Mrs Kim Swan (aka Dr Kim Bunter)
52 Milne Rd
Armidale, NSW, 2350
12/4/2021

Dear May,

Please find following my OBJECTION to the proposed Oxley Solar Farm (SSD-10346, EXH-15820559)

May – I am a highly qualified research scientist with a degree in Agriculture, and Masters and PhDs in research. I am pro-solar, as is evident from my own home installation of solar panels. However, I feel almost compelled to object to this proposal on a number of grounds, which I outline briefly below.

- 1. Failure of the NSW and regional planning processes
- 2. Lack of community consultation in initial site selection
- 3. Poor site selection as evident from failing to consider key site constraints outlined previously by the State Planning department
- 4. Failure to address community concerns
- 5. Significant environmental concerns and risks
- 6. Other unsatisfactory outcomes overstating benefits when site selection is the key concern

Failure of the NSW and regional planning processes

In order to have some impact on State planning with respect to the outcome for this proposal, 50+ individuals from the local community are expected to provide feedback within one month of the exhibition of the 300+ pages of proposal (prepared with a lead time of >1 year), despite the fact that with an even longer lead time:

- a. Armidale Regional Council have not yet developed their policies in readiness for the New England REZ (minutes ARC, February 24, 2021)
- b. The State government have not yet completed their registration of interest process (commencing end March 2021?) so how do they expect to understand the extent and impact of applications in our REZ area and manage the cumulative impact?
- Our local members (Barnaby Joyce and Adam Marshall) still cannot decide which side of the fence they wish to sit on, when the community conflict between renewable energy goals and poor site selection become apparent
- d. The community consultation (appendix C) outlines strategies only to manipulate support for the project. None of project application or media activities includes a balanced or an honest representation of possible disadvantages for the community (ie loss of blue sky/wilderness visual amenity for National Park), or lack of local benefits (eg power generated is exported, limited long term employment, loss of sustainable, productive

- agricultural land). There are even strategies to 'limit points of contact'. All material is biased towards the developer, and why wouldn't it be when the developer is paying for all assessment and reporting activities? There should be an unbiased process of application development.
- e. Why are representative bodies and agencies that should have an interest only to be 'informed', not 'consulted' (See Appendix C: Community consultation plan). What are their views regarding implications of the proposed development? There is no practical empowerment of community in this plan. Just ticking boxes after inappropriate site selection.
- f. Location of large scale solar farms a LONG WAY from where the power is required. The power generated at Oxley will not directly benefit the local community it is effectively exported. There is already significant and increasing personal investment in solar infrastructure, which is becoming discouraged. Transmission losses to more distant sites will be high. Existing electricity infrastructure will be challenged. This is in stark contrast to the obvious benefits of other (smaller) solar farms powering mining at Broken Hill, tourism at Ikara-Flinders Ranges, factories in cities. Why not solar assisted hydroelectricity in this region? NSW planning should invest in infrastructure that allows siting of large scale solar or other renewables in locations where land use conflict is minimised. Only a small amount of land is required for renewables why locate it where conflict is inevitable?
- g. Reporting full of professional jargon. No lay-person interpretation of the impact of the development. Eg can we expect increased erosion and loss of water quality in the primary waterways or not? Do we expect displacement of existing wildlife or not? How often do hail storms occur of sufficient severity to damage solar panels in our area? I appreciate that technical detail is required for all construction, but all proposals should have summaries that are interpretable by lay people. In fact, relevant details like the array format, orientation and location of inverters and roads etc are still up in the air for this proposal. How are the local community supposed to respond? They are thoroughly intimidated.

Lack of community consultation in site selection

The site selection by the Oxley Solar Farm developers (hereafter termed OSD) occurred in secret, hidden by confidentiality agreements between the OSD and landowners. How does that form of site selection involve community? All parties in that process had their own agendas, and those agendas did not include canvassing the broader community about the most appropriate siting within this region. Further, siting options are limited by existing infrastructure, which of course can be altered by NSW planning. This is exactly why there will be objections to this proposal, because the most appropriate site within the New England REZ has not been selected through active consultation or through development of appropriate infrastructure. In addition, this lack of consultation creates unnecessary friction between landowners and developers, indeed community members, and does not constitute appropriate planning. How has it come about that pro-solar residents have to object to a solar farm? Only due to poor site selection.

There are guidelines for developers of solar farms (Large-scale solar energy guideline for state significant development 2018, NSW Government). Based on key site constraints, the proposed site fails the following key site constraints (as taken directly from the guidelines):

Section 4.2 Key site constraints

Visibility and topography – '...sites with high visibility, such as those on prominent or high ground positions, or sites which are located in a valley with elevated nearby residences with views toward the site. This is particularly important in the context of significant scenic, historic or cultural landscapes.' The location chosen cannot be screened effectively due to topography, and the site is located next to a National Park. There are numerous solar farms built without this obvious impact on visual amenity.

