From: [redacted]
To: Do-Not-Reply IPCN Submissions Mailbox; IPCN Enquiries Mailbox
Subject: Objection Submission & References to the Spicers Creek Wind Electricity Generating Works + BESS
Date: Friday, 6 September 2024 4:57:38 PM
Attachments: 240705 - Letter to Minister Scully re Number of Households Served Claims (2).pdf

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Objection Submission & References to the Spicers Creek Wind Electricity Generating Works + BESS

Please add this Reference to my Objection.
Thank you.

[redacted]

References
Paul Miskelly:- 'Validity of Claims by Renewable Energy Proponents re No. of Households Served by Proposed Generators.'

From:	[redacted]
To:	Do-Not-Reply IPCN Submissions Mailbox; IPCN Enquiries Mailbox
Subject:	Objection Submission & References to the Spicers Creek Wind Electricity Generating Works + BESS
Date:	Friday, 6 September 2024 4:58:18 PM
Attachments:	Miskelly_-_Storage_Requirements_for_100-percent_Renewables_05-03-2024.pdf

Objection Submission & References to the Spicers Creek Wind Electricity Generating Works + BESS

Please add this Reference to my Objection.
Thank you.

[redacted]

Reference:-
***Paul Miskelly's - Storage requirement for 100 percent Renewables on the Eastern Australian Grid - Initial Findings**

5 July 2024
The Hon. Paul Scully MP MLA
Member for Wollongong
Minister for Planning and Public Spaces
Parliament of NSW
[redacted]

Dear Mr Scully,

Validity of claims by Renewable Energy Proponents re No. of Households Served by proposed Generators

Executive Summary

From an analysis of real generation data for an example solar farm, coupled with a reliable set of household consumption data, it is shown that the claims made as to households served and the scale of battery storage required for a particular proposed solar farm in NSW are, quite simply, considerably overstated. These findings beg the question as to how many other such proposals, perhaps already approved by Planning NSW and the Independent Planning Commission (IPCN), have made similar, untested, claims.

There are several important consequences of these overstatements by proponents.
1. To service a given expected level of Demand, always an essential metric for which to have a reliable estimate, if it is found in subsequent operation that proponents have wildly overstated the demand that their proposed generators might service, then either far more generators will have to be built, posing significantly increased environmental and social impacts, destruction of valuable farmland, etc., or, where not addressed, massive Statewide power shortages will be the inevitable consequence.
2. Addressing any serious shortfall in battery storage would require a massive increase in the number of BESS installations, resulting in similarly vastly increased social and environmental impacts, and a massively increased fire hazard to surrounding regions, the latter resulting from the inherent safety issues endemic in the Li-ion battery technology itself.
3. Massively increased waste disposal issues resulting from the hugely increased resource requirements. It is to be kept in mind that solar panels do not last 25 years as claimed by proponents, and batteries, from the Hornsdale experience, have a service life of less that 10 years.

To give some idea of how far wrong the proponent is in its calculations, even with a battery storage equivalent to 450 Geelong Big Batteries, a number which would be impossible to fit into the selected site, the proponent's solar farm can never supply 262,000 homes.

This poor performance needs to be considered in conjunction with such as the spectacularly poor performance of wind generation across the Eastern Australian grid during the present calendar year. Wind's poor performance occurs frequently, if chaotically. In this background, to consider the further closure of coal-fired generation in the hope that wind plus solar generation plus battery storage will replace it is best described as an extremely dangerous policy.

Introduction

So often we see the claims in proposals for Wind and Solar Farms, or other such renewable energy facilities, that for any given proposal, the proponent claims that, it will "power so-and-so-many thousand homes". How valid are these claims and how readily might they be checked?

I thought to examine one such claim and to provide my findings to you as the Minister responsible for the Planning Approvals process here in New South Wales.

The starting point for any such analysis is the obtaining of reliable data as to the average household consumption of electricity in NSW.

In searching for official data on household electricity and gas consumption, I found the publication by the Australian Energy Regulator (AER) entitled:
"*Residential Energy Consumption Benchmarks*", published on 9 Deccember 2020,
and available at:
https://www.aer.gov.au/system/files/Residential%20energy%20consumption%20benchmarks%20-%209%20December%202020_0.pdf

I have chosen data from that very comprehensive document for what the authors refer to as Climate Zone 5. See Table 16 on page 37. According to the preamble in section 4.2.4.Climate Zone 5:

"*The sample includes 1,908 households in Climate Zone 5. This includes 1,339 in New South Wales and 505 in South Australia. Climate Zone 5 covers several metropolitan areas including greater Sydney and Adelaide. The remaining 64 are in Queensland, in a small pocket to the immediat west of Brisbane.*"

I have chosen the Climate Zone 5 data as being representative of the household consumption patterns in the region of Eastern Australia in which the particular proposed project is to be sited. From that same Table 16, I have chosen the data as representative of households in NSW, that is, covering the wider region within which the proposed project is to be situated, and which therefore it is most likely to supply. Climate Zone 5 Table 16 data for NSW is reproduced below:

"*Table 16: Climate Zone 5: Electricity consumption benchmarks by household size (kWh)*"

State/Territory	Household size	Summer	Autumn	Winter	Spring
NSW	1	732	745	927	705
NSW	2	1,278	1,232	1,565	1,162
NSW	3	1,530	1,503	1,903	1,425
NSW	4	1,819	1,717	2,148	1,627
NSW	5+	2,158	2,082	2,761	2,007

For my analysis, I have chosen the line in the above table for a household of 4 persons. What I did was to use the seasonal average consumption of a representative household of 4 persons in conjunction with 5-minute AEMO SCADA data for a representative generator, scaled to match the specifications of a solar farm proposed here in New South Wales for a similar location.

Preliminaries

For this analysis, I chose the claims made by the proponent for the Birrawa Solar Farm, a proposal that is, I understand, presently before NSW Planning for consideration.
At the proponent's website: https://acenrenewables.com.au/project/birriwa-solar/
under the opening heading "The project", the following relevant claims are made:

1. "*It will generate enough energy to power approximately 262,000 average Australian homes.*"

2. *"The solar component of the project will have a capacity of around 600 megawatts (MW) and include a centralised Battery Energy Storage System (BESS) of up to 600 MW for 2 hours. The BESS will enable energy from solar to be stored and then released during times of demand."*

The Issued Scoping Report at:
https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=SSD-29508870%2120211012T060833.452%20GMT
provides the further relevant information that, *"Birriwa Solar Farm which includes:*
- *the construction and operation of a solar photovoltaic (PV) energy generation facility with an estimated capacity of up to 600 MW; and*
- *associated infrastructure, including grid connection and battery storage of up to approximately 1,000 MW (with an energy storage duration of up to four hours)."*

From these statements I have presumed that: the Solar Farm is to have a capacity of 600 MW, and the Battery Energy Storage System (BESS) will have a capacity of 4000 MWh (1000 MW output times 4 hours).

Analysis - Ability of the Solar Farm plus BESS to supply the claimed number of households

It is an oft-overlooked fact, where renewables proponents discuss the performance of wind and solar generation in terms of average outputs, that solar panels produce no electricity whatsoever at night, all night, every night, 365 days per year, (includes leap year nights too!).

Any associated battery storage must therefore make up the supply shortfall, this being the full requirement of any power generated by the solar facility, for an average of 12 of those hours, at the very least, of every 24-hour day of the year, (the 12 hour period being an average value for the period commonly known as "night-time", or "darkness").

The proponent states that the proposed BESS has a storage capacity of 1000 MW times 4 hours, providing a potential maximum battery storage capacity of some 4000 MWh.
Presuming that the BESS battery is fully charged at any given sunset, and not allowing for losses, (which are indeed significant, and will be required to be fully accounted for in any detailed analysis), the question is: how many homes can the battery supply during the 12 hours of the night?

In any proper analysis, proponents must show, to satisfy the latter part of the second claim above, that the BESS battery will be able to supply the full Demand, required by 262,000 homes, during the full night time period, including long winter nights. That's the implied meaning of: "*The BESS will enable energy from solar to be stored and then released during times of demand."*

Any detailed analysis must allow that the hours of darkness for each day vary throughout the year, being a minimum at the Summer Solstice and a maximum at the Winter Solstice (which incidentally, for 2024, has occurred just prior to the writing of this document). In considering the worst-case scenario, on winter nights, the night-time period is significantly longer than 12 hours, even in New South Wales at the latitude of the proposed location for the Birrawa facility.

For this analysis, I have presumed that the period to be considered commences on 1 January 2023, and ends at 10 June 2024, so that the initial nights, the period of darkness is close to the minimum for the Summer, so, for the purposes of the analysis, is favourable to the facility's initial start state.

For generator data, I am using the real-time 5-minute generation data, publicly available from the AEMO, the operator of the Eastern Australian Grid, for the solar farm at Darlington Point New South Wales, which is listed by the AEMO as having an installed capacity of 245 MW. I have

multiplied the output at each 5-minute data point by a factor of 2.182, (the multiplier being derived from the fact that as the stated capacity of the Birrawa solar generator is to be an installed capacity of 600 MW, then its output at any time, given that it is to be sited at a location not far distant from the Darlington Point facility in a similar climatic region, can be considered, to a first approximation, to be 600/285 times the output of the Darlington Point facility), and replaced it in the generator table.

The next step is, at each 5-minute timestep, to determine the Demand during that 5-minutes, resulting from 262,000 average Australian homes, in Zone 5 of the above table, each home comprising a 4-person household, these values varying as to the Season of the calendar year.

These Demand values are added to the generator table constructed above.

It is then a relatively simple matter to proceed to step through the table,

- determining the difference between the generator Supply and the Demand;
- adding (if a generation surplus) or subtracting (demand during the 5-minute period being greater than generator supply) the result from the current state of the BESS battery charge, terminating the process should the BESS battery charge state drop below 20-percent of rated capacity, or if not;
- repeating the preceding steps at the next 5-minute time step to re-run the calculation, until;
- the last 5-minute time step is processed, indicating that for the given time span, the solar generator plus BESS is able to satisfy the Demand imposed by 262,000 average Australian homes.

Limits: where the battery continues to discharge, the battery charge may not fall below 20-percent of the rated capacity (here 4000 MWh times 0.2 = 800 MWh), as such a state of discharge has a detrimental effect on battery lifetime. Where the battery charges, it may not charge to above 80-percent of full capacity, that is 3200 MWh. These then are the lower and upper limits of the battery's state of charge, (for the choice of these limits, see, for example, (Post, 2019).

Results

Commencing the run at 12:05 AM, that is, just after midnight on 1 January 2023, with an initial charge as the 80-percent limit, that is, 3200 MWh, the run terminated with the battery being discharged to its 20-percent limit at 2:05 AM on 2 January 2023.

This is a definitive result. A BESS of 4000 MWh capacity is incapable of supplying the Demand requirements of 262,000 homes for even 2 nights of the year 2023, at the height of the Summer months, when nights are shortest.

Conclusion 1 The above analysis shows that the claim by the proponent that the solar "farm", presuming that it has an installed capacity of 600 MW, that it will supply 262,000 average homes, can best be described as wildly optimistic.

This massive failure requires a clear explanation from the proponent showing, in detail, how the calculations were performed and what assumptions were used, to arrive at a number of 262,000 average Australian homes served.

It is tempting to re-run the calculation, decreasing the number of households each time until, if possible, a value for the number of households might be reached where the process is able to step through the entire time period under consideration, that is: 1 January 2023 – 10 June 2024.

I did repeat the process and found that the 600 MW Solar Farm plus 4000MWh capacity BESS battery is able to support some 22,500 average Australian households, that is, some 11.64 times less than that claimed by the proponent, so of the order of 10-percent of the proponent's claim..

I also chose a Battery Storage value of 200,000 MWh, which is a very large battery, being in fact the equivalent of some 450 Geelong Big Batteries, but even with this amount of storage, the combined system, addressing the Demand of 262,000 average Australian homes, fell over at 2023/04/18 02:35:00, that is, after some 3 and a half months operation. Clearly, where even using a battery storage that is so large, so gargantuan, that it is completely unachievable, also fails, then the claim that the proposed solar farm will serve 262,000 homes is in the realms of fairyland.

It is clear from this last run that the required demand simply runs down the initial battery storage, that is, in attempting to supply 262,000 homes, the solar farm is unable to recharge the battery sufficiently to any extent at all.

Conclusion 2 If the claim made by the proponent for the Birrawa Solar Project as to number of homes served is typical of the process being used generally by proponents of renewable energy projects that come before Planning NSW, then this analysis suggests that serious questions need to be asked about the assessment methods presently used, by both Planning NSW, and the Independent Planning Commission.

Yours faithfully,
Paul Miskelly
Moss Vale NSW
[redacted]

References

Round-trip battery efficiencies are mentioned in:
https://atb.nrel.gov/electricity/2023/utility-scale_battery_storage

Limits of Li-ion grid-scale battery charge/discharge:
Post, W 2023 *BATTERIES IN NEW ENGLAND TO COUNTERACT A ONE-DAY WIND/SOLAR LULL?* Available at:
https://www.windtaskforce.org/profiles/blogs/batteries-in-new-england

Post W *BATTERY SYSTEM CAPITAL COSTS, OPERATING COSTS, ENERGY LOSSES, AND AGING*. Available at:
https://www.windtaskforce.org/profiles/blogs/battery-system-capital-costs-losses-and-aging

Post W 2019 *THE HORNSDALE POWER RESERVE, LARGEST BATTERY SYSTEM IN AUSTRALIA*. Available at:
https://www.windtaskforce.org/profiles/blogs/the-hornsdale-power-reserve-largest-battery-system-in-australia

From: [redacted]
To: Do-Not-Reply IPCN Submissions Mailbox; IPCN Enquiries Mailbox
Subject: Objection Submission & References to the Spicers Creek Wind Electricity Generating Works + BESS
Date: Friday, 6 September 2024 5:06:18 PM
Attachments: c658ee36-33ea-478b-be21-a5500a424a0f_1540x982.jpeg.webp
unknown.png
image.png
SCEPTICISM IS A CRUCIAL ELEMENT IN ENERGY MIX Chris Mitchell - Business Australian 29 July.pdf

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Objection References Spicers Creek Wind

Please add these References to my Submission.

