Culcairn Solar Farm IPC Submission

I’m a fourth-generation farmer on our property which was first settled by my great grandfather in 1912. Our property lies directly east of the proposed Culcairn solar development across Weeamera rd. We are also neighbour to the already approved Walla Solar development on our southern boundary across Benambra rd. The cumulative effect of these 2 developments totalling 1500 ha concerns me.

I would like to address several of my major concerns.

You would be aware the local Culcairn South west bush fire brigade has made the decision that it is unsafe to expect volunteer fire fighters to enter the solar development if a fire does start. The reasons for which are ;

1 For entrapment risks.

2 Toxic fumes associated with burning solar infrastructure.

3 Lack of access for fire trucks between panel rows and.

4 Electrocution risks. Water and electricity are not a good combination.

With the sheer size of these developments, I am concerned that if a fire does start it may lead to a massive fire front which may easily affect our property.

The land on which the Culcairn solar development is situated is infested with a serious weed problem of Silver Leaf Nightshade. This weed is incredibly difficult to control and highly invasive as it has a small pea like berry that can be spread by birds dropping the seeds. I am, and I think understandable, highly concerned that under this development it will become prolific and a massive seed bank will develop impacting our property.

Hairy panic is also a prolific weed which grows on summer rains. Hairy panic is toxic to sheep so will not be able to be controlled with sheep grazing. Neoen have stated they will develop a weed management plan but as neighbours who will be impacted by these weeds, we would like to know precisely what the plan entails. We do not believe with the design of the solar rows it will be possible to have machinery work between the rows due to the connecting rods which track each row following the sun. Boom spraying will therefore not be possible. While hand or spot spraying would be impractical on a site of this size.

I, like many others am very concerned about the lack of studies on solar developments of this scale on the heat bank effect. Especially with 2 such large developments on 2 sides of our property. Its only logical that 900000 glass panels will generate substantial heat, the effect of which is clearly unknown. Any studies that have been undertaken have been on significantly smaller areas, so the comparison is not really relevant on this scale. There is virtually no screening down the eastern side of the development protecting us from hot westerly winds in the development plans.

The glare that a solar footprint of this size will be a problem for neighbours. This has become evident at the Bomen solar facility near Wagga Wagga.

I am concerned the effect of water shedding off the solar panels has been totally underplayed. I note the Appendix I Flood study within the EIS and am concerned about its assumptions on impervious calculations. Rain collecting on panels will lead to water running off instead of infiltrating.

A recent gentle 40mls rain event on the relatively small 30-megawatt Corowa solar facility led to table drains running a banker according to its neighbour. 900000 - 2 metre by 1 metre panels equates to 1.8 million square meters of hard impervious surface. 1 mm of rain on 1 square metre of area measures 1 litre of water. A 25 mm rain event on 1.8 million square metres of impervious surface will lead to 45 million litres of water shedding off the panels. That is 45 megalitres in just 1 relatively small 25 mm rain event. This amount of water cannot infiltrate quickly enough, not to lead to substantial amounts of water having to go somewhere. This is going to seriously impact neighbouring properties. What amount of damage could a larger storm create? This I see as a major issue that has gained virtually no attention.

Neoen have made much of their neighbour consultation. Yes, they have ticked the boxes by meeting with us on our properties, however we have never been given adequate answers to these and several of our other concerns. We have property near Walla Walla and use both Weeamera and Benambra roads for machinery access as well as a travelling stock permit to drove stock between the properties. We have voiced our concerns about the amount of traffic these roads will carry and the impact it will have on our access during construction but have had no real answers to this issue.

We have posed the question of insurance liability risk. If we inadvertently cause a fire on our property which then escapes onto the solar development. Neoen simply state that they have their own insurance policy, so we are protected. However, with a $500 million development adjacent to our property if we are found negligent then our $20 million liability cover will not go far. We cannot afford to insure ourselves against that risk and this leaves us very exposed.

