects on the river system in the CWO REZ area and beyond.

Merotherie Road is the proposed major access route for the Merotherie Energy Hub, yet 1.7km of it is a flood plain. During the time of traffic survey for this EIS, Merotherie Road was "inaccessible due to a major flood event"! It is proposed the road will be upgraded and a replacement bridge constructed over the Talbragar River. Engineering solutions will always have impacts on the natural environment. At present the flood water comes up, crosses the Merotherie Road flood plain and subsides without serious or long lasting disruption to agricultural activity. Upgrades with culverts and other man made materials will cause flooding upstream and concentrate flows downstream which will result in significant erosion and reduction in available agricultural land and create new drainage lines and artificial water courses.

This technical paper states that "while the sites of the proposed New Wollar Switching Station, Merotherie Energy Hub and Elong Elong Energy Hub are not impacted by mainstream flooding, they are all presently inundated to varying degrees by overland flow that is conveyed along a number of local drainage lines that run through each of the sites. The thirteen sites where the 330 kV switching stations are proposed to be located are also not impacted by mainstream flooding. However, twelve of the thirteen sites would be inundated by overland flow due to local catchment runoff to varying degrees (the exception being switching station M1)." This suggests the sites are inappropriate!

It is also states that "the New Wollar Switching Station and the energy hubs all have the potential to impact on flooding and drainage patterns due to:

- an increase in the rate and volume of runoff from the substation pads, access roads and other hardstand areas within the switching station and energy hubs, which in turn has the potential to increase the rate and volume of runoff being conveyed in the receiving drainage lines
- the redirection of flow along diversion channels and culverts that are proposed to control runoff through the switching station and energy hubs, which in turn has the potential to result in a redistribution of flows in the receiving drainage lines."

Yet the impact on flooding in the area is deemed minimal!

The impact of work sites and construction on the surrounding major and minor water courses is shown in the EIS technical report to be substantial. There are considerable changes in peak flood levels and the extent and duration of flooding due to the energy hubs, switching stations, transmission line support structures and access roads and tracks. While a lot of the increases are stated to be less than 10%, the impact on agricultural land will be immense, especially to neighbouring landholders. There is the likelihood of changes to current water courses due to the “series of diversion channels and culverts” proposed to be “installed to convey local catchment runoff through and around the site in order to manage the impact of flooding on the switchyards, transformers, control buildings and associated infrastructure”. I did not find in the EIS where the impacts of diverting water from current water courses on neighbouring landholders would be taken into consideration.

During the construction period there will be disruptions to contour banks and waterways on properties where easements have been acquired. If there is a large rain event during this time the damage would be catastrophic to not only the land in the construction area but everywhere downstream. There is also the potential for erosion due to earthworks within the energy hubs and switching stations. When this point was raised with EnergyCo staff at a drop in session in Dunedoo on 11th October 2023 the response was that the damage done would have to be rectified. When erosion occurs from flash flooding, soil often ends up kilometres away from where it started, meaning new soil would have to be sourced to remedy the issues, with which comes a lot of biosecurity issues. There are many watercourses that will be crossed frequently during construction and therefore have access tracks created. As with all disturbances to soil around water the potential for scouring increases. Once this damage is done it is near impossible to repair. All of these risks need to be examined in much more depth before construction begins.

This transmission project has the potential to cause extensive and irreparable damage to the above ground water system in the area covered by the Central West Orana Renewable Energy Zone. EnergyCo needs to further investigate the potential impact on flooding by ground truthing all the previously supplied information provided by desktop studies and engaging landholders with local knowledge to increase the proponents understanding of this matter. The ‘detailed design’ surrounding flooding needs to be released for public comment before any construction, including road upgrades, is undertaken.

