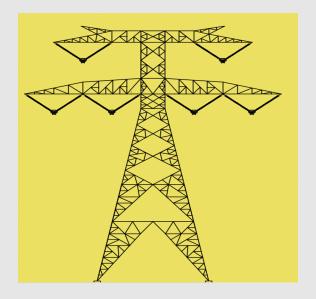
# INQUIRY INTO FEASIBILITY OF UNDERGROUNDING THE TRANSMISSION INFRASTRUCTURE FOR RENEWABLE ENERGY PROJECTS

**Organisation:** ReD4NE Inc.

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Legislative Council Select Committee on State Development inquiry into and report on the feasibility of undergrounding the transmission infrastructure for renewable energy projects,

10 October 2023

## REDANEINC.

Community Alliance for responsible energy development for the New England ABN 24 781 068 051

#### Introduction

**ReD4NE Inc** – As a number of members of the Select Committee appreciate ReD4NE is the Regional Representation Group based in the New England representing at a regional level many of the Communities issues concerns -inequalities associated with the Energy Transition . The Committee will recall it is a not-for-profit community based incorporated association **Who is ReD4NE**, is best communicated through our Protocols which were attached to our Original Submission to the Standing Committee. **Bushtricity** is as it previously appeared before the Standing Committee a strategic advisor.

ReD4NE is happy for its original submission to be included for the purposes of the Select Committees deliberations and would be happy to give evidence in its support. Since the Standing Committees Report and the Committee Hearing in Armidale the situation has not improved. For the purposes of the Select Committee we take the opportunity to refresh our outlook in text hereunder including reference to Attachment A last month's engagement with the Minister's Office . We summarised our observations as an update;

- The Government has got increasingly more desperate to secure replacement generation as confirmed by the needs highlighted in its own Reliability Health Check Report (RHCR).
- This desperation has placed pressure on an already poorly planning DPE Planning and Assessment Regime. Communities have become more educated and frustrated as to what is poor and procedurally unfair administrative process.
- As to transmission rollout the situation has deteriorated the Government's own RHCR confirmed the inadequacies of the Energy Co Governance Model. On the ground this inadequacy has been replicated by a well-intentioned but a seriously inexperienced teams who can't answer as to key questions associated with infrastructure assumptions. They present with no answers as to what social licence means despite the fact that it's a pertinent point of merit assessment in its own governance framework. This Energy Co role and performance needs to be a serious point of the Committee's Inquiry it lacks transparency and therefore integrity.
- An obvious demonstration of this concern has been the paucity and clumsiness of processes
  currently on display in the Central West Orana. The Community have had an 8000 page
  highly technical EIS dropped into a 28 Day public exhibition period whilst at the same time
  Energy Co is pursuing compulsory acquisition. This is very third world undemocratic
  processes -not something one would expect in a modern energy economy such as NSW.

We thank the Standing Committee who were insightful in its deliberations of the evidence presented. In particular we would like to commend its two key recommendations. Firstly, on the need for an Energy Ombudsmen -and independent voice between communities and Government and secondly the need for independent Cumulative Impact Assessment. **Despite the logicality of the Committees conclusions neither of these two recommendations have been acted upon.** 

ReD4NE replicates for the Select Committee the same clarity of message we made to the Standing Committee . As is demonstrated by this and other inquiries and media slowly the evidence is beginning to mitigate in favour of communities who were targeted to do the heavy lifting on the decentralisation end of this transition. It is our ambition that this submission together with the

earlier submission in its response to the Committee's Terms of Reference (ToR) is of value in supporting the concept of **undergrounding transmission infrastructure**. However more than that, there is a broader submission message that the MLCs can take back to their bunker in Macquarie Street. In short, we believe the energy transition to date has been clumsy and incompetently managed by inexperience. The Bush long ago stopped buying the spin that decentralisation of energy was a regional economic nirvana.

