

SAVE Gundry Plains

On behalf of the community

EIS Submission – Gundry Solar Factory – FINAL 6DEC2024

WE OBJECT - THIS PROPOSAL SHOULD NOT BE APPROVED

OVERVIEW

The BP (Lightsource, LightsourceBP, Lightsource Development Services Australia Pty Ltd) EIS is a joke.

BP has had 2.5 years to develop the EIS and we have 28 days to respond – how is this fair?

Over 3,000 pages of paid consultant gobbledy gook to justify their required outcome. The EIS is riddled with errors and especially the ultimate weasel words "the Project is not expected to create any significant conflict with... residential uses of land". Of course they are required to say this because the T & I SEPP law requires BP to have located the project to avoid conflict with existing and future residential uses of land. It didn't of course, and nothing can remedy that which means that if this project is approved it is probably unlawful.

The difference between reality and the fiction in the EIS is gobsmacking. BP depicts the Gundry Plains as a vast agricultural area and their EIS does not once describe the area correctly or honestly. Figure 2.4 – Receivers – p61 of EIS which identifies 108 receivers/residences and more people impacted gives BP's game away. BP attempts to convey an impression of the area as one where vast broad scale agriculture is occurring rather than a place of small and large hobby/lifestyle farms with some close by rural homes on a few acres. At one point it describes the landscape as: "rural infrastructure (sheds, fencing and farm equipment) and homesteads on large rural lots. Large rural lots! In essence the approach taken by BP in the EIS is "let's not talk about the war". Let's just pretend this area is something that it isn't and hope no-one notices.

Then there is the bit where they say there are "no alternative locations" to get to their cherished grid.

The very best bit is titled the "DO NOTHING OPTION" where of course BP simply says the project must happen because of its benefits so the project "not going ahead" is not an option. No mention here of the true impact on the poor people of Gundry Plains and Goulburn! BP is just wrong on this one. They have another option right now and they should take it. They were told this option as far back as April 2022 when they first met with residents. Their option is called the "WALK AWAY OPTION."

CONFLICT WITH CURRENT USE – RURAL RESIDENCE LIFESTYLE

The NSW Premier and the Minister for Regional NSW launched the Government's "Make the Move" campaign earlier this year and chose a rural lifestyle block south of the Freeway at Brisbane Grove in view of the Gundry Plains. A 7 square kilometre solar factory as your closest neighbour will not encourage one to choose Goulburn as "the" location to move to.

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Large Scale Energy Guideline - To approve large-scale solar energy development near certain regional cities, the consent authority must be satisfied that any urban land conflicts, impacts on urban growth potential and important scenic values are not significant. This applies to State significant solar energy generation projects located on mapped land for the regional cities of Albury, Armidale, Bathurst, Dubbo, Goulburn, Griffith, **Goulburn**, Mudgee, Orange, Tamworth and Wagga Wagga.

Nowhere in the EIS does BP say the project was located to avoid conflict with residential uses of land. Yet that is what the law requires. It is likely that this is not an oversight but a careful omission. Because as the Scoping Report reveals, there were two things on BP's mind when locating the project: 1. proximity to the grid and 2. clear relatively open land which avoids clearing native vegetation. These two features alone drove the question of location. They are both worth tens and tens of millions of dollars to BP. BP did not give any serious consideration to the poor people living as neighbours and very close by. It's as simple as that and their own Scoping Report reveals that.

What BP does instead is simply skip over this and say instead that there are no significant conflicts with the residential uses of land. This is like saying black is white. And is an insult and an affront which reflects the way they have treated the impacted landowners from day one. BP needs to convince the planning panel that there is no significant conflict and that cannot be remedied with mitigation.

This is a battle between a massive multi-national and a very wealthy Sydney Banker who has never lived in Goulburn versus the impacted landowners. If it is approved it will ruin a number of us financially and mentally, including two young families.

BP is not saving the planet with this development. This is a story of insatiable corporate greed - with the people living in Gundry being the ones who are paying for it.

LANDSCAPE CHARACTER ASSESSMENT

The scenic qualities of the rural landscape and the openness of views of Gundry Plains are an important characteristic for members of the local community, visitors and most people of Goulburn.

The scale of a massive 7 square kilometre industrial facility located on the floor of Gundry Plains in the middle of the visually sensitive rural landscape is a massive intrusion and conflicts with the rural life style nature of the area.

To satisfy the requirements of the State Environmental Planning Policy – Infrastructure (SEPP), there must be an assessment of the landscape character which takes into account the cultural and deeper aspects of the landscape held by the residents and the local community. There is the requirement to make an assessment of the sense of place that is attached to the area.

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It is also a requirement to assess scenic quality which includes taking into consideration community values. The openness of the views is also an important characteristic of the landscape character.