Bushfire Risk

The bushfire history in the EIS is incomplete. Whilst the Sir Ivan bushfire is mentioned, the major bushfire that started between Dunedoo and Cobbora in December 1979 as more than one fire, and burnt nearly to Ulan, impacting a fair amount of the proposed project area is not referred to. Both of these fires had dramatic and vast impacts on our local communities including, but not limited to, livestock losses, loss of homes and farm infrastructure, and in 1979 loss of human life. The cost of these major bushfires is not just financial. My personal experiences of fighting the Sir Ivan fire and helping affected landholders afterward has left me with memories I would rather forget (euthanising sheep with ears and mouths burnt off, picking up a pile of dead lambs on a fence caught up and burnt trying to escape and seeing the most resilient farming families brought to their knees, just to name a couple). The aerial firefighting assistance during the Sir Ivan Bushfire was invaluable. The planes and helicopters saved countless homes, livestock and agricultural infrastructure.

The technical paper relating to bushfires states that “there are no identified difficulties in accessing and suppressing fires that could occur within the operation area. The overall operation area is characterised by gently undulating grasslands and some discrete areas of woodland and forest vegetation. The areas surrounding the project are broken up by farmed areas, roads, powerline easements and other small breaks providing a range of suppression options (both land and aerial)

based on specific conditions during a bushfire.” While the transmission line alone is said not to impact aerial firefighting, which I could not disagree with more, the cumulative impact of having numerous wind turbines in the same vicinity will likely decrease, if not stop, the aerial assistance during a bushfire event, and having major solar installations near the lines will severely effect ground firefighting efforts. I notice it is the bureaucratic arm of the Rural Fire Service, not the local volunteers or even the nearest control centre, that is contacted to comment on this sort of project. I request that the nearest RFS control centres, being Mudgee and Coonabarabran be contacted for their opinion on the impact the transmission line project, combined with the wind and solar factories, will have on aerial and ground firefighting efforts in the region.

There are enough bushfire ignition risks in rural areas without adding massive transmission lines and wind and solar installations. The EIS states, “the project is located in an area with significant potential to carry large scale and intense bushfires, and construction activities within the construction area have the potential to cause a bushfire and therefore a risk to public safety” and “the risk of bushfire from project construction activities has been assessed as extreme.” These statements alone is enough to suggest our area is going to need a greater force of firefighters and equipment during the construction period.

Transmission lines have long been recorded as fire ignition sources. “Six of the major fires on “Black Saturday”, February 7th 2009, were caused by faults in the electrical distribution network. These wildfires collectively burnt over 270,000ha, caused the death of 159 people and destroyed 1832 homes” in Victoria. Technical Paper 10, Bushfire, also states “of note the research concludes that electrical fires have a propensity to become large fires compared to those from most other fire ignition causes, because they are more likely to occur when conditions are conducive for rapid fire spread. As such, the risk of bushfire ignition on days of elevated fire danger is high and the consequences are high.” EnergyCo should be supplying the project area, and its local communities with extra firefighting equipment and staff/volunteers for the construction period and life of the project to help protect the region. The RFS is not a mythical creature that appears only when there is a fire; it is a group of volunteers made up mostly of farmers and landholders who dedicate their time to defend our homes and livelihoods.

The bushfire technical paper states that there will be 20,000L static water supply at workers accommodation camps for firefighting purposes, and a 38mm storz outlet on each tank. “Firefighting equipment (inclusive of a slip on unit) will be maintained and/or accessible to all active construction site personnel during the declared bushfire danger season and site personnel trained in its use.” This implies EnergyCo are expecting our local RFS and Fire & Rescue units will be made available to fight fires within the project area and at construction sites and workers camps. It is not reasonable nor fair that impacted communities should volunteer their time to protect EnergyCo’s assets. There should be a manned Fire & Rescue style truck at each workers’ camp and two manned Cat 1 RFS style trucks available for bushfire fighting. There should also be a minimum of 100,000L of water available for firefighting purposes at each workers camp and construction compound.

Bushfires pose a very serious risk to farming communities as they not only impact homes but livelihoods. If there is a fire caused by the EnergyCo project I expect that all EnergyCo staff, right up the hierarchy will be made available to help euthanise stock, bury dead animals, fix fences, feed and possibly transport remaining stock and comb through burnt houses and farm infrastructure looking for anything of value, all at EnergyCo’s cost. That burden should not also be placed on the affected community!

