From: Ivnette Iablack
To: IPCN Enquiries Mailbox; Do-Not-Reply IPCN Submissions Mailbox
Subject: Wallaroo Solar Electricity Generating Works + BESS - SSD-9261283 OBJECTION Submission - Part 1
Date: Wednesday, 31 July 2024 4:24:22 PM

Dear IPCN,
Wallaroo Solar Electricity Generating Works & BESS defies all the Principles of Ecological Sustainable Development & the NSW Government's Objectives of Clean, Reliable, Affordable, Secure Energy

If approved, this undulating 393 ha site will become industrialised, contaminated wasteland - a visual eyesore & a Public Health & Safety Risk - never returned to its inherent food producing capability as claimed
There are NO Conditions included by the Department to guarantee the protection of the site or surrounding land & water sources from the typically irresponsible Solar Construction processes, the detrimental impacts of Toxic Solar Panels on site, the typical, damaging erosion & water/sediment run-off, the inevitable toxic contamination resulting from onsite aged, degrading Solar panels, if inferior, broken, fractured by hail or burnt
There is no acknowledgment of these obvious, common occurrences in the Assessment & therefore, no large-scale, clean-up, decontamination or Evacuation plan for dealing with sudden, destructive storm or hazardous, toxic fire events, nor for the excessive, toxic waste burden that will curse communities & our children's Intergenerational Equity

The Department's Recommendation for Development Consent of Wallaroo Solar is creating a "set of circumstances that causes or threatens to cause material harm to the environment."

• involving actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial; (that)
• results in actual or potential loss or property damage

Photo montage of the present, uncontaminated, pretty rural site of the planned Wallaroo Solar + BESS.

The EIS states:-
"Objectives of the proposed Wallaroo Solar Farm are to:
• Generate renewable energy and improve network stability

• Minimise environmental impacts
• Minimise social impacts and maximise social benefit."

There is NO Public Benefit from this project - it is the Antithesis of Caring for Country & Protecting Nature - it is NOT FOR THE GREATER GOOD!

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.

According to AEMO's long term data, Solar only has an actual average capacity factor of 17% so the Proponent's weather dependent claims of powering approx 48,000 homes is ludicrous & impossible (Reference: Paul Miskelly's: Storage requirement for 100 percent Renewables on the Eastern Australian Grid - Initial Findings)

DPHI APPROVAL OF SOLAR/WIND ELECTRICITY GENERATING WORKS & BATTERY ENERGY STORAGE SYSTEMS ON RU1 LAND DEFY THE PARIS AGREEMENT BY THREATENING AUSTRALIA'S FOOD SECURITY AS WELL AS ENERGY SECURITY, ECONOMIC PROSPERITY & NATIONAL SECURITY.

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."

The Local Regulatory Authority - Local Council are ultimately Responsible/Liable for any Land/Water Contamination or Pollution caused by Solar/Wind Electricity Generating Works according to POEO Act.

Inflicting Toxic Contaminating Wallaroo Solar Electricity Generating Works & a Filthy, Fire Hazardous Battery Energy Storage System on the Yass Valley Council & Community is Moral Hazard & Gross Negligence - showing "a lack of care that demonstrates reckless disregard for the safety or lives of others, which is so great it appears to be a conscious violation of other people's rights to safety "

The Department & previous IPCN Panel's reliance on obvious fabrications in the Large-Scale Solar Guidelines is incorrect:-
To Quote the **Energy Assessment Director:**
"In regard to your query regarding the issue of contamination, the metals in solar panels cannot be easily released into the environment This is because the metals are enclosed in thin layers between sheets of glass or plastic within the solar panel Because of this, the use of metals in solar panels has not been found to pose a risk to the environment
To readily release contaminants into the environment, solar panels would need to be ground to a fine dust "

This is not supported by any credible Research or Expert Witness evidence!
****Leaching Via Weak Spots in Solar Panels**
https://www researchgate net/publication/348883160_Leaching_via_Weak_Spots_in_Photovoltaic_Modules

***The Amended Condition C8 - Prior to Commencement of any Works - Stormwater Management Plan** - set by Oxley Rd Solar Uranquinty 24th Nov 2022 in response to Expert Witness advice from Professor Ian Plimer regarding Solar's inevitable Toxic Contamination impacts during operation - **has not been included in the Department's Conditions of Consent.**
This includes REGULAR QUALIFIED TESTING ONSITE & DISCHARGE FROM THE SITE, AVAILABILITY OF RESULTS, CONTAMINATION RESPONSE PROCEDURE, etc

Inclusion of this is imperative for RU1 land with the Murrumbidgee River located only 4 km to the West & Gooromon Ponds & Ginninderra Creek forming part of the Eastern & Southern borders respectively

It is completely wrong for the proponents to say:- "the project is not in a water-sensitive area or near groundwater" .that it "remains consistent with ecologically sustainable development and is in the public interest."

