Planning Services Department of Planning and Environment GPO Box 39 SYDNEY 2001

27th August 2018

ATTENTION: Director – Resources and Energy Assessment

Submission in Objection to the Proposed Springdale Solar Development in Sutton NSW

Dear Sir/Madam,

I am writing to object to the proposed Springdale Solar Development on Tallagandra Lane, Sutton. Thank you for taking the time to consider the concerns that I have raised in this submission.

I am an engineer with a keen interest in renewable energy technologies and a passion for the development and deployment of sustainable, reliable and affordable energy generation (in fact, I conducted a feasibility study into the production of biofuels from on-campus waste cooking oils for my final year honours thesis). I am in no way against solar energy developments. I do however believe that any such development (or any other proposed major energy development), should proceed only if shown to be in line with a nationally responsible energy generation plan.

The Australian Energy Market Operator's (AEMO) Integrated System Plan identifies three priority renewable energy zones (REZs) across NSW. These zones have been identified after consideration of the following factors: energy resource and geography; cost-effectiveness; environmental, heritage and land-use considerations; contribution to a strong and diversified economy; Investor and community support. The Sutton site proposed for the Springdale development is not within one of these zones. The nearest REZs to the proposed Springdale Solar site in Sutton are identified as suitable for wind generation, rather than solar generation, owing to the respective wind and solar resources in the area.

My specific concerns with the proposed development at this site are listed below.

1. Site Solar Irradiation and Generating Efficiency

The efficiency of any solar generating facility is a function of the solar irradiation at the generation site. It is true that, as a result of the high levels of solar irradiation, much of Australia's landscape is well suited to solar energy generation. Having grown up on a property which borders the proposed development (91 Tallagandra Lane), I can confirm that during the winter months, the valley in which the development is proposed is frequently blanketed in fog well into the late morning and occasionally afternoon. Such conditions would significantly reduce the operational hours and hence generating efficiency of a solar development. Daylight hours in the valley are also reduced as a result of the hills to the west of the site.

There are many areas of the Australian landscape where such fog conditions do not occur. The REZs targeted for solar generation in AEMOs Integrated System Plan are such areas.

The efficiency of any private power generating facility and its subsequent revenue are of course the concern of the private company and those parties with an interest in that company. Any expenditure of public monies however, by way of subsidies or otherwise, would be irresponsible if it contributed to the development of a facility in a location with sub-optimal solar resources.

2. Fire Risk and Control Measures

Having only last year raced to my father and uncle's aid as they worked to extinguish a bushfire on the boundary of their property which borders the proposed site (a fire which was brought under control only shortly before reaching the Sutton village and having destroyed property but thankfully no life), I have concerns about the seemingly little significance placed on the risk of fire within the EIS, and what I believe to be inadequate mitigation measures.

Claims that the area proposed for the development is not one of high fire risk are unfounded and not supported by the recent fire history in the area. The restricted access to the site from proposed boundary fencing, insufficient on-site water storage for fire control, and absence of a detailed fire management plan, are all concerning.

Sites within the REZs identified in AEMOs Integrated System Plan, which are not in close proximity to many neighbouring properties, are better suited to such developments in regards to fire risk mitigation.

3. Biodiversity and Ecological impact

As a resident of the Canberra Suburb of Forde and frequent visitor to the Mulligans Flat and Goorooyarroo Nature Reserves, I am concerned that a development of such significant scale in such proximity, could have a detrimental ecological impact on these important wildlife sanctuaries. This impact could be by way of interruption to wildlife and flight corridors, or other. I do not believe that it is possible to fully qualify or quantify the impact such a development could have on these important wildlife conservation and sanctuary areas. I do however believe that the risk of such an impact does exist and with a prevalence of more suitable locations identified in AEMOs REZs, it does not make sense to proceed with this development of this scale so close to an environmentally sensitive area.

4. Lifestyle and Financial Impact on Neighbours

There are many properties that share a boundary with, or are in line of sight of, the proposed development site. Similar to my uncle, my wife's parent's property shares a boundary with the proposed site and has views over the valley. They, like many of the more recent residents in the valley, have paid a significant financial premium to realise the dream of a country lifestyle in this picturesque and tranquil setting of farm land and rolling green hills (admittedly somewhat less green of late as, like the rest of NSW, the region is drought stricken). If the proposed development were to proceed, the landscape would be unrecognisably transformed. The allure that first brought many residents to the area would certainly be lost, and the lifestyle and emotional impact on all neighbours would be significant.

Such a development would also cause a reduction in land values of surrounding properties; especially those with sight lines across the valley (of which there are many). This financial impact

would limit or prevent relocation options for residents for which the lifestyle and emotional impacts of the development were too great.

Of course, the REZs identified in AEMOs Integrated System Plan, are selected so as to minimise such impacts on neighbouring properties, and are therefore more appropriate regions for such developments.

5. Heritage Impact

I have three sisters and three cousins who grew up on our parent's farm at 91 Tallagandra Lane. We are the 6th generation to have lived and farmed this area. My uncle's property immediately borders the proposed development site. The land is highly productive farming land and the area has a rich agricultural heritage. My ancestors, George Reid and Mary Casey, were the first to settle on and farm the land in the early 1800s. The very rich heritage of the Reid family in the area is well documented in 'A Pictorial History of the Read/Reid family in Australia 1849-1979', by Lyall Gillespie. Lyall Gillespie is also a Read descendant. 'Lyall Gillespie Corridor' in my home suburb of Forde, ACT, is named in his memory.

As outlined above, avoiding land with heritage significance was a criterion in AEMOs selection of the REZs identified under their Integrated System Plan. The site on Tallagandra Lane identified for the Springdale Solar Development is not appropriate for this reason also.

For the reasons outlined above, I believe that the site proposed for the Springdale Solar Development in Sutton is unsuitable. Instead, developments of this nature should be considered in light of AEMOs Integrated System Plan, and situated accordingly.

Thank you for taking the time to consider the points I have raised in this submission.

Kind Regards,

David Hardwicke,

Forde, ACT, 2914