NSW GOVERNMENT

Large-Scale Solar Energy Guideline

DRAFT

For State Significant Development

November 2017

November 2017

Disclaimer

Copyright notice

Contents

Introduction

The *Large-Scale Solar Energy Guideline* (the Guideline) provides the community, industry, applicants and regulators with guidance on the planning framework for the assessment and approval of large-scale solar energy development proposals under the *Environmental Planning and Assessment Act 1979* (EP&A Act), which are classified as 'State significant development' (SSD).

This Guideline identifies the key planning and strategic considerations relevant to solar energy SSD in NSW. It aims to assist in the site selection and design of proposals and it will be used by the Department of Planning and Environment (the Department) to assist in the assessment of relevant development applications.

This Guideline is intended to be a general guidance for solar energy SSD in NSW. It is not intended to address all circumstances and not all considerations or matters in it will be relevant to every proposal.

This Guideline should be read in conjunction with any guidance published by the Department about the environmental impact assessment process in respect to SSD. Guidelines on the assessment process have been developed to assist applicants to understand and navigate the requirements of the NSW planning system. Specifically, guidance on scoping, community engagement and preparation of an Environmental Impact Statement (EIS) will be relevant and expand on the outlines of these stages provided in this document.

Solar energy technology is an emerging industry, with a high potential for significant technological advances in future. This Guideline endeavours to address the potential development impacts of solar energy infrastructure as fully as possible. The Department will update and review this Guideline in future, to ensure it is reflects current knowledge and technology.

Objectives

The objectives of this Guideline are to:

- provide guidance to the community, applicants, industry and regulators on how the Department assesses environmental impacts of solar energy SSD;
- encourage industry to undertake suitable site selection for solar proposals, including associated infrastructure, to reduce the likelihood and extent of land use conflict and environmental impacts;
- facilitate better outcomes by promoting early identification of impacts;
- promote meaningful, respectful and effective community and stakeholder engagement throughout the development process;
- support the sustainable development of large-scale solar energy industries in NSW by providing a clear, consistent and responsive policy framework;
- support solar energy investment into NSW, to promote clean, efficient and reliable energy generation, in addition to regional economic benefits such a job growth and economic diversity; and

- encourage broad engagement on solar energy development to attract investment and provide employment in supportive communities, and to build social licence.

Application of the Guideline

A solar energy development (or project) means any works, infrastructure and buildings for the purpose of the generation of electricity by solar power. This includes energy generation from photovoltaic (PV) systems, concentrated solar thermal, lens concentrator systems, and associated buildings (including battery storage), electricity connections and other structures. This Guideline applies to all applications for development consent for, or modifications to, a solar energy project that is SSD where Secretary's Environmental Assessment Requirements (SEARs) were issued after the date of publication of this Guideline.

The site selection and environmental assessment matters outlined in this Guideline are primarily related to the development of large-scale ground-mounted solar energy projects. They are not intended to apply to floating solar or hybrid systems (solar combined with other energy generating sources). For these systems project-specific SEARs may reference other guidance material, however, the assessment principles and outcomes sought for the solar energy elements are envisaged to be similar to what is set out in this Guideline.

Although the focus of this Guideline is SSD, it may also be of use to applicants for non-SSD solar energy projects, when undertaking site selection and scoping[1]. Those exercising consent authority functions for non-SSD projects (such as councils, local planning panels and joint regional planning panels) may also choose to apply this Guideline, as relevant.

Strategic Context

Australia has the highest average solar radiation per square metre of any continent in the world. NSW has an abundance of excellent solar resources and established electricity infrastructure that, along with declining technology costs, makes it attractive to solar farm developers.

The NSW Government supports the development of a sustainable solar energy industry in NSW and acknowledges that there is broad public support for the adoption of alternative, renewable, low emission energy generation sources[2].

The NSW Government is receiving an increasing number of project applications for large-scale solar energy projects. Although the solar industry is already established in NSW, its relative infancy compared to its potential provides an opportunity for clear guidance to drive best practice development that is ecologically sustainable and promotes safe, efficient and consistent solar energy projects.