Thank you.
[redacted]

References:
****The Missing Whole-of-System Cost Model in the AEMO 2024 ISP:-**
"Recommendations
1. A thorough investigation by independent authorities and immediate implementation of effective accountability mechanisms must be implemented to counter the complete failure of public energy policy regarding reliability and energy costs based on misleading information from public institutions.
2. The AEMO ISP and CSIRO GenCost documents must be subjected to higher genuine standards for truthfulness, completeness and professional engineering processes in place of slavishly following flawed existing policies.
3. Embedding wind & solar targets into the National Electricity Rules must be halted to end the replacement of power systems engineers by politicians and government bureaucrats selecting technological design solutions without proper engineering qualifications.
4. Independent expertise for frequent technical and financial review must be employed in new accountability processes at multiple levels and points in time with a mandate to examine and openly examine a wide range of technological approaches.
5. The AEMO 2024 ISP must be discarded and an immediate start be made on a new energy NEM plan considering all power system technologies." (PDF Attached)

DEFIES NATIONAL ELECTRICITY LAW
AEMO, and everyone in 'authority', place primacy on emissions target rather than the other requirements of the NEL. The emissions requirement was only added to the NEL in Sep 2023, and the NSW Emissions Reduction Act 2023 was only passed in Nov 23 (other states were similarly tardy to legislate any targets), - so on what basis did any Gov act prior to that to impose all this on us? Yet they all did, and still emphasise emissions over other objectives. NEL is made in the SA Parliament, and in the 2nd reading, the minister there also reiterated that all objectives are equal.

****Stockholm Convention on Persistent Organic Pollutants (POPs)**
"We have a human right to clean drinking water and an environment free of toxic load," Dr Stops said. "Dr Orellana reminded us that Australia has ratified the Stockholm Convention on Persistent Organic Pollutants (POPs) in 2004.
Waste-to-energy incinerators were identified by the Convention as a major source of unintentional POPs pollutants such as dioxins. As a signatory, the Government is required to take measures to address those emissions. Waste-to-energy incinerators are incompatible with that requirement."
https://lismoreapp.com.au/NewsStory/incinerations-opposition-groups-launch-online-petition/6539d5df28c0030028ec065d
https://lismoreapp.com.au/NewsStory/incinerations-opposition-groups-launch-online-petition/6539d5df28c0030028ec065d

****WIND TURBINES ARE A FAKE GREEN SCOURGE - SHEDDING TONNES OF MICROPLASTICS FROM WIND TURBINE BLADES (KNOWN AS 'LEADING EDGE EROSION') - AFTER ONLY A FEW YEARS OF OPERATION.**

Mark Twichell spells out the poisonous truth - why Wind Turbines are a dangerous idea.
The Buffalo News October 2022.

"Wind Turbine Blades leave a toxic waste legacy for centuries to come, but there is an even more

immediate threat - their blades naturally erode during operation - spreading tonnes of microplastics far & wide.
The epoxy compounds they shed contain toxins that are finding their way into our oceans & drinking water.

The particles eroded from Wind Turbine blades includes epoxy resin which is 40% Bisphenol (BPA) - a frequently banned endocrine disrupter & neurotoxin" - equally as toxic as blue asbestos & lethal to young children.

"Academic research has shown the potential for 137 pounds of epoxy micro particles to be shed per turbine per year.
The resulting annual BPA release can potentially contaminate 17 million gallons of drinking water per turbine while threatening aquatic & terrestrial life.

Minimising the shedding depends on specialised blade coatings that contain toxic ingredients from the PFAS family of 'forever' chemicals which are biologically cumulative & non-degradable.
These coatings likely need replacement after a few years.
PFAS is a common ingredient in lubricants & hydraulic fluids which routinely leak from Wind Turbines."

****18th August 2022 - Dr Eric Blondeel says:-**
"That the plastics in the blades are toxic - is without doubt!"

****<u>Bisphenol A</u>** - a toxic chemical used in the epoxy resins that are used to make turbine blades. High speed spinning blades 300 KM/H collide with dust particles, rain and hail chipping off small particles of the resin coating.

'As far back as 2012 the World Health Organisation warned about potential carcinogenic properties of endocrine disrupters & concluded that these substances pose a global threat to public health.
Unborn & young children are especially vulnerable because their hormone system is still developing.'

https://stopthesethings.com/category/bisphenol-a-wind-turbine-blades/

https://greatlakeswindtruth.org/newsworthy/media-release-na-paw-will-bisphenol-a-be-the-end-game-for-industrial-wind-the-pfos-poly-and-perfluoroalkyl-substances-pfas-pfos-is-used-in-lubricants-coatings-paints-varnishes-plastics-and/
https://greatlakeswindtruth.org/newsworthy/essay-by-dr-ir-eric-blondeel/

https://bergensia.com/bisphenol-a-in-wind-turbines-damages-human-fertility/es-human-fertility/

****<u>GROUND WATER SUPPLIES MUDDIED BY PILE DRIVING FOR THE MASSIVE WIND TURBINE BASES.</u>**
***Wind farm woes continue as Victorian turbines fail after only five years – www.cairnsnews.org - 11th April 2024**
https://cairnsnews.org/2024/04/11/wind-farm-woes-continue-as-victorian-turbines-fail-after-only-five-years/

1. NEW MODERN SLAVERY CONDITION- requiring proof prior to construction that NO Slave Labour supply chain components be used in construction.
****New Condition Inserted C4A** - Dealing With Modern Slavery.
Commonwealth Modern Slavery Act 2018

***NSW Local Council Act 1993**
428 Annual Report
438 ZE Duty to Ensure Goods & Services Are Not Procured From Modern Slavery.

This applies to all NSW Government Bodies - including Councils - for those who Host, Procure or have a Power Purchase Agreement with Solar/Wind Energy Generation/BESS whose construction has used Modern Slavery Supply Chain Sourced Components

2. AMENDED STORM WATER MANAGEMENT PLAN CONDITION re-CONTAMINATION – QUALIFIED TESTING/REPORTING, CONTAMINATION RESPONSE PROCEDURE, etc.
****Amended Condition C8.**
Prior to Commencement of Any Works - Storm Water Management Plan.
On Site & Discharge From the Site.
Testing Points & Regular Water Samples, Suitably Qualified Person.
Written Response Procedures if CONTAMINATION is Found - required PRIOR to CONSTRUCTION.
Availability of Results.

****BLOOD BATTERIES - THE DARK SIDE OF ELECTRIC VEHICLES** - Gravitas Plus YouTube
https://m.youtube.com/watch?v=RFHvq-8np1o

****THE DISTURBING REALITY OF COBALT MINING FOR RECHARGEABLE BATTERIES.**
"CLEAN COBALT IS A FICTION – THERE IS NO CLEAN COBALT - IT'S ALL MARKETING!"
https://www.news.com.au/finance/business/mining/harvard-professor-explains-heartwrenching-source-of-electric-vehicle-iphone-batteries/news-story/db881f47c76db89581409c092a740c4c
Joe Rogan exposes sad truth about cobalt used in electric vehicle, iPhone batteries |news.com.au — Australia's leading news site.
Cobalt is in all iPhones, tablets & crucially EV's - it maximises charge & stability.
Before anyone knew what was happening the Chinese Government & Chinese companies took control of almost all of the big mines in the Congo, with the local population displaced & the Congolese people under duress - digging in subhuman, gut wrenching conditions - using all raw human force - clanking the cobalt out of the ground!
Throughout the whole history of slavery, never has there been more suffering that generated more profit than was linked to more lives of people around the world than what is happening today in the Congo - mining cobalt in appalling, heart wrenching & dangerous conditions.

****NSW Fire & Rescue - SARET Research** explain the dangerous, delusional 'Renewable' EXPERIMENT- that is now threatening our lives throughout rural Australia - irresponsibly inflicted on us without our Consent!
"There is a general lack of guidance and provisions in building codes, standards, and legislation in relation to safety to address the potential risks from these emerging technologies. Part of the problem is that we do not yet know enough about their probability of failure, their mechanisms of failure and potential consequences of failure."

****Sediment Run-Off Contaminating Land/Water - Court Case -**
"Created, Operated, and Maintained a Nuisance"
Solar farm runoff pollutes property, couple awarded $135 million - CFACT
https://www.cfact.org/2023/06/06/solar-farm-runoff-pollutes-property-couple-awarded-135-million/
By Bonner Cohen, Ph. D. |June 6th, 2023
25th Oct 2023 update …A federal judge has dramatically reduced a jury's $135 million award to a Georgia couple (https://www.ajc.com/news/couple-awarded-135m-after-solar-project-turns-their-lake-to-mud-hole/BZ6BYXQREJCDROQV6ZASUW5WOI/)

****Wind Turbine Fire**
https://www.cfs.sa.gov.au/news-media/media-alerts/wind-turbine-fire-at-redhill-7-february-2024/#:~:text=A%20fire%20has%20destroyed%20a,around%20the%20collapsing%20wind%20turbine.

**** A Wind Turbine has Burst into Flames** last night in Portland. The wind farm operator is investigating the cause of the fire. 29th June 2024
#7NEWS https://x.com/7NewsMelbourne/status/1806869935706231003

****Gateway Energy Storage System Fire: Otay Mesa, CA - YouTube**
https://www.youtube.com/watch?v=A7UY4ioP4VQ

****Yet another Lithium Battery FIRE**
this one in Scotland - **Lithium Battery Recycling Centre**.
https://youtu.be/d-hvsz2tyhc?si=S16_g1LWETu1pj70.

****Bouldercombe Battery Fire Sparks Warning for Residents in Regional Queensland - 26/09/23**
https://www.9news.com.au/national/bouldercombe-battery-fire-sparks-warning-for-residents-in-regional-queensland/b4b3058a-cb0b-4209-a02d-6b12d80c63ac

****Meet The Expert On Turbine Eagle Deaths The Wind… | Cowboy State Daily**
https://cowboystatedaily.com/2024/04/05/meet-the-expert-on-turbine-eagle-deaths-the-wind-energy-industry-turned-on/

****Defiance of Australian and International Environmental Standards**, which the Australian Government is not adhering to when it comes to bulldozing through tropical rain forests, taking the tops of evergreen mountains for erection of Wind Turbines?
The Australian Government, in bulldozing through tropical rain forests, and taking the tops of mountains for erection of Wind Turbines is not meeting Australian and International Standards.

References:
AS/NZS ISO/IEC 17021.2:2013 [ISO/IEC TS 17021-2 :2012] ***Conformity assessment - Requirements for bodies providing audit and certification of management systems. Part 2: Competence requirements for auditing and certification of environmental management systems***

AS/NZS ISO/IEC 17021.2:2013 Clause 6.7 regarding Use of Space/Physical Attributes (Clause 6.7)
Requires knowledge of:

a. the interactions of the physical attributes (size, shape and colour) of buildings, structures and equipment with the local environment (eg, man-made structures that detract from natural ambience, nature, flora and fauna, and natural settings of the environment in which they have been placed);
b. Operational controls and techniques to manage physical attributes, such as planning and design, landscaping, use of colour to reduce intrusive impact on the environment; and
c. the monitoring of spatial planning, building and equipment requirements as well as maintenance systems and landscaping

Brad Bishop
Managing Director
GRAD DIP MAN, DIP LOG MAN, CSC, AFAIM, WG CDR (RTD),
AHPRA Performance and Professional Standards Panel (PPSP)
[redacted]
w: **qasinternational.com.au**

***Whole of Life-Cycle Green House Gases**
Neither has there been any calculation made for the **most potent Green House Gas of all** - man-made SF 6 - leaking from Solar manufacturing, Wind Turbines & increased Switch Gear & Circuit Breakers…..

Wind turbines contains the worlds most powerful green house gas, SF6. bergensia.com	<cropped-Bergensia-mobile-logo-180x180.png>

****Wind turbines contains the worlds most powerful green house gas, SF6. - Bergensia**
https://bergensia.com/wind-turbines-contains-the-worlds-most-powerful-green-house-gas-sf6/

****Why Are Massive Amounts of the World's Most Potent Greenhouse Gas Being Ferried Out into the Ocean off the Eastern Seaboard?** 28/6//24

https://lindabonvie.substack.com/p/why-will-thousands-of-pounds-of-the

***National Security Nightmare**
https://www.senatorpaterson.com.au/news/chinas-spy-threat-to-energy-supplies
There are no secure measures currently in place to prevent malicious actors from using Solar Inverters to disrupt the Solar Electricity Grid.

https://www.aspistrategist.org.au/does-chinas-rapid-rise-in-the-australian-car-market-pose-a-security-risk/

***"In July, Transgrid struck a deal with China's ZTT International for the delivery of more than 17,500 kilometres of high-voltage conductors to get ahead on HumeLink and VNI West." 4th Dec 2023**
https://reneweconomy.com.au/transgrid-hands-out-multi-billion-dollar-contracts-for-controversial-humelink-build/m

The Government has no measures to protect new energy sources from malicious actors!

