16 January 2018

NSW Department of Planning and Environment
GPO Box 39
Sydney NSW 2001

Re: Submission on Draft Large-Scale Solar Energy Guideline

EPS is pleased to provide this submission on the Draft Large-Scale Solar Energy Guideline (Guideline) released by the NSW Department of Planning and Environment (DP&E) in November 2017.

The format of the submission is information extracted from the Guideline is *italicized* and **bolded**, followed by EPS's general comments on the selected information.

P9 – Development consent for SSD applications – 25 objections to the application

General Comments:

As a result of increased internet accessibility and the proliferation of online social networking, there are highly active and mobile anti-renewable groups that have both local members, interstate members and international members.

The groups submit template/form letters in an attempt to intentionally trigger assessment by the Planning and Assessment and Commission (PAC) and delay project timelines. The trigger of 25 objection submissions is out of step with the changed pace of technology and resulting increased connection of like-minded anti-renewable technology groups.

Section 89F(3) of the EP&A Act states:

*During the submission period, any person may make written submissions to the Minister with respect to the development application. A submission by way of **objection** must set out the grounds of the **objection**.*

"Grounds" in this context means "reasons" or "justifications". Currently negligible reason or justification is required for a submission to be deemed an objection consequently objections that are frivolous and/or vexatious and/or unjustified are considered acceptable and qualify to satisfy the 25-objection trigger for a development to be referred to the PAC.

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P9 – Other approvals – required approvals

General Comments:

Specifying 'planning' in first sentence should be considered.

P10 – The environmental impacts of transmission or distribution lines required for a solar energy project will still be considered in the assessment of the application for the development, even though they are to be assessed under Part 5 of the EP&A Act.

General Comments:

Transgrid has previously advised the customer is responsible for obtaining all approvals, and that Transgrid do not use their self-determining rights for 3rd party projects. Transgrid's recommendation was approval for the connection arrangements should be through the SSD process.

P12 – Large-scale solar development is not constrained by access to resources to the same extent that mines or other forms of renewable energy generators are

General Comments:

Two crucial resources required for large-scale solar farms are the proximity and access to a substation and the local network's connection capacity to receive the large scale solar farm's power. This is acknowledged on P6 of the draft Guideline - "*solar developments are primarily limited by their access to the transmission and distribution network*" and P13 – "*Preferable site conditions include (but are not limited to): proximity to the electricity network and connection capacity available at the anticipated connection point".*

If a substation and/or local network connection capacity cannot cater for the large scale solar farm's power the development will not proceed.

If a substation and/or local network connection capacity can cater for the large scale solar farm's power if augmentation works are undertaken to the substation and/or local network connection capacity it is highly likely the cost of augmentation works will make the development uneconomical and consequently the solar farm will not proceed.

The areas that can meet the requirement for substations and local networks with connection capacity combined with the size of land required for large scale solar farms are rural lands/rural areas used for primary production.

Further, constraints such as geological conditions and flooding can significantly influence project viability and constrain land to similar extents as other renewable energy generators.

P13 – Land that does not contain native vegetation or has previously been cleared and utilised for industrial-type purposes (brown-field sites) in rural settings & P16 – land use compatibility – solar energy developments are not a traditional rural land use and further issues may arise during assessment.

General Comments:

The availability of land previously utilized for industrial-type purposes (brown-field sites) in rural settings is limited. Brown-field sites will rarely have the requisite size for a large scale solar farm and will rarely have the proximity and access to a substation.

Land value, and the cost of land acquisition, is an important factor contributing to the economic viability of a large scale solar project. The interplay between land value and feasibility is most evident in the initial site suitability analysis for a project.

While EPS has not attempted to test the value regimes of industrial versus rural lands across the entirety of NSW, it is our view that in the majority of cases industrial land commands a significant value premium in comparison to rural/agricultural lands. A large scale solar farm is unlikely to be the highest and best use of industrial-type purposes (brown-field sites) in rural settings and therefore a large scale solar project is unlikely to be delivered by the market in this land type scenario.