Decision makers are required to consider the public interest when weighing the overall benefits and impacts to the community and individuals before determining development applications in NSW. Large scale solar energy projects can support jobs and investment in regional NSW, help to put downward pressure on wholesale energy prices, and reduce reliance on fossil fuels, thereby contributing to reductions in air pollution and greenhouse gas

[1] The Clean Energy Council uses a 5MW threshold to distinguish medium and large-scale solar. However, this Guide applies to SSD ($30M+). The 5MW threshold would be relevant where this Guide indicates that industry and other consent authorities may want to use this document for guidance.

[2] *Community Attitudes to Renewable Energy in NSW* (Office of Environment and Heritage, 2015)

emissions. Solar energy is also now one of the lowest cost energy generation options for new generators making it an attractive energy alternative.

Background

In 2016, 19.6 per cent of Australia's electricity came from renewable energy, the most of any year this century[3]. There are 12 large-scale solar projects (greater than 5 MW) in operation nationally, representing 319 MW of generation capacity, and a further 480 MW of projects that have received grant funding and could commence construction in 2017.

NSW is a leader in large-scale solar energy development, with Australia's largest solar farms at Nyngan, Broken Hill and Moree making up 211 MW of operational capacity.

Like other developments, large-scale solar energy projects may provide jobs and attract investment in regional NSW. A single solar development may generate several hundred jobs during construction and requires ongoing maintenance from a small team. There are also flow on benefits to local businesses, primarily during construction, similar to other resource and energy developments. However, solar development is not restricted by geographical or geological circumstances as is the case for mining and wind developments. Rather, solar developments are primarily limited by their access to the transmission and distribution network. This means solar developments might provide investment in regional communities that may not have similar opportunities from other industries.

In the strategic context, large-scale solar energy proposals provide an opportunity to:

- address the aims of the International Paris Agreement on reducing greenhouse gas emissions;
- contribute to NSW achieving net-zero emissions by 2050 as set out in the NSW Climate Change Policy Framework;
- contribute to the Commonwealth's renewable energy target;
- deliver on commitments in the NSW Renewable Energy Action Plan; and
- assist in meeting energy demand and improving energy security for NSW in the context of the regulatory framework for the National Electricity Market.

These strategic factors may be considered in the assessment and determination of large-scale solar energy developments, in particular the contribution to increased energy security, efficiency and reliability, emissions reduction and improved network planning.

International Paris Agreement

Under the International Paris Agreement, Australia has committed to reducing greenhouse gas emissions by 26 to 28 per cent below 2005 levels, by 2030. One of the key initiatives to deliver on this commitment is the Commonwealth Government's Renewable Energy Target (RET). The large-scale component of the scheme encourages investment in renewable energy projects to achieve 33,000 gigawatt hours (GWh) of additional renewable energy generation by 2020. This would represent around 23.5 per cent of Australia's electricity generation.

[3] *Clean Energy Australia Report 2016* (Clean Energy Council, 2017)

Independent Review into the Future Security of the National Electricity Market

In June 2017, Dr Alan Finkel AO, Chief Scientist released the *Independent Review into the Future Security of the National Electricity Market* (Finkel Review). The Finkel Review proposed a blueprint for energy development to ensure that the National Electricity Market (NEM) is secure, reliable, rewards consumers and lowers emissions. This is underpinned by a focus on an orderly transition, better system planning and stronger governance. The Finkel Review made 50 recommendations intended to achieve the proposed outcomes.

On 14 July 2017, the Council of Australian Governments (COAG) Energy Council agreed on a timeline to implement 49 of the 50 recommendations of the Finkel Review. The Council noted that the Commonwealth Government was still considering the recommended Clean Energy Target.

To guarantee the reliability of electricity supply and ensure adequate dispatchable capacity, the NSW Government will work through the COAG Energy Council to implement the recommendations of the Finkel Review. The review recommended that the Australian Energy Market Commission (AEMC) and the Australian Energy Market Operator should develop and implement a Generator Reliability Obligation, and AEMC the Energy Security Obligations, both by mid-2018.