Beautifully Hackable - Irina Slav on Energy - 12/8/24
https://irinaslav.substack.com/p/beautifully-hackable?utm_campaign=email-post&utm_source=substack

Robert Bryce Substack - 20th May 2023

"In 2020, China controlled about 92 percent of the global NdFeB magnet and magnet alloy market… 58 percent of the rare earth mining market, 89 percent of the oxide separation market, and 90 percent of the metallization market." Commerce Department, September 2022. Graphic: Energy Department, 2022

21st April 2024 - Robert Bryce

Complete Inadequacy & Unsuitability of Incapable Battery Energy Storage Systems
Paul Miskelly's:-
****'Storage requirement for 100 percent Renewables on the Eastern Australian Grid - Initial Findings.'**

****'Validity of Claims by Renewable Energy Proponents re No. of Households Served by Proposed Generators.'**

Storage requirement for 100 percent Renewables on the Eastern Australian Grid - Initial Findings

Executive Summary - Notes for policymakers

As stated in the Conclusions below:
It would seem that Australian government authorities have not performed and made publicly available any analysis that provides any indication whatsoever, in a readily understandable way, how many "Big Batteries" will be required in Eastern Australia to meet the 100-percent Renewables' Storage requirement, how they will be sourced and paid for, what are the energy requirements for their production, what are the waste disposal and CO2 emissions resulting therefrom, importantly, where these batteries are to be sited, and, given their relatively short service life, how they will be recycled and re-used.

It beggars belief that none of this absolutely necessary preliminary, investigative work seems to have been addressed by the relevant Australian Planning Authorities.

The findings of this analysis are:

From an analysis based on the AEMO Operational Demand data for calendar year 2023, to even begin to consider a 100-percent Renewables scenario for the Eastern Australian Grid:

1. The present wind and solar energy facilities complement will need to be increased, as a minimum, by a factor of 3.31.
2. The minimum Storage Requirement to provide coverage during the worst extreme, prolonged minima in output of the renewables, must be able to supply the full Demand for a minimum period of 24 days. This translates to a Storage Requirement of 12,077,136 MWh, equivalent to some 27,000 Geelong Big Batteries, or some 94,000 Hornsdale Big Batteries.

According to: https://victorianbigbattery.com.au/faqs/ , the Geelong battery covers an area of the same size as the Geelong Kardinia Park GMHBA Stadium field. This is an area of some 2 hectares.

Some 27,000 Geelong Big Batteries would occupy an area, a minimum area, of some 54,000 hectares. This does not include the area required for the corridors for the necessary connecting transmission lines. It is clear that government policy is to acquire rural lands for this purpose, rural lands which are predominantly farmland, that is, land used for food production. This makes it a very significant land grab. This land take is in addition to the considerable amount required for the additional wind and solar "farms", each of which itself constitutes a very significant land grab.

Taking over farmland to build facilities to produce intermittent energy is a violation of Article 2, Section 1(b) of the Paris Agreement (2015).

Article 2 1(b) of the 2015 Paris Agreement states:

"This Agreement… aims to strengthen the global response to the threat of climate change, in the context of sustainable development and efforts to eradicate poverty, including by:

"(b) Increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development, **in a manner that does not threaten food production";** See: https://unfccc.int/files/essential_background/convention/application/pdf/english_paris_agreement.pdf .

Policymakers need to understand, very clearly, that these storage batteries are merely a band-aid; they would not be necessary except for very serious shortcomings in the forms of generation that these batteries are required to support.

A battery does NOT extract energy from the wind or the sunshine. These batteries are required simply because both solar and wind generation are highly intermittent forms of generation and these forms of intermittent generation have a major failing: neither is dispatchable. These forms of generation are also incapable, unlike conventional generation, of providing the very necessary inertia required for grid system security. The batteries would not be required if these forms of generation were a plug-in replacement for real, conventional generation.

The batteries then are a necessary band-aid. That they are required as a band-aid does not justify the requirement for the vast land-grab that will result from their use. The battery unit itself is NOT a "renewable", or any other form of, generator.

Also, policymakers need to understand, for this renewables plus battery storage scenario to even begin to be a feasible option:

1. that the battery storage cannot simply be added incrementally over a period of time from some low starting value. It must be available as the amount as stated, that is, 12,077,136 MWh minimum, and it must be fully charged at the time of switch-over to 100-percent renewables.
2. that the renewables complement must be at the level as stated,

before shutting down any of the remaining dispatchable generation. Attempting to shut down existing dispatchable, fossil-fuelled generation before the above capacity requirements are met, in full, will merely lead to frequent, unpredictable, widespread blackouts.

Policymakers also need to consider the following:

1. Neither the required units of renewable generation nor the battery storage units "grow on trees" or "pop out of thin air". At present, all such units are fully imported, increasingly from suppliers whose intentions toward Australia are recognised by Australia's Security Services as being rather less than benign. At any time, these suppliers could impose a trade embargo on the supply of this equipment, instantly posing a profound risk to National Security. See also Wilson (6).

2. Each Geelong-scale Big Battery will occupy the space, involve the land take, as quoted above, of an AFL football stadium, and then some. Where and how are are some 27,000 Geelong Big Battery equivalents going to be sited?

3. What considerations have been given to the transmission line requirements to connect so many of these grid-scale batteries to the Eastern Australian Grid?

4. Where are these grid-scale batteries to be manufactured? What amount of CO2-producing fossil-fuels will be required to mine the ore, extract, refine and manufacture, the enormous number of battery modules required?

5. Given the massive scale of the battery requirement, and the known probability of risk of fire, the provision and cost thereof of permanent firefighting facilities and staff, similarly on a massive scale, must be factored into the operations of these battery storage units.

Abstract

Francis Menton, in a recent article (1) , discusses a scholarly paper by a certain Balazs Fekete and colleagues (2), and a blog post article by Fekete himself (3), discussing their experiences in getting the paper published. In the paper, Fekete *et al* concluded, for the fairly large region of the US that they considered, comprising 18 adjoining northeastern States, that a value of storage, equivalent to some 25 percent of the total annual demand for that region, is the minimum requirement. On an average demand basis, this 25 percent is equivalent to some 91.25 days of demand.

Putting that into the Eastern Australian context, 25 percent of annual demand for the year 2023, based firmly on AEMO operational data, is some 20,970 MW (the average annual demand for 2023), times 24 hours/day times 365 days/year times 25 percent, or, 45,924,300 MWh.
To put that number into some sort of real item of equipment, that is the equivalent of 102,054 Geelong Big Batteries. (The Geelong BB has a stated storage capacity of 450 MWh.)
Clearly, these are enormous numbers, implying an enormous and unprecedented infrastructure requirement, the like of which has never been attempted in Australia, if indeed anywhere.

To seek to put the likely requirement into the context of the Eastern Australian grid, I thought to apply the analytical method described by Fekete *et al* (ibid.) to the Eastern Australian grid, where, instead of having to deduce likely electricity generation performance from regional wind behaviour and solar irradiance characteristics, as Fekete *et al* (ibid.) were, it seems, required to do, presumably because they did not have access to electricity performance data for their region, I could use directly the publicly-available, actual AEMO-supplied operational data, thus hopefully removing a significant source of uncertainty in the results from the analysis.

The first step was to sub-total, respectively, the hydro, wind farm, and solar farm data, from the AEMO's NEMWEB site at every 5-minute timepoint from the year 2023 Dispatch_SCADA data. I also collected the AEMO's Operational Demand and estimated Rooftop PV data for 2023. Each of these latter datasets is supplied at 30-minute timepoints, so I presumed to interpolate these values to the intermediate 5-minute timepoints. This approach allowed the use of the Fekete *et al*. methodology at every 5-minute timepoint.

Note: I did not include pumped-hydro in the hydro subtotals. At present, the operators of pumped-hydro plants are not constrained to purchase the pumping component from renewables' sources, so I have presumed that these sources provide what is essentially delayed fossil-fuel generation.

Methodology

Essentially, as I understand it, the Fekete *et al* (ibid.) methodology is applied in the following way:

(a) At the first, or earliest, timepoint in the series of interest, sum the renewables' subtotals (MW), subtract the corresponding demand (MW), the result is the deficit/surplus value at that timepoint.
(b) Convert this deficit/surplus value to MWh, noting that the time period is 5 minutes, and store it as the accumulated deficit/surplus.
(c) Repeat at the next timepoint, but for this, and successive timepoints, add the surplus/deficit from each previous timepoint. (Where it is understood that to "add" is an algebraic addition: a deficit carries a minus sign, so, "adding" a deficit value is essentially subtracting it).
(d) Continue in this fashion, recording the deficit/surplus value at each timepoint, and accumulating a total deficit/surplus value across the entire time span of the operational data.

This process, as Menton (1) observes, is very similar to the procedures used in normal financial profit and loss accounting. It is important to mention “deficits” because, at present, given that the renewables capacity on the Eastern Australian grid is still far short of being able to supply the present demand requirement, running this accumulation process with the current values of the renewables’ subtotals quickly results in a very large, negative value, that is, a large deficit, and hence a failure to supply sufficient generation to meet demand.

Before atempting the analysis, it is useful to attempt to place limits on the various likely values, where that is possible. For example, what might be the maximum possible value of the Required Storage, presuming the absolute worst-case conditions?
As the lower limit, the Required Storage cannot be less than zero.
Presumably, the absolute maximum value might be that required to meet one year’s Demand. (It may safely be presumed that having all forms of generation shut down for more than a year, which is what this value implies, would be deemed to be totally unacceptable.)
This value is readily determined: Average Demand (MW) times 24 hours times 365 days per year,
Inserting the value for Average Demand for calendar year 2023 in the equation:
20966.7409399774 MW times 24 times 365 MWh per year, resulting in a value for the upper limit of the maximum Required Storage of: 183,668,651 MWh (per year).
The range for the value of the Required Storage that would meet the variations in the Total Demand during one year, must lie somewhere within the range: [0 - 183,668,651] MWh.

To attempt to study what would be a likely 100 percent renewables configuration, I thought to run a number of different scenarios where, in each, in turn, I multiply the present wind and solar sub-totals by a positive number, starting at two, and then calculate the accumulation for the entire period (all 5-minute time points for 2023). If that multiplier produces a negative value for the running total of the accumulation – signifying a blackout - then increase that multiplier number and repeat the deficit/surplus calculation for the entire preiod. Repeat as necessary, increasing the multiplier for each scenario attempted until an overall surplus – no negative values in the running accumulation - results. To give some sort of context, the first, the “multiply-by-two” scenario is equivalent, to a first approximation, to doubling the installed wind and solar farm capacity. Unsurprisingly, this scenario also results in a large deficit, but it is not as large as the first case.

Note: in devising this strategy, I chose not to use multipliers on the Hydro and Rooftop PV subtotals for the following reasons:

i. given community attitudes regarding hydro dams, it is extremely unlikely that there will be a significant increase in hydro capacity in the foreseeable future,
ii. Rooftop PV capacity is already so large that it is straining grid stability limits in the middle of the day on almost every day, so it is extremely unlikely that even a doubling of capacity, for example, would continue to be actively encouraged by government policy. (Also, the figures provided by the AEMO for rooftop PV performance are an estimate only.)

In an earlier version of this work, I sought to commence the stepwise process with a Storage of zero, hoping to build it up over time to some sort of steady-state by starting with a sufficently large multiplier of the current renewables’ generation portfolio.

It soon became apparent that this methodology failed, in that a very large initial portfolio of renewables-only generation was required, resulting in the situation that, without reducing the multiplier over time, the amount in storage just kept increasing monotonically.

I thought to look at other possibilities, first doing a search of the hydrology literature on such as: "sizing resevoir storage to match demand". I found the following, potentially useful, link: "https://engineeringnotes.com/water-engineering-2/storage-resevoir/how-to-determine-capacity-of-a-storage-resevoir"
Two methods were described, the second being what is called the "Mass Curve method". What became clear here was that, in order to determine the required storage, in any run, the initial storage in the resevoir must be such that, on commencing the march through the timesteps during, for example, one calendar year of 5-minute timesteps,

A first step to a "Real" Battery Scenario

As it is of absolute importance to obtain the best estimate of the storage requirement, I thought to give due consideration to the very real losses in using battery storage. As a first step to including these very real losses in any practical battery storage configuration, I thought, from the outset, to consider the case of the "non-ideal" battery. In a recent email citing a paper at: https://www.windtaskforce.org/profiles/blogs/battery-system-capital-costs-losses-and-aging , Willem Post cites the following recommendation from Tesla, the manufacturer of the Hornsdale "Big Battery" in South Australia, that to maximise battery life:
"The 40% throughput is close to Tesla's recommendation of 60% maximum throughput, i.e., not charging above 80% full and not discharging below 20% full, to achieve a 15-y[ear] life, with normal aging". See also Post (7) for a comprehensive discussion of grid-scale battery losses.

In determining the accumulating storage then, I needed, at the very least, to ensure that at all times that:

- the resulting value for the Required Storage was set at 1.25 times the maximum accumulating storage, (thus ensuring that the accumulating storage never exceeded the battery manufacturer's requirement that 80 percent of the actual storage is never exceeded),
- at any time point, the amount of the storage component available to calculating the deficit/surplus was never such that the residual in the battery storage was permitted to fall below the stipulated 20 percent of the current Required Storage capacity.

What became clear from the use of the hydrologist's methods is that any iterative attempt at predicting the required storage must presume that the chosen storage is at full capacity at the commencement of the iteritive procedure.
Also, it seemed sensible to chose an initial value for the multiplier/s such that the average value of the total available renewables-supplied generation, (that is, wind plus solar far plus Rooftop PV plus hydro), is equal to, or just slightly greater than, the average demand for the period under consideration, here the calendar year 2023.