Cropped lands do not contain native vegetation and are cleared. Considering other requirements for large scale solar development including size of land, proximity and access to a substation and the local network's connection capacity there is more opportunity to develop large scale solar on cropped lands.

The NSW Government's Standard Instrument LEP and State Environmental Planning Policy, adopted by Local Government areas, implement the NSW Government and Local Government strategic planning policy/principles for each land use via the adoption and application of a Standard Instrument LEP zone.

The principal Standard Instrument LEP zone applied to rural lands used for primary production is RU1 Primary Production. DP&E's LEP practice notes, circulars and guidelines including PN 11-002 and PN 11-003 indicates the role and function of land zoned RU1 Primary Production is to provide for most kinds of commercial primary industry production including extensive agriculture, intensive livestock and intensive plant agriculture, aquaculture, forestry, mining and extractive industries, rural industry including agricultural produce industry, livestock processing industry, sawmill or log processing works, stock and sale yard and other rural industries that are not specifically defined.

The zone is aimed at utilising the natural resource base in a sustainable manner. The zone is not a default zone for non-urban land. The zone is allocated to land where the principal function is primary production.

The State Environmental Planning Policy (Infrastructure) 2007 aims to facilitate the effective delivery of infrastructure across the State. The SEPP indicates the role and function of land zoned RU1 Primary Production includes infrastructure such as sewerage systems, waste resources management facilities, electricity generating works, solar energy systems and emergency services facilities.

Individual Local government strategic planning policy/principles have included industry and other infrastructure in the role and function of land zoned RU1 Primary Production. For example, Griffith SILEP 2014 permits with consent in zone RU1 Primary Production, Offensive industries; Offensive storage establishments; Truck depots; Warehouse or distribution centres. Wagga Wagga SILEP 2010 permits with consent in zone RU1 Primary Production, Industries; Passenger transport facilities; Storage premises; Transport depots; Truck depots; Warehouse or distribution centres.

Government strategic planning policy/principles envisages the role and function of land zoned RU1 Primary Production to include agriculture, commercial primary industry production, rural industries, infrastructure and some industry. Large scale solar farms are a type of infrastructure development that is appropriate for land zoned RU1 Primary Production.

The DP&E's LEP PN 11-002 notes the RU1 zone is aimed at utilising the natural resource base in a sustainable manner. A large scale solar farm utilises the suns' energy to generate low emission energy, reducing greenhouse gas emissions that will contribute to NSW achieving its target of net-zero emissions by 2050 as set out in the NSW Climate Change Policy framework.

P-13/14 While the following types of land or sites are not precluded from large-scale solar energy development, they do indicate areas of constraints that should be identified as part of the constraints mapping:

- ***important agricultural lands, including Strategic Agricultural Land (both critical industry clusters and biophysical strategic agricultural land) and land with soil capability classes 1, 2 and 3. Consideration should also be given to any significant fragmentation or displacement of existing agricultural industries.***

Constraints may be early indicators of potential land use conflicts.

General Comments:

The Strategic Agricultural Land and land with soil capability classes 1, 2 and 3 criteria should not be listed as an "Area of constraint" for the following reasons:

The identification of Strategic Agricultural Land (both critical industry clusters and biophysical strategic agricultural land) was introduced as part of a range of measures designed to deliver greater protection to agricultural land from the impacts of mining and coal seam gas. Large scale solar farms do not have the same potential impacts on agricultural land as mining and coal seam gas development.

As previously discussed the role and function of land zoned RU1 Primary Production includes infrastructure such as large scale solar farms.

Large scale solar farms adjoining land zoned RU1 Primary Production do not impede owners of adjoining primary production land from using their land for lawful agricultural practices. Large scale solar farms are not adversely impacted from normal farming practices that include residual noise, light, dust and other normal farming impacts. A large scale solar farm is not classified as a "sensitive land use". Therefore, the potential for land use conflict between land used for a large scale solar farm and land used for lawful agricultural practices is low.

