13 August 2024

AEMO 2025 Inputs Assumptions and Scenarios Report (IASR) Consultation

Introduction

In response to AEMO's request for stakeholders to provide feedback on how IASR scenarios should evolve, I as a New England grazier offer the following compilation in defense of the rural landscape and natural environment.

The Great Dividing Range and Western Slopes are Australia's most productive, biodiverse, and substantial topographic features. They have served as a dependable food bowl and producer of plantation timber to the Australian economy for centuries. These commercial activities, essential to the Nations prosperity, cannot continue to be viable without fossil fuels as the driving energy source well into the foreseeable future.

The Range's National Parks and reserves that encapsulate the greatest biodiverse forests in Australia, which apart from being home to critically important ecosystems, also provide enjoyment to thousands of people including many tourists seeking relief from the built environment.

The dryland cropping/grazing and irrigated horticultural farming lands in the highly productive Riverina region of NSW is another vitally important resource, and reticulation of water from the Murrumbidgee River by a maze of irrigation channels is key to this region providing one-quarter of all fruit and vegetables products in NSW. The Riverina is an extremely environmentally sensitive region and a vitally important food bowl for NSW and export markets, that has coexisted with mother nature for generations.

But the obsession by the current Federal government in offering up these rich, biodiverse regions to wind and solar farm proponents on which to build thousands of enormous new generation turbines, millions of solar panels, thousands of mega-batteries, and tens of thousands of kilometers of interconnecting high voltage power lines; potentially transforming the landscape into an industrial wasteland. The turbines and solar panels will render thousands of acres of fertile agricultural land sterile. The new transmission grid will cut a swathe thousands of kilometer's long through magnificent forests and prime farms, rendering the land to that of a worthless moonscape.

As this poorly planned travesty unfolds, it is becoming increasingly evident that it can bring only human misery and ecocide to bear on our rural communities and natural landscape, and in so doing will threaten the Nation's food, energy, and ultimately sovereign security.

Sadly, I feel the renewable energy rollout has the potential to develop into an uncompromising divide between City *vs* Country – and possibly **'***the great divide'* of this Nation could be in our midst. Be rest assured that this reckless rollout will be unequivocally denied by the will of the country folk of this Nation to the very end.

Advanced economies – including most of Europe, much of the United States, Canada, Australia, New Zealand, and others – have embarked upon an impossible mission to decarbonize their economies and achieve *net zero* emissions of carbon dioxide ($C0_2$) and other greenhouse gases by 2050. The *net zero* plan turns almost entirely on building large numbers of wind turbines and solar panels to replace reliable and affordable generation facilities that use fossil fuels (*coal, oil, and*

natural gas) to produce electricity. The idea is that, as enough wind turbines and solar panels are built, the former coal, oil, and gas-burning power stations can gradually be retired, leaving an emissions-free electricity system. That idea might be credible if one was to ignore the carbon emissions already embedded in the renewable energy infrastructure and the backup problems associated with energy storage e.g., Snowy 2.0, that will be required to deliver reliable electricity twenty-four seven.

Embedded Carbon - $C0_2$

Embedded carbon is the CO_2 emissions created in manufacturing and the transport to a job site and the construction practices used to assemble, erect, and dispose of structures.

Put simply, embedded carbon is the *carbon footprint* of an infrastructure project before it becomes operational. It also refers to the CO_2 produced in maintaining the infrastructure and eventually decommissioning it, transporting the waste to landfill, or recycling it.

So, it is important to account for the embedded CO_2 emissions resulting from the manufacture, deployment, construction, and disposal of all the wind turbine towers, blades, solar panels, mega – batteries, roads, transmission towers and transmission lines. There is no disputing the fact that the total amount of electricity that will ever be generated by industrial wind turbines and PV solar panels will never in their short lifespan compensate for the embedded CO_2 emissions resulting from the manufacture, deployment, construction, and disposal of all that massive infrastructure.

It simply doesn't stack up economically (*without subsidies*) nor environmentally!

