

In early May, 2017, I submitted the same set of Comments to the four NSW solar farms then on exhibition (Limondale, Beryl, Gilgandra and Bayley Park)¹. Together with others, I expressed concern for the impact of the growing avalanche of solar farm Applications would have on energy security and electricity prices.

Over the ensuing months, the Department wrote an identical response as the Assessments for these four projects were published.

In the last Assessment for the Beryl solar farm, the response (attached) was relegated to the “Other Issues” section.

The PAC also failed to consider the issue during the Beryl Determination, so the following objection will be submitted to the three solar farms currently on exhibition (Jemalong, Tarleigh Park and Currawarra).

Since May, 2017, the situation has worsened significantly.

Twenty six (26) **new** solar projects have entered the NSW planning system, totaling 4425 MW of capacity.²

All will be approved within the next 12 months because that is what the Department does and has proved this year that they can.³

New solar projects are entering the NSW planning process, on average, weekly. I do not have access to the equivalent figures for other states, but due to their Renewable Energy targets, I would expect them to be as high or higher.⁴

In addition there are over 1500 MW of approved but unbuilt NSW solar farms.

So, you have competing trends.

Overall demand for grid-based electricity in NSW, approximately 14000 MW at the summer peak, is not increasing

Rooftop solar continues to rise rapidly, and therefore, as rooftop solar is behind the grid,

Demand for grid based electricity will consequently fall.

In a matter of years, the solar backlog could provide all the grid based electricity needed during NSW summer windless afternoons.

What happens on those hot windless afternoons when the sun begins to set?

Firstly though, a review of what the Department wrote in their Assessments of the original four solar farms in response to our submissions.

¹ It is worth reading. See Beryl submission 204624

² Power will be required on hot windless summer afternoons when demand is highest. Solar efficiency at these times is at its peak, so capacity is a good measure of output.

³ Goonumbla solar farm was approved less than 7 months after the issuance of SEARs

⁴ Victoria. 40% renewables by 2015. Queensland 50% renewables by 2030.

NSW has a more sensible “aspirational target” of 50% decrease in Net greenhouse gas emissions by 2050, but that could change with a change of Government. However, the argument could be made that NSW faces a bigger challenge, as they have to actually do something to make it happen. Vic and Qld may meet their targets by doing nothing. As coal fired baseload is forced out of the market, renewable energy is all they will have left.

A couple of paragraphs from these identical responses are of particular interest:

“These concerns were expressed at a high level, and were not supported by any detailed evidence showing how intermittent energy in general could affect energy security and/or electricity prices, or how this project in particular would do that.

This makes it difficult, if not impossible, for the Department to evaluate these concerns in any meaningful way, particularly in the context where it is required to look at the planning merits of this project.”

This inability to understand, and respond to the issues, is of course typical departmental nonsense, as anyone who keeps track of the looming renewables debacle on top of what happened last summer in South Australia and elsewhere would agree. DPE planners responsible for assessing NSW solar projects should be the first to see the issues. Blaming it on community members for not proving their case is also typical.

To assess each project individually without considering the cumulative impact is totally irresponsible.

Over the same ensuing months since May 2017, the Department changed its mission statement to include:

“To enrich the lives of people in NSW through our work on high quality planning, housing delivery, great design, culture, clean environments, wildlife protection and energy security.”

By adding “energy security”, someone in the Department had enough awareness to recognize the looming disaster.

Over the same ensuing months, NSW and Federal politicians and supporting government controlled entities have also recognized this looming disaster.

In late November, AEMO released its solution to the potential summer problems of “black events” facing Victoria and South Australia by finding some extra fossil fueled resources and some volunteers to have their own private little blackouts, otherwise known as demand management.

NSW was not mentioned. We apparently will be OK until Liddell closes either completely in 2022 (planned) or partly next month (unplanned).