Neither has the necessary New Modern Slavery Condition C4A been included by the Department for Wallaroo Solar - requiring proof prior to Construction that NO Slave Labour linked components will be used

****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.

*New Condition Inserted C4A - Dealing With Modern Slavery.

Commonwealth Modern Slavery Act 2018

Reliable, Ethical, Secure 24/7, Far Superior, Australian Solution = Nuclear Power with a Minimal Environmental Footprint 1/75th of the Land Area required for Equivalent Capacity Industrialised Solar & 1/360th of the Land Area required for Equivalent Capacity Industrialised Wind.

1/75th of this 393ha Wallaroo Solar site would be ONLY 5 24ha for the equivalent capacity of genuinely clean, safe, reliable, secure, 24/7 Australian Nuclear Power

From: lynette lablack
To: IPCN Enquiries Mailbox; Do-Not-Reply IPCN Submissions Mailbox
Subject: Wallaroo Solar Electric ty Generating Works + BESS - SSD-9261283 OBJECTION Submission - Part 2
Date: Wednesday, 31 July 2024 4:39:21 PM

Dear IPCN,
I have included a photo of part of the original view of my neighbouring property - now an unreliable, intermittent industrialised Solar wasteland at Bomen Wagga Wagga

With 500,000 toxic Solar panels forced on our Community with NO Social Licence, the biodiversity & ecology of the area has been destroyed as Solar developers denude the landscape, clear fell all the trees - leaving nothing but bits of logs - for the displaced threatened species
followed by a haven of weeds as shown in the next photo - creating a terrifying, toxic Fire Risk in far too close proximity to neighbours - as taken here from our fence line

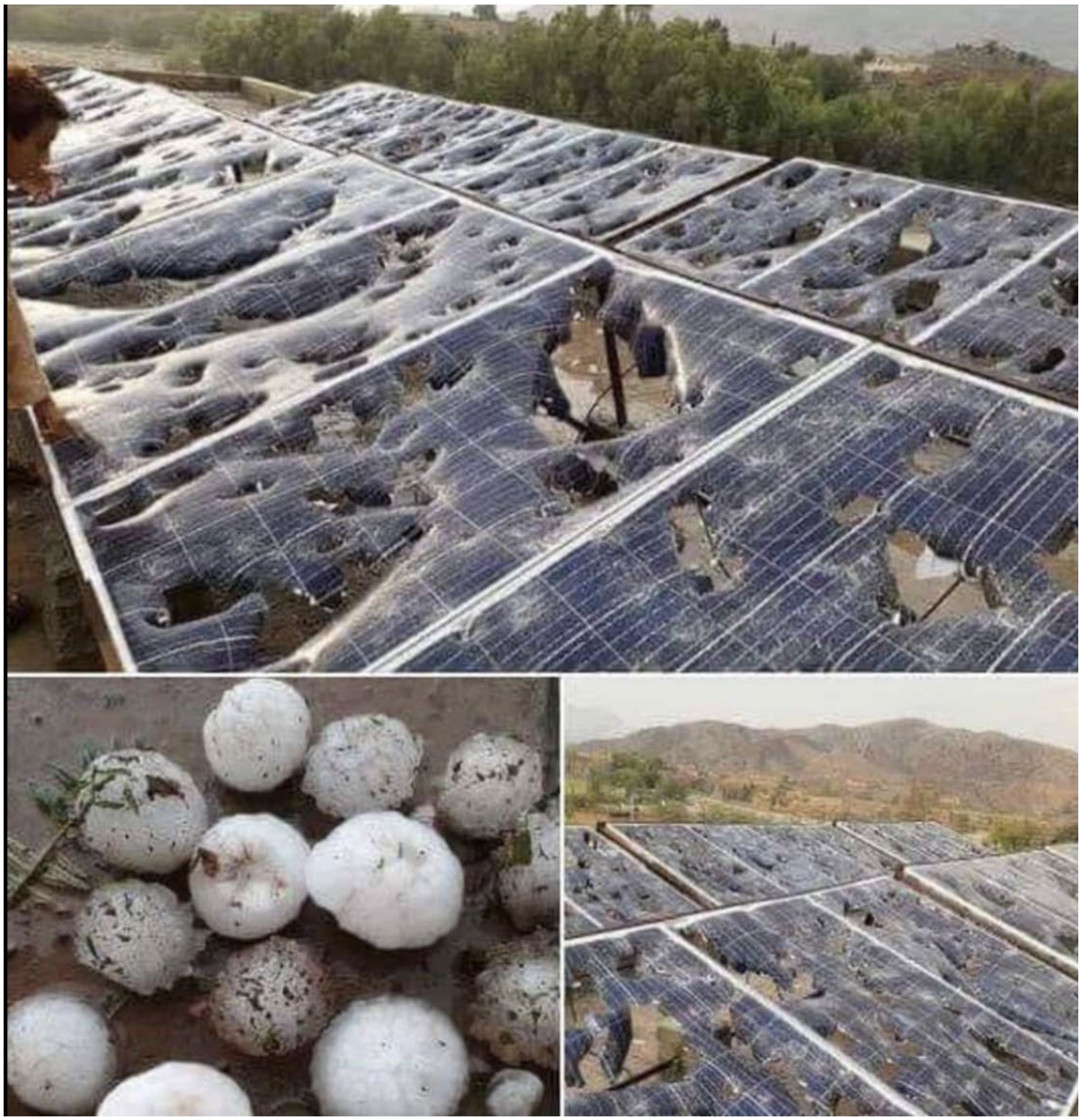
The extremely dangerous Approvals of Industrialised Electricity Generating Works forced on neighbouring property owners is completely unacceptable - highlighting to local firefighters, that the buffer area around the Solar EG Works is dangerous and makes neighbouring property indefensible because of the security type fencing and an overgrown vegetation area that would turbo charge a fire as well as creating an entrapment risk for fire appliances The hidden habitat logs on the ground are an inexcusable danger to a fire truck and a long burning hazard that would have to be monitored for days in case of a fire
Negligence is on clear display!