Energy Storage

Wind and solar facilities provide only intermittent power, which must be fully backed up by something – fossil fuel generators, nuclear plants, batteries, or some other form of energy storage – so that customer demand can be matched at times of low wind and sun, thus keeping the grid from failing. The Federal government has mostly or entirely ruled out fossil fuels and nuclear as the backup, leaving some other form of storage as the main or only remaining option. They have then simply assumed that storage in some form will become available. The consideration of how much storage will be needed, how it will work, and how much it will cost has been entirely inadequate.

Energy storage to back up a predominantly wind and solar generation system to achieve net zero is an enormous problem, and very likely an unsolvable one. At this time, there is no proven and costed energy storage solution that can take a wind and solar electricity generation system all the way to net zero emissions, or anything close to it. Governments are simply setting forth blindly, without any real idea of how or whether the system they mandate might ultimately work or how much it will cost. The truth is that, barring some sort of miracle, there is no possibility that any suitable storage technology will be feasible, let alone at an affordable cost, in any timeframe relevant to the announced plans of the politicians, if ever.

Baseload and Peaking Power

To understand why wind or solar power, even with battery backup, will not be sufficient to supply the electric power needs of any modern industrial economy, one must first understand how an electric power system works.

A large-scale power grid consists of two segments. Baseload power and peaking power:

Baseload power is the minimum amount of energy required for normal daily operations. Coal and hydro have satisfied our Nations baseload for the past

century because they operate full time. It is interesting to note that wind turbines require baseload electricity to start up, before the blades gather sufficient momentum to turn by the force of the wind.

Peaking power is the additional power that is needed when the system is forced with unusual amounts of demand. Natural gas has served to provide peaking power because it can be cycled on and off quickly, as needed.

Neither wind nor solar can be relied upon for either baseload or peaking power necessary to drive industry**,** wind turbines generate power only when the wind blows between certain speeds, and the power they generate fluctuates constantly as wind gusts vary. Solar provides no power at night, and only reduced power on cloudy days, during storms, or when dirty. Battery backup, the power source that is supposed to fill the gaps when wind and solar are not producing electricity or are producing less than what is in demand, will not exist in the needed capacities for decades to come, if ever. There simply aren't enough batteries, not enough being built and not enough of the needed raw materials to build them being mined and refined.

These realities, mean every megawatt of wind and solar added to the electric grid requires a megawatt of backup from traditional sources to run constantly at less-than-peak levels as spinning reserve, to regulate the flow of fluctuating power delivered to the grid from turbines and solar panels when they are operating and to take up the slack during periods when either or both sources of weather-dependent power are not operating.

High Voltage Transmission

Because wind and solar '*renewable'* energy generation is widely acknowledged as being inherently weather dependent, there is a belief by AEMO that this intermittency of power supply can be averaged out by regional interconnectors, which it hopes will improve reliability through geographic diversity. If one region is experiencing a wind or sun drought, then AEMO hopes other regions won't be and will generate enough surplus power to supply the ones that are short.

Nation building is not built on the hope that something might work, but on proof that it will work, long before committing hard funding. There is no proof whatsoever that a massive overbuild in HV transmission will solve the basic flaw of wind and solar generated electricity, that is it is weather dependent. Power lines are more susceptible to faults and blowing over during severe weather conditions, and the longer the high voltage grid stretches across our continent, the greater the likelihood there will be of interruptions to supply resulting in blackouts. More power lines will only compound and further exacerbate the underlying problem of '*renewable*' energy, and that is it is totally dependent on idyllic wind and sunlight.

Analytical economic social and environmental studies together with indisputable modelling need to be carried out by independent experts *(at arm's length from the CSIRO)* before any more money is wasted on excess HV transmission, transmission that will only encourage an imprudent overbuild in wind and solar farms. Further expansion (*completely unnecessary if the nuclear option of generating baseload power is implemented alongside existing or brownfield coal-fired power station sites*) of the grid will only cause more harm to the rural landscape and natural environment and render valuable farmland next to worthless.