In support of the pertinency this ReD4NE outlook we attach our full Submission (**Attachment A**) prepared and presented to the Minister of Energy Environment and Climate Change's Chief of Staff on 19 October 2023. This Submission summarises the many of the concerns the New England faced at the time. ReD4NE had the opportunity through both zoom connection and in person to elaborate on the key points of concern. We would be happy to offer this opportunity again to the Select Committee should it be prepared to take evidence. We strongly believe that from the majority of elements we raise with the Minster's Office there are many initiatives that the Select Committee should embrace as recommendations going forward.

This **Select Committee** submission has been shared amongst ReD4NE members it has broad support. We are encouraging members to submit their own submission as they see fit.

## Responding to the Undergrounding Issues of the Inquiry

We thank the **Select Committee** for the opportunity to place on record the replication of our strong and 'in-principle' support for ungrounding of all HV transmission specifically -VNI West Link, CWO Link, Humelink **and now New England Link.** 

- Whilst the New England Link is probably 2 -3 years behind other infrastructure as referenced above Communities, we represent are fast coming to understand the magnitude of the imposition of this infrastructure and the clumsiness and unfairness of the manner in which Energy Co are prosecuting the challenges. They present an opaque proposition devoid of transparency and social licence.
- These Communities are still coming to grips in dealing with the effects of the frenzied land grab by developers -intent on maximising development opportunity and profit drain out of the communities with minimal contribution to social licence.
- Nonetheless these Communities don't have the luxury of ignoring the importance of
  undergrounding if they are to preserve their place for 'food and fibre' and if they are to
  protect the integrity of the rural landscape for the benefit of intergenerational equity.
- Since the Standing Committee's Inquisition, we have researched best practice
  undergrounding particularly in Europe's energy economies. We have met and interviewed
  some key TSOs -Transmission System Operators particularly in Germany and we have spoken
  with other Transmission Industry Representatives in Europe. There were two obvious
  downloads we took away from those conservations;
  - Underground particularly of HVDC transmission is more the norm in Europe.
  - Planning Assessment of regulated assets is moving away from narrow technical RiT-T assessment to a broader review which takes account of a more comprehensive insight of socio-economic and environmental considerations. A fairer more equitable cost v benefit regime.

• Since the Standing Committee Inquiry our support for the Humelink Alliance work has grown. It would seem that the economic validity of Transgrid economic assessment has eroded in favour of undergrounding. In essence ReD4NE supports the Humelink Alliance Inc's conclusion

Since the parliamentary inquiry there have been a number of developments and issues with the Humelink project that raise further questions about the assessment process and the project as an overhead line, including the support offered by the Amplitude Consultants Review of the GHD/Transgrid Humelink undergrounding report and the Stop Rethink Humelink mini report. The public exhibition of the Humelink Environmental Impact Statement (EIS). The request to the Australian Energy Regulator (AER) for the reapplication of the regulatory investment test for transmission (RIT-T) to the Humelink project for the material changes in circumstances for the project. In principle we support the underground concept for Humelink ,CWO West Link, Hunter link and for New England Link.

As we put on the record at the Standing Committee it is appreciated that ReD4NE presents with the DNA as concerned regional communities and agricultural landholders – we are not energy economist – please review our input contribution as such. We will do our best to deal with the issues as we see them in the ToR. In doing so you appreciate our need to contextualise our response within an unfortunate transitional environment we believe the Governments have created. We seek for the record to make to the **Select Committee** similar points as set out hereunder in an identical extract.

#### The NSW Energy Infrastructure Investment Road Map.

ReD4NE believes the NSW Energy Transition agenda prosecuted under the Berejiklian and Perrottet Governments was, unnecessarily, the most ambitious in Australia. It was debased by a combination of political spin and political zealotry. Institutionally it was and remains incompetent in terms of its inability to engage with rural communities. It presents inexperienced management of a significant economic and technological transition.