Biodiversity – no Koala management plan; minimisation of potential habitat loss, soil erosion and water quality issues in the proposal. This is an area for breeding quolls, koalas, platypus and other native species. The land-based species <u>traverse</u> this landscape, including the proposed site. Vegetation corridors have been planted to facilitate this on numerous properties in the area. The proposal notes some remnant woodlands with good native diversity, but fails to mention that the wildlife traverse this and adjacent landscapes. The water-based species are sensitive to water quality.

Residences – Despite the contention otherwise, MANY rural residences can view this site, with some severely impacted. See https://raywhiterurallivestock.com.au/properties/rural/nsw/armidale-2350/mixed-farming/2485354 for a dramatic illustration of the beauty and productivity of this predominantly grazing agricultural landscape with beautiful rural outlook.

Agriculture – grazing land is also valuable for Agriculture; it enables sustainable production of livestock. It is arbitrary to consider grazing enterprises as less useful than land used for cropping in the perspective of food security and the best use of Agricultural land in a variety of locations. Based on the ASIC report the business interests behind Oxley Solar Farm are Chinese (directors) and Hong Kong based. Is this not foreign purchase of Australian agricultural land to repurpose for solar farming? The decommissioning of dams would also make the site not suitable for under-panel grazing by sheep. Indeed, the developers do not commit to this activity – they simply mention its possibility. It is disingenuous to suggest that the land will be returned to its former use after 30 years. This has been clearly stated by representatives of NSW planning at public meetings.

Natural Hazards – the site spans two major waterways and a locality and topography characterised by known problems with susceptibility to soil erosion. The land pencilled for the proposal is predominantly classed as an erosion hazard, and wind and surface erosion are already evident. Solar farms are infrequently located on sloping sites because of difficulties in controlling erosion. This is exacerbated by soil types prone to erosion in this locality. There is only 1 paragraph directed to Erosion in Appendix F – totally insufficient. Erosion and contamination of waterways is a major risk and barely discussed. There have also been several severely damaging hail storms in the local area since 1996 (Sep 1996, Jan 2000, Dec 2006, Nov 2017), potentially damaging to solar panels – which are only required to withstand 35mm hailstones. Two of these storms resulted in Armidale being declared a Natural Disaster Zone, with extensive damage to homes, windows and car windscreens (future solar panels?). Statistically (my area of expertise) I think we can expect a significant storm to affect the proposal site or close local areas over a 30 year period?

In addition:

1. There is an unacceptable level of cumulative impact given the existing approval of 'Stringybark' solar farm, which is directly adjacent to the proposed site. 90% of the Oxley Solar Farm will be under solar infrastructure (895ha), adjacent to a further 148ha footprint approved for Stringybark Solar. Many land holders East of Milne Rd will have solar panels covering a 90 degree field of vision. The proposal is amongst the largest already developed

- or approved for development within Australia, but the developer has no track record in completing or operating developments of this scale to date.
- 2. The RU1 zoning is not representative of the adjacent land use. This proposal **fails** to identify the RU4 zoning of the many adjacent residents. The majority of landholdings in this area are in fact effectively used as rural residential, with a desirable rural outlook. Ian Sinclair (EDGE Land Planning) developed the guidelines for rural residential development in the Armidale Dumaresq region in 2004. Sinclair (2002) states that, 'the term rural does not define the use of the land, it defines the character one of rolling hills interspersed with native and exotic vegetation and animals. The main feature of rural land is that it has an unplanned, non-uniform, natural look ...'. Not a sea of solar panels? The higher land values and therefore rates received by council from this locality reflect the rural residential use and not the actual zoning (RU4) currently applied to the land. Other less desirable areas also zoned RU4 (eg Herbert Park area) have much lower land values. It is disingenuous to minimise this fact. The development detracts from the visual amenity and land values for these landholders.
- 3. 32 residences are within 2km of the proposed site (appendix C, page 7) and several of these will have views of the solar farm. Again, surely zoning should have reflected this high level of rural residential use of this area. Because of the elevated topography surrounding the solar farm, effective screening is also impossible. Further, the extent of glare and reflection are impossible to establish given that the choice of panel layout is not yet confirmed. Regardless, some residences will have an unacceptably large (surrounding) industrial view of panels very close by (within 1km) from within their internal living areas. The viewpoint analysis does not include any consideration of views from these landholder residences, despite the sometimes large visibility of the site. In addition, the selection of viewpoint location appears biased towards locations with lower impact. Eg Choice of OSF02 is disingenuous: the photo is taken from below a roadside cutting, ~100-200m below a rural residence which has very clear views of the proposed site. Despite this bias, overall, 30% of the chosen viewpoint locations were assessed to exhibit moderate to high visual impact of the solar farm. With respect to my residence on Milne Rd, I disagree with the assessment that 'The Project is likely to form a small portion of these views and in the context of the visual character would have a low visual impact' and can provide pictures to illustrate this if requested.