There needs to be a cleared perimeter - an Exclusion Zone of at least 200 metres or more - surrounding the whole Solar EG Works to protect neighbours & their Food Producing Property/Land/Water from Fire/Fire Residue Contamination & Toxic Smoke Inhalation - with ready access for Fire Fighters within the boundaries of the Solar site itself
Under current Conditions, Fire-Fighters would be forced to be in neighbouring properties - in a dangerous position - waiting for the menacing Industrialised Solar Fire to come to them or in the case of an accidental Fire starting on the farmer's land - such as an escaped stubble Fire or if a bearing on a machine drops hot metal and starts a fire, etc - which then heads into the overgrown Solar perimeter & Solar panel area - it is impossible to access & defend the Solar site

From: Ivnette Iablack
To: IPCN Enquiries Mailbox; Do-Not-Reply IPCN Submissions Mailbox
Subject: Wallaroo Solar Electricity Generating Works + BESS - SSD-9261283 OBJECTION Submission - Part 4
Date: Wednesday, 31 July 2024 4:53:33 PM

Dear IPCN
The following series of 6 photos show the extensive environmental damage already caused by wrongly approved industrialised Solar at Bomen, Wagga Wagga

Far worse is yet to come when inevitable toxic contamination occurs on site & for surrounding land & water from common degradation & events - such as Hail Storms & Solar/Battery Fires, etc



The Department & previous IPCN Panels have continually failed to acknowledge & address these Public Health & Safety Risks to our food producing land & vital water sources

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Dea PCN
Se es of 6 pho os

From:	lynette lablack
To:	IPCN Enquiries Mailbox; Do-Not-Reply IPCN Submissions Mailbox
Subject:	Wallaroo Solar Electricity Generating Works + BESS - SSD-9261283 OBJECTION Submission - Part 5
Date:	Wednesday, 31 July 2024 5:01:26 PM