Visual & Noise Impacts

The visual and noise impacts are assessed by experts who are not local, but generally from metropolitan areas where it is common to see major infrastructure and almost always hear traffic or construction type noise. These impacts are also subjective; one person may enjoy looking at wind

turbines, others do not; how is that calculated? Those engaged to prepare these documents do not live in the proposed project area so are not subjected to the views or noise on a permanent basis. Many people who have lived most of their lives or choose to move to rural areas do so for a slower, quieter, more scenic lifestyle; turning our farm land into an industrial area will ruin that for a lot of people.

Transmission lines are known to be unsightly and noisy during operation. The CWO REZ transmission project has several permanently inhabited residences located within 500m of proposed line routes, some of which are close to double 500kV lines and some close to the triple line made up of two 500kV lines and one 330kV line. The EIS main report states that “where practicable” the line should be located “at least 500 metres from existing dwellings to minimise impacts to visual amenity”. There are numerous dwellings within 500m of the operation area, several within 100m, of the project who will be subjected to noise exceedances, both construction and operational.

Water

The EIS main report states “700 megalitres of water would be required for construction per year.” That consists of around 250ML of non-potable water for dust suppression, earthworks and pavement compaction and landscaping, and 450ML of potable water for general worker facilities and concrete batching activities. The non-potable water is expected to come from rainwater harvesting, reuse of construction water, reuse of treated wastewater and/or groundwater inflows, reuse of treated mine water and unregulated water sources including the Upper Talbragar River Water Source, Lower Talbragar River Water Source and Upper Goulburn River Water Source, under water access licenses for the project. The potable water is expected to come from existing regulated and unregulated surface water sources, and “potable water for human consumption would be supplied from council owned potable water supplies in Dunedoo, Coolah and Gulgong”. 700ML per year is equal to 1.91ML per day. According to a Warrumbungle Shire Councillor, last summer the town of Coolah (722 people – Census 2021) used around 0.62ML of water per day. The proposed usage is a huge amount of water that our towns and farming communities cannot afford to lose, especially if the forecast El Nino continues. Water needs to be sourced from further afield, which will then cause more transport issues.

Waste

Waste water treatment plants are expected to be built at accommodation camps and construction compounds, otherwise it will need to be transported to licensed treatment facilities. “Local waste management facilities closest to the project may have limited or no capacity to accept construction waste from the project (as discussed in Section 18.3) and may also have restrictions on throughput. If closer (but generally smaller) local facilities are unable to accept the waste quantities from the project, there may be a requirement to transport the waste generated by construction of the project (most likely via road transport using heavy vehicles) to larger regional facilities (where permitted by the Waste Regulation) located further away from the construction area. This may have the impact of longer and different waste haulage routes and additional traffic movements on the road network.” More heavy vehicles that our roads cannot handle.

The main EIS report states that “if improperly managed, waste generated during construction of the project has the potential to contaminate soils, pollute water and generate leachate, odours and dust as well as result in associated environmental, health and safety risks.” Is it an independent body that oversees the ‘proper’ management of waste?

“There is the potential for unexpected volumes of waste to be generated, including potentially contaminated material. During construction planning, suitable areas would be identified (within the construction area if practicable) to allow for contingency management of unexpected waste,

including contaminated materials.” Does this mean unexpected contaminated waste may be buried within the project site?

“Potential waste management impacts of this project may therefore be significantly exacerbated by the potential cumulative waste management impacts of the relevant future projects.” It is obvious the waste management facilities within the CWO REZ and wider area do not have the capacity to manage the expected waste generation from the transmission project, let alone the proposed wind and solar installations in the area. This is a major issue that EnergyCo must deal with before construction commences.

“EnergyCo has undertaken a series of studies to guide how cumulative impacts in the Central-West Orana REZ will be managed, including a dedicated study on waste management.” I would like it noted this is one of the 28 documents not yet available to view referred to in the EIS.

Environmental Impacts

It is stated in the EIS main report that there are expected direct impacts to 1032 hectares of native vegetation and the potential to directly impact 33 species of threatened flora and fauna or their habitat, including the threatened Squirrel Glider. There was also koala scat found near one of the roads EnergyCo will use during construction (referenced in the Birriwa Solar Farm EIS). Destroying threatened flora and fauna, and their habitat, should not be permitted, even if there are offsets purchased. I was under the impression ‘green power’ was about saving all of the environment, not just the convenient parts.