Why are the lifetime of efforts of all of these local residents sold out when other sites are possible, but simply have not been adequately and publically canvassed?

Failure to address local community concerns

- 1. The community concerns are predominantly those noted from a single public meeting at a fairly obscure venue. People who attended that event clearly did not provide many written comments, but they did voice verbal concerns. Are their voices not heard without written documentation? If so, they should have been properly informed of that at the time and I'm sure there would have been much more written material for the proponents to work with.
- Despite OSD being informed of local Koalas and other important endangered wildlife in the area (spotted quolls, platypus), the application provides no Koala management plan and marginal consideration of any management or site constraints relating to endangered wildlife species.
- 3. It is amazing that the community consultation considers that 'Informing' groups only (eg Tourism, National Parks) is sufficient, despite a clear conflict between the industrial solar

- landscape with tourism and national parks investment in developing 'the region's natural attractions [which] include areas of wilderness and wild rivers, granite boulder formations and waterfalls within world heritage listed national parks' (Appendix C, page 5).
- 4. Why is a noise management plan needed if there are so few people affected? Is this not evidence that an appreciable number of local people are affected?
- 5. The proposal does not really address the goal of the LEP 'To minimise conflict between land uses within this zone and land uses within adjoining zones.' There are pretty clear conflicts with agricultural land use and rural residences.

Environmental concerns

The proposal outlines many strategies for mitigating various constraints. These are aimed at limiting impact (eg visual screening) or reducing risks (eg erosion, water quality issues). Unfortunately, on-paper mitigation activities are not full-proof. What are the true implications and/or costs of failing to prevent specific risks AT THIS SITE. They may be unnecessary AT A BETTER SITE. There are a few major risks for the Macleay catchment in particular, affecting local and downstream users of this water, which are not guaranteed never to occur just because some strategies have been put in place (eg natural hazards from fire or storms are obvious cases). What are the true cost of failures in this regard? These include:

- 1. Contamination of major waterways as a result of panel damage due to fire or other circumstances. 985+ ha of panels is the source of a lot of potential contamination in major waterways (Gara River, Commissioners Waters) of the Macleay catchment. Fire occurred along Gara road recently (2020-2021), as well as within the nearby gorges (2019). Hail damage can be very significant in this region.
- 2. Contamination or loss of water quality in these waterways as a result of major erosion resulting from the installation of solar panels. Erosion is very poorly dealt with in the application.
- 3. To date, the developers have one other significant approval approved in NSW (Wollar Solar Farm) but no track record in actually completing the development of or operating a large scale solar farm? How about they generate a track record with respect to addressing constraints and environmental concerns based on their first approved application first?

A range of other significant unsatisfactory outcomes for the region

- 1. This area (Blue Hole) has significant history for our first nations people. This is not clearly articulated within the proposal and suggests that the local aboriginal community have not been appropriately consulted. Loss of aboriginal culture has major consequences for all Australians, but particularly for our indigenous communities. This includes important sites and food foraging (ie the water catchments again!).
- No significant ongoing employment. No improvement in energy security or costs locally.
 Fragmentation and division in a community that would otherwise support renewable development sited in more appropriate locations.
- 3. Another farm lost to foreign ownership and removed from agricultural production. The assertion by OSF that the farm can be returned to Agriculture after 30 years is naïve and deceptive. The NSW minister of planning recently stated (at the meeting held by NSW Farmers, July 2019, Cattleman Armidale) that large scale solar plants would not be

- decommissioned after 30 years, plus as noted above the necessary infrastructure for stock (eg watering points) will be removed as part of the development. I therefore suggest that this development is a permanent removal of productive agricultural land from agricultural activities.
- 4. Loss of tourism potential in this region. Replacing blue sky wilderness with industrial landscapes. A wasted investment in promoting this region for tourism? The scenic helicopter tours currently fly over the proposed solar farm site, as do wedge tailed eagles and even migrating pelicans and black swan. The site is adjacent to a popular National Park and will be viewed as visitors enter the park.
- 5. Increasing failure to attract professionals to regional areas such as Armidale because their investment in rural properties with a rural outlook is nullified. Loss in land value is a major deterrent to investing in rural property and relocating to regional centres. This was recently illustrated (by many staff losses) when APVMA moved to the region, and is important to maintain academic staff (located at UNE) in this region.

As a concluding statement —my objection to this proposal is related to the proposal being located on THIS SITE, aimed at maximising prospects for developers and recipients of cheaper energy distant to this site. Foreign ownership is another issue that should be resolved. Planning should have a role in developments being made on the best sites — not just one that is convenient for developers and 1-2 landholders that will make considerable profit from their land sales at the expense of the local community. There is so little land required for siting solar farms. I truly ask NSW planning to stop enabling legitimate complaints to be trivialised and instead start achieving their goals of directing appropriate siting of solar farms or renewable energy through actively planning!