#### In context;

- Seeking to replace four if not all five ageing coal generators by the end of the decade will historically be regarded as energy planning lunacy. As was the Government's covert opposition it placed in the path the Santos Narrabri gas project. NSW is the most populated industrial state in Australia with the highest demand profile. A Roadmap outlook transitioning to a near total renewable energy supply was going to be very challenging, particularly, with social licence in the Bush failing to ignite.
- City-centric commitment to the inaugural Integrated System Plan (ISP 2018) without due
  consideration and consultation with the REZ hosting communities was very poor
  administration. The decision to blindly support the suggested REZ geographic allocation
  based on academic evaluation was naïve and incompetent power system planning.

The NSW Electricity Strategy 2019 heralding objectives of a reliable affordable and sustainable electricity future was simply naïve ambition and incompetent government. Ministerial spin suggests "At the same time, this Strategy is expected to reduce electricity bills by \$40 per year, drive \$8 billion in private investment, create at least 1,200 jobs and make NSW the home of Australia's first coordinated Renewable Energy Zone.

Consumers and businesses across NSW expect the Government to show clear and decisive leadership to manage the changing electricity system. This Strategy sets out the NSW Government's clear expectations for what the electricity system must do and how it must deliver for consumers.

I'm confident that, over time, the actions in this Strategy will restore confidence in our grid." 1

- Regional Communities are already in a very challenging position -trying to fend off over development -inappropriate development and unethical development. This activity spurred on by an over stimulated market development program. Programmatic expenditure mainly grants funding indulging -pre commercial research -which will never see the light of day, in light of already proven technologies -such as dispatchable electric batteries and pumped hydro. Hardly cautious market signals from Governments from which to stimulate a more measured rollout by the developers. Developers desperate to stake out fragile grid connection in a 'free for all rush' on any flat land or land with a sniff of wind as long it was underwire. Land owners and communities having been largely left to defend their own ground -whilst at the same time educating themselves on the nuisances of planning law.
- The NSW Planning Regime is a broken beast most certainly from the Communities perspective and probably also from the Developers view point if the current noise is to be acknowledged. The Developers, of course argue it's too slow too inclusive! The Communities say the opposite in a Planning Regime which boast community participation as one of its core planning principles -it processes leaves the community particularly at site acquisition scoping stage in absentia. This situation is exacerbated by 'a one foot in front of the other' 'tick a box' planning process which culminates in an 'ex post facto' EIS impact reflection on a site that was selected two or more years earlier. The Government DPIE produce guideline after guideline which most developers try to manipulate. So, more fuel to fire that confirms social licence is elusive. By way of example the Community Consultation Committee process was always lopsided in its bias to developers and generally its failure to inform and consult. Communities called for change and the over reaction from Government was to scrap the preapproval part of the consultation. So instead of making the consultation process fit for purpose or 'meaningful/genuine' to use the government's words they remove the established pre-approval bridge. This just continually erodes confidence and promotes distrust on major issues of concern such as transmission infrastructure.
- A more competent Government would have confirmed that the Roadmap Transition should have been supported by a more just and fit for purpose planning regime which emphasised 'planning' —as in a strategic land use planning sense rather just 'development'. There is a balance, which unfortunately a Government in haste was reluctant to pursue. Most modern energy economies deployed strategic land use planning to determine 'what, where and when'. The previous Government just created a free for all land grab.
- Now the Communities are getting 'over development' noise in stereo with EnCo and Transgrid both banging the major transmission upgrade drum. Neither are overly competent in their communication. Both deploy engineering processes dominated by 'a lines on map' with little accommodation of people and place. Both have a predilection to deployment of the DAD principle 'Decide -Announce -Defend'. An old DPIE tool extracted from the

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<sup>&</sup>lt;sup>1</sup> Minister for Energy Matt Kean 2019 DPIE

Southern Tablelands wind wars, the objective being to ride out the noise -hoping that eventually the Bush will lose interest.