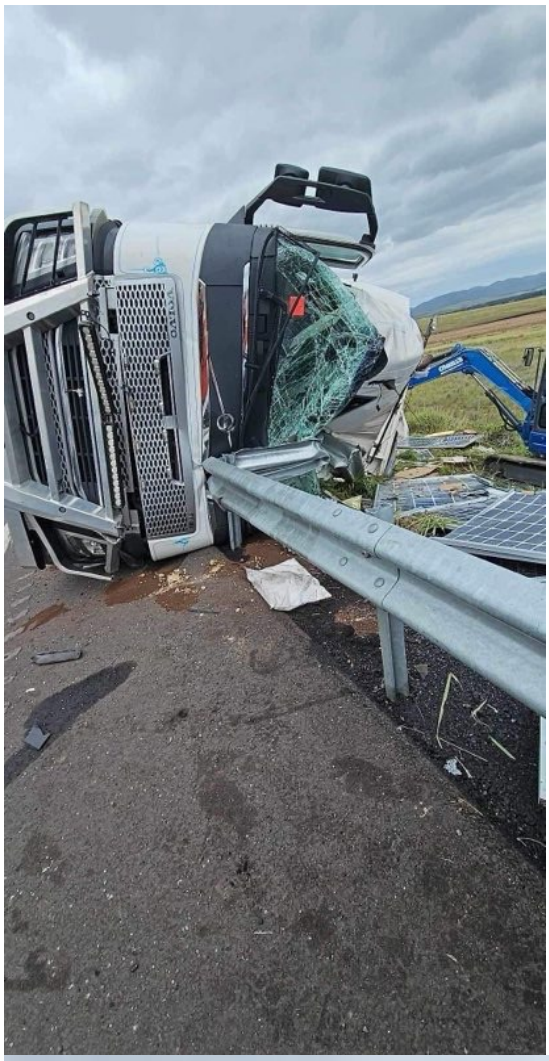
Dear IPCN,
I have also included 2 photos of the Farcical NON- existent Biosecurity Offsets in our Bomen area - taken 4 yrs after Construction.

The final photos are of more Public Health & Safety Risks the renewable industry present - including hazardous Transportation practises of dodgy Solar developers typically cutting corners regarding their costs - using inexperienced Visy Drivers, the consequential contamination disaster left adjacent roadside farming land & midst running water & also the unethical nature of industrialised Solar - with clear evidence of the typical reliance on unethical, cruelly tortured Uyghur Slave Labour linked components - clearly shown here in the final photo with packaging marked with JA Solar Panels - destined for Stubbo Solar, Gulgong in the Central West.

There are NO Essential Upfront Bonds & therefore, NO Guaranteed Decommissioning & Remediation as well as the unacceptable Condition that infrastructure only be
'removed to a depth of 500mm, unless the Planning Secretary agrees otherwise.'
Meaning the condition of
• Restore land capability to pre-existing productive capacity - which includes cropping of RU1 land will NOT happen.

OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT
"A1. In meeting the specific performance measures and criteria in this consent, all reasonable and feasible measures must be implemented to prevent, and if prevention is not reasonable and feasible, minimise, any material harm to the environment that may result from the construction, operation, commissioning upgrading, rehabilitation or decommissioning of the development."

The Department's Conditions DO NOT in any way
"• prevent, minimise and/or offset THE MOST adverse environmental impacts of the development" as required.
They are totally inadequate & do not address the ongoing unethical behaviour, the Heat Island Effect impacts commensurate with scale, the obvious Toxic Contamination consequences from Wallaroo Solar Pty Ltd's plans, Solar's repetitive transportation accidents that are so environmentally harmful - presenting an irreversible Public Health & Safety Risk to all of us who rely safe roads, on healthy food production & uncontaminated water, nor the fact that the NSW RenewaBULL Infrastructure Roadmap & AEMO's fraudulent ISP (Integrated System Plan)based on the clearly debunked GenCost Report is all shambolic Policy Making, dangerous to Grid Operation & Totally Mad!




O'HEELL'S


O'NEILL'S
RECOVERY
SOLAR 晶澳

From: lynette lablack
To: IPCN Enquiries Mailbox; Do-Not-Reply IPCN Submissions Mailbox
Subject: Wallaroo Solar Electricity Generating Works BESS - SSD-9261283 OBJECTION Submission - Part 6
Date: Wednesday 31 July 2024 5:22:57 PM

An ASIC search reveals that The Applicant - Wallaroo Solar Pty Ltd, is a company with a paid-up capital of only $120 & the ultimate holding company New Energy Development Pty Ltd - also with a paid up capital of only $120 is the beneficial shareholder of 60 shares in Wallaroo Solar Pty Ltd.
The Sole Director of New Energy Development Pty Ltd, is 38-year-old Prudence Mary Flynn of [redacted] ACT [redacted]
The beneficial owner of the other 60 shares in Wallaroo Solar Pty Ltd is a foreign company based in Spain - UNIVERGY INTERNATIONAL, S.L,.

As is the case with Mining companies in NSW, there is a requirement to pay a Rehabilitation Bond prior to a mining licence being issued - ensuring Rehabilitation funds are available to restore the land to its inherent capability - as is claimed by the Applicant & Department will occur regarding Wallaroo Solar.
However, there is no incentive for the Applicant to comply with Condition B37.

