

To whom it may concern,

I am writing to you re the Quorn Park Solar Farm (QPSF) propose, situated to the west of the town of Parkes in NSW.

While I am by no means opposed to renewable energies, I worry about them being placed on what is highly productive farming land, in a usually high rainfall environment. Rainfall averages for Goonumbla from 1882 (approximately 10 km away) is 528 mm (BOM) and averages generally from 40-50 mm per month over the year. Unfortunately, the last two years 2018 and 2019 have been decile 1 rainfall years, and 2 of the lowest rainfall years on record. This comes of the 2016 year, which was a decile 10 rain event receiving 970 mm.

While rainfall in these years have been significantly lower than average, due to the changes in modern farming practices and use of best management practices crops and pastures for livestock are still able to be grown and harvest. While not making farmers significant profits, they are still able to be viable enterprises while also looking after their biggest asset, the soil.

Showing the strength of the farming systems in this district, land sale values have increased significantly in the last 3 years. Farms just north of Parkes in 2017 sold for an average of \$2,600/Ha, while just a month ago a farm sold for \$8,400/Ha.

While the land value for the QPSF proposal would not be as high as these figures it would have a 20-30% reduction in value for that area.

I worry about the where we are heading as a country and the importance we place on growing food. We see some of our prime agricultural land around cities being swallowed for housing. As a boy growing up north of Adelaide I remember fields of horticulture and cereals crops between Gawler and Elizabeth. These are now swallowed up with housing estates.

I understand that the QPSF is located next to a developing town in Parkes and has a suitable transmission line next to it, wouldn't somewhere more marginal to the west be a more suitable site and better use of low rainfall environments. I note in the environmental statement for QPSF figure 14 shows potential energy zones (NSW gov. March 2018) and the massive area to the north of Hay. This area of marginal grazing systems in a low rainfall environment is in my view far more suitable for this type of project. Transmission losses via high voltage lines equates to 5-8% (US Energy Information Agency). On a project of the size of QPSF, this relates to a 4-6.5 MW loss

In the Environmental statement for the QPSF, I note that soil test has been done. The author states that the soil is acidic and hence is reducing crop growth. While this statement has some truth to it, there are some issues with this statement. Industry standard in agriculture is not testing 0-5 cm, it is in fact 0-10 cm. Combining parts of these samples would make some difference but the statement that the soils are acidic is correct. As you can see from the soil test pits points on pg 438 and results on pg 449, like most farms throughout the district there is natural variation in pH.

Hence on page pg 49 under point 9.4.1 LOSS OF AGRICULTURAL LAND the following statement is made

With respect to the above the following is noted:

- the development site does not provide the best combination of soil, climate, topography and water for agricultural production;

If this was true, then some proportion of the central west cropping/grazing area would be unsuitable for farming practices. This is obviously very untrue and a part of the many issues that farmers deal with to grow crops and pastures on their farms. The current lessees of the property understand that the farm has not had lime for some years and have discussed with the owner the options available to get lime onto the farm.

Aside from the pH issues the soil is very fertile, lacks compaction and has great organic matter. To surmise that the issues around pH make this farm unsuitable for broadacre cropping are completely false.

On pg 52 the EIS, it states the following;

In this context, the following is noted. The Parkes LGA covers a total area of 595,492 ha. Available data from the Australian Bureau of Statistics (ABS) dataset National Regional Profile for Parkes LGA, 2004- 2008 provides the total land areas for agricultural commodities in the Parkes LGA from 2006 (most recent data available).

The data identifies the following:

- The total area of holdings for all agricultural land use is 550,573.40 ha, covering 92.46% of the Parkes LGA area.
- The total area for cereal crops for grain is 164,531.90 ha, covering 27.63% of the Parkes LGA.
- The total area for non-cereal broad acre crops for grain is 5,210.50 ha, covering 0.87% of the Parkes LGA

Where the data presented here are sourced from the 2015-16 Agricultural Census, run by the Australian Bureau of Statistics.

Value of agricultural production

Parkes Shire	2015/16			
Commodity (Click rows to view sub-categories)	\$	%	New South Wales%	Parkes Shire as a % of New South Wales
Cereal crops	76,776,882	51.2	23.1	2.5
Other broadacre crops	22,234,276	14.8	15.3	1.1
Nurseries & cut flowers	--	--	--	--
Crops for Hay	3,658,429	2.4	2.5	1.1
Vegetables	710,278	0.5	3.2	0.2
Citrus fruit	--	--	--	--

Value of agricultural production

Parkes Shire	2015/16			
Commodity (Click rows to view sub-categories)	\$	%	New South Wales%	Parkes Shire as a % of New South Wales
Grapes (wine and table)	--	--	--	--
Other fruit	--	--	--	--
Nuts	--	--	--	--
Wool	19,064,479	12.7	7.2	2.0
Milk	2,167,987	1.4	4.5	0.4
Eggs	7,395	0.0	2.0	0.0
Livestock slaughterings	25,305,862	16.9	33.6	0.6
Agriculture - Total Value	149,925,590	100.0	100.0	1.1

Source: Australian Bureau of Statistics, [Value of Agricultural Commodities Produced, Australia, 2015-16](#). Cat. No. 7503.0

These figures refute the above statement, and show that over 66% of the land use in the Parkes shire is for broadacre cropping

The statement under 9.4.1 LOSS OF AGRICULTURAL LAND on pg 52

“In this context, it is reasonable to assume that loss of an additional 470 ha of agricultural land from production as a result of the QPSF would not exceed a threshold that would result in a significant reduction in the productivity of the region.”

is true but taken into the context of the planned Parkes Special Activation Precinct will cover an area of 4800 Ha. This project will cover some 4000 Ha of agricultural land not being developed for the inland rail. Taken all together as a complete parcel, there is a substantial area of agricultural land that is designated to become unusable.

In summary I hope the information above shows that placing an solar farm on Quorn Park is not a benefit to the Parkes area, with communities further to the west in more need of a project like this