A consequential reduction in farm values should be an obvious and tangible negative cost of the devil's thread of '*renewable*' energy. It is unacceptable just to pay landowners compensation for easements, when the erosion of property values is realized by all neighbouring properties that are in view of the transmission lines. This negative cost to the broader community needs to be the subject of far greater research and an independent inquiry.

Footprint

Despite these realities, the Federal government intends to shut down all baseload and peaking power sources as fast as he can, and then to meet net zero electric power needs, wind turbines and solar panels will then need to carpet an incredibly disproportional percentage of Australia's land mass. Much of it, prime agricultural land.

Believing that industrial wind and solar farms are destined to improve our environment requires a high level of cognitive dissonance. It demands that one ignores the wholesale environmental destruction and loss of extremely limited productive agricultural land **(***it is important to note that only 4% of Australia is arable*) needed to place 3,800 turbines, 64 million solar panels and string together 28,000 klms of high voltage transmission lines.

There is also the humanitarian repression involved to mine *(immense footprint - tenfold that of mining conventional minerals*) and process the minerals and suite of rare earths for the manufacture of solar panels and mega-batteries.

Terrestrial Biodiversity

The wholesale slaughter of millions of birds and bats; including rare and protected raptors which have a *'certain classification'* risk of collision with turbine blades, like our iconic Wedge-tailed Eagle being smashed to smithereens year in year out by wind turbine blades, until their extinction. Raptor densities are often higher along ridgelines; however, this is also the preferred location for turbines – right in the path of these birds that rely on updrafts to get airborne. ***'This is the perfect storm'***. Proper surveys carried out by independent world-renowned ecologists in Southern California (*Wiegand 2012*) and Tasmania (*Debus 2022*) have now confirmed a raptor habitat population sink of approximately 80% since wind farms began operation.

Apart from the salient impacts of bird strike, there are the less obvious consequences to terrestrial fauna, like our iconic Koala, from clearing of habitat

and the reduction in connectivity between patches of remnant woodland used for feeding, resting, commuting and dispersing during extreme events. Another critical concern is the phenomenon of ground heating. Wind turbines alter local atmospheric conditions by disrupting natural wind patterns, leading to localized warming and drying out of the ground, commonly referred to as the '*heat island effect'*. This effect not only has an immediate impact on koalas and other vulnerable wildlife, but finally leads to tree dieback resulting in relocation of fauna populations to less desirable habitat. And then there is the '*noise annoyance'* repercussions to consider. Research *(Martin 2024*) in North Queensland by wildlife biologist Roger Martin has found that infrasound & low frequency noise (ILFN) generated from wind turbines can cause Koalas to abandon high quality habitat, and it masks long range contact calls, thereby decreasing their breeding success.

No amount of '*biodiversity offsets credits'* will ever bring these poor creatures back to life or replace their breeding habitat with '*like for like'*. This incongruous scheme (*Biodiversity Offsets Scheme*), which allows damage in one location to be offset by investment in biodiversity elsewhere, is seriously flawed in many aspects and is in urgent need of review, particularly with respect to wind farms proposed on lands with remnant woodlands adjacent to National Parks and Reserves. These woodlands serve as connectivity corridors for wildlife to freely commute in and out of the Parks and provide refuge in times of bushfire events, common in Australia. Eighty five percent of many National Parks were burnt out in the 2019/20 Black Summer bushfire event, but fortunately most of the adjacent woodlands on freehold lands were saved and so were many wildlife, that have since repopulated and migrated back to the Parks. The woodlands are just as important, <u>if not more important</u>, as the Parks themselves in serving as sanctuaries and breeding habitat for wildlife. Expansive wind farm footprints however are severely compromising the Parks and adjacent Woodland Connectivity Corridors primary purpose, i.e., to provide sanctuary and breeding habitat for flora and fauna during and post bushfire events.