The identification of Strategic Agricultural Land as part of the measures designed to deliver greater protection to agricultural land from the impacts of mining and coal seam gas identified approximately 2.8 million hectares of biophysical strategic agricultural land. Land within these 2.8 million hectares suitable to meet the requirement for substations and local networks with connection capacity combined with the size of land of land required for a large scale solar farm is minuscule and will have little to no impact on the 2.8 million hectares biophysical strategic agricultural land.

Fragmentation of rural land and loss of land to viable rural production is created by residential or rural residential subdivision development. Large scale solar farms do not require or promote residential or rural residential subdivision development.

Large scale solar farms do not remove the land like mining or intersect with aquifers like coal seam gas or prevent forms of agricultural production continuing simultaneously on the land. If the land on which the large scale solar farm operates has been cropped the land essentially is fallowed for the life of the large scale solar farm thus preserving and possibly improving the soil structure and chemical fertility of the soil. At the end of the project the solar farm infrastructure can easily be removed, and the land returned to agricultural production.

The overriding need for large scale solar farms in terms of public interest including the NSW Government meeting greenhouse gas emissions outweighs the small amount of Strategic Agricultural Land and land with soil capability classes 1, 2 and 3 that may be suitable and possibly used for large scale solar farms.

P16 – Key assessment issues – Biodiversity

<u>General Comments:</u>

Cropped land, in most cases, do not raise biodiversity issues because there are usually little or no legislated biodiversity values to assess because of the disturbance to the land.

The current biodiversity legislation encourages large scale solar farms to be developed on cropped land to avoid possible biodiversity offsets which in most cases make a large scale solar farm uneconomical.

There is an anomaly between the current biodiversity legislation and cropping of agricultural land that doesn't require consent. If at the time of inspecting the land for biodiversity values the land is not cropped or ploughed/tilled there may be biodiversity values e.g. grasslands, that require offsets that could make a large scale solar farm uneconomical however if the land is cropped or ploughed/tilled ready for planting then it is unlikely there will be any biodiversity values e.g. grasslands, that require offsets.

As a general principle if a large scale solar farm is located on agricultural land that is cleared and can be cropped without consent the land should be treated as having no biodiversity values requiring offsets. This removes the potentially farcical situation of land being cropped then harvested and then inspected to confirm there is little or no legislated biodiversity values to assess.

If a large scale solar development must be screened with vegetation to reduce the visibility of the solar farm from visual receptors the vegetation screening requirement should not be surreptitiously used by DP&E & OEH as a revegetation program for local native vegetation that will require, under current legislation, biodiversity offsets to remove the vegetation when the solar farm's infrastructure is removed and the land returned to its original state i.e. cleared agricultural land available for agricultural production e.g. cropping. If DP&E & OEH is proposing to use a vegetation screening requirement as a revegetation program of the local native vegetation, then this should be clearly stated in the guidelines. However, considering previous tension between sections of the farming community and government over clearing of native vegetation for farming practices and farmers right to farm DP&E & OEH's use of the vegetation screening requirement as a revegetation program of local native vegetation could drastically reduce the already limited potential sites for large scale solar farms.

P16 – Key assessment issues – Heritage

General Comments:

Cropped land in most cases do not raise cultural heritage issues because there are usually little or no in situ cultural objects to assess because of the disturbance to the land.

The current cultural heritage legislation encourages large scale solar farms to be developed on cropped land to avoid possible cultural heritage issues which could delay or possibly prevent a large scale solar farm.

P17 – Key assessment issues – visual impacts – screen or otherwise reduce visibility of the site

General Comments:

Visual impacts should not be a key assessment issue.

The draft guideline acknowledges that large scale solar farms will be in regional NSW and specifically in rural settings.