NSW Government policy

The NSW Government, through the NSW Climate Change Policy Framework has a long-term objective of achieving net zero emissions by 2050. The Framework recognises the importance of reducing greenhouse gas emissions in energy generation, and the opportunities which the renewable energy industry offers for the State.

The NSW Government's *Renewable Energy Action Plan* (2013) promotes the development of renewable energy in NSW. The plan has 24 actions under three goals:

1. Increase renewable energy investment and projects
2. Build community support for renewables
3. Attract and grow renewable energy expertise.

With changes in the National Electricity Market and the generation mix, security of energy supplies is also becoming an increasing concern for households and businesses. In response, the Australian and NSW Governments have been reviewing the reliability, resilience and affordability of our current electricity systems. Technological advances, such as battery storage and concentrated solar thermal, can provide dispatchable energy and other system security services. This can contribute to NSW's long-term energy security while also contributing to national emissions reductions targets.

Planning Framework

The EP&A Act sets out a planning assessment and approval pathway for different kinds of development, including SSD solar energy development. The various pathways for solar development are outlined at Attachment A.

Permissibility

Permissibility of solar energy development is determined by the relevant environmental planning instruments, including State Environmental Planning Policies and local environmental plans (LEPs)[4]. The EP&A Act and the EP&A Regulation also establish the assessment and approval pathways and other development controls relevant to solar energy developments, which are not necessarily permitted in all zones. Key reference points include:

- the zoning and land use provisions of the relevant LEP;
- Part 3 Division 4 of the *State Environmental Planning Policy (Infrastructure) 2007* (Infrastructure SEPP);
- Part 4, and Schedule 1 clause 20, of the *State Environmental Planning Policy (State and Regional Development) 2011* (SRD SEPP); and
- Section 89E of the EP&A Act.

Where solar energy development is permitted with consent, an applicant may lodge a development application for determination by the relevant consent authority. If the applicant is not the owner of the land to which the application relates (or is not the only owner), evidence must be provided that all the relevant landowners consent to the application[5]. If the land is owned by the Crown, landowner consent and lease arrangements must be obtained from the Department of Primary Industries (Crown Lands).

Not all solar development will require development consent. The Infrastructure SEPP provides for certain "solar energy system" development to be exempt development if carried out by or on behalf of a public authority. The Infrastructure SEPP also provides for solar energy system development that satisfies requirements in the SEPP (for example, in respect of size, height and distance from adjoining boundaries), to be 'complying development', for which a complying development certificate may satisfy a requirement for development consent.

[4] If a SSD proposal is partly or wholly prohibited, it can still be lodged along with a proposed environmental planning instrument that would make the development permissible (if approved by the Minister). This would be considered in the assessment process.

[5] It should be noted that the consent of a landowner to lodge an application is for assessment purposes only and does not bind the landowner to the eventual outcome.

SSD declaration

Under the EP&A Act and the SRD SEPP, a solar energy development is SSD[6] if it:

- has a capital investment value (CIV) of more than $30 million; or
- has a CIV of more than $10 million and is in an environmentally sensitive area of State significance.

Alternatively, under the EP&A Act, the Minister for Planning may declare a specified development on specified land as SSD. However, the Minister must first obtain advice from the independent Planning Assessment Commission (PAC) on the State or regional planning significance of the development, and make that advice publicly available.

Large-scale solar energy development, which is not SSD, may be designated development if it satisfies criteria in respect of 'electricity generating stations' in Schedule 3 of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation). Similar to SSD[7], an application in respect of designated development must be accompanied by an EIS and therefore applicants seeking consent for designated development may find aspects of this Guideline useful for such applications.

Development consent for SSD applications

To carry out solar energy SSD, development consent is required from the Minister for Planning under the EP&A Act. The Minister has delegated his function of determining SSD applications to the PAC (except where the application is made on behalf of a public authority. As such, SSD is usually referred to the PAC for determination. However, some applications may remain with senior officers of the Department to determine (under delegation from the Minister) if:

- there have been less than 25 objections to the application; and
- the local council has not objected; and
- a political disclosure statement has not been made.