Telecommunications and mobile data

The Telstra network would be the most used throughout the project area and CWO REZ. On the Telstra webpage (<https://www.telstra.com.au/exchange/investing-millions-on-regional-rural-and-remote-coverage>) it states “we have a longstanding commitment to provide connectivity to regional, rural and remote areas. Telstra is more than just another telco; it’s often the only telco.” “Our commitment to regional areas is about more than just giving people a good network to stream movies on. With the pandemic driving a massive surge in online services – especially from the government – it’s about making sure everyone can benefit and thrive in the new digital age.”

Even with our current population the network is struggling. It is obvious when the bulk of people wake up in the morning and start using their devices and when children get home from school, also on days when the weather is not conducive to being outside (raining or very cold). The increase in population in the area, even by just the EnergyCo workforce, will have a major impact on our connectivity, not to mention the cumulative effect of the whole of REZ potential workforce. Having access to the internet is no longer optional, and the transition to renewable energy could have vast detrimental results to connectivity in regional NSW.

During the Sir Ivan Bushfire in February 2017, we lost all mobile phone service. Evacuation text messages were received days after they were sent, which was too late. There needs to be major upgrades done to the rural and regional telecommunication network prior to any CWO REZ construction commencing.

Workforce & Workers Camps

There are two temporary workers camps currently proposed for the CWO REZ transmission project. One at Neeley’s Lane, Cassilis, for 600 workers, and the other at the Merotherie Energy Hub, for 1200 workers. Forcing farming families to live so close to hundreds of people, in isolated areas, is appalling. There are often women alone with small children in these areas. What restrictions will EnergyCo put in place to keep all the families in our district safe? Will the camps be fully enclosed by

fencing and manned by security personnel? Will there be a no alcohol policy, and will there be drug testing carried out?

As discussed earlier in my submission, the equipment outlined in the EIS for firefighting purposes is not adequate for protecting the construction area, neighbouring and local properties, nor the workers accommodation facilities. If there is a major fire event, where will the workers be evacuated to? Our local towns and villages cannot handle that sort of influx of people, especially during an emergency.

The EIS states “approximately 10 per cent of the construction workforce is expected to be from the study area and the remaining workforce is expected to come from within NSW.” Employers in this region have been struggling to find workers for years; anyone who lives in the study area would have a job if they want one so the CWO REZ transmission project, and the solar and wind projects will poach employees from businesses in the region, causing more issues for small business and local councils. It also says, “this assessment assumed that 90 per cent of the required direct construction workforce for the project would reside in the workforce accommodation camps and that none of the wages of these people would be spent in the regional economy.” This leads me to question where the benefits of this project, and the whole CWO REZ are for the local communities, especially small business in rural towns?

There is provision for first aid facilities and a full time medical practitioner or paramedic at the workers camps. This is apparently to minimise the impact on the local and regional health services. This will work for minor illness but I assume if a worker becomes very ill or has a serious accident an ambulance will be called and the patient will be taken to the nearest emergency department. As I’m sure EnergyCo has been made aware on a number of occasions the health and emergency services in the project area and surrounds are severely lacking. Wait times to see a GP are normally over three weeks, even in larger towns, the emergency departments in Mudgee and Dubbo are always full to bursting and nurses in this region are always working short staffed. Throwing money at this situation will not fix it; like many others it is based around lack of available work force. EnergyCo should have a dedicated, manned ambulance available for transporting any construction workers should the need arise so the responsibility does not fall on the affected community’s services.

The EIS outlines the demobilisation and rehabilitation phase of the construction compounds and workers accommodation camps but what will happen to that land, which EnergyCo has either acquired, or is in the process of acquiring, once the CWO REZ transmission project construction ends? This needs to be discussed with the local community and decided before construction begins.

I was informed by Mike Young, EnergyCo Executive Director, Planning and Communities, during a phone call on November 2nd 2023 that an expressions of interest campaign should be released by the end of this year to find a specialist provider to roll out a whole of REZ accommodation strategy. Why is this happening after the EIS exhibition period has closed, and so many wind and solar proponents already have plans for their own workers accommodation facilities? This just serves to highlight the chaos and confusion the rollout of the CWO REZ has been tainted by.