It is apparent that Wallaroo Solar Electricity Generating Works + BESS is not a viable plan with funds available for an essential, upfront Decommissioning/Remediation Bond requirement.
Given these circumstances, there is little doubt that if Approved by IPCN, The Applicant, Wallaroo Solar Pty Ltd, will be liquidated prior to the end of life of the project & toxic components left stranded, with the Local Yass Valley Council & Community ultimately bearing the responsibility/liability burden under the POEO Act for the toxic waste & serious/irreversible Land/Water Contamination that will inevitably occur.

There has been no acknowledgment of these detrimental impacts or bunding to address aged/degrading, broken, inferior, hail fractured or burnt Solar panels onsite during its operational life.
Adherence to the Principles of Ecologically Sustainable Development is required, with the Precautionary Principle & Intergenerational Equity paramount - erring on the side of the Environment in NOT Approving Wallaroo Solar + BESS, as the Public Health & Safety Risks - including Toxic Contamination of our Food resource land & vital Water sources - including the unregulated Murrumbidgee River - are irreversible.

References -

TWO NEW PRECEDENTS HAVE BEEN SET by Oxley Bridge Rd Uranquinty Solar Determination 24th Nov 2022 - NEW MODERN SLAVERY CONDITION & AMENDED STORMWATER MANAGEMENT PLAN (re CONTAMINATION.)

**Professor Ian Plimer's 3 minute presentation regarding Solar Panel Contamination Risks.
PPSSTH-149 - DA22/0122 - 1268 Oxley Bridge Road Uranquinty 2652
https //www.planningportal.nsw.gov.au/planning-panel/electricity-generating-works-solar-farm-8

**Hail Storm Photos & Industrialised Solar Contamination Risk to the Reliably Productive Food Bowl at Bomen, Wagga Wagga Photo are included via this link also - the Hail Stones & some of the Fractured Solar Panels from the damaging 31st Oct 2020 event that left masses of broken Solar panels in situ for a shocking 10 - 11 months without Due Care - with some panels still remaining fractured & leaching contaminating heavy metals years later!

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
eg. City of Sydney, the Opera House, Kiama, Shoalhaven, Shellharbour Councils & Westpac, etc. have an unethical PPA with Spark Infrastructure s Xinjiang Jinko Solar based Bomen Solar - unethically Hosted by Wagga City Council.
REROC has an unethical PPA with Iberdrola - with Xinjiang JA Solar based Avonlie Solar - unethically Hosted by Narrandera Shire.

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.
……..

Dr James Cockayne
NSW Anti-slavery Commissioner
M [redacted]
Commissione[redacted]

Carolyn Kitto 'Be Slavery Free
Ph [redacted]
[redacted]

Ramila Chanisheff
Australian Uyghur Tangritagh Women's Association - AUTWA
University of S.A
Ph [redacted]
admin@autwa.org

Slave Labour Supply Chains
Missing Information Thwarts Ethical Sourcing
Murphy and Crawford s report, Over-Exposed Uyghur Region Exposure Assessment for Solar Industry Sourcing

***Over-Exposed | Sheffield Hallam University updated Nov 2023**
https //www.shu.ac.uk/helena-kennedy-centre-international-justice/research-and-projects/all-projects/over-exposed

*The graphs indicating **Companies & Solar Panels connected to Xinjiang** are in the following link -
*Xinjiang Solar Panels - Uyghur Slave Labour/Concentration Camps/Genocide - 'In Broad Daylight' - Professor Laura Murphy
https //www.shu.ac.uk/-/media/home/research/helena-kennedy-centre/projects/pdfs/evidence-base/in-broad-daylight.pdf

***The Office of the United Nations High Commissioner For Human Rights**
https //www.ohchr.org/sites/default/files/documents/countries/2022-08-31/22-08-31-final-assesment.pdf

***Australia ratifies International Forced Labour Protocol** | Australian Minister for Foreign Affairs Minister for Women Marise Payne
https //www.foreignminister.gov.au/minister/marise-payne/media-release/australia-ratifies-international-forced-labour-protocol
……..

***NSW Fire & Rescue - SARET Research explain the dangerous, delusional RenewaBULL EXPERIMENT- that is now threatening our lives throughout rural Australia is being 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."