Other Approvals

This section outlines the other approvals commonly required to carry out solar energy SSD projects. This section only provides an outline of the required approvals and further details should be sought from the relevant government agency.

---

[6] The SRD SEPP declares development to be SSD if it is, by the operation of an environmental planning instrument, not permissible without development consent under Part 4 of the EP&A Act, and the development is specified in Schedule 1 or 2 of the SRD SEPP

[7] Under the EP&A Act, a development that is classified SSD cannot also be designated development. The SSD classification automatically supersedes a designated development classification.

Planning approval – Transmission lines

An electricity generating project must connect to the electricity transmission or distribution grid to enable distribution of the generated electricity. Wherever possible, the Department prefers that development of transmission and distribution lines should form part of the associated SSD solar energy project, particularly if they are not being developed by, or on behalf of an electricity supply authority, public authority or authorised network operator.

Transmission and distribution lines are usually owned and operated by an electricity transmission operator or distributor (under the *Electricity Supply Act 1995*, or an 'authorised network operator' under the *Electricity Network Assets (Authorised Transactions) Act 2015*, rather than the solar energy generation operator. The Infrastructure SEPP makes development for the purpose of an electricity transmission or distribution network permissible without consent when carried out by or on behalf of an electricity supply authority or a public authority[8]. Such development may be assessed under Part 5 of the EP&A Act. The environmental impacts of transmission or distribution lines required for a solar energy SSD 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.

In these instances, an applicant should provide information in the EIS about the necessary transmission lines, including the proposed location, timing of decision-making, interaction with the timelines of the solar energy project and relevant stakeholders, in order to assist the consideration of all aspects of the project.

Applicants should consult with the relevant transmission operator and distribution network service provider early in the project planning process to clarify responsibilities and the applicable assessment pathways for transmission and distribution infrastructure, available capacity and any requirements with respect to connection to the relevant electricity grid.

Environmental Protection Licence

An environment protection licence (EPL) under the *Protection of the Environment Operations Act 1997* (POEO Act) is not typically required for electricity generation by solar power. Applicants should be aware that an EPL may be required in situations where the solar energy development is a hybrid system or combined energy generating system that incorporates other energy sources (such as wind or gas). Also, other licensing obligations may arise where large-scale battery storage is part of the project and the batteries need to be transported to the site (e.g. dangerous goods licence).

Commonwealth EPBC Act approval

The Commonwealth and NSW Governments have signed a Bilateral Agreement under the *Environment Protection and Biodiversity Conservation Act 1999* (Commonwealth) (EPBC Act) relating to environmental assessment. The Bilateral Agreement accredits the NSW environmental assessment process for SSD proposals that impact on certain matters of national environmental significance under the EPBC Act, thereby removing the need for separate assessment by the Commonwealth[9]. The decision on whether to approve the impacts on matters of national environmental significance is made by the Commonwealth.

Due to the commencement of the *Biodiversity Conservation Act 2016* (NSW) on 25 August 2017, the NSW Government and the Commonwealth Government are reviewing the Assessment Bilateral. For all transitional projects, which continue to assess biodiversity impacts under the *Threatened Species Conservation Act 1996*

[8] There are exceptions where the land is reserved under the *National Parks and Wildlife Act 1974*.

[9] The Bilateral applies to development for which the Minister for Planning or an agency of the State is the consent authority.

(NSW), the applicant will not be required to undertake a separate assessment under the Commonwealth EPBC Act. For projects that are required to assess biodiversity impacts under the new Act, applicants will be required to undertake assessment under both the NSW and Commonwealth legislation, until a new Bilateral Agreement is in place.

Applicants are encouraged to make a referral to the Commonwealth Department of the Environment and Energy early in the assessment process to understand if Commonwealth approval is required and therefore whether the proposal is to be assessed under the Bilateral.