BP have conducted an assessment of the visual impacts to the regional city of Goulburn as part of their landscape and visual impact assessment and which were prepared in accordance the Solar Guidelines and the Technical Supplement.

The assessment of landscape character should have been carried out as part of the site assessment and cannot be done retrospectively and this assessment is not remediated by a reliance on historic consultation which was for a different purpose to that required by the SEPP.

Views and visual impact assessments based solely on guidelines are not sufficient to satisfy the requirements of the SEPP.

BP has not conducted any engagement or consultation with the Gundry Plains community nor any direct engagement with those most affected by the proposed development regarding the landscape characteristics and scenic quality.

The bottom line is that BP is unable to comply with the requirements of the SEPP and further, had BP conducted their assessment as part of their site selection they would not have chosen this site.

CONTAMINATION AND POLLUTION

The NSW Department of Planning has previously advised the Independent Planning Commission “that to readily release contaminants into the environment, the solar panels would need to be ground to a fine dust...”

The Large-Scale Solar Energy Guideline, Frequently Asked Questions (Guideline FAQ) provides the following advice on whether solar panels contaminate soil (page4):

The metals in solar panels (including lead, cadmium, copper, indium, gallium, and nickel) cannot be easily released into the environment. This is because metals such as cadmium telluride (CdTe) or cadmium sulfide (CdS) 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 need to be ground to a fine dust.

The Independent Planning Commission has as recently as July 2024 requested the Planning Department to provide further information on contamination risks associated with solar panels. The Department’s response included reference to the Guideline FAQ and noted that it was informed by the advice from the Environment Protection Authority (EPA).

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Whenever the issue of contamination by solar panels was raised in the past the Independent Planning Commission has accepted the advice contained in the Guideline FAQ. The Independent Planning Commission has also said in the past that “in the absence of any robust contrary evidence”, that the risk of contamination from damaged and/or degraded solar panels is minimal.

Well, here is the robust contrary evidence.

Researchers at the Institute for Photovoltaics and Research Centre SCoPE, University of Stuttgart and the Institute for Sanitary Engineering, Water Quality and Solid Waste Management, University of Stuttgart, 70569 Stuttgart, Germany published a paper on 29 January 2021 titled **Leaching via Weak Spots in Photovoltaic Modules**.

Abstract:

*This study identifies unstable and soluble layers in commercial photovoltaic modules during 1.5 year long-term leaching. Our experiments cover modules from all major photovoltaic technologies containing solar cells from crystalline silicon (c-Si), amorphous silicon (a-Si), cadmium telluride (CdTe), and copper indium gallium diselenide (CIGS). These technologies cover more than 99.9% of the world market. We cut out module pieces of 5 X 5cm² in size from these modules and leached them in water-based solutions with pH4, pH7 and pH11, in order to simulate different environmental conditions. Unstable layers open penetration paths for water-based solutions, finally the leaching results in delamination. In CdTe containing module pieces, the CdTe itself and the back contact are unstable and highly soluble. In CIGS containing module pieces, all of the module layers are more or less soluble. In the case of c-Si module pieces, the cells' aluminium back contact is unstable. Module pieces from a-Si technology also show a soluble back contact. Long-term leaching leads to delamination in all kinds of module pieces; delamination depends strongly on the pH value of the solutions. For low pH-values, the time dependent leaching is well described by an exponential saturation behaviour and a leaching time constraint. The time constant depends on the pH, as well as on accelerating conditions such as increased temperature and/or agitation. **Our long-term experiments clearly demonstrate that it is possible to leach out all, or at least a large amount of the (toxic) elements from the photovoltaic modules. It is therefore not sufficient to carry out experiments just over 24h and conclude on the stability and environmental impact of photovoltaic modules.***

A copy of the paper is attached.

A number of people on the Gundry Plains are concerned that parts of their properties and their water may be contaminated by water run-off from the solar site

Livestock producers as part of their accreditation are required to identify risks and now they have an additional contamination risk which will have to be managed at an additional cost, presuming it is able to be managed.

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As the Gundry Plains is part of the Sydney Water Catchment, there is the likelihood that the Sydney water supply could be contaminated.

Soil contamination of the solar site and neighbouring properties is also a likelihood.

FIRE RISK

BP have stated that there is an increased risk of fires from a solar “farm” however they have no idea of the fire behaviour on Gundry Plains. BP must have had a group think exercise to come up with the idea of 180,000L of water in tanks spread around the site was sufficient and practical. A fire pump hosing down a 330KV substation that catches on fire would use all the water within 4 hours – these fires take days to get under control.

There are fire prone areas on Gundry Plains and many of these are on the eastern side of the plain directly in the fire path coming off the solar site. The prevailing winds that push grass and bush fires on Gundry Plains are Westerly and North Westerly. Some residents on the eastern side along Koorringaroo Road are required to have a 30M APZ (Asset Protection Zone) around their residence, however the arrogance of BP thinks it should get away with a 10M APZ for their very large incendiary device (solar factory).