***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.

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

***Add 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

****Leaching Via Weak Spots in Solar Panels**
https //www.researchgate.net/publication/348883160_Leaching_via_Weak_Spots_in_Photovoltaic_Modules

***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/) whose property was fouled by muddy runoff from a solar project next door down to $5 million, after objections from the plaintiffs in the case.
In an order issued Monday in the Middle District of Georgia, Judge Clay D. Land wrote that the punitive damages awarded to the couple were worth many magnitudes more than the property that was damaged, and therefore were excessive.
Unsurprisingly, connected with this RenewaBULL Junk ruination is the Woke, virtue signalling, GREENWASHING of the BIG TECH, BIG ENERGY USER DATA CENTRE - 'Solar development was built to serve a data center owned by the parent company of Facebook'

***The Starting Step for the Production Of Pure Silicon....SiO2 + C -> Si + CO2 ....IS the Heart of the Solar Panel!**

***Every step in the production of Solar PV power systems requires an input of fossil fuels** - as the carbon reductants needed for smelting silicon from ore, to provide manufacturing process heat and power, for the intercontinental transport of materials, and for on-site deployment.
https //www.azbackroads.com/around-the-west/rangefire-massive-amounts-of-coal-and-wood-must-be-burned-to-create-solar-panels/

*** Coal's Importance For Solar Panel Manufacturing – Watts Up With That?**
https //wattsupwiththat.com/2024/05/23/coals-importance-for-solar-panel-manufacturing/

***200 Million Tonnes of Toxic Solar Panels Destined For Landfills Near You**
stopthesethings.com

***Case for base line soil and ground water testing as part of solar zoning requirements BEFORE a solar developer starts to build, and periodic testing for the life of the solar facility.**
Galvanised Steel supports
https //www facebook com/share/p/srbXaCbKgVXocgsm/?mibextid=xfxF2i

James Falcsik White County Indiana Residents Against Solar
21 h ·
The hazardous materials that exist in solar panels receive a lot of attention out of concern they will leach out into the soil over time, especially if they are damaged by weather events. Has anyone considered what happens to the soil and ground water on a farm that is converted to thousands of acres of solar panels, with tens of thousands of buried ten-foot-long galvanized steel I-Beams driven into the soil to support the racking systems?

The 13-acre solar farm I worked on used more than 900 galvanized steel columns. Now I am an electrical guy, not a farmer or an agricultural specialist. The zinc coating of galvanized steel corrodes at a higher rate in soils with a Ph lower than 7.0. It gets more complicated when copper is present and the soil acts as an electrolyte. When galvanized steel corrodes it can leach cadmium, lead, and zinc into the soil. In fact, the EPA warns that "cadmium can be released to drinking water from the corrosion of some galvanized plumbing and water main pipe materials." The USDA states "galvanized metal containers are not safe to serve food and drinks in. The acidity of the food or drink could dissolve the zinc coating allowing it to leach into the food or drink." So, what happens to the rich agricultural soil that is made a pin cushion by all these galvanized steel columns that support solar panels for 25 years? Does this make a case for base line soil and ground water testing as part of solar zoning requirements BEFORE a solar developer starts to build, and periodic testing for the life of the solar facility? The solar developer should also bear the cost of this testing, not the taxpayer.

***The Photovoltaic Heat Island Effect: Larger Solar Power Plants Increase Local Temperatures**
(University of Arizona Science & Technology Parks Solar Zone)
https //www.nature.com/articles/srep35070
…….

*Industrialised Solar cursing us at Bomen is HEATING our micro-climate - as you can see on a Qld State Government web site - where you can check for Fires - it has a **satellite image of reflective heat**. It shows large Solar Factories to be on Firewhen they aren't. It's picking the heat coming off the panels!

Electrical Engineer Paul Miskelly's Response to the satellite imagery of reflective heat from Industrialised Solar -
"The energy in the sunlight that strikes solar cells that is not converted to electricity will be absorbed and converted to heat. This will be re-radiated to the atmosphere. There goes your unconverted 80 percent.
By comparison, even though plants re-radiate the energy in the green part of the visible spectrum - that s why they look green - clearly they are doing a lot better job of absorbing and using the energy in the other parts of the visible spectrum than can solar cells. That this is correct is confirmed by what Mr Creed has found. That looks to be irrefutable evidence that solar panels re-radiate heat, and lots of it."

