I am representing the neighbouring property to the proposed site known as R1, where the design is concentrated on kilometers of boundary and lies within the 3 kilometers of both the proposed and one approved solar developments.

I am very appreciative of the panel coming here and opening this platform and I understand you are here as specialists in your fields to make final decisions and have experienced a broad range of speakers and information. I also appreciate that you may prefer statistics in relation to the proponents to consider but many don't have funding for an army of researchers to form independent professional opinions of the EIS. I hope some practicality of my concerns, local knowledge and questions - at the least - contributes to the progression of introduction to solar as the worlds hope towards clean energy.

I cannot stress my disappointment that prime agricultural land (NSW Biophysical Agricultural Land) has been supported for industrial scale solar farming. Food, biodiversity and water contamination are also part of world resource insecurity. I have already have watched neighbours go through this process for Gunnedah Solar on 203 hectares of agricultural land and its approval. Also approved is Iron Bark Energy solar, an ideal of what I expected of large scale solar farms, built on brown belt land and encouraging community title. Combined, both are 192MW's with possibility of simultaneous development now the latter seems delayed.

I'm not questioning climate change, renewables or discouraging local economy but I do question why this scale of solar farming is on agricultural land, when we can be the one of the world's leaders as we are seen in roofing solar. Repeatedly the government is asked why with extensive sun and non food producing land, is it not preferable to floodplains, and agricultural land just because of proximity to a grid line. If the government could provide more ways for development on brownfield and unproductive areas, in comparison with other resources sacrificed for one, the conflict would be avoided.

My experience of the initial stage of development of the project has shown that solar, referred to as socially responsible, is known for permitting uncomfortable behaviour not dissimilar to mining strategies in the consultation process. It is upsetting for those affected and totally unnecessary and I ask that you please rectify these procedures so that ongoing, and new solar farming development have a respectful practice when dealing with potential neighbours. Obviously it's a necessarily fast moving area but as any adjoining landholders or even part of a larger community as people, we have many expectations including being informed, and educated about the decision making process and matters that may affect us, and have questions answered.

Many responses from proponent for the DPI to questions raised by neighbours and the public, are based on they "understand the requirements of this condition and will comply with it." So obviously the final stages of development are based on merit. As a property owner we are relying on the proponent to follow protocol to ensure limited affects including our own health and safety, therefore we are also dependent on their merit throughout this process, which is disconcerting from a company that announced the development on local news

before any affected neighbours were notified, then encountering eye rolling and being told to "look it up" when attending public information meetings. This may sound irrelevant to you but this is all about a process for both renewables, government, community and neighbouring land owner. I hope that you understand this consultation period requires that all parties are being treated with respect and transparency, as SEARS guidelines require. The alternative, is community divide and discouragement rather than for collective and informative information and discourse. I would like to think that our concerns are recognized as having a legitimate interest in the final outcome - as much as yours. An EIS full of adjectives of unlikely, not likely, should not significantly' also frame the uncertainty of how adjoining properties and the future of the proposed development are impacted or concerns legitimate after the above mentioned behaviour. (This is clearly not very respectful and has been a major difficulty in interaction with the development proponents.)

I am encouraged to see some flexibility in changes in the development, starting with setbacks. I was asked at the public meeting why I was concerned about kilometers of solar on our boundary fence when "they got one in 80m from someone's house' and they could offer screening, which of course, the owner of our property, will unlikely appreciate, before their purpose is effective. If so much attention to view shed concerns renewable applications and with glare and glint and this application is deemed approvable, can't it stretch to the governments support with landcare examples of renewal by additional screening. This is an existing business entrance, a home and only a fourth of the boundary the panels face on our property.

You would have driven past these from Tamworth airport (image)
To just down the road from the proposed site. (image of Landcare OGR)
These changes suggest the distance is 164m from the garden orchard. The water bore at 133 m from the boundary, supplying water to our 1902 house and cattle securely, is apparently with acceptable vibration levels for bore integrity.

In small print on the design in appendix A, (image) there is another door of uncertainty... that despite promising changes under no. 6 ....Setbacks are considered in layout are subject to change during detailed design phase".

Is this the developer honouring the proximity concerns so we're less affected daily or is this a clause to renig any mitigation?