Results

In summary, after trialling many iterations using different multiplier values, I found that the multiplier 3.31 is required, with a storage requirement equivalent to 24 days of average demand. This requirement, remembering that the total storage required is 1.25 times the actual storage required to balance the demand, (given that the storage may be filled to no more than 80 percent of capacity), is 12,077,136 MWh. This then is the storage required to be able to balance demand at all times throughout calendar year 2023.

Giving some sort of context to what this bare number means -
it corresponds to 26,842 Geelong Big Batteries, or, 93,633 Hornsdale Big Batteries.

It is useful to compare the latter with an estimate by Paul McArdle, which I understand is some 70,000 -80,000 Hornsdale Big Batteries. But I further understand that Mr McArdle presumed, as a reasonable first approximation to obtaining a ball-park figure, that the batteries are “ideal”: he did not attempt to address such practicalities as, available storage vs the required storage, transmission losses, two-way trip losses, redundancy required based on battery failure frequency, etc.

The inclusion of any of these many other very real sources of energy losses in the round-trip from generation of surplus through to battery storage to subsequent supply to meet the demand at those times when there is a deficit in the renewables’ output merely increases the required battery storage.

There are several, extremely serious, implications resulting from these findings.

1. Impact on CO2 emissions reductions calculations

With a requirement of some 30,000 “Big Batteries”, there is a clear requirement on the authorities that they determine an accurate estimate of the CO2 emissions resulting from the mining, milling, refining, manufacture of the colossal amounts of materials required for the production, transport and site preparation for this huge number of “Big Batteries” required. That the resulting CO2 emissions might occur in countries outside of Australia does not excuse the requirement for the necessary accounting: any resulting CO2 emissions are released into the same atmosphere.

2. Recycling Burden

Any realistic estimate gives a battery lifetime of some 10-15 years at most. How will it be possible to develop efficient, both in materials and energy efficiency, and effective, recycling and re-use regimes to process such horrendous quantities of waste battery materials? Uttering pious words that “a circular economy will be developed” with no thought as to the detail, as NSW Planning, for example, is doing at the present time, is merely a strategy of leaving the resolution of these horrendous problems to future generations. For a realistic estimate as to the extent of the waste disposal issue, see Mills (4).

3. Environmental Impacts

Given that the Geelong “Big Battery” requires a land-take that is at least equivalent to that of one of Victoria’s Australian Rules Football Stadiums, there is an urgent need to address the likely environmental impacts of what is, by any estimation, a huge land-take requirement. Also worth emphasising is that there can be no argument as to land-use of the land-take required for a BESS. These behmouths occupy the entirety of the land on which they are constructed. There is also the land take required for the enormous amount of overburden and waste rock generated by the mining and milling operations required in the winning of the necessary materials required for the batteries. Again, see Mills (4).

4. Fire Risk

At present, various EIS reports for BESS proposals usually emphasise the risk of fire damage TO the proposed BESS facility from bushfires. There seems to be no account taken of the likely damage to the vicinity of any BESS resulting from fires that start within the facility itself. That there is a very real risk of fires starting in these facilities during, say, a fast-charging scenario, seems at present to be almost totally ignored in these proposals. That there is such a very real risk is indicated by the high rate of fires occurring in domestic premises resulting from the presence of

active, in-use batteries of the same Lithium-Ion technology. To think that such a level of risk can be ignored when of the order of 30,000 Geelong Big Batteries is the requirement, is simply fanciful.

5. National Security Concerns

As each of these "Big Battery" installations takes up a huge area, poses a significant fire risk due to the Lithium-ion technology used, and that there will be potentially so many of them, these big batteries constitute a very real National Security risk. It is not inconceivable that a determined aggressor, using something as simple as a concerted drone attack, could set out to destroy these installations, resulting in Eastern Australia a firestorm that would make, for example, the fire-bombing of Dresden during WWII, look like a village bonfire in comparison. That a grid-wide blackout resulting in the total paralysis nationally for some weeks would be the inevitable result of such an attack seems to be an almost incidental consequence. There is also the very real risk that a cyber attack on any potential "back-door", built in by foreign suppliers, could be used to shut down the batteries instantly, at any time, producing widespread blackouts. Why have governments seemingly given no thought to the likelihood of such a scenario? See, for example, Prins *et al* (5) for a UK perspective of the likely devastating impacts on National Security that so-called "Net Zero" policies are already causing and increasingly will have in Britain. For the Australian context and perspective, the excellent paper by Wilson (6) is recommended unreservedly. This paper not only discusses the, entirely negative, impacts of the present policies supporting renewables in Australia, it also provides a foundational basis for the meaning of Energy Security.

Conclusions

This initial analysis indicates that something of the order of the equivalent of some 30,000 Geelong "Big Batteries" will be required to even begin to address the storage requirements of a 100-percent Renewables scenario for the Eastern Australian grid at present electricity Demand requirements. This figure of 30,000 does NOT address the round-trip losses necessarily resulting from the generation, storage, and later release of electrical energy from that storage. Accounting for these very real losses would merely increase the required battery storage figure.

This number of "Big Batteries" resulting from this very preliminary stage of my investigation indicates the requirement for some very serious investigative work, as a matter of extreme urgency, by those in authority who are presently forging ahead with the "100-percent Renewables plus Battery Storage" policies.

It is instructive, I think, to quote from the paper of Fekete *et al* (2), where they summarise the outcome of their extensive literature search on the topic of the need for the requirement for backup and/or storage to support intermittent renewable generation:

"*Perhaps the most disturbing statement was "Many studies suggest that large (>50%) CO2 emission reductions will not be possible without carbon capture and sequestration (CCS)" (Loftus et al., 2015; Craig et al., 2017) citing the "Deep Decarbonization Project" (https://ddpinitiative.org). If this is a prevailing sentiment among researchers studying the viability of transitioning the energy sector to renewables, one would wish that they were louder and clearer several decades and trillions of dollar investments ago and informed the public that renewables are not sustainable since they will always require the assistance of fossil fuels.*"

Similarly, as far as I am able to determine, no relevant Australian government authority has performed and made publicly available any analysis that provides any indication whatsoever, in a

readily understandable way, such as how many “Big Batteries” will be required in Eastern Australia, how they will be sourced and paid for, what are the energy requirements for their production, the waste disposal and CO2 emissions resulting therefrom, where these batteries will be sited, and, given their relatively short service life, how they will be recycled and re-used.

It beggars belief that none of this absolutely necessary preliminary, investigative work seems to have been addressed by the relevant Australian Planning Authorities.

Pursuing this grand dream of “Renewable Energy Superpower” for Australia is, to use a term of Mark Mills, “an exercise in magical thinking”. Put simply, it is time that this nonsense ceased.

Paul Miskelly
4 March 2024
[redacted]

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From: [redacted]
To: Do-Not-Reply IPCN Submissions Mailbox; IPCN Enquiries Mailbox
Subject: Spicers Creek Wind + BESS References
Date: Friday, 6 September 2024 5:24:47 PM

Dear IPCN,
Please add these Spicers Creek Wind + BESS Comments & References to my Submission
Thank you

Lynette LaBlack

False Claims of Powering 370,000 Homes!!
No credible Electrical Engineer adhering to their Code of Conduct would approve such obvious deception!

Wind Generation only has an average Capacity Factor of 30% & AEMO's long term data shows Solar's average Capacity Factor is actually 17%!
"Wind only blows two days out of five, …
If you only had to go to school two days out of five, you wouldn't get very far at school, but we are are designing an energy school which we are just not going to pass!" (Adi Paterson)

Wind has lots of periods of absolutely zero output.
It has no chance of supplying ANY homes during those periods, and neither will any other wind works at those times during wind droughts.
Extreme variability is a characteristic of Wind generation.

The Grid is not like a Bank Account!
It's not possible to borrow now and pay back later. Supply must match demand at all times, second-by-second, 24/7, 365 days per year. That means that the grid can't work with average outputs. If a wind or solar generator drops its bundle, as they do often do, and there is nothing available to instantaneously fill the gap, the grid goes down, into prolonged blackout. So, intermittent generation is both pointless AND extremely dangerous.

Electrical Engineer Paul Miskelly's initial Battery Storage findings for the Eastern Grid show that Squadron's Spicers Creek Wind + BESS plan would require
YET ANOTHER LAND GRAB - with further calculations revealing at least 3x MORE FILTHY, TOXIC BESS on our limited, irreplaceable, Agricultural Land & even more Wind Turbine Monstrosities would be required than this plan includes - in order to meet this claim.
Thus, the EIS must be resubmitted with accurate calculations according to approx number of households being powered.

Indeed it is clear, the NSW DPHI's Fake Green 'Renewable' Infrastructure Roadmap has a filthy, contaminating, anti-Agriculture, anti-Rural, Deindustrialisation, De-population, ideologically Woke agenda that is NOT FOR THE GREATER GOOD - defying ALL the Principles of Ecological Sustainable Development & the Paris Agreement.

Paris Agreement
Taking over farmland to build facilities to produce intermittent energy is a violation of Article 2, Section 1(b) of the Paris Agreement (2015).

Article 2 1(b) of the 2015 Paris Agreement states:
"This Agreement... aims to strengthen the global response to the threat of climate change, in the context of sustainable development and efforts to eradicate poverty, including by:
"(b) Increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development, in a manner that does not threaten food production"; See:
https://unfccc.int/files/essential_background/convention/application/pdf/english_paris_agreement.pdf .
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****Biodiversity Offsets are Nothing but a Trading Market** with no real transparency or demonstrative environmental benefits.
https://www.crikey.com.au/2023/05/18/biodiversity-offsets-scheme-crisis/
Biodiversity offsets are arguably one of the most damaging environmental policies in a smorgasbord of bad policies, according to the environmental community…..
'Offsetting has become a trading market with no real transparency or demonstrative environmental benefits.
Proponents self-refer projects, both at the NSW Government and Federal levels.'

There is No Social Licence
Squadron have been prioritised through cosy, questionable deals at all levels of Government through their political donations, by splashing money around in communities feigning environmental/energy security/affordability benefits & even weaselling their way into schools to indoctrinate the children with false claims of sustainability, environmental protection & Intergenerational Equity. However, Squadron have never genuinely or transparently consulted with the community on an honest, factual basis.

Community Impact Survey: April-May 2024 – Property Rights Australia
https://propertyrightsaustralia.org.au/community-impact-survey-april-may-2024/

National Koala Recovery Plan is clear, unequivocal and must be applied to development proposals undergoing Federal Environmental Assessment.
Page 80 of the National Koala Recovery Plan states that the following activities should be avoided:
• clearing of habitat used by Koalas for feeding and resting
• reducing connectivity between patches of habitat used by Koalas for feeding, resting, commuting and dispersing (either by clearing of vegetation or by the erection of barriers to passage)
• clearing of habitat used by Koalas during extreme events (heat waves, drought/fire refuge)
• activities that will expose Koalas to additional threats (e.g. dogs, cars) in places where Koalas must use the ground to move between resting and feeding trees.
The Federal Minister for Environment must STOP approving 'renewable' projects that are

inconsistent with the National Koala Recovery Plan.
Halt further destruction of endangered koala habitat. You can download a copy of the Guide here. https://tinyurl.com/5y9ddm24

To read the National Koala Recovery Plan, see National Recovery Plan for the Koala Phascolarctos cinereus (combined populations of Queensland, New South Wales and the Australian Capital Territory) (dcceew.gov.au)

From: [redacted]
To: DO NOT REPLY IPCN Submissions Mailbox; IPCN Enquiries Ma lbox
Subject: IPCN Spicers Creek Wind Re erence - Fwd: WorkSafe Alert: Blade Throw Inc dent - Golden Plains W nd Farm
Date: Friday 6 September 2024 5:01:48 PM
Attachments: image001.png
image002.png
image003.png
image004.png

Please include my Reference for Spicers Creek
Thank you

Lynette LaBlack

Date: 5 September 2024 at 1 33 21 pm AEST
Subject: FW: RE: WorkSafe Alert: Blade Throw Incident - Golden Plains Wind Farm

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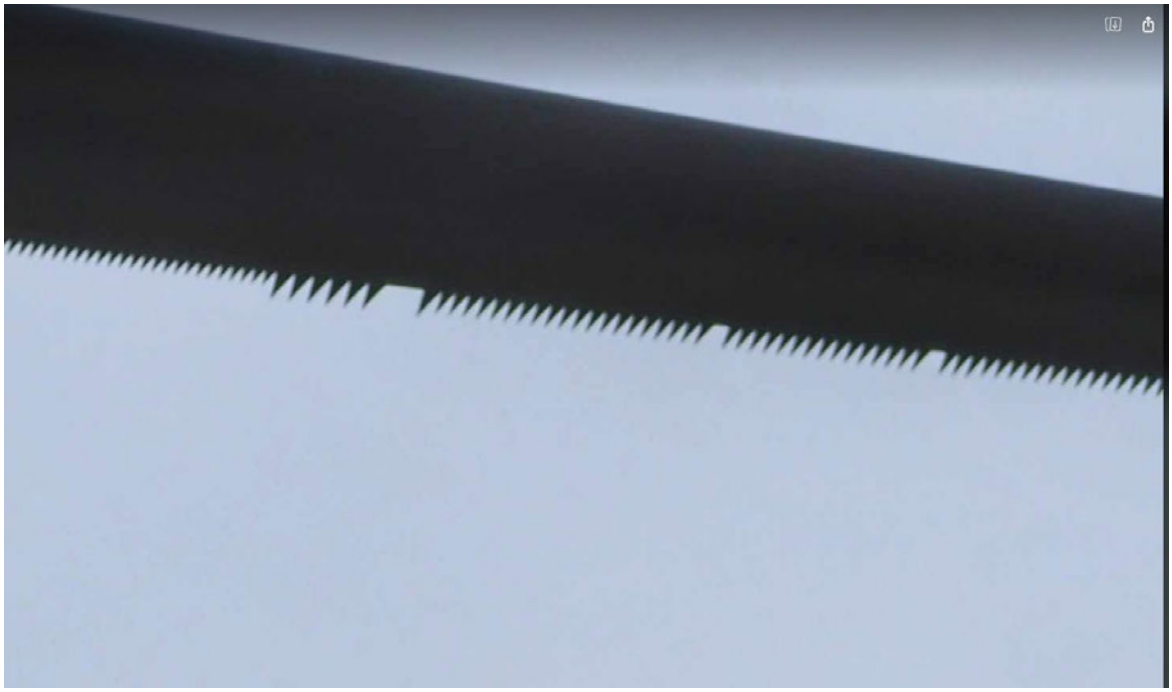
Sent: Thursday 5 September 2024 1:25 PM
To [redacted]
Cc [redacted]
Subject: RE: WorkSafe Alert: Blade Throw Incident – Golden Plains Wind Farm