Another concern I have is the Merotherie Energy Hub accommodation site being upgraded to house more workers as EnergyCo will own plenty of land to facilitate the increase. I was assured by Mike Young, in the same phone call mentioned above, that this would not be the case, but I would like to see that in writing.

Community consultation & engagement

“In November 2021, the Central-West Orana REZ was formally declared by the Minister for Energy and Environment and EnergyCo was appointed as the Infrastructure Planner (pursuant to section 23(5) of the *Electricity Infrastructure Investment Act 2020* (NSW)) to lead the delivery of REZs in NSW. At this time, EnergyCo assumed responsibility for engaging local communities and

stakeholders to inform the development of new transmission network infrastructure within the Central-West Orana REZ.” I would be interested to know where the ‘local community engagement’ was prior to this announcement which has led us to where we are now. Communities that were unaware of the Electricity Infrastructure Investment Act 2020 (NSW)’s existence have since been lumped with the responsibility of becoming a major part of “the renewable power plant of the future” (Penny Sharpe). There are still people in parts of the CWO REZ that don’t even know what it is or that they reside in it!

There have been several survey and consultation periods. One being the “revised study corridor” consultation, during February and March 2022, where “feedback was sought to inform the proposed route for new transmission network infrastructure within the revised study corridor”. EnergyCo received 35 submissions in response to this. 22 of the respondents were local land holders within the revised study corridor; 16 of which indicated they were opposed to hosting transmission infrastructure on their land! The response from EnergyCo to this opposition included “wherever possible, we will avoid locations where landowners are not supportive” and “we will work closely with any potentially affected landowners to come to a mutually acceptable agreement”. This has not been followed through in my opinion. As pointed out later in my submission there are numerous land owners who still have not negotiated a ‘mutually acceptable agreement’ with EnergyCo.

Another survey was the Stakeholder Listening Survey and it was undertaken by 55 people. I sincerely hope there were not major decisions based on this as it is a miniscule proportion of the number of people that will be affected by the CWO REZ, being over 150,000. There was a survey done by a member of the Coolah community, more specifically targeted at that area that had 130 responses, more than double what EnergyCo achieved throughout the whole CWO REZ. EnergyCo has obviously, in my opinion, failed at engaging the community.

The Community Feedback Report states there were 290 survey responses received during the period from 23rd January 2023 to 31st March 2023. This is still such a small proportion of the population affected by the CWO REZ which shows the lack of effective ‘community engagement’. 72% of the respondents lived in the CWO REZ and their strongest areas of concern included workforce accommodation, impacts to land use and agriculture, roads and traffic, environmental impacts, increased demand for local services, availability of short-stay accommodation, visual amenity and availability of workers. The release of the EIS has not eased the concerns in any of these areas.

EnergyCo held community information sessions in February 2023 in Wellington, Coolah and Gulgong. Why was Dunedoo not included at this time?

It is most disappointing that the majority of the EnergyCo employees with roles centred around community were changed half way through the EIS exhibition period. More frustration has been encountered having to explain existing community concerns to new staff. The structure of EnergyCo staff/consultants should have been much more transparent; I understand there were consultants engaged by EnergyCo but I can find no public record of this. I request an explanation of EnergyCo staff and roles.

There have been many issues raised through community drop in and pop up sessions conducted by EnergyCo. I have raised many concerns at these sessions, but have only received one response, when the employee I spoke to was prompted by a follow up email. Some issues specifically raised at the Dunedoo Community Information Session (11th October 2023) following the release of the CWO REZ Transmission EIS were: the Merotherie Road flood plain, firefighting equipment at workers camps, road ratings and capacities and the use of the name Merotherie for the Energy Hub.

I would like to note that the NSW Department of Planning and Environment have not yet made any effort to engage the communities most affected by all the renewable energy development to educate locals on how best to make submissions and how to use the planning portal.

Social Impacts

The EIS main report states that “community values are diverse across the local and regional social localities. Most of the respondents value the views, natural landscape, surroundings and agricultural potential of their properties. Other valuable factors include sense of community and safety, privacy, nature and the serenity of the social locality.” All of the things mentioned will be irreparably changed due to the CWO REZ transmission project and the wind and solar installations it will bring with it. These are the things that are valued most in our communities but are being tossed aside to make way for a “renewable energy” power system that will not keep the lights on.