There are over 90 Parks and Reserves with adjacent woodland habitat on The Great Dividing Range, many of which are or will be severely impacted by wind farm and solar farm developments and, all are home to protected and endangered species of flora and fauna. The importance of these areas is demonstrated by the many plants and animals that are listed on both the NSW BC Act and the Federal Environmental Protection and Biodiversity Conservation Act (EPBC Act) e.g., iconic Koala *(endangered*), Little Eagle (*endangered*), Brown Falcon (vulnerable), Glossy Black Cockatoo (*endangered*), Southern Greater Glider (*endangered*)**,** iconic Wedge-tailed Eagle (*protected*), Spotted-tailed Quoll (endangered), Brush-tailed Rock-wallaby (*endangered*), Echidna (endangered) to name but a few. And countless varieties of rare vegetation including *hollow bearing* trees that predate European Colonisation of this country, that will be sacrificed in the aim of reaching net zero.

Why is it that these protected areas, some containing UNESCO World Heritage listed Gondwana Rainforest, are no longer protected once a renewable energy developer applies to government to build a wind or solar farm. Why is the *'rule book'* suddenly tossed out the window, completely ignoring all existing constraints contained by law in the Federal EPBC Act 1999, and then the door left wide open for mainly foreign owned companies and foreign financial institutions, including some having undisclosed geopolitical conflicts of interest to walk in and irreparably destroy our environment and take home the lucrative subsidies.

It is an outrageous contradiction in terms, to continue to approve ***'killing fields'*** on, and adjacent to wildlife sanctuaries and breeding grounds.

What passes for environmentalism these days has absolutely nothing to do with the conservation of our natural and rural landscapes – this obsession with wind and solar farms is now unleashing ecocide and actively vandalising the environment. The irony is that the acute threat to Australia's biodiversity comes not from the slow warming of the planet, supposedly by CO_2 the gas essential in the biological process of photosynthesis and hence the planets panacea for life, but from the reckless deployment of wind turbines and solar panels in our most

beautiful and fragile ecosystems on The Great Dividing Range and Western Slopes and Riverina Plains.

Marine Biodiversity

The expansion of offshore wind farms poses significant risks to marine biodiversity. Offshore wind turbine survey and construction impacts on whales and dolphins is now universally understood. In New Jersey USA, where seismic exploration for offshore turbines is underway, between 5 December 2022 and 16 June 23, fifty-three cetacean (*whale and dolphin*) deaths have occurred. www.ackrats. Prevention is better than cure. World renowned environmentalist and author Michael Shellenberger's investigation of whale deaths on the east coast of the USA exposed: "*The dozens of ships surveying the waters off New England and New Jersey in preparation for wind farm construction, blasting the sea floor with sounds as loud as high-powered weapons, 24 hours a day".*

Here in Australia the Federal EPBC Act Policy Statement 2.1 – Interaction between offshore seismic exploration and whales

Australian Government Department of the Environment, Water, Heritage and the Arts September 2008, extract states:

"The effects of human-made sound in the marine environment are a concern for marine life. This is particularly true for cetaceans (whales and dolphins), which may be sensitive to certain sound levels. The impact of human-made sounds may potentially result in physical and/or behavioral changes for these animals. The impacts of seismic surveying on whales are not fully understood. Accordingly, precautionary mitigation measures aimed at preventing physical damage and minimising detrimental behavioral changes and significant impacts should be applied to ensure protection for whales."

The east coast of Australia is named the "*Humpback Highway*" because over 40,000 whales migrate north each year to calve in the warm waters of Queensland and then return to Antarctica with their calf beside them.

It is well documented that whales and dolphins are extremely sensitive to audible and inaudible noise (*by means of infrasound whales communicate with one another across entire oceans*) and the unbearable noise generated by seismic sounding and drilling disorients the mother from its calf, causing them into a panic state leading to loss of communication, navigation and finally their death.

Under the terms of the Australian Federal Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act), offshore oil exploration and drilling is banned in waters that cetaceans frequent. There is no reason why this same standard of precautionary *principle* should not apply to offshore wind farms to ensure there is no possibility of harm coming to these gentle giants of the deep.