05 September 2024

WorkSafe Senior Inspector
WorkSafe Victoria.
[redacted]
Geelong VIC 3220

Attention WorkSafe Victoria
RE: WorkSafe Alert: Blade Throw Incident – Golden Plains Wind Farm
I wish to alert WorkSafe Victoria to several blade throw incidents at Golden Plains Wind Farm Stage 1 East Section.
I believe the operations of the wind farm pose a serious risk to public safety.
I understand that the wind turbines have only just been installed (2 weeks) and already some blades are throwing components.
The photos below show the sharp serrated components projected into the environment near public roads and onto neighbour's properties.
I believe the operator of the Golden Plains has contravened the OH&S Act 2004 by putting the health and safety of members of the public at risk s2(c) and by failing to prevent the release from height of any plant substance or thing s37(2)(d).
I also believe the design of the blades is not safe s27 the manufacturer has produced unsafe plant s29 the suppliers have supplied unsafe plant s30 and the installers could have potentially installed the turbines knowing or reasonably knowing that the components were unsafe to install s31.
Serrated wind turbine blades are installed close to homes allegedly as a means of diminishing special audible noise.
This makes these turbines particularly dangerous because they are located close to residences and public roads.
I ask that you investigate this wind farm as a serious risk to public safety.



The Missing Whole-of-System Cost Model in the AEMO 2024 ISP

The Real Cost of the NEM Transition

A Report by Independent Engineers, Scientists and Professionals 31 July 2024

Summary

The government has not provided a true estimate of cost for AEMO's plan to transition the NEM to intermittent wind & solar, yet it claims adding reliable nuclear and gas power generation is too costly.

AEMO published its 2024 Integrated System Plan (ISP) in June. It contains only one paragraph[1] to indicate annualised capital costs as either $122 billion present value or $142 billion upfront present value, not including "commissioned, committed or anticipated projects, consumer energy resources, or distribution network upgrades". This unrealistic, poorly defined estimate needs much clarification.

The whole-of-system analysis in this report, draws on 2024 ISP capacities for generation and storages and CSIRO 2024 GenCost cost factors[2], and shows total capital costs for the 2024 ISP over one trillion dollars for a system unable to deliver reliable power[3]. This is about twice the capital costs of four alternative grid designs using gas, coal and nuclear. When fuel costs for gas and coal are considered, nuclear plus gas designs are likely to be the least costly of all options.

A More Comprehensive Capital Cost Analysis

The whole-of-system cost charts in Figure 1 below provide both total capital and present value for a more comprehensive model of the planned NEM grid transition, showing a present value more than four times higher than the 2024 ISP figures. Estimates include both CSIRO's somewhat optimistic declining future capital cost factors and its flat 2024 cost factors to reflect uncertainties in forecasting. The Baseline 2024 ISP estimates include all generation and storage costs including consumer energy resources, transmission lines, distribution network upgrades and other support costs to reflect the total costs to the economy.

Extending the Baseline ISP with additional gas or storage to overcome the major unreliability of the ISP's design incurs extra costs and makes clear that 'firmed renewables with batteries' is unaffordable. Four alternative designs using gas, coal and nuclear provide comparisons. The results, based on AEMO and CSIRO data, show that the present transition plan is the most costly approach by a large margin.

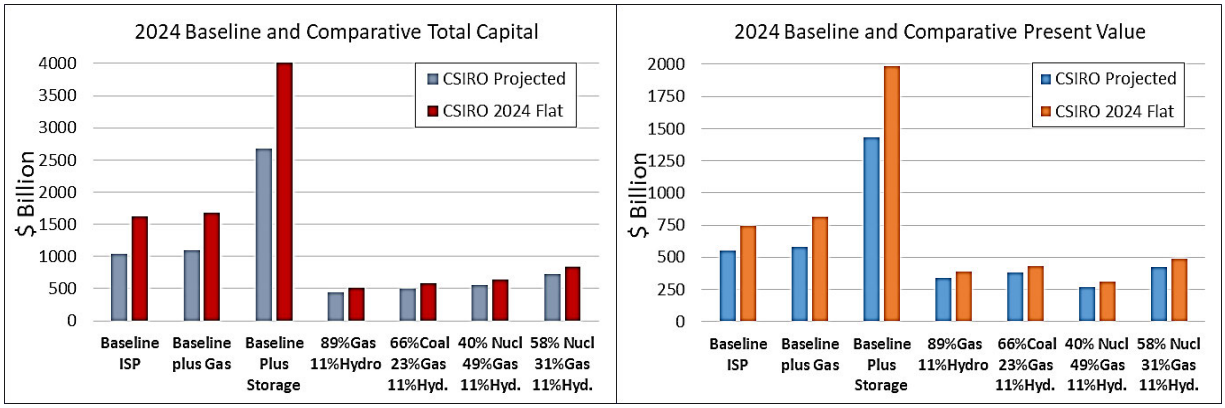


Figure 1 AEMO 2024 ISP Baseline and Comparative Whole-of-System Capital Costs in 2024 dollars

[1] AEMO 2024 Integrated System Plan Page 74

[2] ISP Figures 2 and 20; GenCost Section 4.3;

[3] The 2024 AEMO ISP Will Not Deliver Reliable Power, Independent Engineers, Scientists and Professionals, 19 July 2024

Conclusions

1. Our analysis uses a proper high reliability systems engineering approach to assess a 24-hour cycle under worst-case conditions of maximum demand, wind and solar droughts and the need for a minimum 20% dispatchable reserve margin (DRM)[4] to guard against facility outages. A whole-of-system 'Baseline' power budget using 2024 ISP capacities shows the DRM at minus 19% by 2030 and falling much lower by 2040. Widespread and frequent blackouts are certain.
2. Adding battery storages and extra wind & solar to recharge them ('firmed renewables') to achieve 20% DRM overnight results in completely unaffordable total capital costs of several trillion dollars and provides storage for just one 16-hour overnight period. And it still leaves daytime DRM massively negative. Battery storage capacity for one week requires $5-7 trillion. Replacements every decade would cost upwards of $3.5 trillion. This is simply not a viable path.
3. Alternatively, adding gas to existing hydro to essentially duplicate the grid when wind and solar are in drought requires a not-insignificant additional capital cost of $30-60 billion. It would provide continuous backup capability, day and night, but its low utilisation rates would make its economics unattractive for investors.
4. The four alternative grid designs, 89% gas plus hydro, 66% coal plus gas & hydro, 40% nuclear plus gas & hydro, and 58% nuclear plus gas & hydro, provide reliable 24/7 power with less than about half the capital costs. The nuclear options, with lifetimes up to 80 years lasting far beyond 2050 compared with wind and solar, minimise costs for gas and probably reduce emissions to less than the Baseline ISP, once whole-of-life emissions for mining, processing and manufacturing of almost 900 times more material is taken into account. All four alternatives impose a tiny environmental footprint compared to the 1.6 million hectares for Baseline ISP wind & solar.
5. It is clear that contrary to continual claims that wind & solar are the cheapest form of electricity generation, it is in fact the most expensive when proper whole-of-system estimates are made. The present plan for transition of the NEM is disastrous in terms of reliability, cost to the economy and in particular to the environment, without being a path to the lowest emissions.
6. The alternative cost models assume wind & solar installations taper off after 2030. At additional cost, a small level of wind & solar (15-20%) can be maintained in the long term grid design.

Recommendations

1. A thorough investigation by independent authorities and immediate implementation of effective accountability mechanisms must be implemented to counter the complete failure of public energy policy regarding reliability and energy costs based on misleading information from public institutions.
2. The AEMO ISP and CSIRO GenCost documents must be subjected to higher genuine standards for truthfulness, completeness and professional engineering processes in place of slavishly following flawed existing policies.
3. Embedding wind & solar targets into the National Electricity Rules must be halted to end the replacement of power systems engineers by politicians and government bureaucrats selecting technological design solutions without proper engineering qualifications.
4. Independent expertise for frequent technical and financial review must be employed in new accountability processes at multiple levels and points in time with a mandate to examine and openly examine a wide range of technological approaches.
5. The AEMO 2024 ISP must be discarded and an immediate start be made on a new energy NEM plan considering all power system technologies.

[4] DRM is the sum of baseload power over maximum demand. In 2019 the DRM was plus 20% (AER)

Independent Engineers, Scientists and Professionals

This report has been prepared and supported by independent engineers, scientists and professionals who have many decades of relevant experience and requisite qualifications without any monetary conditions, employment or conflicting interests.

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Appendices

Appendix A Estimation Methodology

A. The AEMO 2024 ISP provides the data (Figures 2 and 20) regarding total NEM capacities of all generation (GW) and energy storages (GWh) in 2024-25, 2029-30, 2039-40 and 2049-30.

B. The CSIRO 2024 GenCost report (Section 4.3) provides projected capital cost factor data (in 2024 dollars) for various energy technologies. This data excludes of all subsidies, offsets and tax breaks, which nevertheless have to be paid by all consumers in one form or another.

C. Since the projected cost factors are largely declining and are based on forecasts which contains substantial uncertainties, a second estimate using flat CSIRO 2024 cost factors provides higher cost estimates reflecting potential upsides.

D. A power budget for each grid design model is based on a 24-hour cycle broken into 8 hours centred on midday when solar is available and 16 hours overnight when solar is essentially zero. The DRM is the surplus/deficit of the sum of baseload power over peak demand in each of the 8 and 16 hour periods. Stored energy is used only during overnight periods to contribute to dispatchable power; recharging takes place in daytime when solar is expected to be available but is also subject to weather conditions causing low outputs.

E. Except for the Baseline 2024 ISP model using only the capacities specified in the ISP, the capacity data for other models is adjusted to achieve a DRM in each period and year of at least plus 20% to ensure reliability in the face of facility outages.

F. The capital costs of Snowy 2.0 and Borumba pumped hydro facilities are taken from current government announcements. Costs of passive storages behind the meter are included because they lower demand while making no direct input to the grid.

G. The capital costs prior to 2024-25 are estimated using the 2024-25 ISP capacities and CSIRO 2024 cost factors.

H. The capital costs for each of three periods, 2024-30, 2030-40 and 2040-50 are estimated as the sum of the various generation capacities installed in each period plus the replacement for past installations that have exceeded lifetimes valued by the cost assumption for the mid-point of each period.

I. The modelled lifetimes are 10 years for batteries, 20 years for wind and solar, 30 years for gas, 50 years for coal and 80 years for pumped hydro and nuclear.

J. Costs for existing hydro facilities were not included in any models due to lack of data. Costs for existing coal plants were not included since they are near end-of-life and being retired.

K. The present value estimate is derived by applying a 7% per annum pre-tax, real discount rate applied to capital expressed in 2024 dollars in three periods: 2024-30, 2031-40 and 2041-50 at mid points.

L. The demand side participation (DSP) capacity derived by the 2024 ISP is not used since it is clearly not a source of power but rather a reduction in demand brought about by time-of-use tariffs and central controls to impose rationing on consumers. i.e. this misguided policy attempts to make customers serve a deficient grid design rather than the grid delivering power to consumers as and when required.

M. NEM peak demand is defined by AEMO's 2023 ESOO report for 10% Probability of Exceedance (POE) loads based on detailed forecasting. Note: peak demand will exceed this value about 36 days per year, reinforcing the need for a healthy DRM.

N. The AEMO ISP's use of daily demand profiles to demonstrate grid performance is rejected for use in high reliability system design, which requires worst case conditions. The advent of EV recharging

overnight will flatten future demand profiles (according to the 2022 ISP and supported by surveys which show most EV owners prefer/require overnight charging). Incentives (punishing tariffs) to recharge during daytime when solar power is often in surplus is highly problematic and unlikely to gain social licence. Worst case system design must use a flat peak demand. The 10% POE peak demand definition is further support for a conservative approach to worst case conditions.

O. Other costs applied to all models include transmission lines, low voltage distribution networks, grid stabilisation facilities, land acquisition for transmission lines (land costs are included in Gencost cost factors for generators), and an allowance for disposal, recycling and remediation.

P. While the accuracy of this whole-of-system cost estimation methodology is not precise, neither are all future model projections, which inevitably contain considerable uncertainty. However, we apply the same methodology to all seven case models, thus making relative accuracy among them better than absolute accuracy.