Subject Opinion from USA Aerospace Engineer who is also fascinated by physics and climate science -
George Franklin
"Solar panels are at best about 20% efficient. They convert almost 0% of the UV light that hits them. None of the visible spectrum and only some of the IR spectrum. At the same time as they are absorbing light they are absorbing heat from the sun. This absorbed heat is radiated into the adjacent atmosphere. It should be obvious what happens next. When air is warmed it rises. Even small differences in ordinary land surfaces are capable of creating powerful forces of weather like thunderstorms and tornadoes. These weather phenomena are initiated and reinforced by land features as they are blown downwind. It is all too obvious to me what will happen with the heat generated by an entire solar farm. Solar farms will become thunderstorm and tornado incubators and magnets.
Solar panels are dark and and they emit energy to the space above them when they are not being radiated. This is known as black-body radiation. Satellites flying in space use this phenomenon to cool internal components. If they didn't do this they would fry themselves.
So solar farms not only produce more heat in summer than the original land that they were installed on, but they also produce more cooling in winter, thus exacerbating weather extremes.

So I conclude with this. There is nothing green about green energy except the dirty money flowing into corrupt pockets.
There is no such thing as green energy. The science doesn't exist. The technology doesn t exist. The engineering doesn t exist. We are being pushed to save the planet with solutions that are worse than the problems."

*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.

*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

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

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

***Australia quietly snuck in a shadow carbon price. - The Centre for Independent Studies**
https //www.cis.org.au/commentary/video/australia-quietly-snuck-in-a-shadow-carbon-price/

***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.

From:	Ivnette Iablack
To:	IPCN Enquiries Mailbox; Do-Not-Reply IPCN Submissions Mailbox
Subject:	Wallaroo Solar Electricity Generating Works + BESS - SSD-9261283 OBJECTION Submission - Part 6
Date:	Wednesday, 31 July 2024 5:51:40 PM
Attachments:	Miskelly_-_Storage_Requirements_for_100-percent_Renewables_05-03-2024.pdf

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

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

SOUTH BURNETT MANAGING RENEWABLE PROJECTS MOTION
https://www southburnett qld gov au/news/article/2570/managing-renewal-projects-in-the-south-burnett?fbclid=IwZXh0bgNhZW0CMTEAAR3AXfxlYXvnbG5Aj94by9LO8s3Du1nIKd4m2f8b4tjJqVnJjb7ZcqmAhRo_aem_ARdeXUAOyjHcP4Rn5c2RlgrhtBVlENa-E6bNsY-OTABeeRTB6XtrV1bmgKnlY6MzroDMt_XtQQQ1iG7VPCbZFK8K
Including:- "owners of large-scale renewable developments indemnify adjoining private landowners from any public liability risk "

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
e:[redacted]

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ASIC
Australian Securities & Investments Commission

Current & Historical Company Extract

EXTRACT

Name: NEW ENERGY DEVELOPMENT PTY LTD
ACN: 633 113 827

Date/Time: 19 July 2024 AEST 09:24:02 PM

This extract contains information derived from the Australian Securities and Investments Commission's (ASIC) database under section 1274A of the Corporations Act 2001.

Please advise ASIC of any error or omission which you may identify.

Organisation Details		Document Number
Current Organisation Details		
Name:	NEW ENERGY DEVELOPMENT PTY LTD	0EKL67383
ACN:	633 113 827	
ABN:	55633113827	
Registered in:	Australian Capital Territory	
Registration date:	26/04/2019	
Next review date:	26/04/2025	
Name start date:	26/04/2019	
Status:	Registered	
Company type:	Australian Proprietary Company	
Class:	Limited By Shares	
Subclass:	Proprietary Company	

Address Details		Document Number
Current		
Registered address:	ONE GROUP (AUST) PTY LTD, Suite 3, 327-329 Woodpark Road, SMITHFIELD NSW 2164	7EAT25394
Start date:	04/02/2020	
Principal Place Of Business address:	Unit 3, 2 Dacre Street, MITCHELL ACT 2911	7ECL56034
Start date:	20/11/2023	
Historical		
Registered address:	13 Alan Watt Crescent, CASEY ACT 2913	0EKL67383
Start date:	26/04/2019	
Cease date:	03/02/2020	
Principal Place Of Business address:	17 Walter Crocker Crescent, CASEY ACT 2913	7EAT25394
Start date:	14/01/2020	
Cease date:	19/11/2023	
Principal Place Of Business address:	13 Alan Watt Crescent, CASEY ACT 2913	0EKL67383
Start date:	26/04/2019	
Cease date:	13/01/2020	

Contact Address	
Section 146A of the Corporations Act 2001 states 'A contact address is the address to which communications and notices are sent from ASIC to the company'.	
Current	
Address:	Suite 3, 327-329 Woodpark Road, SMITHFIELD NSW 2164
Start date:	30/01/2020
Historical	
Address:	Suite 3, 327-329 Woodpark Road, SMITHFIELD NSW 2164
Start date:	24/01/2020

