

NAME REDACTED OBJECT Submission No: 179498

| Organisation:   | Save Our Surroundings (SOS)   |             | Land use compatibility,Visual  |  |
|-----------------|---|-------------|--|--|
| Location:       | New South Wales 2852  |             |  |  |
| Submitter Type: | I am a member of the community with a view about the proposed development | Key issues: | impact,Traffic and transport,Social impacts,Temporary accommodation,Other issues |  |
| Attachment:     | SOS Submission  |             |  |  |

Submission date: 6/13/2024 8:08:32 PM

Please refer to the attachment

## Save Our Surroundings (SOS) submission to the IPCN on the Birriwa Solar Works and BESS proposals, SSD-29508870

Save Our Surroundings opposes consent of this proposed project on numerous grounds which make it 'not fit for purpose'. That is, it does not satisfy the key assessment considerations stated by the DPIE in its Assessment report. These considerations being "...energy security, land use compatibility, transport, social and visual amenity."

In addition, the project and recommendations ignore a huge number of relevant negative issues that this project would create, but which the Assessment Report largely or completely ignores, such as:

- increased emissions;
- increased power prices for consumers;
- a change the character of the landscape;
- degradation of the land;
- a breach of the Paris Agreement;
- wildlife impacts;
- increased fire risks;
- facilitation of the use of slave labour;
- decreased grid stability;
- excessive material requirements;
- increase in grid vulnerability;
- not having social licence or community consent to proceed;
- inconsistency with similar projects;
- a poor use of resources;
- huge amounts of waste;
- low Australian content;
- the extent of subsidies provided;
- end of life impacts
- ignoring real life experiences with existing similar projects;
- negative cumulative impacts.

The above will be addressed in this submission, but first a simple factual example, which is one of many, taken from the AEMO's website dashboard and provided by John Moore on change.org.

On 4th June 2024 at the peak demand period for power from the NEM grid only 1% was generated by solar, wind, and batteries, which are well over 32% of the capacity of the National Energy Market (NEM). So much for the AEMO's claim that "a mix of solar and wind is needed, and they offer complimentary daily and seasonal profiles."

Particularly at 7pm and 7am (Or a time that suits you?) watch (and record) the mix of coal, gas hydro, batteries, solar and wind generation and the prices per MWh for each State on the AEMO dashboard.

https://aemo.com.au/energy-systems/electricity/national-electricity-market-nem/data-nem/data-dashboard-nem

Example: Eastern States 4th June 2024 5.50pm EST. Batteries 0%, Biomass 0%, Black Coal 46% Brown Coal 14%, Gas 21%, Hydro 15% Diesel 1% Solar 0%, Wind 1%. A peak time and solar and wind only contributing 1%. Solar will has gone to sleep for the next 14 hours and wind can't get much lower than 1%.

South Australia 4th June 2024 5.50pm EST. Batteries 6%, Gas 76%, Diesel 16% Solar 0%, Wind 2%.

On the 4th June 2024 from 5.50pm EST to 9:05pm EST, South Australia, which has over 60% wind and solar capacity and big batteries, went from providing energy from batteries 6%, solar 0% and wind 2% to zero supply from its "renewables" capacity in under three hours!

A CHAIN IS ONLY AS STRONG AS ITS WEAKEST LINK. WITH SOLAR IT'S SIXTEEN HOURS OF DARKNESS EVERY NIGHT, PLUS INTERRMITENT CLOUD AND RAIN. WIND IT IS PROLONGED CALM (WIND DROUGHTS) OR GALES. BATTERIES GO FLAT QUICKLY.

WHEN THEY COINCIDE, YOU GET THE RESULT BELOW WHICH MEANS RENEWABLES WILL NEVER REPLACE COAL FIRED POWER STATIONS.

The facts speak for themselves. From the AEMO data dashboard. Eastern States 4th June 2024 4.50pm EST. Batteries 0%, Biomass 0%, Black Coal 46% Brown Coal 14%, Gas 21%, Hydro 15% Diesel 1% Solar 0%, Wind 1%.

THIS SITUATION OF 3% OR LESS FROM RENEWABLES HAS GONE FROM 4.50pm to 10.00pm (5 hrs) SO FAR AND CONTINUES

And South Australia 4th June 2024 5.50pm EST. Batteries 6%, Gas 76%, Diesel 16% Solar 0%, Wind 2%.

STOP PRESS: South Australia 4th June 2024 9.05pm EST. Batteries 0%, Gas 97%, Diesel 3% Solar 0%, Wind 0%.