Appendix B Cost Model Notes

Baseline 20024 ISP Model Case

The Baseline ISP 2024 grid design contains severe deficiencies in both baseload power and energy storage capacity causing the DRM by 2030 to be minus 10% instead the desired plus 20% – a shortage of 30% in dispatchable power. For 2040 and 2050, the shortages exceed 60%.

Such a design could only be based on hopes that weather conditions will always enable 'some power' to be produced in 'some parts' of the grid to be delivered to the rest of the NEM by an extensive network of transmission lines. However, AEMO's historical power supply data[5] tells a different story of frequent periods, often on windless nights, when NEM available solar and wind power capacity factors fall close to zero. Some drought periods can last for more than three days and repeated episodes can often occur with only short intervals in between. Prolonged months-long spells can cause average renewable capacity factors well below expectations.

The AEMO 2024 ISP is a deeply flawed grid design which cannot deliver reliable power – blackouts are inevitable.

The cost of transmission network upgrades is based on the 2024 ISP plan to install 10,000 km of new transmission lines. Costs are estimated to be $1.3 to 2.0 million per km and subject to escalation. Significantly less transmission line costs are required for the four alternative cases.

The 2024 ISP "…assumes upgrades and other investments needed to enable distribution networks….will occur through other mechanisms…". This study makes an estimate for distribution network upgrade costs of about 5-10 thousand dollars per house based on expert opinion[6]. Much of this cost becomes unnecessary for the four alternative cases.

Stabilisation facilities such as synchronous condensers (costing $10-20 million each) will increasingly be required as baseload plants with rotating machinery are retired in favour of systems using electronic inverters. However, as with the transmission and distribution network costs, much of this is unnecessary for the four alternative cases.

Land acquisition costs for transmission lines are estimated from $200K-230K per km and are a subject of considerable debate in project approval hearings, where social licence is in short supply.

There is little information on projected costs for disposal, recycling and land remediation as a result of very substantial materials from expired wind turbines, solar panels and batteries. A nominal figure of $1-2 billion per year in future is used as large volumes of required replacements build up in the Baseline ISP case.

Baseline Plus Additional Gas Generation Case

The 2024 ISP phases out coal generation by 2037 and replaces CCGT (merit) gas plants with OCGT (flex) gas plants (designed to some day burn hydrogen, if or when available). To restore a plus 20% DRM, this Case adds much additional gas generation, starting in 2030, to almost quadruple the planned level by 2050. The daytime period is most critical since the minimal 2024 ISP storages will be depleted overnight and are primarily intended to handle short peak demands and transients.

[5] Independent Engineers , Scientists & Professionals, Submission to AEMO CSIRO Draft 2024 ISP GenCost 9Feb2024, P18-20

[6] Electric Power Consulting Submission on the 2024 Draft AEMO Integrated System Plan

Maximum gas generation, hydro and biomass baseload provide a 20% reserve margin indefinitely during daytimes which rises well above 20% combined with storages at night. At night, gas generation would probably be lowered to reduce emissions but also at the cost of reducing the capacity factors of gas plants and their economic efficiency.

One implication of this case is the need to assure domestic gas supplies and deliver infrastructure are sufficient.

Costs for transmission lines and other elements remain as for the baseline case.

Table 1 provides a summary of key power system demand and DRM.

	2029-30		2039-40		2049-50	
	Night	Day	Night	Day	Night	Day
	GW	GW	GW	GW	GW	GW
Peak Demand	44.3	44.3	52.3	52.3	55.2	55.2
Baseload Power	53.2	53.2	62.5	62.5	66.5	66.5
Storage Power	5.9		10.8		16.2	
Dispatchable Reserve Margin %	33.3	20.0	40.1	19.5	49.7	20.5

Table 1 Baseline Plus Gas Generation Case

Baseline Plus Additional Storage and Wind & Solar Case

This Case leaves gas generation the same as in the Baseline Case and retires coal generation in the 2030s. A massive addition of extra utility battery storage of almost six times the level in the 2024 ISP by 2050, is required to achieve a DRM above 20% to protect against a worst case wind & solar drought on windless nights. And this also requires a corresponding massive increase in wind & solar to recharge them.

Even this large storage capacity would only cover a single night under worst case conditions.

The capital cost is estimated at $2.6-3.9 trillion. Since the marginal cost of adding batteries is $485 billion per day, a grid system with a seven day battery storage capacity would have a total capital cost of $5-7 trillion, even without adding more renewable recharge capability. The 10 year life of batteries also incurs massive ongoing replacement costs on the order of $3.5 trillion per decade.

Moreover, two further interrelated problems need addressing. The DRM during daytime – absent storage outputs – is disastrously below minus 50% so that there is no means to recharge the large battery capacity in the event of a wind & solar drought.

The reality is a reliance on a minimum level of at least 10% capacity factor for all wind and solar generation. This is not a real solution for DRM since wind & solar are not dispatchable.

In view of these estimates, this Case, widely touted as “firmed wind & solar with big batteries”, is simply neither technically viable nor economically affordable.

An 89% Gas Powered Grid Case

This Case follows on from the Baseline plus added gas Case. Capital cost is minimised by keeping the same gas generation, which together with hydro can indefinitely provide the plus 20% DRM both night and day. By halting further rollout of both wind & solar and battery storage after 2030, major capital cost savings are obtained as a trade-off against a lower reduction of operating emissions.

However, it should be noted that gas generation has about half the emissions of the present coal-based grid. The Case also avoids the substantial emissions involved in mining, processing and manufacturing of

all of the materials required for wind turbines, solar panels and batteries and their frequent replacements. The amount of such materials has been estimated at about 700-900 times the materials needed for a typical baseload power plant. Therefore, the net increase in emissions of this Case may not be substantial.

Further, the very small environmental footprint of this alternative is negligible compared to wind and solar farms and is therefore another factor for consideration.

Another significant benefit is that gas and hydro facilities will run at higher capacity factors providing more attractive returns for investors, thus providing greater market stability and improving national productivity.

A detailed analysis is needed of the trade-off (Trade Off Analysis) in this Case between the lower capital costs and the postulated emissions reductions offset by the increased Renewable Materials Costs and other environmental benefits.

A 66/23% Coal/Gas Grid Case

This Case is a continuation of using coal generation and its expansion. Instead of retiring existing coal plants, they are replaced and expanded to double the present capacity by 2050. As for the previous Case, wind & solar and storage rollouts are halted after 2030.

While limited emission reductions are evident in this Case, potential exists for using advanced coal plant technology to improve efficiency. Carbon capture is not part of this model. However, benefits include the avoidance of renewable facility costs, a negligible environmental footprint and reduction of substantial emissions from mining, processing and manufacture of wind & solar.

As for the 89% Gas Powered grid Case, another significant benefit is that coal, gas and hydro facilities will run at higher capacity factors providing more attractive returns for investors, thus providing greater market stability and improving national productivity.

Again, a Trade-off Analysis is required for the Case.

A 40/49% Nuclear/Gas Grid Case

For this alternative, the GenCost 2024 cost assumption for large scale nuclear power plants is used. Ongoing product development of SMR systems is proceeding briskly at multiple companies including Rolls Royce (the manufacturer of the planned AUKUS submarine reactors). SMRs offer a vision of production line manufacturing efficiencies for standard products, which will be approved by multiple countries as are commercial jetliners, thus simplifying and shortening the approval process. It will be several years before SMR products are sufficiently mature to be able to assess their true cost factors. This has not prevented many countries from already placing orders for SMRs.

Nuclear fission power plant technologies have a 70 year history of increasing safety, maturity, minimal environmental impact and zero operating emissions, which provides an attractive option.

This Case posits a blend of gas (for fast reaction to load variations and grid transients) and nuclear power generation. The 2024 GenCost 2024 capital cost assumption for large scale nuclear plants can be favourably compared with other generation technologies when adjusted for estimated lifetimes as indicated in Table 2.

From this comparison, a nuclear power plant is effectively much more competitive than the GenCost 2024 results would indicate.

	Nuclear	Gas	Solar	Onshore Wind	Offshore Wind
Lifetime Years	80	30	20	20	20
GenCost 2024 Cost Assumption $B/GW	8.5	1.3	1.4	3.0	6.7
Lifetime Adjusted Nuclear Cost Assumption $B/GW	8.5	3.2	2.1	2.1	2.1

Table 2 Equivalent Nuclear Capital Cost Factor Adjusted for Lifetime

In this Case, rollout of wind & solar and storages are halted after 2030 because nuclear and gas baseload generation can run continuously, thus avoiding further capital costs. As its capital cost is much higher than gas plants, nuclear plant should be run continuously at high utilisation rates to achieve the lowest unit cost since the fuel cost per KWh is much cheaper than gas. The gas component provides an ability to quickly ramp up and down to compensate for variable load demands.

Since nuclear plant installation is unlikely to commence before mid-2030s, it is vital that new gas generation facilities be launched as soon as possible supported by expansion of domestic gas production infrastructure on the east coast. Gas is a critical component of all viable future electricity grid options. There should be no equivocation, unless it is preferred to maintain coal generation indefinitely. Gas will be the bridge to and ongoing support to reliable nuclear generation.

If it is desired to maintain some level of wind & solar in the grid, the substantial gas generation in this Case provides plenty of scope for backing up wind & solar. However, this will lower the capacity factors of the gas plants thus increasing their unit costs and the wind & solar will incur additional capital costs and increased emissions from mining, processing and manufacture of wind & solar.

Again, a Trade-off Analysis is needed for this Case.

A 58/31% Nuclear/Gas Grid Case

This Case increases nuclear power generation while reducing gas and maintaining hydro outputs. The increased capital cost relative to the previous case of 40% nuclear needs to be traded off against the potential for emissions reductions.

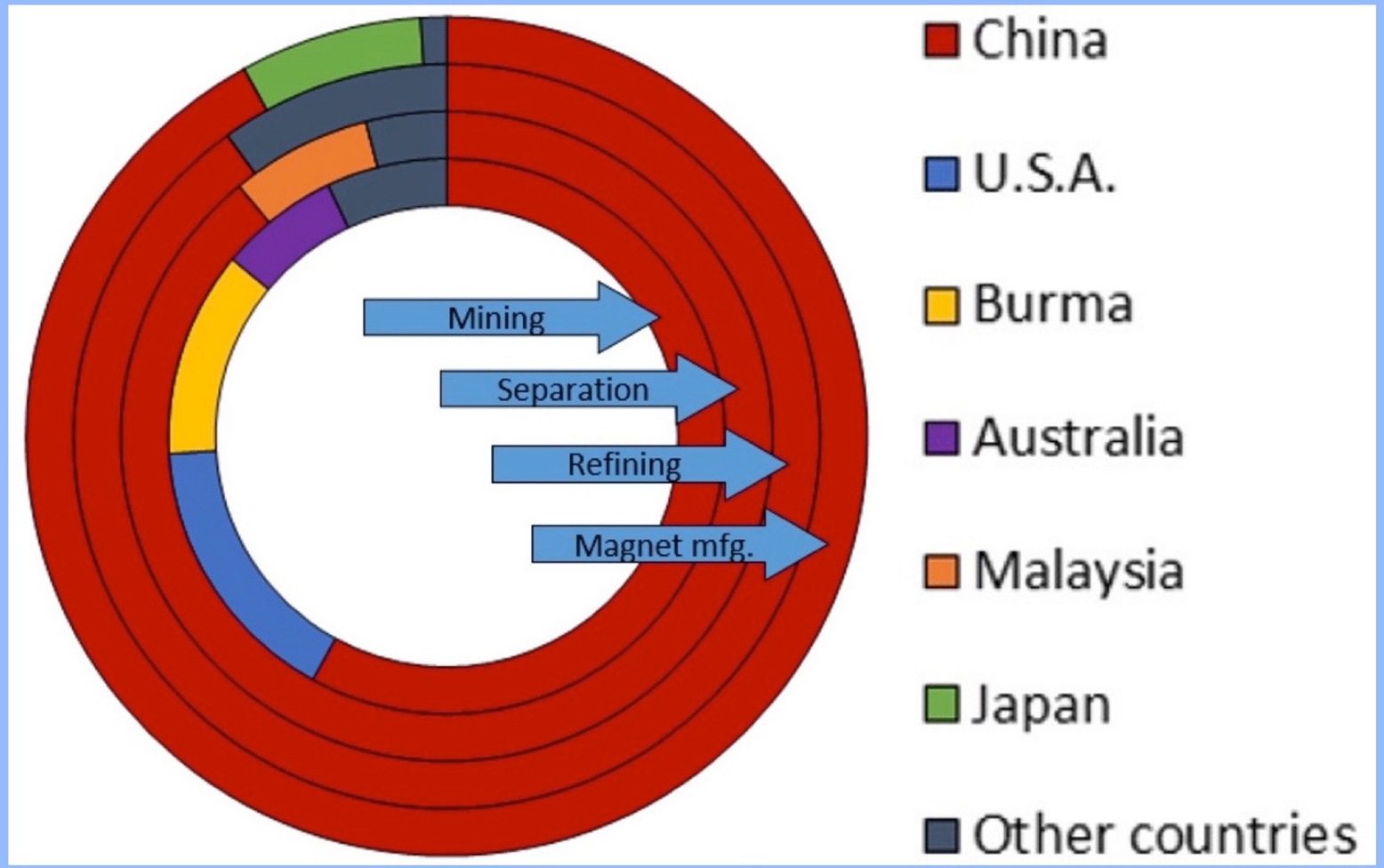
PARIS AGREEMENT

Article 2, Section 1(b) of the Paris Agreement

2015 states:

"(b) Increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development, IN A MANNER THAT DOES NOT THREATEN FOOD PRODUCTION."