Cease date:	30/01/2020

Officeholders and Other Roles		Document Number
Director		
Name:	PRUDENCE MARY FLYNN	7EBD43808
Address:	[redacted] ACT 2913	
Born:	10/03/1986, WAGGA WAGGA, NSW	
Appointment date:	22/12/2020	
Secretary		
Name:	PRUDENCE MARY FLYNN	7EBD43808
Address:	[redacted] ACT 2913	
Born:	10/03/1986, WAGGA WAGGA, NSW	
Appointment date:	22/12/2020	
Previous Director		
Name:	DANIEL ADIN FLYNN	7EAX27758
Address:	[redacted] ACT 2913	
Born:	20/12/1979, BRUCE, ACT	
Appointment date:	08/11/2019	
Cease date:	09/10/2020	
Name:	JAN CHRISTIAN ANDRE SAFKO	0EKL67383
Address:	[redacted] VIC 3193	
Born:	15/10/1983, , SWEDEN	
Appointment date:	26/04/2019	
Cease date:	08/11/2019	
Previous Secretary		
Name:	DANIEL ADIN FLYNN	7EAX27758
Address:	[redacted] ACT 2913	
Born:	20/12/1979, BRUCE, ACT	
Appointment date:	08/11/2019	
Cease date:	09/10/2020	

Share Information

Share Structure

Class	Description	Number issued	Total amount paid	Total amount unpaid	Document number
ORD	ORD SHARES	120	120.00	0.00	0EKL67383

Members

Note: For each class of shares issued by a proprietary company, ASIC records the details of the top twenty members of the class (based on shareholdings). The details of any other members holding the same number of shares as the twentieth ranked member will also be recorded by ASIC on the database. Where available, historical records show that a member has ceased to be ranked amongst the top twenty members. This may, but does not necessarily mean, that they have ceased to be a member of the company.

Name: PRUDENCE MARY FLYNN
Address: [redacted] ACT 2913

Class	Number held	Beneficially held	Paid	Document number
ORD	120	yes	FULLY	7EBT35344

Previous Members

Name: PRUDENCE MARY FLYNN
Address: [redacted] ACT 2913

Class	Number held	Beneficially held	Paid	Document number
ORD	120	no	FULLY	7EBI79073

Name: DANIEL ADIN FLYNN
Address: [redacted] ACT 2913

Class	Number held	Beneficially held	Paid	Document number
ORD	120	yes	FULLY	7EAX27758

Name: JAN CHRISTIAN ANDRE SAFKO
Address: [redacted] VIC 3193

Class	Number held	Beneficially held	Paid	Document number
ORD	120	yes	FULLY	0EKL67383

Documents

Note: Where no Date Processed is shown, the document in question has not been processed. In these instances care should be taken in using information that may be updated by the document when it is processed. Where the Date Processed is shown but there is a zero under No Pages, the document has been processed but a copy is not yet available.

Date received	Form type	Date processed	Number of pages	Effective date	Document number
26/04/2019	201C Application For Registration As A Proprietary Company	26/04/2019	3	26/04/2019	0EKL67383
28/01/2020	484 Change To Company Details 484B Change Of Registered Address 484C Change Of Principal Place Of Business (Address)	28/01/2020	2	28/01/2020	7EAT25394

09/06/2020	484 Change To Company Details 484E Appointment Or Cessation Of A Company Officeholder 484N Changes To (Members) Share Holdings	09/06/2020	3	09/06/2020	7EAX27758
22/12/2020	484E Change To Company Details Appointment Or Cessation Of A Company Officeholder	22/12/2020	2	22/12/2020	7EBD43808
25/06/2021	484N Change To Company Details Changes To (Members) Share Holdings	25/06/2021	2	25/06/2021	7EBI79073
15/06/2022	484N Change To Company Details Changes To (Members) Share Holdings	15/06/2022	2	15/06/2022	7EBT35344
20/11/2023	484C Change To Company Details Change Of Principal Place Of Business (Address)	20/11/2023	2	20/11/2023	7ECL56034

*****End of Extract of 4 Pages*****


Bomen Revegetation Project
This revegetation project has been powered by Spark Renewables and Westpac as part of the Bomen Solar Farm project.
Under this partnership sites around Bomen will host over 90,000 native trees, shrubs and groundcovers to enhance local biodiversity, assist recovery of threatened species and help combat climate change.
SPARK