Seabirds, which rely on coastal and marine habitats for nesting and feeding, are also at peril from offshore wind farms. The construction of turbines in migratory paths leads to abnormally higher mortality rates resulting from a '*certain classification'* due to fatal collisions with turbine blades. Additionally, the presence of wind farms disrupts feeding grounds, forcing seabirds to travel greater distances to find food, which reduces breeding success and significantly increases the risk of population declines (*Environmental Science & Technology, 2023).*

No other Australian industry is allowed to operate with such immunity and impunity. It is time to end this blatant bias and exemptions for the wind industry, which industry must be held to the same standards, laws and regulations that apply to the offshore oil industry and all other marine industries.

Federal and State governments approval of these developments, despite the obvious environmental impacts, raises serious questions as to their commitment to protecting Australia's natural heritage. Approval of offshore wind farms is clearly in breach of the Australian Federal EPBC Act 1999 Clause 3A part (b): and using the *precautionary principal*, all offshore wind developments should be banned off the Australian coastline to ensure there is no possibility of harm to cetaceans, seabirds, or other marine species.

Contamination and Waste Management

Australia's population is growing very quickly, so it follows that demand for electricity is going to grow exponentially over the next two decades, meaning we will need to build even more turbines, panels, batteries, roads, and high voltage transmission lines than presently estimated, if we are to meet net-zero by 2050. And by then that infrastructure will have reached its comparatively short end of life (20 years) and will need to be replaced with the next round of renewable energy infrastructure. One could liken this ridiculous situation to - *'a dog chasing its tail'*.

Then there is the monumental problem of toxic contamination finding its way into soil profiles and waterways including; rivers, creeks, farm dams, town water storage systems, city water storage systems, Oceans and The Great Barrier Reef; and waste management arising from wind and solar components, that every level of Australian government from Federal and State to LGA's and respective EPA agencies is sweeping under the carpet, as no level of government will acknowledge (*formally*) that there is an issue with contamination from leaking solar panels and from eroding turbine blades or has a Waste Management Plan in place for the spent renewable energy infrastructure.

Europeans who have far more experience with wind turbines than us are ringing alarm bells regarding toxic Bisphenols (BPA) eroding from the leading edges of the blades as a fine microscopic dust. They draw the analogy of 'The Trojan Horse Affect', when micro-particles of BPA enter the intestinal systems of fish and animals and going up the food chain. Finally finishing up on our dinner table – 'The Trojan Horse Affect'. The World Health Organisation (WHO) has recognised the dangers of this highly toxic chemical for some time and now thankfully this research has been passed onto the EU Chemicals Register – ECHA/REACH, which body is preparing new stricter regulations and recommendations regarding the manufacture, deployment and disposal of wind turbine blades in Europe.

Nor does any Australian government agency impose decommissioning bonding on wind and solar farm developments, which is standard practice in both the mining and construction industries. Where are the hundreds of millions of toxic solar panels and hundreds of thousands of poisonous BPA ridden turbine blades going

to end up. This is a ***'ticking time-bomb'*** of massive proportions that can only end in intractable litigation.

Technological Transformation

Proponents of net zero admit the technological transformation required is akin to a wartime effort. If net zero is to be accomplished, all manufacturing will have to be directed away from whatever products we make now and be diverted to the production of millions of turbines, panels, electric vehicles, batteries, transmission towers and power lines, battery packs and associated technologies for the net zero economy. The government will have to conscript factories, and by extension their workers, into a warlike net zero crusade against chimeric climate change. It would all be for naught, moreover, because global greenhouse gas emissions would continue to rise due to embedded emissions in renewable infrastructure, and due to powering economic growth in developing countries that are not foolish enough to impose fossil fuel restrictions on themselves.

Then there are the labour demands of the net zero transition. Even if all the thousands of truck drivers, fuel station and convenience store employees, oil and gas field workers, coal miners, workers at chemical refineries and power stations, and others put out of work by the net zero ambitions could seamlessly transition to jobs in mining, refining, building, installing, and maintaining renewable energy technologies, Australia would have to open its borders to millions more migrant labourers in order to get the job done in the truncated timeline required. We simply cannot build, manage, and maintain the equipment, tools, vehicles, and appliances needed with the labour force currently residing in Australia.