On one image the road (image detailed design) is shown within the site boundary of the first panels and another adjacent to our driveway (image close to house)

Their view shed is this...(image taken from eis)

This would be ours, (image gate at orchard and back entrance)

And from the mailbox and entrance (image) if this is returned to the original design for a highly sensitive receiver.

I consider this a considerable effect not only on lifestyle but productivity with livestock during development of over 2 kilometers of boundary. I am not able to

comment from lack of information of the substation for storage further down the road.

The separation distances from houses given for other solar design, just in this area and already approved, in Narrabri and Gunnedah are 350 meters to 500 meters, also regarded as highly sensitive, like us, in their EIS. So why aren't the same standards even applied or initially considered here?

There is so much area available for the project and yet its current and compact design lies very close beside one home and boundary. Either its time for Kevin McLeod to be involved with solar design solutions and consider proximity to residences with large-scale solar farm development? Or you have appropriate buffer zone restrictions, starting now, that are needed in this type of development, as they are town planning and other industrial sites. The current situation is neither consistent nor acceptable.

I am also appreciative the natural waterway or swale to the north has been acknowledged and addressed. (image)It was the only small run off plan I read in the EIS and am relieved that it has had more consultant investigation so that our local knowledge could contribute to the break (or peak) flow of 1984. (image of map w both swales).

However, it does not address the other similar watercourse to the south, (image south swale). Although this would clearly be flood prone based on the flood zone image in figure 2 in the report. (image figure 2) This image of the 1984 flood, (image of floods area) does show that area as flooded again by a breakout from the Naomi River. (image w solar design)

This image (image of NSW flood) of the 98 flood is viewed from Carrol and is also inclusive of the solar development and similar height to the 84 flood. From the proponents report, the 1971 and 1955 floods, being the highest recorded floods, were larger than the 1984 flood and they imply that they did do modeling for those floods, yet these outcomes are not shown in the report. Why is this? This southern watercourse does run largely through the adjoining land and owners property known as R8, and would also be affected by water breakout.

This is why I have some contention with flood issues and run off not taken into consideration. It's clear that the concerns about the water path were addressed by undertaking the consultant's report, although now they may not have been, in the new design. Why isn't flood fencing considered and the subject to run off onto our adjoining property also not considered and particularly when 80 percent of the land is covered by panels for the development is densely on a boundary and near a home? Available research shows that runoff from solar panel farms at these densities can increase peak flow by more than 200% in heavy storms. Where does this additional water run- off go?

These photos are taken of the neighbouring solar site (image of water on site) and from outside the front of our house (image on R1) from the  $29^{th}$  of March and one night of rain with 223 points... How do we not know this could become more frequent with changes in climate?

I understand resolving energy crisis and climate change takes action, rapid advancement in technology and fields of science... However, during my involvement in this process and developing understanding of what it means to live by large scale solar, I find that the science provided does not take into consideration local knowledge and first person experience. Sadly, science misses taking that into account. Fortunately with persistent efforts and flood experience neighbours were able to encourage some flood fencing with Gunnedah solar. After appeal.. less than three kilometers away which shows it can be possible that local experience is valued.

In 1969 the US Congress formally recognized that even if each land-use project is allowed to produce only a small environmental impact, enough small impacts can accumulate to have a large effect. To consider cumulative effects, the affected environment should be defined broadly to include any potentially significant effects occurring away from the immediate project area. Most EISs limit themselves to the immediate area surrounding the project.

With this in mind, as a property within a couple of kilometers inclusion between two large scale solar farms and knowing the first solar farm in Western Australia was developed in 2012 with 150,000 panels, according to wiki, what guarantee could you give on the cumulative effects on a generational property that lies in between? I don't think you could or you can borrow one of the proponents' unlikely/not likely adjectives.

(image of EIS and all receptors in land between)

The hosting properties will bring in reliable revenue but what of a property facing cumulative effects? As the term is defined from the 70's: to include total of all impacts to a particular resource that have occurred, are occurring, and will likely occur as a result of any human action or influence, including the direct and reasonably foreseeable indirect impacts .I know agricultural activities can have impact, but this is not like that. . This project allows landowners who are the hosts to receive good recompense for the long term use of land and adjoining landholders that do not, can be subject to as much change from the project as those who benefit financially. Adjoining landholders, also wear, what it would mean for existing business practice particularly in development stage and possibly including relocation when you live centrally within 150m.