Technical Paper 7, Social, states that “while most social indicators were gathered by desktop research, some aspects of the existing environment were obtained through primary data sources, including interviews and an online survey.” To gather most of the social indicators via desktop study is atrocious and highlights again the lack of community consultation.

The time taken to attend meetings, research projects, write submissions to EIS’s and lobby Members of Parliament is taking a toll on those trying to keep up. All of the time we put into matters surrounding the CWO REZ, as land holders and community members, is unpaid and costly to our small businesses. All proponent employees get paid, but we get nothing!

Affected landholders

Landholders affected by the CWO REZ transmission project have often been treated with complete disregard and disrespect. Most had compulsory acquisition mentioned in their first meeting with land acquisition managers. I have been through the same process with the then RMS during the Golden Highway upgrade so I am aware how much pressure those two words put on people. In the early days of negotiations many landholders were shown maps of the proposed transmission line route but were not allowed to take photos of them or keep copies. What did EnergyCo have to hide? There was also an instance when a land owner was contacted by his land acquisition manager to ask permission for surveyors to enter to his property to ‘peg out the boundaries’. The landowner agreed but when he returned to his property the transmission line easement was pegged out. The landowner rang the land acquisition manager only to have him deny the pegs were placed on his property by EnergyCo! Another landholder was told the proposed transmission lines would be placed next to the already existing line easements on his property. When EnergyCo contracted surveyors started looking in another area on his property he was told the easement hadn’t been decided, which according to maps was untrue.

The EIS main report states in the avoidance and minimisation of impacts section that “where practicable” the alignment should be located:

- “at least 500m from existing dwellings to minimise impacts to visual amenity”
- “where the alignment traverses through private property, the design has been developed with the aim of positioning infrastructure in areas that align with the current land use activities of these properties (in consultation with landowners where practicable) to minimise impacts to the property and land use”
- “in consideration of landowner feedback, willingness of landowners to host permanent project infrastructure with an easement on their property”

There are two dwellings I am aware of that are both permanently inhabited and located under 500 metres from the transmission lines, one double 500kV lines and the other double 500kV lines and a single 330kV line as well as a switching station. Dwellings 399 and 717. There are numerous others that are within 500m of the proposed project operational area, some under 100m. This is unacceptable and should be rectified. There are several landholders still in negotiations with EnergyCo regarding possible changes to the transmission line route, but have heard nothing for several weeks. How is it expected these landowners, and the broader community, comment on the

'proposed route' when it is not finalised?!? Let alone landholders signing agreements with so few details; my understanding is there has not been any discussion with affected landholders surrounding actual details of the construction process, for example, will the transmission line easement be fenced out or will livestock not be able to be run on affected properties? These details should be made available not only to the affected landholders but the general public as a show of transparency from EnergyCo.

The landholders I have heard from have certainly not been consulted about the "current land use" or "minimising impacts to their property or land use". One holding is being cut in half, with the proposed easement ploughing through infrastructure such as cattle yards, silos and a shed which are positioned where they are for good reason, accessibility.

"Willingness of landholders to host permanent project infrastructure" is irrelevant in this case as EnergyCo has the power to compulsorily acquire easements, and is seemingly happy to use that power.

The mental health impact the negotiations and interactions with EnergyCo are having on both directly and indirectly affected landholders is immeasurable. Stress often leads to lack of sleep which can lead to mistakes being made and farming accidents occurring or possible road accidents. It also leads to frustration and possible out of character actions. EnergyCo is pushing landholders to their mental limits.

EnergyCo has been using the divide and conquer tactic so there is no support for affected landholders. There has often been pressure put on those impacted by the proposed route to sign non-disclosure agreements rather than having an open and transparent negotiation with the property owners as a group. The NSW Government should be ashamed that this is how public authorities are treating its citizens and needs to adopt a more clear and equitable process for future projects.