Wind and solar farm developers by way of massive subsidies (*improper*) can offer workers irresistible renumeration and as the construction of these renewable energy projects unfold it is placing unprecedented demand on regional labour. Cracks are already starting to appear here in regional NSW (*and Australia wide*) with labour shortages putting extreme downward pressure on livestock markets with abattoirs now on a no-quote basis and kill space stretching out to 8 weeks

(normally 1-2 weeks). Processors are struggling to find labour and, they say if they had the work force, they could kill an extra 2,000 head of cattle a week at each abattoir. As one processer said recently – "*If abattoirs across the country had the labour, then we may very well be looking at a different market*".

Coal

Coal has served humanity exceedingly well in enabling the Industrial Revolution to evolve and has saved millions upon millions of lives since that time by providing reliable and affordable power. There is no escaping the fact that fossil fuels have had the lowest global footprint, by far, for providing electricity, although they emit carbon dioxide, but what doesn't. Remember the embedded CO_2 in the manufacture, deployment, assembling and erecting of wind turbines, solar panels, and mega-batteries and, then the disposal of same.

Coal remains the largest source of power globally and given its wide availability, and reliability, it is likely to remain so for the foreseeable future. It is important however to draw the distinction between two types of coal. There is anthracite *(black coal*) and there is lignite (brown coal). Anthracite is mostly burnt and exported from here in Australia *(apart from in Victoria where they burn lignite*), whereas lignite is more commonly resort to in the Northern Hemisphere. Anthracite is a clean burning coal, whereas lignite is recognised worldwide as a toxic highly pollutant coal. Thankfully the Australian economy continues to rely on anthracite (*black coal*) for export revenue and as a source of affordable, reliable electricity, as it matches the requirements for modern high efficiency Ultra Super Critical High Energy Low Emissions (HELE) coal fired power plants and, in the production of alumina, chemicals, cement and steelmaking to name but a few. I feel it is important to note that the two critical building blocks, cement and steel, cannot be cleanly and commercially produced by any other means than by anthracite *(black coal*).

In comparison, the wind and solar farm footprint projected to cover a totally unjustifiable expanse of Australia's land mass, impacting mainly on The Great

Dividing Range and Western Slopes will be far too great and have far too many reaching consequences for any reasonable person to contemplate. And despite this utterly preposterous footprint, renewable energy is still far too weak a source of electricity to drive Australian industry on a constant commercial basis.

The laws of physics and the challenges of engineering mean the near instant shift to zero emissions, many expect simply cannot occur. The modern world was built to run on fossil fuels and any transition will take much longer than we have so far imagined, if it can be achieved at all.

Nuclear

The only possible way I can see of achieving net zero and maintaining reliable affordable dispatchable power, is by nuclear energy. Small modular reactors (SMR's) would be the best possible replacement baseload generators for Australia's remaining coal fired power plants. For instance, four SMR's stacked in sequence at Liddell would comfortably cover the gap left by the withdrawal of coal at that plant.

But Energy Minister Bowen continues his mantra, that nuclear power will push up electricity prices and take too long to come online, insisting that wind and solar are cheaper and will be a faster path to net zero. This war cry is baseless as is evident by his obstinate refusal to engage in any rational debate on renewable *vs* nuclear power generation. Anytime he does present costings on wind and solar he refers to the CSIRO GenCost Reports, which reports conveniently and consistently leaves out the $1.2 to $1.5 trillion cost for an entirely new (*of gigantic physical proportions*) transmission grid that is required for the renewable energy option, which cost will be passed on mainly to unsuspecting urban consumers. And he continues to argue that 82% of our electricity demand will be satisfied by renewables by the end of the decade.

What My Bowen doesn't mention is that nuclear SMR's could be up and running at Liddell in a similar timeframe. This scenario is perhaps a more likely outcome, firstly because of the dialogue and cooperation (*despite the prohibition on*

nuclear) that continues via the 'Australian Treaty Series 1981 No 8' between Australia and Canada, and secondly that the existing transmission grid can be utilised - thereby negating any need to build a new one.