In 2008 a report by Access Economics Pty Ltd (albeit for wind farms, but is relatable) wrote property values tend to capture peoples perceptions of the impacts of rural wind farms, such as noise, visual amenity, biodiversity, fire risks and social cohesion.

Overland offers a setback and screening to compensate the visual, noise and vibrations with a new design. ungenerously, compared to others, by 50 meters off the boundary near the house, but what can be offered with an unknown cumulative effect of having land in between two large scale solar infrastructures

when often, the main factor influencing a properties value is the lands productivity, which R1, our property, has proved consistently.

In this development procedure there are hundreds of pages on the biodiversity, soil, structure, design and other quantitative information in deciding location of each solar farm development, independently.

22 Meters from the solar will lie my ancestors ruined wagon travelling from Hexam at settlement (image wagon) and also the properties biodiversity (image trees and mountain) and livelihood based on productivity.

Upon consulting the soil scientist who drew the NSW government map of soil, I find that the soil information is not adequate, it is misleading and incorrect. The soil is dispersive and sodic, (which contributes to erosion from increased runoff) as well as being dominated by Vertosols, which have serious foundational issues. If this development was a freeway or rail line every neighbour would have opportunity of recompense but the possibility of cumulative effects on productivity goes beyond compensation with biodiversity, even if you and I are not here for witness after 60 years of its impact. This project's EIS concluded that there were no cumulative impacts, yet without any great analysis, apart from traffic concerns, which I also ask, (image of road run off and dust of truck passing) (image of run offs on public road)

If the local council enthusiastically supports both solar developments running consecutively, even independently, on these small and dusty roads, the surrounding community will have their hands tied behind back, and they, who've contributed to local economy. before this development, will suffer the dust, water run off with suppressant and the increased danger on this road. The roads nearer to town have already substantially improved in anticipation of the solar farms approval. How can a small section of road, approximately 4 kilometres, not be sealed? This development is not deeply considering the likelihood of effect of two simultaneous solar developments, for cumulative residents. and land. and/or species. The cumulative impacts at all.

## (image properties in between)

I can see that to develop and predict cumulative effects would currently be a challenging science and it would require your support and great guidance for issues that complicate analysis, but surely now, some large spatial and temporal scales need to be involved. There are obviously a wide variety of processes and interactions that influence cumulative effects, and only over an extended time could a land-use activity and the landscape's response to that activity be accessed or projected.

Do you not feel that, with (what a new energy spokesperson on ABC termed a gold rush) for renewables, that developing appropriate techniques for assessment of impacts has been lacking? and comprehensive data is needed for both assurance for landowners and environment?

There is an amount of requirement of responsibility for proponents but surely routine surveillance for environment and health impacts with cumulative effects are also warranted and should be seriously considered.

We all are experiencing a fast moving area but a broader approach than project based assessment with sustainability towards landscape conditions as well as, community well being, provide a more qualitative approach. America, the U.K and Europe have already begun cumulative effects research. Please encourage minimising negative cumulative effects for a holistic promotion and be inclusive of all resource sustainability before development.

I hope my time and concerns don't surmount to a tick in a box, but can encourage solar developing with an honest consideration of our stress factors that can also reach beyond consultation challenges, proximity, noise, traffic, flooding, dust and run off but potential of successive impacts on receptors... inclusive of flora and fauna, water and soil within your examination.

On top of this, these lands are our home, where we, and my ancestors have farmed productively since 1872 when Gunnedah had just reached 500 in population, without any of these extra stresses.

How can these scoping and development guidelines and behaviours overlook cumulative and community impacts. and .. over other valuable resources which are also included in addressing climate change concerns, and resource insecurity, by ongoing development on agricultural land ..and , could even lead to a possible displacement of a loved solastalgic resident under a term of socially responsible?

I am banking on you, as others, not to encourage a sucker punch approach whilst introducing large scale solar, but to avoid any contribution within this transition to other environmental and adjoining land pitfalls, when there is hope Australia can take opportunity to lead this renewable and develop further inclusive and positive actions toward it. Lets not replicate what's being discovered in roofing solar as tens of thousands of unsafe systems are being recalled because price and immediacy came at a cost to quality and safety.

This point in time, the beginning of a new era of energy production, offers opportunity as planners and a community to adopt consideration and foresight..rather than repeating mistakes and ad hoc approaches which have already led us to renewables in the first place. We can get it right the first time and this is an opportunity to reconsider development where progress can be claimed, because resource inclusive progress is what we need.