The Committee will appreciate against this context regional communities, in the absence of any meaningful information from Energy Co, are struggling to support the need for any transmission – over ground or underground. This conclusion is validated by the reluctant acceptance by the Federal Government in its messaging and the comments from the CEO of its market operator AEMO. We have created a broken not fit for purpose governance system regulating Communities and renewable energy development as evidenced by the Department of Climate Change, Energy the Environment and Water (DCCEEW) Review – *Improving community engagement and support for energy infrastructure*. It proposes as follows;

"Review to enhance community support and ensure that electricity transmission and renewable energy developments deliver for communities, landholders and traditional owners (the Review).

### Scope of the Review

- 1. The Review will consider community attitudes towards renewable energy infrastructure and provide advice on the best way to maximise community engagement and benefit in planning, developing and operating renewable energy infrastructure.
- 2. In conducting the review, the AEIC should have regard to the following:
- a) Perceived or actual environmental impacts
- b) Perceived or actual impacts on agricultural land, including: I. Emergency management, including fire and biosecurity risks. ii. Increases in landholder insurance premiums; and. iii. Tourism impacts and other aesthetic and cultural considerations.
- c) Perceived or actual impacts on Indigenous heritage and land rights
- d) Community engagement and benefit sharing including financial, local infrastructure, knowledge sharing, and any other types of benefit.
- 3. The AEIC can advise on how to maximise community engagement within the existing regulatory and legislative frameworks, including the National Electricity Law, the National Energy Objectives and the Regulatory Investment Test for Transmission.
- The AEIC may also provide recommendations to the existing regulatory frameworks that would better enable community engagement in all stages of planning and development.
- 5. The AEIC may assess current relevant government, and industry, policies and reforms, and suggest changes that improve community support for the necessary and rapid expansion of clean energy generation, while:
  - a. Preserving and expanding Australia's unique flora, fauna and fragile ecosystems;
  - b. Supporting agriculture and other land uses, including innovative co-location approaches;
  - c. Respecting First Nations people and ensuring they have opportunities to benefit from the transition;
  - d. Delivering community benefits in consultation with communities including any financial benefits, local employment opportunities and skills development;
  - e. Supporting regional development; and 6. Any other related matters. "

Communities generally will support this inquisition. Preferably it should have more of an air if independence as the AEIC is sometimes perceived as the Government's trojan horse -we continue to sleep with one eye open as to who is inside. Clearly a difficult role. For now, we will take what's on offer and embrace the opportunity.

## **Support for Undergrounding**

We have refreshed our support for Undergrounding of HVDC. The Terms of Reference requisite consideration of *costs and benefits* of undergrounding -there are far more imminent energy economic thinkers than ReD4NE who more adequately finesse this question than the Community. Nonetheless our practical nous suggests as follows;

- We understand the basics of RIT-T-Framework and its application for regulated transmission assets. We have recommended above that the RiT-T follow the interpretation of the more advanced energy economies by broadening the base of externalities considered. In essence greater respect for the socio-economic and environmental implications on host communities.
- We understand the role cost benefit analysis plays in the assessment of what becomes regulated and importantly what gets passed back to the consumers by way of costs. In this regard for the purposes of this Submission to the Committee please regard our basic understanding is aligned to the Humelink Inc 's interpretation; and
- We don't understand whether we have in the NSW Roadmap or the Federal Powering the
  Nation a conducive balance between on the one hand the public benefit to consumers and
  on the other hand a profit bias, in the emphasis on return to shareholders of these network
  infrastructure plays.