Liability

Insurance is a big issue that is not covered, to my knowledge, in the EIS. Is the landholder liable if there is a machinery accident where transmission infrastructure is damaged? Is EnergyCo liable if there is damage to property caused by transmission infrastructure? Who is liable if there is a bushfire?

During construction is EnergyCo liable for any damage done to property, livestock and any accidents that may occur on local roads?

Allowance of power per home & CWO REZ capacity

EnergyCo states the CWO REZ will, at 3GW capacity, power 1.4 million homes, hence the need for the transmission line project. There are 17 projects proposed, under construction and operating within a 50 kilometre radius of Birriwa that, according to their advertising and websites, claim they will power a total of just over 3.87 million average homes. According to the 2021 census there are only 3.2 million homes in NSW so why the need for so many projects, let alone more REZ's in NSW? Is there a standard formula for calculating how much power an average home consumes, as each proponent has a different allowance, or is this just false advertising?

There is nearly 7GW of solar and wind proposed by candidate foundation generators in the same 50km radius. Given there is no maximum capacity for the CWO REZ will the capacity keep increasing until all of these projects are built?

Lack of Transparency

The NSW Network Infrastructure Strategy released in May 2023 states the 'deliver now' network arrangement would have 4.5GW capacity by 2027/2028 with new 500kV lines between the Merotherie Energy Hub and Wollar with 330kV extensions to Elong Elong, Uungula and Uarbry West & East. As a community we were always told the 'deliver now' arrangement was for 3GW, but have never seen maps where the lines between Merotherie and Elong Elong were only 330kV; they have always been mapped as 500kV. I was under the impression the decision had not been made to increase the CWO REZ capacity from 3GW to 4.5GW, due to the fact we had the opportunity to comment on the draft declaration amendment from the date of media release, 7th August 2023 to 4th September 2023, and the uprate from 330kV to 500kV lines between Merotherie and Elong Elong is in the 'secure now' arrangement. It seems plans, at least since May 2023, have been centred around 4.5GW capacity. This deception is typical of the way EnergyCo has conducted itself throughout the 'consultation' period thus far, which is not only wrong but disgusting!

It should also be noted that Mike Young, EnergyCo Executive Director, Planning and Communities was not available for around 6 months in early to mid 2023 and his replacement did not return phone calls. It has been very difficult to get any information.

There is also the fact that Technical Paper 2. Agriculture was prepared by Tremain Ivey Advisory. Richard Ivey, partner in the aforementioned consultancy business is also Deputy Mayor of Dubbo Regional Council.

The communities and local councils involved in dealing with EnergyCo have been drip fed information as EnergyCo sees fit. It is impossible to see the big picture when you only have a portion of the applicable information.

What's next?

The 'secure now' arrangement also involves a possible line to the south from Uungula toward Burrendong, and the 'plan for the future' entails a line from Merotherie toward the Gilgandra/Tooraweenah area and/or from Wollar to a new hub at Stubbo. I request these routes and other pertinent information on the proposed routes of these lines be made publicly available as it is relevant to how the CWO REZ wide community may feel about the current proposal. There are proponents making themselves known in the Tooraweenah and Mendooran areas so do they have information the general public isn't privy to?

Inaccuracies & Omitted Reports

In this submission I have used the name Merotherie as that is how it is stated in the documents but I have raised on numerous occasions with EnergyCo staff that it is not the appropriate name for the energy hub in the Birriwa area. While the energy hub is located in the Merotherie locality this name has been causing issues for the family who own the property "Merotherie". I request the name of this infrastructure site be changed. I note the Elong Elong Energy Hub is a long way from the village itself, yet it was still named as such.

In Technical Paper 13, Traffic and Transport, it is stated that the Merotherie main camp site would house up to 1000 workers and the Neeley's Lane satellite camp would house up to 800 workers. The main EIS document, and others, state it would be 1200 workers housed at Merotherie and 600 at Neeley's Lane.

Page xi of Technical Paper 13 states construction is estimated to take about 3 years to complete. The EIS main document states construction is estimated to take about four years!

