Submission regarding the Draft Large-Scale Solar Energy Guideline

Proposal to mitigate the negative effects of large-scale solar farm development on rural communities in NSW

The Department of Planning & Environment strongly encourages submissions on exhibited plans and policies, to help create the best possible outcomes for the State. The Draft Large-Scale Solar Energy Guideline was on public exhibition until mid-February 2018.

Unfortunately, I missed the public exhibition period because large-scale solar development only became known to me in March 2018. Accordingly, I thank you for the opportunity to provide a late submission.

Four weeks ago, I received a call from an energy company advising me that 2 large-scale solar developments are being proposed in Gunnedah. Gunnedah is part of the agricultural region of the Liverpool Plains in North West NSW. The proposed developments are 10% and 50% larger than the current largest operating solar farm in Australia and are located just 2km apart in a congested rural setting and on prime agricultural land.

With freedom to locate a large-scale solar farm on any land, energy companies can identify sites where renewable energy can be generated at least cost and maximum profit. Ideal sites are identified as large areas of flat, cleared land with road access in close proximity to high voltage electricity infrastructure. Such sites are regularly found on prime agricultural land and / or in congested agricultural settings where many agricultural and rural enterprises exist.

Approval of large-scale solar development on prime agricultural land means that our Government is favouring and subsidising the profits of often foreign-owned energy companies over the long-term production of food, in a time when we are facing population booms and threats to global food security.

Considering the amount of taxpayers' money being used to support these energy developments, are the energy companies also allowed to take away our bread-baskets in order to maximise their profits?

I would like to propose an alternative which I believe could mitigate the negative effects and simultaneously increase the positive effects when large-scale solar development is proposed on prime agricultural land and / or in congested rural settings.

I am hopeful that the Department might to consider the merits of this proposal for inclusion in the Large-Scale Solar Energy Guideline.

Existing situation

Increasing numbers of rural communities in NSW are being faced with large-scale solar farms where vast areas of often prime agricultural land will be covered with solar panels. This alienates hundreds of hectares of food-producing land for the 25 – 50+ year life of the solar farm in a time when we are facing population booms and threats to global food security.

Apart from this, large-scale solar farms create division and protest within those communities due to the imbalance of the associated positive and negative impacts. This imbalance occurs when a single landowner is offered a fortune for access to the required land whilst simultaneously imposing negative impacts upon neighbouring landholders. These impacts include devaluation of neighbouring properties due to proximity to a large-scale power plant, effects on agricultural activities, visual amenity and rural character, and more. Local community objection can be powerful and capable of delaying or stopping the development, which in turn impacts upon our nation's progress towards reaching our green energy targets.

Another significant impact is that any farmer wanting to diversify into solar farming is not able to because the large-scale solar farm has taken whatever spare capacity is available on the grid.

An alternative is proposed – smaller but more solar farms.

Smaller but more solar farms

Where an energy company identifies a business opportunity on prime agricultural land and / or in a congested rural setting, it is proposed that instead of one large-scale solar farm, there be smaller but more solar farms. There are several compelling benefits to this model:

1. Vast areas of prime agricultural land are not sacrificed

Adopting a 'smaller but more' approach means that single vast areas of prime food-producing land are not sacrificed for 25 – 50+ years within an era of population booms and threats to global food security.

Smaller localised 'patches' of poorer quality soil within a prime agricultural district could be utilised instead to generate solar power, rather than wiping out a single vast area.

Smaller solar farms will also disburse the visual impact of a large-scale development provided the smaller solar farms are required to be inconspicuously located.

2. More solar power generated

Large-scale solar developments are constrained by sites that combine vast cleared areas in close proximity to high-voltage infrastructure. Small-scale developments can tap into the lower voltage and more abundant network, which makes more sites available.

If many farmers were offered the opportunity to generate solar power, the cumulative output could be enormous, and much greater than a single large-scale facility.

The current largest solar farm in Australia is located at Nyngan and produces 102 MW of solar power. Using the current ratio of 1 MW per 2.5 acres of solar panels, if each farmer was to offer 100 acres of his poorer quality land, the farmer could produce 40 MW of solar power. Just 3 farmers already exceed the output from a large-scale facility, with huge associated benefits to the farmer and community.

3. Closer alignment with regional planning strategies

Importantly, a smaller-scale approach aligns with the strategic direction of regional plans to preserve prime agricultural land whilst also embracing the need to develop clean energy.

4. Economic benefits

In a 'smaller but more' approach, the energy company approaches several /many farmers who live in the vicinity of a suitable electricity grid and offers to lease (for eg) 100 acres of their poorer-quality and less productive land for 25-50+ years, for around $80k - $100k per year. The farmer is extremely happy because he has diversified his farming activities and is now drought-proofed, or at least less dependent upon traditional / rain-derived income.

The additional income he now earns he spends locally on improving his existing farming activities which improves the productivity and output of his farm, which creates more income for him and more food for Australians, whilst simultaneously creating green energy. This additional wealth makes the farmer less dependent on Government relief subsidies, freeing up Government funding for other areas of need.

If farmers widely were offered this opportunity, there could be an enormous shift in existing pressures on farmers, existing pressures on Government relief funding, genuine benefits to local economies, and strong local support because the benefits have now been distributed and made truly local. This reduces the level of resistance to the developments which in turn enables the Government to more easily head towards reaching renewables targets.

In addition to this, property values which are predicted to be significantly affected if adjacent to a large-scale solar power plant may in fact *increase* if there is a lucrative transferrable lease agreement generating income from a small solar farm located on an area of poorer-quality and less productive soil on the property.

Summary

Large-scale solar farms on prime agricultural land

The practice of approving large-scale solar development on prime agricultural land means that Government is favouring and subsidising the profits of often foreign-owned energy companies over the production of food at a time when we face population booms and threat to global food security.

Considering the opportunity given to energy companies to profit from Australia's solar resources, and the amount of support our taxpayers provide to those companies, it is unreasonable to keep our food-producing land off limits?

We appeal for the Guidelines to restrict large-scale solar developments to poorer-quality, non-productive, rocky or desert land which is in abundance in this country, rather than on limited food-producing land.

Large-scale solar farms in congested rural settings

It is suggested that where energy companies identify a suitable electricity grid in a congested rural setting, instead of a single large-scale development, there be several / many smaller-scale developments.

This means that many farmers are given the opportunity and associated benefits of diversifying into solar farming, and energy companies are not restricted to only large-scale sites adjacent to high voltage infrastructure.

Accordingly, we appeal for the Guidelines to require energy companies to adopt the 'smaller but more' approach when business opportunities are identified in congested agricultural settings.

I would welcome the opportunity to meet with you to discuss the proposal further.

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