China Controls >90% Of Global NdFeB Magnet Market & 100% of Dy & Tb



Source: https://www.energy.gov/sites/default/files/2022-02/Neodymium%20Magnets%20Supply%20Chain%20Report%20-%20Final.pdf .

From: [redacted]
To: DO NOT REPLY IPCN Submissions Mailbox; IPCN Enquiries Mailbox
Subject: Squadrons Spicers Creek Wind Electricty Generating Works BESS (SSD-41134610) Objection Submission
Date: Friday 6 September 2024 4:57:00 PM
Attachments: unknown.png
IMG_7585.png

Dear IPCN
Please find my Objection to Spicers Creek Wind Electricity Generating Works + BESS.
My submission is fine to be published as anonymous.
Thank you.

From Lynette LaBlack
[redacted]

Submission of Objection to 'Spicers Creek Wind Farm, up to 117 wind turbines, with energy storage and associated infrastructure'
SSD-41134610
Located at Elong Elong Goolma Gollan Dunedoo
Applicant: Spicers Creek Wind Farm Pty Ltd.

IPCN Commissioner (Panel Chair)
Professor Neal Menzies
Other Commissioners
Suellen Fitzgerald, Michael Wright

FALSE & MISLEADING INFORMATION
Squadron s Spicers Creek Wind Electricity Generating Works + BESS (SSD-41134610)is another disingenuous, destructive part of the Fake Green RenewaBULL Wind/Solar Energy Poverty Grift & Ponzi Scheme/Scam that the Independent Planning Commission must reject in order to abide by their own advice of "Providing false or misleading information in connection with a planning matter is a criminal offence under the Environmental Planning and Assessment Act 1979."

Whilst NSW DPHI state
"The key assessment considerations are energy security, biodiversity and visual impacts.
The Department has also undertaken a comprehensive assessment of the full range of other potential impacts and recommended a range of detailed conditions, developed in conjunction with agencies and councils, to ensure all potential impacts are effectively minimised, managed or offset.
The project would have the capacity to generate 700 MW of renewable energy, sufficient to power around 370,000 homes per year. The project would save up to about 2,060,000 tonnes of greenhouse gas emissions per year and would make a material contribution towards the State meeting its net zero targets and the renewable energy objectives of the Roadmap…….
The Department considers the project would not result in any significant impacts on the local community or the environment, is located on a suitable site for a wind farm development, and any residual impacts can be managed through the implementation of the recommended conditions.
The project would result in benefits to the State of NSW and is therefore in the public interest and is approvable."…..

NSW DPHI has failed on all counts, neglecting to adequately address all of the following -
1.Defies Objectives of National Electricity Law
2.Public Health & Safety Risk - Land/Water Contaminating, Increased Toxic Fire Risk.
3.Public not informed of the serious, long term & continuous effects of these large-scale industrial developments.
4.These projects are NOT reversible as claimed by the proponent.
5.Removal of vegetation & pollution of the area which will not be able to be rectified on the retirement of the site from the proposal.
6.Lacks or shows limited consideration of the local micro-climate - creates Weather Changes & Heat Effects.
7.The proposed change from farming to industrial is a destructive land use.
8.The proposal will result in fragmentation of the local landscape & limit land-use options.
9.No bond is proposed, which will lead to residual industrial waste polluting the landscape forever.
10.Likely toxic hazard not discussed in the proposal, nor any minor reference.
11.Does the proposal abide by the Commonwealth Modern Slavery Act (2018) in the construction of the Turbines/BESS & the mining of materials for construction eg. cobalt.
12.Is the Development a National Security Risk, reliant on our most Hostlie Enemy, subject to the CCP s National Intelligence Law, with Chinese Components able to be surveilled or remotely disabled?
13.Unobtainable Public Liability Insurance for Neighbour Victims.
14.Reliant on Intensive Embedded Energy, Increasing SF6 Emissions, Contaminating/Polluting Life Cycle & Massive Toxic Waste Burden.
15.No Social Licence Sought or Granted by the Public at Large or Locally.

DEFIES OBJECTIVES OF NATIONAL ELECTRICITY LAW
It is completely negligent to peddle biased, untested propaganda in order to rush through UNTESTED, RECKLESS RENEWABLE INFRASTRUCTURE EXPERIMENTS that can only be described by the most credible of Experts as "SHAMBOLIC POLICY MAKING, DANGEROUS TO GRID OPERATION & TOTALLY MAD!"
National Electricity Law Objectives of Price, Quality, Safety, Reliability, Security & an actual whole of life Reduction in Greenhouse Gas Emissions are not met by Squadron s Spicers Creek Wind + BESS Intermittent, Weather Dependent plan.
AEMO, and everyone in 'authority', place primacy on emissions target rather than the other requirements of the NEL. The emissions requirement was only added to the NEL in Sep 2023, and the NSW Emissions Reduction Act 2023 was only passed in Nov 23 (other states were similarly tardy to legislate any targets), - so on what basis did any Gov act prior to that to impose all this on us? Yet they all did, and still emphasise emissions over other objectives.
NEL is made in the SA Parliament, and in the second reading, the minister there also reiterated that all objectives are equal.

7 National electricity objective:
The objective of this Law is to promote efficient investment in, and efficient operation and use of, electricity services for the long-term interests of consumers of electricity with respect to-
(a) price, quality, safety, reliability and security of supply of electricity; and
(b) the reliability, safety and security of the national electricity system; and
(c) the achievement of targets set by a participating jurisdiction-
(i) for reducing Australia's greenhouse gas emissions; or
(ii) that are likely to contribute to reducing Australia's greenhouse gas emissions.

****The Missing Whole-of-System Cost Model in the AEMO 2024 ISP:-**
"Recommendations
1. A thorough investigation by independent authorities and immediate implementation of effective accountability mechanisms must be implemented to counter the complete failure of public energy policy regarding reliability and energy costs based on misleading information from public institutions.
2. The AEMO ISP and CSIRO GenCost documents must be subjected to higher genuine standards for truthfulness, completeness and professional engineering processes in place of slavishly following flawed existing policies.
3. Embedding wind & solar targets into the National Electricity Rules must be halted to end the replacement of power systems engineers by politicians and government bureaucrats selecting technological design solutions without proper engineering qualifications.
4. Independent expertise for frequent technical and financial review must be employed in new accountability processes at multiple levels and points in time with a mandate to examine and openly examine a wide range of technological approaches.
5. The AEMO 2024 ISP must be discarded and an immediate start be made on a new energy NEM plan considering all power system technologies." (PDF Attached)

*AEMO CEO Must Be Sacked For Failing To Ensure Affordable, Secure And Reliable Energy Supply - 15th Dec 2023
https //ipa.org.au/ipa-today/aemo-ceo-must-be-sacked-for-failing-to-ensure-affordable-secure-and-reliable-energy-supply
Australians need affordable and reliable energy, not a regulator advocating for ideologically based outcomes that will undermine our energy security."
"The current situation Australia finds itself in with record and rising energy bills, forecast blackouts, and an increasingly unreliable energy grid, are all core features of the policy of net zero emissions. It is all pain for no environmental gain," said Mr Wild.

**The 'Sunk Cost' Trickery That Makes Renewables Seem Cheaper Than They Are - 23rd July 2023.

https //www.fresheconomicthinking.com/p/the-sunk-cost-trickery-that-makes?utm_medium=web
AIDAN MORRISON
How CSIRO justifies the exclusions "Sunk Cost"
But wait, this deception is so brazen and transparent…….
All of these tens of billions of dollars of projects are explicitly excluded from the cost of integrating renewables.

**Energy Transition Masquerade: The $360 Billion You Pay - YouTube
https //www.youtube.com/watch?v=x0NKDozvO58

**Unravelling AEMO's Integrated System Plan: World-class, Incompetent, or corrupt?

https //youtu.be/mFcaZ0fgWzk

**Counting the Cost: Subsidies For Renewable Energy - The Centre for Independent Studies
https //www.cis.org.au/publication/counting-the-cost-subsidies-for-renewable-energy/

**More misinformation from CSIRO on Nuclear
https //www cis org au/commentary/video/more-misinformation-from-csiro-on-nuclear-copy/

Nuclear VS Renewables: What Will It Cost? | Zoe Hiltonhttps //www.youtube.com/watch?v=Mw_AX9WaJ08

You are being Conned - GenCON Report & equating AEMO & the Government with Animal Farm! - Adi Paterson
https //youtu be/J50hWO2DKHc

ESSENTIAL NEED FOR SOVEREIGN 24/7 AUSTRALIAN POWER FOR INDEPENDENT ENERGY SECURITY = NATIONAL SECURITY
AS recently exposed by ASIO s Mike Burgess when he questioned what it would mean for the country if a foreign state "took down all the networks, or turned off the power during a heatwave?"
"I assure you, these are not hypotheticals," Mike Burgess said.
https //www.news.com.au/national/politics/asio-boss-mike-burgess-reveals-former-politician-sold-out-australia-during-annual-threat-assessment/news-story/fc7af6cc7a4f9dbd2c54305eb6b8bb4e
28/02/24

CORPORATE SUBSIDY MINING
At the heart of Squadron s plan is CORPORATE SUBSIDY MINING - A FINANCIAL PRODUCT FUNNELLING PUBLIC MONEY INTO THE FAKE GREEN GRAVY TRAIN prioritised by POLITICAL DONATIONS.

Transparent clarification of the 'Spicers Creek Wind Farm Pty Ltd Applicant & Holding Company s ability to have the financial capability to guarantee all of their claims & conditions being met is essential.
It is clearly apparent that the Renewable Industry is plagued by 'SHELL Companies - designed to fold & walk away from their toxic contaminating infrastructure as it degrades on site & becomes stranded assets.

NSW Premier Chris Minns & DPHI Energy Assessment Director have finally been forced to admit publically that Hosting Landowners will be responsible for the Decommissioning/Remediation of industrialised Wind/Solar/BESS Infrastructure - news to many gullible, naive, inveigled Hosts.

The fact that the NSW DPIE long pretended that Renewable companies
would ensure Decommissioning/Remediation was done has been extremely deceitful & underhanded.
Neither has Council responsibility/liability under the POEO Act been transparently declared to Local Regulatory Authorities by the NSW Government s DPIE/DPHI who are unjustly inflicting MORAL HAZARD on unsuspecting Councils who have just trusted the flawed DPIE/DPHI & IPCN Approval process & not done their Due Diligence.

Unlike Dubbo Council, we have seen the Warrumbungles Council stand up with integrity & ethics for their Ratepayers validly Objecting to Spicers Creek Wind, yet it remains a mystery why Dubbo Council continues to defy its Duty of Care to the Ratepayers, opting instead to embarrassingly & conflicting prostrate itself before corporate renewable subsidy miners who do not have the welfare of the Dubbo Shire community or environment at heart at all.
As the Local Regulatory Authority, Dubbo Regional Council must immediately Determine the Risks that they face & are subjecting their Ratepayers to - regarding their ultimate Land/Water Contamination/Pollution responsibilities/liabilities & Modern Slavery Duties for the plethora of Wind/Solar Electricity Generating Works they have strangely & questionably fallen over themselves to Host in their Shire.
In addition, it is well known around Australia that prior to his retirement, Australian Energy Infrastructure Commissioner Andrew Dyer highlighted Squadron s dodgy Spicers Creek Wind Neighbour Agreement - advising certain impacted neighbours to have their Lawyer commence a Class Action against Squadron.
The IPCN must expose the trail of Vested Interests in this respect.

INDEMNIFY NEIGHBOURING VICTIMS REGARDING PUBLIC LIABILITY.
As a long suffering victim of the Ecocidal nightmare of neighbouring RenewaBULL Industrialisation - it is glaringly obvious that there must be a requirement that all neighbours are fully indemnified in respect to the Public Liability Insurance that we are unable to gain or afford - due to such costly Industrialised projects being forced midst our typically rural, farming communities.

Added to this is the **'Renewable' company turnover factor** - citing my own experience -
Since 2019, Bomen Solar Electricity Generating Works has had FOUR different owners
1.Renew Estate - partly owned by German developer Wirsol Energy.
2.April 2019 - Cheung Kong Infrastructure s subsidiary Spark Infrastructure - 2021 subsidiary Spark Renewables.
3. 22/12/21 - KKR, Ontario Teachers Pension Plan Board ("Ontario Teachers ") and Public Sector Pension Investment Board ("PSP Investments" and together, "the Consortium")
4.May 2023 - Malaysian Tenaga National Berhad

For more than five years since construction, none of the Conditions have ever been met.
In fact claims made by these companies are completely false eg. https //sparkrenewables.com/about-us/
This is nothing but deceitful propaganda - so typical of the disingenuous NOT Clean NOT Green NOT Sustainable Renewable Industry - causing ongoing, extreme heartache, no benefits & ecocide in our pretty & productive rural, food producing areas
In fact, not once was my family ever contacted or consulted at all by the developer, the DPIE or the Wagga Council regarding Bomen Solar - denied of Due Process - including any opportunity to Object - only finding out about the neighbouring Bomen Solar plans after Approval. **THIS IS NOT SOCIAL LICENCE!!**

DEFIES ALL PRINCIPLES OF ECOLOGICALLY SUSTAINABLE DEVELOPMENT
In order to satisfy these requirements
there is an essential need to **Independently & Reputably Determine the Contamination Risks - Apply the Precautionary Principle & Reject this proposal as the Environmental Harm is too great & irreversible.**
There is nothing more important to the welfare of the people of NSW/Australia & for Intergenerational Equity than **LIFE SUSTAINING, UNCONTAMINATED SOIL & WATER** - yet the NSW DPIE/DPHI continues to peddle false 'Clean, Green, Sustainable propaganda, confect 'evidence "so lacking in integrity that no weight can be placed on it," irresponsibly 'trust the developers & deliberately ignore their responsibilities to ensure Public Health & Safety of the people of NSW/Australia.