DP&E's current rationale seems to be visual impacts arise from changes in available views of the landscape that occur because of a large scale solar farm. Visual impact is determined through the subjective assessment of sensitivity of the visual receptors (i.e. residents, people viewing areas from public spaces) and the magnitude (scale) of the change in view.

Key components of a visual assessment are identifying the existing environmental values of an area and the future planned environmental values of the area. As previously identified and discussed Government's strategic role and function for land zoned RU1 Primary Production includes agriculture, commercial primary industry production, rural industries, infrastructure, and some industry.

Consequently, if Government wants to meet their "strategic factors" listed in the draft guidelines then areas that provide the requirements for large scale solar farms should be considered areas where the future planned environmental value of an area includes large scale solar farms that must be considered part of the existing landscape.

There are many rural landscapes that include industrial style development and infrastructure including Griffith that has significant wine processing structures/infrastructure in rural areas and Tamworth that has significant chicken breeding structures/infrastructure.

In some cases, DP&E and OEH have required large scale solar developments to be screened with vegetation to reduce the visibility of the development site from visual receptors e.g. neighbouring land owners, public road. This has typically required vegetation to be planted and maintained around the perimeter of the site for the life of the solar farm. As previously discussed if a large scale solar development must be screened with vegetation to reduce the visibility of the development site from visual receptors the vegetation screening requirement should not be surreptitiously used by DP&E & OEH as a revegetation program of the local native vegetation.

P17- Key assessment issues – transport

General Comments:

The construction phase of a large scale solar farm generates the most traffic because the construction is time critical. Only a portion of the construction phase generates the volume of traffic likely to exceed the capacity design of existing rural roads. The construction phase is limited to approximately 6-8 months. If the project life of a large scale solar farm is 30 years, then the construction phase will be less than 1 year.

The operational phase of a large scale solar farm generates a volume of traffic that will not exceed the capacity design of existing rural roads. If the project life of a large scale solar farm is 30 years, then the operational phase will be approximately 29 years.

The decommissioning phase of a large scale solar farm generates a volume of traffic that is unlikely to exceed the capacity design of existing rural roads. If the project life of a large scale solar farm is 30 years, then the decommissioning phase will be approximately 1 year.

The requirement for road upgrades and maintenance commitments instead of only traffic management measures to control approximately 6-8 months of construction traffic requires further consideration by DP&E and RMS. The current default position of requiring road upgrades and maintenance to cater for construction traffic can add hundreds of thousands of dollars to the project and create long term maintenance cost issues for a local council.

P21 – Development footprint, new technology and site design – Flexible consent

General Comments:

EPS is supportive of the statement made regarding granting of flexible consents. The pace of technology change, and in some instances commercial structuring, results in the need for reasonable flexibility within the development consent.

P21 – Development footprint, new technology and site design – Note 21 – For example the installation of battery storage at a later stage would only be approved as part of the consent footprint if a full assessment of the impacts and risks of the batteries can be provided in the EIS. Otherwise a modification would be required.

General Comments:

There is no indication of what "*a full assessment of the impacts and risks of the batteries*" is. To avoid individual expensive lengthy assessment of battery systems while reducing the potential adverse impact/risk of a battery system the NSW Government should adopt an international standard for battery systems.

If the proposed battery system meets the international standard, then the battery system should be approved without any further assessment.

Battery storage can provide dispatchable energy and other security services which can contribute to NSW's long-term security while also contributing to national emissions reductions targets.

Having a long drawn out expensive process to assess the potential impacts and risks of battery systems that meets an international standard is unreasonable and unwarranted.

P24 – Community and Stakeholder Engagement

General Comments:

In paragraph three, the words 'AND COMMUNITY' should not be capitalised.

If you would like clarification on any of the above comments, please do not hesitate to contact us at reception@enviroproperty.com.au or 02 4981 1600.

Best regards,
Environmental Property Services (EPS)