I am concerned with the agricultural assessment report on the number of sheep which has been estimated to be able to run on the solar development. As a neighbouring sheep grazier, I think that the expectation that 14000 wethers can be successfully run on the given area is wildly optimistic. Especially with the management constraints associated with operating machinery amongst solar panel arrays.

I am concerned about the possibility of decreasing land values. Neoen state that there is no evidence to show land values are affected. However, several properties for sale near the proposed Jindera solar development have been unable to attract interest even in a booming local real estate market.

I am concerned that information contained it he EIS and subsequent reports are not being checked or so called ground truthed. Just because its written in a document doesn’t make it correct. For instance, when a researcher was spoken to doing a bio-security survey along Benambra road what he was looking for they replied frogs. It was a hot summers day so not really likely to find many, one would think. They then asked if we had seen a particular parrot as they didn’t know what it looked like. Surely it is the job of the Department of planning and now the IPC to ground truth everything in the proposal. Not to just accept what the proponents say as gospel.

I am concerned about the decommissioning phase of the development. Is there an absolute guarantee the site will be fully rehabilitated to its former condition at the proponent’s expense? Or is it possible that they will be able to walk away and leave the district with an environmental disaster?

There are many more issues to be considered such as toxic waste leaching out of broken panels throughout the life of the project through to its decommissioning. Dust suppression during construction and who will monitor it.

Although Neoen downplay any risks or adverse effects the development will have on neighbours, I would like to know who is going to make them accountable if this was to occur. Who for instance will make them accountable for any increase in silver leaf nightshade on our property due to their negligence? If my land values do suffer due to the cumulative impact of 2 huge solar developments what compensation should I receive. These types of scenarios we as neighbours would like to be protected from. Clear and measurable parameters need to be established to protect neighbours from any adverse effects forced upon them.

The planning for Australia’s future renewable energy needs requires much thought and foresight. At the moment our energy policy seems to be being determined by foreign owned solar companies as to where they want to place their solar industries in the most convenient and cost-effective locations for them. Namely under already constructed transmission lines with no regard to high value productive agricultural land. Indeed, the Department of planning seems to be complicit in aiding these developments as they are yet to reject any solar developments throughout the state.

Climate change is a serious issue and closely linked to climate change is food security. As climate change continues, productive agricultural land areas will diminish. It does not make sense to try ad solve one problem of replacing coal-based energy with renewables and create another issue of losing prime agricultural land In the process by placing solar on such land.

The Government has named three main renewable energy zones within New South Wales however Culcairn Solar Development is not even within 200 Kms of the nearest energy zone. What is the point of setting up these renewable energy zones if the Department of Planning recommends a development so far outside these zones?

The number of Solar Development proposals on prime agricultural land in NSW is growing daily. Eventually at some point in time somebody will say enough. It just makes far greater sense for these developments to be built out west where they will not impact high value agricultural land or neighbours. Surely this is a perfect opportunity for Government to plan for a renewable future, appropriately built, in areas best suited to serve our nation’s future energy needs. To build a network of transmission lines with the capacity to futureproof our Nation’s energy requirements. If Singapore can build an enormous Solar Industry in NT and cable power 3000kms then transmission line losses can obviously be overcome.

I believe both sides of this debate will admit that it has led to much fracturing in our community. Tensions are running high. People are being verbally attacked in the streets and businesses. I heard just last weekend those opposing the development referred to as Luddites. People against development and progress. Nothing could be further from the truth as Australian farmers are world leaders in agricultural innovations. They are highly regarded and considered to be some of the very best farmers in the world. This land in the Greater Hume Shire is some of the most reliable and productive farming land in the State. Land values have skyrocketed in the Shire because it is recognised as such valuable farming land.

It has been argued that tensions will ease as Solar Developments are completed and begin operation. I however fear that with the cumulative impact of four very large Solar Developments within very close proximity of each other, this will not be the case.

Thank you for treating our concerns seriously and for placing Agriculture as an important component when designing our nations energy requirements.