SA RENEWABLES CAPITAL OF AUSTRALIA WITH BATTERIES, SOLAR AND WIND PRODUCING NO ELECTRICITY, ZERO, NOTHING

All this again underlines how important (beginning with Liddell which closed in April 2023, Eraring in 2025, Yallourn in (2032 now 2028), Bayswater in 2033, with Loyang A in 2045). **AND** 

How much more evidence does the DPIE and the IPCN need to reject the Birriwa applicant's claims, and repeated by the DPIE, that the project will:

- replace the output of retiring coal-fired power stations (non-equivalence of capacities)
- increase the reliability of the grid (exact opposite, no power at times, unreliable source)
- provide cheaper electricity (zero electricity cost nothing, world-wide prices have risen)

- provide energy security (intermittent weather dependent can never by secure, nor can sourcing most of the components from one unreliable source)
- be in the public interest (e.g. increased cost of energy, business failures, companies moving overseas, increased government debt from subsidies, net job losses; increased emissions, intergenerational inequality, social upheaval, reduced food production, environmental damage).

But more factual evidence is available, most of it from experts in their field. The IPC panel heard some of these experts at the Birriwa public meeting held on 4th June 2024. Yet neither the DPIE or the Applicant responded to one of those presentations. Their summing up just ignored every speaker, just as they repeatedly ignore factual objecting submissions, except for their preferred few topics for which they have stock answers and conditions ready.

Each negative point referred to earlier is only presented in brief form in table 1 below. They are not all the issues that we could have included. There are many research papers, scientific papers, books, documentaries, manufacturer's specifications and documents, government information, legal cases, media articles, data from applicants, etc. to support these negative impacts.

Our concerns are that the DPIE and the IPCN are still too inexperienced in assessing solar, wind and BESS proposals and just rely far too heavily on the marketing statements of the Applicants, even when misleading statements are made and obvious errors, inconsistencies and omissions occur. One DPIE Project Contact once told SOS that they do not have the resources to investigate claims contained in objecting submissions. This shows a serious flaw in the planning evaluation and approval process.

Table 1 Summary of some of the unsatisfactorily addressed negative issues

| # | Issue   | Points   | Comment  |
|---|---|--|--|
| 1 | increased<br>emissions                        | Embedded GHG upfront; ignores long payback time of just the panels let alone all the direct & indirect emissions from supporting infrastructure; use of fossil fuels from grid use; emissions from maintenance operations; vegetation removal & burn offs; no substantiation of CO2e reduction claims, project output or claimed economic life; Australia's anthropogenic emissions reductions will have negligible effect on climate. | SOS papers previously supplied to IPCN. Australia's GHG emissions are about 1% of the 3% of anthropogenic contribution to the global atmosphere. 2017 Chief Scientist statement to senate enquiry. |
| 2 | increased power prices for consumers          | Solar works are idle at least 75% of their short lifetime; actual consumer power prices have outstripped CPI for a decade; no jurisdiction in the world with over 30% of wind & solar have cheap electricity; 61% increase in small business failures already in 2024; massive increase in consumers unable to electricity bills.  | Applicant's capacity factor & degradation rates. SA has Australia's highest power prices with 60% renewables capacity; gov't handouts to compensate for failed achievement of actual reductions    |
| 3 | a change the<br>character of the<br>landscape | Rural character reduced; A BESS is not an approved structure on RU1 land; cumulative impacts of closeness of similar projects; DPEI does not raise impact on landscape character   | Land & Environment Court ruling on Burrundulla Solar & definition of visual amenity vs landscape character   |
| 4 | degradation of the land                       | Erosion; soil contamination; soil salinity increased; increased compaction; water diversion to   | Per expert & land holder presentations at IPC public   |