The following 28 documents are referenced in the EIS but are not available to view to my knowledge:-

1. Construction Environmental Management Plan
2. Aboriginal Cultural Heritage Management Plan
3. Historical Heritage Management Plan
4. Construction Noise and Vibration Management Plan
5. Soil and Water Management Plan
6. Social Impact Management Plan
7. Workforce Management Plan
8. Local Workforce Participation Strategy
9. Industry Participation Plan
10. Landowner Engagement Strategy
11. Pre-Construction and Construction Communications and Engagement Plan
12. First Nations Liaison Group
13. Complaints Management System
14. Operational Communications Plan
15. Property Management Plan
16. Community Wellbeing Strategy
17. Bushfire and Emergency Management and Evacuation Plan
18. Landscape Character and Visual Impact Management Plan
19. Biosecurity Management Plan
20. Vegetation Management Plan
21. Riparian Vegetation Management Plan
22. Operational Emergency Management Plan
23. Operational Environmental Management Plan
24. Traffic Management Plan
25. Vehicle Movement Plan
26. Driver Fatigue Management Plan
27. Construction Waste Management Plan
28. Biodiversity Management Plan

These inaccuracies and omissions throughout the EIS only highlight the haste to prepare this document to get planning approval and the disregard for the communities who are left to live with the cumulative impacts of all of the renewable energy developments in the area. It is impossible for concerned members of the public to make comment on documents that are not provided.

The EIS documents total 7910 pages, complete with pages of repetition that can only be to confuse and overwhelm the general public. The 'experts' who wrote these documents had months, if not years, to compile all of this information but the communities it affects, who are certainly not experts, were only originally given 28 days, later 42 days, to read and respond to this drivel.

Time invested

I, like many others, did not get the chance to read the EIS in its entirety. Every time I went through the document to find my reference points, I found more things I wanted to mention which just goes to show, firstly, the community was not given enough time, secondly, how incomplete, overwhelming and frustrating this document is, and thirdly, I have no doubt there are issues I have not had the chance to comment on. I have spent more than 150 hours in the last 6 weeks researching EnergyCo documents, wind and solar proponents' documents, attending drop in and pop up sessions run by EnergyCo and writing this submission. Are those of us who comment just being used as a free editing service?

The NSW Planning Portal is in need of a major upgrade if it is to be used so often. Countless hours have been spent trying to upload submissions during peak periods when it usually crashes.

As a farmer, and therefore small business owner, it has taken its toll both financially and mentally, but I think this is too important to let the, possibly only, chance the communities most affected will have to comment on this project pass by. In my opinion the NSW Government has not adequately equipped rural and regional NSW to handle the roll out of the renewable energy zones, but maybe that was always the plan!

Conclusion

It is stated on page lxi of the EIS main report that an 'amendment report' or 'preferred infrastructure report' may be prepared if required, and submitted to the DPE alongside the Response to Submissions Report. Any changes to the proposed transmission line route could have major impacts on landholders (for example: loss of vegetation for shade and shelter, loss of watering points, impact on farm infrastructure) and therefore I would like to request that such reports be placed on public exhibition/re-exhibition for the wider community to comment on.

There should be a moratorium placed over all works and planning processes concerning "renewable energy" until there are more investigations in to the undergrounding of power lines, possible health implications from transmission lines (EMR/EMF), wind turbines (shadow flicker, noise and bisphenol A) and solar panels (toxic material leakage from aged or damaged panels). The fossil fuels used to manufacture all the framework required, and the diesel burnt to transport and construct all of the infrastructure for these large scale projects, makes so called 'green energy' seem more like brown energy!

Generating power where it is needed would negate the need for hundreds of kilometres of transmission lines. Why can there not be money spent on incentives to have solar panels on rooves and batteries to store power at every home in metropolitan Australia? Why does rural and regional NSW have to bear the responsibility of producing power for the whole state? Why are we not questioning CSIRO's Gencost report and looking into other alternatives like nuclear? Projects like Snowy Hydro 2.0, and its cost blowout from \$2billion to \$12billion and lack of transparency regarding the problems it has, and continues to face, are not instilling much confidence in the transition to renewable energy.

The CWO REZ transmission project has the potential to cause irreparable damage to farmers, local communities, the region, the state and Australia, not just through the current proposed lines, but future lines combined with the cumulative effects of numerous large scale industrial wind and solar installations being proposed to connect to aforementioned lines.

Emma Bowman