HEAT ISLAND IMPACT

Studies around the world show that large solar farms create a heat bank extending several hundred metres from the perimeter of the panels. It is naturally worse in the summer months. You don’t need to be a scientist to understand this. But no Australian government has commissioned any studies to explore the extent of the heat bank and the impact on people living close by. The fact the ENVIRONMENTAL IMPACT STATEMENT does not even address this question for the people who would be living in the shadow of this monstrosity should render this entire project unviable from the start.

What Australian would want their hot summer days made “more hot” by living next door to one of these things? And when it snows, the snow will no longer settle to provide the white blanket over Gundry Plains.

The truth is the heat island impact has never been anticipated by policy makers or that solar projects of this size would be located in places like Gundry. That's why no one has bothered to address this issue before.

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LIES BY OMISSION AND DECEPTION – Sub station related

There is a monstrous (and now much enlarged – double the size of the last community consultation version!) sub-station and switch station and a bunch of people living around it and who have already suffered property devaluation and a couple of people who can't even sell their properties!

BP has conveniently omitted that the switching station will require the existing 330KV line to go to the switch and out again – this is 3 lines in and 3 lines out – this usually requires at least one additional 3 line tower (approx. 45M high) plus a 6 line tower to take the lines to and from the switch station and back to each of the 3 line towers. 6 line towers are approximately 85M high. This is a major impact on surrounding residences near Windellama Road and further confirms that BP is prepared to say anything in order to get their proposal approved. This is another issue where BP takes the “let's say nothing” approach.

Photo of the Collector Wind Turbine Factory sub station and switch station beside the Hume Highway at Lerida. This links into the parallel 330KV line to the line that crosses the proposed solar site.



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NOISE NUISANCE

Living on Gundry Plain we are rarely worried by man-made noise.

A number of impacted residents have been advised by BP that there may be times when noise levels received would exceed the Project's Noise Management Level. Some residents will have 2 years of noisy construction and then ongoing operating noise.

They also say they always base their modelling on a worst-case scenario, and they went on to say that their information informs us of how they are proposing to reduce and mitigate the impacts of noise during the construction period. There are no noise mitigation measures proposed in the EIS that address the excessive noise.

CUMULATIVE IMPACTS - BP PLEASE EXPLAIN

How can BP say that they “will not materially” contribute to the cumulative impact when the Merino Solar development is only 2 kilometres from the Gundry proposal and Windellama Road is the same main access road that will be used?

“Gundry Solar Farm has not been considered to materially contribute to potential cumulative impacts and therefore these issues have not been highlighted as requiring further assessment in the table provided in this appendix. This is not to infer that other projects with a higher risk of impact may not contribute to cumulative impact, including some of those listed below, **simply that Gundry Solar Farm will not materially contribute to any such cumulative impact and therefore does not require further assessment.**”

Merino Solar Factory Appendix 21

In Planning - Prepare EIS 450 MW proposed solar farm with energy storage and associated infrastructure.

Construction expected to commence (but not approved) in early-mid 2025 to mid-late 2026, with a duration of 12 to 18 months.

Project is expected to generate up to 200 to 300 FTE jobs during construction, with four FTE jobs during operation, as well as 50 casual staff.

Access to the northern site is expected to be provided via a new access driveway linking to Braidwood Road, but could potentially utilise existing arrangements from **Windellama Road** or Gundry Lane. The southern site is expected to be accessed either directly from Braidwood Road or from Painters Lane.

Table of Likelihood of Potential Cumulative Impacts of other impacts

Merino Solar Factory

Biodiversity - medium	Transport - high	Social & Economic - medium
Agriculture.- medium	Waste Management – medium	
Noise and Vibration - high	Visual - high	

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DECOMMISSIONING AND REMEDIATION

It is likely that 1700 acres of panels will simply rot in the paddocks in 25 to 40 years time.

In all of the EIS we are treated to one paragraph and one sentence relating to decommissioning. (see p 51.) It simply says that the law regarding decommissioning will be followed at the time. There is no estimate of the cost at all (!), and then there is a big lie: that BP or its contractors will do it. This is disingenuous at best and a disgraceful lie at worst. BP's formal policy is now to build these things and spin them off. It's called 'asset recycling' and it is fairly clear that BP will NOT decommission this project because it has no intention of owning, running and managing this project.

This project, like so many of the wind projects in our region will be run down in its final years and managed by a \$2 shelf company. If these panels are decommissioned then it will be paid for by the taxpayer. It is beyond our comprehension that governments at all levels and of all hues have let the large scale renewables sector get away with this outrageous lack of accountability to the future and to future generations on the question of decommissioning.

By not requiring the developer to lodge a decommissioning/remediation bond is a further subsidy provided to the developer.

THIS PROPOSAL SHOULD NOT BE APPROVED.