To have any credibility at all the previously complicit IPCN must now ensure all the Principles of Ecologically Sustainable Development are being practically met, that the Precautionary Principle is applied - with Land/Water Contamination/Pollution Risks independently & reputably determined - instead of just 'TRUSTING THE DEVELOPERS BECAUSE THEY DIDN T HAVE THE FUNDS TO DO THE RESEARCH - as admitted to by DPIE Environmental Assessment Officer/DPIE Planner.
Neither covering up the fact that NSW DPHI are silencing any objections that the DPI-Ag, NSW DPIE Water, EPA, NSW Fire & Rescue, etc. may have because they are part of the Government & cannot speak out against it.
Deliberately depriving these bodies of doing the essential research necessary to avoid having any negative/detrimental 'Renewable Energy outcome evidence is outrageous & unconscionable when the **PUBLIC HEALTH & SAFETY RISKS** ARE DIRE.

PUBLIC HEALTH & SAFETY RISKS:
Without healthy food & uncontaminated water we will die.
Anyone who eats - & that's all of us - needs to care about this!
Without reliable, efficient & affordable power people will also die of hyperthermia.

ALL INDUSTRIALISED WIND/SOLAR/BESS ON FOOD PRODUCING LAND DEFY THE PARIS AGREEMENT - including this Spicers Creek Wind + BESS site.
Taking over farmland to build facilities to produce intermittent energy is a violation of Article 2, Section 1(b) of the Paris Agreement (2015).

Article 2 1(b) of the 2015 Paris Agreement states
"This Agreement... aims to strengthen the global response to the threat of climate change, in the context of sustainable development and efforts to eradicate poverty, including by
"(b) Increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development, in a manner that does not threaten food production"; See https //unfccc.int/files/essential_background/convention/application/pdf/ english_paris_agreement.pdf .

MASSIVE LAND GRAB
The totally illogical unconscionable scale of land being entombed for inferior, short term energy generation is a Destructive Land-Use that will NEVER return our rich soil heritage to it's uncontaminated, natural resource land status - its inherent capability
Further References included outline another Massive Land Grab - with the need for a bare minimum of 27,000 GEELONG SIZED BIG BATTERIES to ever achieve a 100% Renewable Eastern Australia Grid! Sheer Lunacy that would Bankrupt the Country!
It is apparent that authorities are ideologically determined to reduce our Agricultural productivity, fragment our Rural Communities & don t care one bit if they poison our soil & water in the process.

Check out this concerning recent Property Sale which appears to be numerous properties along the Transmission Line route - Hay, Conargo, Moulamein to Jerilderie, Dubbo ...
probably yet another BIG CORPORATE SCHEME to REDUCE FOOD SECURITY whilst FINANCING the FAKE GREEN ENERGY POVERTY AGENDA at GREAT SUBSIDISATION EXPENSE to TAXPAYERS & ENERGY CONSUMERS
We need a thorough investigation into this ....
The AFA transaction is subject to shareholder approval & regulatory clearance…
2/9/24
'The SPAC, Agriculture and Natural Solutions Acquisition Corporation (ANSC), is a joint venture between Impact Ag and US asset management firm Riverstone Holdings and aims to use AFA's operations as a vehicle

for agricultural decarbonization and production.'

https //www.agriinvestor.com/impact-ag-offshoot-snaps-up-australian-food-and-agriculture-company-for-a780m/ https //www.agriinvestor.com/impact-ag-offshoot-snaps-up-australian-food-and-agriculture-company-for-a780m/# ~ text=The%20SPAC%2C%20Agriculture%20and%20Natural,for%20agricultural%20decarbonization%20and%20production

1.<u>TOXIC CONTAMINATION</u>
***WIND TURBINES ARE A FAKE GREEN SCOURGE - SHEDDING TONNES OF MICROPLASTICS FROM WIND TURBINE BLADES (KNOWN AS 'LEADING EDGE EROSION') - AFTER ONLY A FEW YEARS OF OPERATION.**
Bisphenol A - a toxic chemical used in the epoxy resins that are used to make turbine blades. High speed spinning blades 300 KM/H collide with dust particles, rain and hail chipping off small particles of the resin coating.

*https //stopthesethings.com/category/bisphenol-a-wind-turbine-blades/

*https //greatlakeswindtruth.org/newsworthy/media-release-na-paw-will-bisphenol-a-be-the-end-game-for-industrial-wind-the-pfos-poly-and-perfluoroalkyl-substances-pfas-pfos-is-used-in-lubricants-coatings-paints-varnishes-plastics-and/
https //greatlakeswindtruth.org/newsworthy/essay-by-dr-ir-eric-blondeel/

*https //bergensia.com/bisphenol-a-in-wind-turbines-damages-human-fertility/es-human-fertility/

*'**FOREVER CHEMICALS' used in LITHIUM ION BATTERIES THREATEN ENVIRONMENT**, research finds | Lithium-ion batteries | The Guardian - 14/7/24
https //www.theguardian.com/technology/article/2024/jul/14/forever-chemicals-lithium-ion-batteries-environment

2.<u>GROUND WATER SUPPLIES MUDDIED BY PILE DRIVING FOR THE MASSIVE WIND TURBINE BASES.</u>
Spicers Creek Wind EG Works + BESS WOULD NOT BE ABLE TO AVOID IMPACTING ON THE HYDROLOGICAL FUNCTIONS OF KEY GROUNDWATER SYSTEMS AND IMPACTING ON VULNERABLE GROUNDWATER SOURCES
*Wind farm woes continue as Victorian turbines fail after only five years – www.cairnsnews.org - 11th April 2024
https //cairnsnews.org/2024/04/11/wind-farm-woes-continue-as-victorian-turbines-fail-after-only-five-years/

3.<u>ELECTRICAL FORCE & ELECTROMAGNETIC RADIATION CAUSING PERSONAL DISCOMFORT IS CRIMINAL ASSAULT</u>
My family & I DO NOT CONSENT TO ALL OF THE UNNECESSARY INTERCONNECTORS/TRANSMISSION LINE INFRASTRUCTURE & RELATED 'RENEWABLE' ELECTRIFICATION NIGHTMARE - CAUSING DETRIMENTAL HEALTH EFFECTS FROM EMF/EMR.

4.<u>DETRIMENTAL INFRASOUND IMPACTS</u> for Human Beings & Animals - resulting in serious ill health is unjust & will be litigated against.

5.<u>NOISE NUISANCE</u> - torture of neighbours - including children forced to wear ear-muffs to bed in order to sleep is unacceptable & unjust.

Members of the Australian Acoustical Society, SLR acousticians pledge to ensure that the welfare, health and safety of the community at all times takes precedence over sectional, professional and private interests". Do Squadron/DPHI Acousticians adhere to this pledge at all times including when providing 'independent expert advice?

6.INCREASED TOXIC FIRE RISK & INABILITY TO FIGHT 'RENEWABLE' INFRASTRUCTURE FIRES due to toxicity & interfering infrastructure eg. Aerial Fire-Fighting.

7.DANGEROUS BLADE THROW INCIDENT – Golden Plains Wind Farm - WorkSafe Alert (see Reference.)

8.DODGY NEIGHBOUR AGREEMENTS
Refer to **Spicers Creek** IPCN Meeting & further evidence from neighbours.

9.NO DECOMMISSIONING/REMEDIATION BOND
Restoring the land to its uncontaminated, inherent capability requires the assurance of the removal of ALL above & underground infrastructure - including the huge concrete base.
Considering this is a 'Shell' company, an upfront Decommissioning/Remediation Bond is essential prior to construction as landowner Hosts have not been adequately or transparently informed about these facts, nor would they ever have the funds to do it considering the huge costs.
Most likely this will end in tears with Hosts losing their industrialised Toxic Wind/Solar/BESS waste strewn land - resulting in a Massive Land Grab for the Government as well as having local Ratepayers burdened by the DPIE/DPHI's Moral Hazard & Dubbo Council's Dereliction of Duty.
(Reference The decommissioning clause on the Planning Permit follows the title.
If the wind company is "absent", defaults on the lease agreement, or simply shoots through back to Spain, it is the owner s responsibility to decommission the 13 turbines.
The current estimate of Codrington turbines @80m high is around $700,000 and I understand this is based on burying them on the Host s property.
Mortlake South Turbines are 186m high – so at a minimum probably double the price of Codrington. (13 x 1.4m = 18.2 million – *no wonder the host wants to sell up now*!)

LACK OF TRANSMISSION LINE CAPACITY regarding Wollar Wellington 330KV substation & 330KV Transmission Line. This transmission line will be a major distributor for coal-fired power to be distributed to Central and Western NSW.
Therefore, a Spicers Creek Wind + BESS Approval is nonsensical as there is nowhere for the generation to go.

SQUADRON ADMIT RENEWABLE ENERGY IS TOO EXPENSIVE IN AUSTRALIA
Given Squadron s admission that Renewable Energy was too expensive in Australia to pursue the production of so called 'Green Hydrogen - abandoning their astronomically costly, publicly funded Australian plans for the US & their recent importation of off-shore Gas announcement regarding their floating Newcastle terminal scheme -
this is an obvious admission that Squadron know full well their 'Renewable plans will NEVER work!
Here we see yet another anti-Australian, opportunistic carpetbagger s energy scheme of importing Gas to plug the flawed policy & planning of pathetically unreliable Weather Dependent Wind/Solar EG Works + incapable BESS.
Additionally, the DPHI s claim is that 'Renewable projects such as Spicers Creek Wind + BESS "would assist in transitioning the electricity sector from coal & gas fired power stations to low emissions sources ….." directly now contradicted by Squadron s latest, opportunistic Gas scheme!

EVERYDAY AUSTRALIANS SUFFER AUSTERITY & HARDSHIP FROM SUBSIDISED, OPPORTUNISTIC RENEWABULL SWINDLE
It is indeed scandalous that we, the Australian public are suffering hardship & austerity with skyrocketing Electricity Prices, Energy Poverty/Deprivation - directly resulting from the Government s Fake Green Energy Policies & self-inflicted Cost of Living Crisis, Loss of Productivity/Economic Prosperity directly attributable to the 'Renewable Swindle as corporate subsidy miners advantage themselves by actively plundering our environment with large-scale Ecocidal impacts - including Toxic Contamination of our Life Sustaining Food Resource Land & Vital Water Sources, Destroying Australia s Economic Prosperity, Food Security, Energy Security & National Security - hoovering up Taxpayers Subsidies to do so - for no Australian benefit whatsoever.

THE NEED FOR AN HONEST ASSESSMENT GOVERNED BY ENGINEERING FACTS, SCIENTIFIC RIGOUR, INTEGRITY & ETHICS
To date we have seen nothing but rubber stamping by IPCN of the NSW DPIE/DPHI s SHAMBOLIC POLICY MAKING, DANGEROUS TO GRID OPERATION & TOTALLY MAD 'RENEWABLE INFRASTRUCTURE ROADMAP - that is NOT FOR THE GREATER GOOD - but a proven Ecocidal Disaster, defying Social Licence, causing Energy Poverty/Deprivation with Skyrocketing Electricity Prices, DESIGNED TO MAKE AUSTRALIA WEAK & CHINA STRONG.
https //www.thegwpf.org/publications/fossil-fuels-for-china-decarbonisation-for-everyone-else/

An Australian Energy System based on Australian Base-Load Coal & a Nuclear Power Future is the ONLY way to "achieve and maintain power system security; and
• minimise the cost of transitional services to end users."

Any responsible Government would prioritise Australia s natural advantage over unethical, CCP Reliant JUNK instead of pandering to the Fake Green Parasites & Vested Interests who are actively Wrecking Australia, Torturing the People, Trashing our Ecology, Biodiversity & Intergenerational Equity - as they GREEDILY RIP OFF ELECTRICITY CONSUMERS & MINE SUBSIDIES!

AN IMMEDIATE MORATORIUM & INDEPENDENT FEDERAL INQUIRY is required - including a comprehensive Audit & investigation into all Energy Companies/Networks + their connected entities/supply chains & all associated Government Departments & Bodies in order to meet the **OBJECTIVES OF THE NATIONAL ELECTRICITY LAW** - prior to any further Approvals by the IPCN.

The looming Federal Election will be a Referendum regarding lifting the Prohibition on Nuclear Power & ensuring the Australian people are heard & prioritised regarding using OUR OWN NATURAL, PLENTIFUL, 24/7 AUSTRALIAN ENERGY RESOURCES for our own well-being - with ALL Objectives of the NEL equally considered & implemented for the GREATER GOOD OF ALL AUSTRALIANS.

7 National electricity objective:

The objective of this Law is to promote efficient investment in, and efficient operation and use of, electricity services for the long-term interests of consumers of electricity with respect to-

(a) price, quality, safety, reliability and security of supply of electricity; and

(b) the reliability, safety and security of the national electricity system; and

(c) the achievement of targets set by a participating jurisdiction-

(i) for reducing Australia's greenhouse gas emissions; or

(ii) that are likely to contribute to reducing Australia's greenhouse gas emissions.

Unreliable, Intermittent, Solar/Wind/BESS are NOT IN THE INTERESTS OF CONSUMERS - DEFYING NATIONAL ELECTRICITY LAW OBJECTIVES OF:-

*PRICE, QUALITY, SAFETY, RELIABILITY & SECURITY OF SUPPLY OF ELECTRICITY.

*THE RELIABILITY, SAFETY & SECURITY OF THE NATIONAL ELECTRICITY SYSTEM.