Over the same ensuing months, every consumer connected to the grid has recognized, through their electricity bills, this looming disaster. Average retail electricity prices have risen 13% in 2016 (AER, May 2017) and are expected to rise by 20% in 2017.

Yet, on four separate occasions, departmental planners and management have expressed an inability to understand the comments made by me and others.

So we give them another chance, through three different solar farms, assessed by three different planners.

They need to consider a few self-evident truths:

Renewable Energy is cheap because no-one is prepared to pay too much for an unreliable and/or unavailable product.

Development for new energy is not driven by market forces, ie the need for new electricity sources, but by Government decree, the RET.

Renewable energy suppliers will accept any price as their prime revenue comes from RECs.

Renewable energy will cause further baseload closures. Why, therefore, would the owners of baseload generators invest the millions needed just to maintain some of them at their present state of disrepair?

Reliable baseload becomes more expensive as, at times, it is the only option available and the quantity available is dropping as generators close, and continue to close.

Generators are in private hands, many overseas owned. They are interested primarily in profitable performance. They have no allegiance to Australia.

Liddell is closing primarily to bolster the price that AGL can obtain from its remaining portfolio of baseload generators.

Expecting coal and gas fired baseload to be sitting there idling away when called upon is a fairytale.

Should NSW need to call on the interconnectors, will their be anything there? Our adjoining states will lose the sun at the same time during the windless summer peaks of demand and will need all of their dwindling or virtually non-existent baseload for themselves.

Any remaining NSW baseload generators will charge the earth for power during a hot windless twilight.

So I ask again,

Will the Department of Planning consider the collective impacts of individual solar projects on the security and costs of our once great electricity network?

The planning process should be bidirectional. The Government, through the Minister, sets the boundaries. Equally, the Secretary should advise Government when the process goes awry.

The Department is running out of opportunities to highlight to the Premier and Cabinet, through their Minister, the contribution the NSW Department of Planning & Environment is making to our expensive dark energy future primarily through solar projects, but also through the few remaining active wind applications, such as our beloved Jupiter.

Should a blackout occur in NSW over the coming summer the Premier will be looking for scapegoats. Planners Hawkeswood, Ko and Stuckey, respectively, may be unfairly targeted. Key DPE solar executive Clay Preshaw and his wind farm equivalent Mike Young will deservedly be the focus of attention as they seem smart enough to grasp, and act on, the issues.

On past performance, I would not be surprised if the Department totally ignores the contents of this submission. Most times I prefer it that way. They can never, however, claim they were unaware of the issues.

Anthony Gardner
Mt Fairy

Beryl Assessment (Page 21)

Issue

Energy Security

- ☐ Concerns were raised in three submissions that the project, or a combination of the project and a range of other renewable energy projects, could have an adverse impact on energy security in NSW and increase electricity prices.
- ☐ These concerns were expressed at a high level, and were not supported by any detailed evidence showing how intermittent energy in general could affect energy security and/or electricity prices, or how this project in particular would do that.
- ☐ This makes it difficult, if not impossible, for the Department to evaluate these concerns in any meaningful way, particularly in the context where it is required to look at the planning merits of this project.
- ☐ Any such evaluation, however, would need to have regard to the broader strategic context on these matters.
- ☐ First, there is strong policy support at both the Commonwealth and State level for the increased development of renewable energy projects, to both ensure that a greater proportion of electricity is generated by renewable sources and to reduce greenhouse gas emissions associated with any electricity generation.
- ☐ Second, NSW forms part of the National Electricity Market (NEM). The NEM is complex and is governed by a robust statutory framework at both the Commonwealth and State level which covers the regulation of electricity generation, distribution and pricing.
- ☐ In the Department's view, the likelihood of the project having an adverse impact on energy security or electricity prices in NSW is extremely low, given that it would only add 87 MW of capacity to the NEM, which at this stage has a total generation capacity of over 47,000 MW.
- ☐ Further, any incremental or cumulative impacts associated with the potential intermittency of renewable energy projects could be mitigated through the operation of the NEM.