In particular we are concerned to ensure that there is full transparency and consistency as to what how costs and benefits are measured -we fear **failure to properly assess all the costs** and to **overstate the benefits** induces market failure and potentially an incorrect allocation of network costs to consumers. There seems to be potential for creative interpretation on minimising the costs side of the equation -particularly as to ignoring '**negative externalities**. On the converse, there seems to be also potential to overstate the '**positive benefits**. So, terms of the NE Link we can advise from a practical perspective as host REZ communities there are **external negative costs** which require consideration;

- The preservation of scarce quality land for agricultural purpose. There is only 6% of
  arable land in NSW for food production. The removal of or the constraining of some of
  that land for transmission easement comes at some cost. Equally, easement constraint
  on farm comes at some cost to farm gate production. This cost needs to be identified
  and measured more accurately.
- Loss of landscape visual amenity. We would like to think that all members of the
  community bush or city alike would like to see an end to antiquated technology of the
  early 20<sup>th</sup> Century. Clearly there is a cost to its ongoing preservation and clearly a major
  intergenerational inequity issue.
- **Reduction in Land Valuation**. Should be an obvious and tangible negative cost. It is unacceptable just to just to pay host landowners some compensation the erosion of

property values is experienced by the wider neighbouring communities. **This cost needs to be the subject of wider research and Inquiry.** 

- Increased hazard risk of bushfire. As demonstrated by the obvious tragedy of Victoria's Black Saturday Bush Fires -the loss of 179 lives and 2029 homes —combustion from transmission infrastructure were one of a number of significant causes in a complex web of causation. This risk needs to be the subject of separate Inquiry.
- Precautionary -health benefits EMF. This story remains and unclosed risk factor for humans and for farm animals. As such we should be classifying it as a precautionary risk and asking the question shouldn't we be costing the risk.
- There is a well-established link between the quality of landscapes and people's well-being people's standard of living. It is not morally right that the landscapes of people in the bush are taken from them, so people in cities can have cheap electricity, when there is another way, undergrounding.

As to the overstatement of positive benefits – EnCo need to sharpen their commitment to transparency – the Community needs full disclosure as to assumed generational output. We keep trying to shine a torch on this issue – but the response is blurred -in 'we don't know language' –this is particularly pertinent on the Walcha Plateau where questionable development doesn't pass muster on social licence or seemingly on need. At this stage a definition on the meaning of *Social Licence* remains elusive to EnCo.

So, the question the Community asks of the Infrastructure Planners such as EnCo – what does a full assessment, including all externalities suggest as to the benefit of the proposed new transmission. At this point in time EnCo are struggling to provide transparency as to the engineering assumption under their transmission corridor planning. EnCo's claim for the New England REZ is they have 32 GW EOI for connection. Despite repeated request they will not validate who and what is proposed. This stonewalling is completely unacceptable and disguises the potential impact to the community;

So as to the proposed and now documented environmental impact assessment -EIA/EIS;

- Environmental Impacts of Undergrounding We leave it to the experts but we assume that any infrastructure which has less over ground exposure is a positive.
- On our desk -top research on International experience OECD countries are very disposed to
  undergrounding. Our research confirms Germany Denmark, Japan, UK and the US are
  positive case studies. The German Grid Expansion Acceleration Act (NABEG) being the model
  most referenced. The Communities don't have bandwidth to exhaustively review all other
  examples in favour of undergrounding -this should be the follow up of this Inquiry.
- Impacts **on Delivery Timing** is a matter for Government and Developers. We are encouraged by the domestic authority in which some groups have embraced the question.
- **Environmental Impacts** whichever way we contemplate this issue -whichever lens we apply **undergrounding** HV must remain **a positive environmental initiative.** We leave it to others with more scientific authority to comment.

#### Conclusion

We thank Standing Committee of Inquiry for a thoughtful process and we welcome the Select Committee inquisition. As to Minister Penny Sharpe we appreciate the opportunity to meet with her office — we await their considered response to our issues of concern as outlined in Attachment A.

