J & R Ag Pty Ltd
36 Brolga Rd
BEAUDESERT QLD 4285
Ph. 0755 413 875
Mobile 0432 348 332
Email. john@jandrag.com.au

J & R Ag

Agricultural Project Management & Consultancy

Development Objection

Oxley Solar Farm SSD No 10346

April 2021

Background

This objection is lodged by the principal of J & R Ag Pty Ltd John Powell.
Having previously lived and farmed in the New England region for some years and having been involved in agriculture and erosion control (Past Director IECA Aust) for over 40 years, I have the necessary credentials to submit a subjective response to this development application.

Whilst I am a supporter of renewable energy projects, I believe the Oxley Solar Farm is in the wrong location. I also believe this development presents some major environmental risks and that the proposal fails to meet the environmental and land management guidelines as set down by the Armidale Regional Council.
This document presents a summary of my objections and the basis for each.

Existing Zoning

The property earmarked for this development falls into the NERC RU1 Zone.
Objectives of the RU1 Zone are

• To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.

• To encourage diversity in primary industry enterprises and systems appropriate for the area.

• To minimise the fragmentation and alienation of resource lands.

• To minimise conflict between land uses within this zone and land uses within adjoining zones.

• To allow for non-agricultural land uses that will not restrict the use of other land in the locality for agricultural purposes. These objectives recognise the potential for off-site amenity impacts of land use in this zone as long the impacts would not impede or restrict other agricultural uses in proximity to the site.

A 895 hectare solar farm surely cannot meet these criteria.

The Biodiversity Conservation Act 2016

“On 25 August 2017 the land management biodiversity conservation reforms commenced. This introduced some significant changes to the way we protect our biodiversity, how we regulate a range of development activities on land and how the impacts of these activities on the natural environment are managed.”

Does a 895 hectare solar farm meet the terms of this Act?

New England Development Strategy 2010

This document sets out several valid reasons to reject this application.

- ENVIRONMENTAL VALUES & CONSRAINTS. “many areas within the region have important environmental values and/or are subject to constraints which may limit development opportunities”.
- THREATENED SPECIES. ‘endangered ecological communities and other important biodiversity characteristics occur within the region”. *Refer Biodiversity Conservation act 2016*
- TOURISM “Under Objectives. Biodiversity and natural ecosystems maintain the ecological values of conservation reserves and recognise their other economic benefits, including their role in supporting tourism”.

It would appear that a 895 hectare solar farm surely cannot meet these objectives.

Erosion & Catchment Management

The soils in the area of this proposed solar farm are developed from granite rock. They have lighter textures ranging from loamy coarse sand to sandy loam. They are highly erodible and easily displaced. It is my opinion that the disturbance caused by construction and the concentration of water from the solar panels will lead to a massive erosion event.

The Southern New England Tablelands Region, State of the Environment Report 2004 (and Supplementary Report, 2004/05) identifies the Gara River as a “stressed sub-catchment”, exhibiting signs of poor water quality. It also shows signs of “high hydrologic and environmental stress”, including: - Eutrophication (due to high nutrient content); and Poor river structure (stream bank erosion and poor riparian habitat). The Stressed Rivers Assessment Report 1998, produced by the former Department of Land and Water Conservation (DLWC), gave the Gara River the highest overall stress classification.

It appears to me that the Environmental Impact Statement Erosion control section could be quite misleading. Extract

An assessment of the impact of the proposed permanent infrastructure on flooding was undertaken by increasing the surface roughness over the proposed development footprint to account for solar array infrastructure and buildings. Typical solar array modules consist of a frame supported by piers at a typical grid spacing of 5-6m. The addition of the solar arrays and their associated infrastructure will result in an increase in surface roughness over the site, from grazed/cropped pasture to a regular grid of steel piers. The change in floodplain roughness associated with the proposed solar arrays was assessed using the Modified Cowan Method for Floodplain Roughness and is shown in Table 5. It should be noted that only n3 (effect of obstructions) has been modified to represent the change in roughness associated with the solar array piers, all other variables remain at pre-development values which are variable across the site and hence have remained at nb, n1 etc. It demonstrates that the roughness is anticipated to slightly increase because of the proposed development.

There is no mention of the increased water concentration off the panels, and increased velocity as it falls to the ground. Finally, how can the roughness be increased by covering the area with panels and reducing vegetation. I believe this assessment to be flawed. I believe that with these highly erosive and fragile soils, this concentration of water and the ground impact could lead to sever erosion.

A 895 hectare solar farm could increase erosion and increase the stress on this fragile river system.

Environmental Planning & Assessment regulation NSW 2000

There would appear to be several areas in which this development would contradict these regulations.

- any transformation of a locality
- any environmental impact on the ecosystem of the locality
- any degradation of the quality of the environment
- any risk to the safety of the environment
- any reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality.

A 895 hectare solar farm surely cannot meet these criteria.

The Developer

According to their submission the Oxley Solar Farm will have 5 employees once it is in operation. I would suspect that the land involved would provide at least this much employment if used for agriculture.

A 895 hectare solar farm is certainly not a driver for increased local employment.

The DA Visual Amenity and Landscape Character

I have read the Oxley Solar Farm's Visual Amenity and Landscape Character and whilst it is an impressive document, I must disagree with many of the conclusions,

Overall, the proposed development will result in the modification of the existing visual landscape locally. However, due to the relatively small vertical scale of infrastructure proposed, the existing landscape features, including vegetation and topography, are able to provide screening, limiting views from a distance. The highest visual effect is likely to be from areas within close proximity to the site. Key results include:

- *There are a total of 30 residences within 2km of the proposal site. Of these dwellings the proposal will be screened by either topography, vegetation or both from fifteen (15) dwellings and visible in varying degrees from fifteen (15)*

dwellings. Therefore for the fifteen dwellings with views, mitigation measures have been recommended to reduce any potential visual impacts of the proposal. Given mitigation, none would be considered to be highly impacted by the proposal.

- *Any views toward the proposal from Castledoyle Road, Milne Road and Anderson Road would be relatively distant and a combination of roadside vegetation, undulating topography and general road direction would limit the opportunities to view the proposal.*
- *Limited views are afforded from the Therelfall (sp) Walking Track due to topography and vegetation.*
- *Blue Hole Picnic Area is located at the entry to Oxley Wild Rivers National Park and there is potential for views of the proposal from this location. Screen planting at the southern portion of the proposal site has been recommended to reduce the potential visibility.*

The Oxley Solar Farm's Visual Amenity and Landscape Character vastly understates the visible locations and the remediation plans are totally inadequate and poorly planned.

I also believe that the assessment of glare potential is also incredibly negligent.

How can a 895 hectare solar farm not have a visual impact on this beautiful area?

New England Tourism.

The Armidale and New England Tablelands Region is a premier tourism and holiday location, with many local business operators relying on the natural beauty of the area as the drawcard for their businesses. The Blue Hole and Oxley Wild Rivers National Park are in very close proximity to this development site and they are important and beautiful tourist attractions in the area.

Why would you threaten the local tourism industry and jeopardise the beautiful Blue Hole and Oxley Wild Rivers National Park by accepting this application?

I have not made any monetary contributions to political parties involved.

John Powell
J & R Ag Pty Ltd