| #  | Issue   | Points  | Comment  |
|----|---|---|--|
|    |   | neighbours; no soil improvement activities  | meeting. Solar panels are  |
|    |   |   | e-waste in Victoria & EU   |
| 5  | a breach of the<br>Paris Agreement                        | Food production should not be impacted; proposed sheep grazing is not a significant offset to lost production of the original site; "Article 2.1(b) in a manner that does not threaten food   | A presentation at IPCN public meeting.   |
| 6  | wildlife impacts  | production;"  Fully fenced site hindering wildlife movement, foraging, etc.; elimination of dams; koalas & other animals threatened as noise (from construction & operation) is known to drive fauna away from traditional habitats   | CSIRO research papers re impact of noise on animals  |
| 7  | increased fire risks                                      | Solar work & BESS fires already in Australia; site has had some of the worst fires in the region; 2017 fire destroyed 35 homes, 5000 livestock, untold wildlife & burnt 500km2  | SOS papers previously supplied to IPCN. A presentation at IPCN meeting   |
| 8  | facilitation of the use of slave labour                   | Most components are made in China and slave labour is largely involved in China & the DRC. Over 90% of PV solar panels and most of a BESS is made in China.   | Expert presentation at IPC meeting. SOS papers previously supplied to IPCN.  |
| 9  | decreased grid<br>stability                               | The NEM has become more & more unstable as more wind & solar works are added to the grid; AEMO increased use of emergency powers to curb demand; NEM is already very near the tipping point when blackouts will be unavoidable  | AEMO statements; NSW<br>Gov't extending life of<br>Eraring; AEMO dashboard<br>(e.g. for 4/6/24)                                    |
| 10 | excessive material requirements                           | The life-time weight of materials per MWh generated for just the solar panels and steel supports far exceeds that of a fully functioning modern lower emissions HELE, CGCT & nuclear power plant  | SOS papers previously supplied to IPCN   |
| 11 | increase in grid<br>vulnerability                         | Fires, hail damage, heavy rain & lightning strikes have reduced the output of solar works; component failures & inability to regulate output have restricted some solar works. Extreme temperature fluctuations such as across the CWO-REZ (-5C to high 40C) impacts efficiency of solar panels and batteries; crowding of so many solar & wind works into REZ's will potentially knock out multiple works when a big disaster ultimately occurs. | Not just weather<br>dependent but weather<br>vulnerable.   |
| 12 | not having social licence or community consent to proceed | Over 96% objections from the communities for the Birriwa proposal. All such proposals around Gulgong/Dunedoo have had similar results.  | Why are the impacted people being ignored?   |
| 13 | inconsistency with similar projects                       | Proposed PV solar & BESS projects using the same technology to produce a single standard product (AC electricity) have widely varying lives, outputs, footprints, vehicle movements, emission reductions yet no apparent comparisons are made or required.  | SOS presentation highlighted one major example but every project has unjustified claims, which SOS often challengers to no effect. |
| 14 | a poor use of resources                                   | Compared to modern alternatives the massive footprint per MW of capacity and huge amount of land & materials consumed and wasted to produce a MWh of energy is unsustainable; the billions of dollars in subsidies & other benefits to  | SOS papers previously supplied to IPCN   |

| #  | Issue               | Points   | Comment                      |
|----|---------------------|--|------------------------------|
|    |                     | solar and wind developers increases the debts of         |                              |
|    |                     | governments and places a great burden on future          |                              |
|    |                     | generations; reduction in food production will           |                              |
|    |                     | impact current & future generations, both in             |                              |
|    |                     | Australia and overseas consumers of our produce.         |                              |
| 15 | huge amounts of     | 1.2 - 1.4 million solar panels & thousands of            | MWRC consultant's            |
|    | waste               | tonnes of batteries - the waste from this project        | report. Stock Agent's        |
|    |                     | will be unimaginable from start to finish let alone      | presentation at IPC          |
|    |                     | the cumulative waste of multiple projects & an           | meeting. Virtually no local  |
|    |                     | influx of over 7000 out of town construction             | employment involved but      |
|    |                     | workers within kms of the towns of Gulgong &             | local jobs will be lost. IPA |
|    |                     | Dunedoo.   | report.                      |
| 16 | low Australian      | The Australian content of these massively                | NREL report. SOS papers      |
|    | content             | expensive projects, which sit idle most of their         | previously supplied to       |
|    |                     | life, has been estimated as between 12 and 15%           | IPCN                         |
| 17 | the extent of       | No skin in the game then no responsibility; the          | SOS papers previously        |
|    | subsidies provided  | applicant gladly takes the taxpayers' money              | supplied to IPCN             |
|    |                     | through subsidies & higher electricity prices but        |                              |
|    |                     | has no willingness to post a bond for when               |                              |
|    |                     | decommissioning, rehabilitation & disposal occurs        |                              |
|    |                     | in a couple of decades.                                  |                              |
| 18 | End of life impacts | Unclear who is actually responsible for                  | Confidential agreements      |
|    |                     | decommissioning, land rehabilitation & disposal of       | hide responsibilities. NSW   |
|    |                     | the waste; potential the then operator of the solar      | EPA law places ultimate      |
|    |                     | works, the host landholders or ratepayers, if the        | cleanup on the local         |
|    |                     | land is contaminated.                                    | authority (e.g. MWRC)        |
| 19 | ignoring real life  | Lack of screening, road damage; vehicle accidents;       | Presentations at IPC public  |
|    | experiences with    | fires; visual impact even at 8 - 10kms or more;          | meeting.                     |
|    | existing similar    | lack of response from authorities; flooding;             |                              |
|    | projects            | erosion; natural damage; loss of value of solar          |                              |
|    |                     | works; failure of works to achieve originally            |                              |
|    |                     | claimed output.  |                              |
| 20 | negative            | All of the proceeding multiple times plus others as      |                              |
|    | cumulative impacts  | projects accumulate in a condensed areas of the CWO-REZ. |                              |
|    |                     | CVVO NEZ.  |                              |
| l  |                     |  |                              |

## Conclusion

The project in not fit for purpose and should not be consented to by the IPCN. No number of mitigations required of the Applicant can satisfactorily address the all these very significant short-comings of this project.

If the IPCN consents to this project they must justify their decision by actually addressing the issues and evidence provided by all the people opposing the project and stating why such evidence was dismissed .

Regards

Save Our Surroundings (SOS)

SOS submission to IPCN for Birriwa Solar and BESS Works