The French and Canadians have put paid to the argument on cost; their consumers pay about half what the wind and solar powered Germans do for example. And the French don't suffer the indignity of routine power rationing and blackouts like their German neighbours, who have a deep reliance on non-dispatchable wind and solar. Indeed, it's nuclear power from France, coal-fired power from Poland and natural gas from Russia, that keeps Germany's near-terminal power grid from total collapse. But unlike Germany, Australia is an Island Nation that doesn't have an umbilical cord to enable us to plug into dispatchable power from a neighbour whenever renewable energy lets us down.

We have 32 countries in the world right now that are nuclear,19 being G20 nations (*Australia being the only G20 country that hasn't gone nuclear),* and for them the economics stack up. And there are another 50 countries that are embarking on nuclear programs or seriously assessing it right now; for them a critical path method (CPM) or timeframe if you like, and the economics also stack up.

Having a civil nuclear industry would increase our sovereign independence with additional long-term benefits to the AUKUS initiatives. Whereas, non-dispatchable renewable power will only make Australia more geopolitically vulnerable, than we already are to the whims of China.

The failure to lift the Federal prohibition on nuclear energy is denying Australians the opportunity to let the market decide between two energy generation options:

- Unreliable, unaffordable, environmentally destructive, wind farms, solar farms, and mega-batteries, connected by a new disorderly maze of 80m high transmission towers (*height of the Sydney Harbour Bridge Pylons)/* high voltage power lines crisscrossing our rural landscape and rendering prime agricultural and grazing land useless and next to worthless.

  Or

- Reliable, affordable, environmentally friendly high energy low emissions (HELE) anthracite fired power stations, nuclear reactors, gas turbines, and hydropower, utilising our existing energy infrastructure, including the *existing transmission grid*, *on the present-day footprint.*

Conclusion

The renewable energy industry has a reputation problem that just won't go away and it's getting worse: '*All fur coat and no knickers'*. Consequently, rural Australians are galvanised in defending our communities, our homes, our land, our farms, our farm animals, our native flora and fauna, and ourselves against the greed of foreign owned conglomerates, who are encouraged and supported by political zealots driven by ideology, not reality. Rural communities are fighting to save all Australians from a fatally flawed unreliable, unaffordable, environmentally destructive patchwork quilt of wind and solar generators, across the eastern states of Australia, proposed to be connected by a hideous web of high voltage transmission lines, rendering prime agricultural and grazing land next to worthless.

The actions of communities in fighting against the renewable invasion has prompted the Federal Government to seek a **'***social licence'* from rural Australians. Make no mistake, this pursuit will be unequivocally denied by the backbone of this Nation.

The existing grid has served our Nation well for generations and is one that can cope with increased demand well into the future. That is, if we continue to generate baseload dispatchable electricity. But the radical idea of reversing that generation by way of wind and solar, will need an overbuild in capacity by a factor of three or four-fold, which means ***'Rewiring the Nation'***, and that will require

thousands of kilometers of gazetted rights of way (ROW) resulting in substantial land devaluations that are crucial issues for 'social licence'. I am in no doubt that the gargantuan issue of rights of way – a 'ROW' as the acronym suggests, together with numerous other renewable energy issues; *environmental, health, roads, transport and indigenous,* can only end in intractable litigation.

Here in Walcha NSW, there is documented proof held by the Walcha Council that 76% of people objected to the proposed wind and solar farms in the Walcha LGA. That survey, however, was taken well before any serious consideration had been given to the impacts of the impending new high voltage transmissions towers and power lines. Now that EngeryCo (*NSW government*) have tabled their plans for a new grid, I would suggest that more than 90% of the community will respond vehemently to the monstrous spiderweb proposed to crisscross our beautiful district.

Communities all along The Great Dividing Range, Western Slopes and Riverina Plains have now joined forces to do everything we can to stop this futile violation of Rural Australia further unfolding.

When will it be that we acknowledge that this renewable energy ecocide is causing irreparable environmental harm and human misery, and we regain a fundamental respect for an unspoiled landscape and our quintessential Australian way of life.

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