ReD4NE offers the following concluding comments;

- We are on the record of welcoming the Standing Committees' two critical recommendations – Independent Cumulative Impact Assessment and an Energy Ombudsmen. We now seek by way of the Select Committee the urgency of implementation.
- Our analysis above **confirms a logical support for undergrounding**. This can be established in a few short conclusions.
  - 1. An undergrounding option should be available on all private land -exercising this option should be subject to the prevailing will of the community.
  - 2. In terms of undergrounding on public lands -this should be decided by the Public.
  - 3. In terms of the cost/benefit threshold analysis justifying transmission infrastructure all costs **including all externalities** should be a matter of full inclusion and transparency.
  - 4. It is acknowledged that the actual cost of undergrounding will be significant. It cannot be blindly assumed this cost will be passed onto consumers.
  - 5. ReD4NE supports the advice of the NSW Farmers Association Energy Transition Working Group to propose new transmission to support renewables in the far west arid belt of NSW. The attractions are obvious.
  - 6. This Inquiry should establish as a next step, what more equitable public benefit model might present as a model that absorbs and amortises the one-off cost of any undergrounding.

As we have stated with a little more actual validation there are leading energy economies in Europe and the US which present an abundance of evidence as to the environmental and economic advantage present in undergrounding. It is noted that Offshore Wind such as Star of the South and HV Marius Link from Tasmania both contemplate undergrounding.

- Our analysis confirms there is much repair work to be undertaken on key elements of this
  energy transition -particularly objectives -strategy and tactics we would argue very poorly
  deployed by the previous government and a very inexperienced EnCo.
  - 1. In this regard we question the efficacy of the Energy Co institutional model -this seems to the between the line's interpretation offered by the Governments RHCR -it

remains a legacy of the 'city centric' poor administration of the previous government. It looms as a classic example of unbalanced bureaucracy - replacing industry experience with youthful exuberance. There are many more examples to support this conclusion since the Standing Committee Inquiry.

- We accept that as a general in-principal objective the need to decarbonise whilst this can't be downgraded, we question the ambitious timetable. Earing -and the obstacles to Santos Narrabri loom as the obvious examples which should be of concern.
- 3. The strategy to diversification of supply options seems narrow -particularly given more advanced economies have a clear vision as to the relevance of SMR deployment into the energy mix.
- 4. The strategy on timing to net zero targets seems patently unrealistic and rushed. International evidence would seem to confirm there is room for flexibility.
- 5. The tactics as to decentralisation a key focus of this submission are clearly lamentable. The underlying theme of this Submission remains **regional communities** have in a planning and governance sense been treated unjustly.

**Red4NE supports Humelink Inc vision** for undergrounding and as such it supports the logical thesis that Humelink and Snowy 2 are one in the same project. This project and other PHS projects should pay for the transmission costs associated with their deployment. In this regard in the New England REZ the OMPS (Oven Mtns) should bear the costs of the transmission to the Armidale Substation. Snowy 2 demonstrates that the whole focus on pump storage in NSW should be subject to further close scrutiny as to **true cost/true benefit** in keeping with the overlooked **externality analysis** we reference above.

As to **New England Link** -ReD4NE will continue, on behalf of landowners and rural communities, to advocate in favour of more meaningful and transparent consultation from Governments and developers. At this point in time EnCo clearly struggle to appreciate what information the Community need. There is an ongoing mentality to 'talk **at** the community' rather than '**talk with** the community'. There is clearly within NSW Institutional silos -a lack of appreciation as to the role and the psychology of regional NSW. EnCo, at least at this point in time, seemingly struggle to even articulate what '**social licence'** actually means -despite the fact that it is enshrined in its governance.

One of ReD4NE's constant request which seems to go unanswered is the need for a robust independent cumulative impact assessment (CIA) -the TOR reference to be jointly agreed. The CIA offered by EnCo as per the CWO is biased to some alleged benefits rather than impacts. This remains an urgent request. It can be funded from the money allegedly offered to the LGAs

Should the Committee so require, Red4NE will be available to present this submission to any hearing in Armidale or elsewhere in the New England.

**Submitted for Consideration** 

**Red4NE Office Bearers**