Assessment under the Biodiversity Conservation Act 2016

Biodiversity assessment is required in accordance with the *Biodiversity Conservation Act 2016* for SSD projects except in the following circumstances:

- Development applications or modifications made before 25 August 2017 but not finally determined before 25 August 2017;
- Development applications or modification applications that require an EIS, including SSD and designated development if:
  - It is made within 18 months after 25 August 2017; and
  - If the Secretary of the Department issued, before 25 August 2017, environmental assessment requirements (such as SEARS) for the preparation of the EIS.
- Development applications or modification applications that require an EIS, including SSD and designated development if:
  - Made after 25 August 2017;
  - If the Secretary of DPE determines in writing that the applicant had undertaken substantial environmental assessment in relation to the EIS before 25 August 2017; and
  - The application is made within 18 months of the Secretary's determination.

In these circumstances, the applicant will be able to continue to apply the former planning provisions including biodiversity assessment under the TSC Act, and will not be required to undertake biodiversity assessment under Biodiversity Conservation Act. Additionally, the applicant will be able to continue to rely on the Bilateral Agreement under the EPBC Act.

Site selection for solar energy development

Planning policy plays a crucial role in the appropriate development of new industries by setting out the conditions that encourage orderly land use, and by outlining the assessment parameters that will inform the decision on whether a development proposal can proceed. 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. As such, site selection provides a strong opportunity for a solar development to minimise its adverse social and environmental impacts and consider stakeholder issues early in the design phase.

This section is intended to complement the information on scoping and development assessment presented later in this Guideline. Environmental impact assessment should be an iterative process that occurs throughout all stages of design and development, from initial speculation and site selection to construction, operation and decommissioning. By using such an approach, significant constraints and impacts may be avoided at the outset, shifting the focus to mitigating and managing unavoidable impacts.

Importance of site selection

This section outlines the other approvals commonly required for SSD solar energy projects. However, details on the assessment pathways, issues and considerations for those approvals are not detailed in this Guideline.

Selection of a suitable site may limit the likelihood of significant environmental or social being identified during the assessment of a project proposal, which may lead to a more flexible consent.

Site selection is influenced by:

- **preferable conditions**, which define a highly suitable site for large-scale solar energy development; and
- **areas of constraint**, which suggest a site may not be ideal for large scale solar energy development, or that it may require additional mitigation actions or more innovative facility design to reduce potential land-use conflicts or unacceptable environmental outcomes.

Preliminary community engagement will help raise public awareness and participation, and may help identify concerns and/or potential mitigation options. This may also help to identify and resolve siting and higher order issues, prior to and during the scoping stage, so that the environmental impact assessment can focus on the other issues.

A suitable site may result in significantly shorter assessment timeframes (because impacts may be reduced or mitigated in advance of the detailed assessment) and may also allow for greater flexibility in consent conditions, which could provide greater opportunity to alter the development over time in response to changes in demand or technology. However, ‘suitable site’ is not an assessment criteria, nor does it reduce the obligation of the consent authority to conduct a thorough triple bottom line review of the project.

Key considerations for site selection

A suitable site for solar energy development may be determined by undertaking a 'constraints mapping' exercise. Geographical Information Systems (GIS) can be used if relevant spatial data is available.

The site selection considerations below[10] relate to environmental and planning issues relevant to a solar proposal, in addition to other considerations, such as the availability and financial cost of the site.

Preferable site conditions

Preferable site conditions include (but are not limited to):

- optimal solar resources: suitable insulation levels and site solar access (orientation, configuration and topography) means that energy generation can be maximised for a facility of a given size;
- sites with suitable land area, geology and hydrology, and adequate access and road connections, including options for managing construction traffic;
- sites with characteristics that may assist in minimising localised impacts such as:
  - land that does not contain native vegetation or has previously been cleared and utilised for industrial-type purposes (brown-field sites) in rural settings,
  - unobtrusive sites with flat, low-lying topography, and
  - sites with potential to be screened, such as those that can be readily vegetated along boundaries, to reduce visual impacts,
- land that can be readily decommissioned and rehabilitated back to pre-existing or better condition;
- localities where the community broadly supports the development[11];
- localities identified by Government as optimal for renewable energy development; and
- proximity to the electricity network and connection capacity available at the anticipated connection point.

Areas of constraint

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

- areas of native vegetation or habitat of threatened species or ecological communities within and adjacent to the site, including native forests, rainforests, woodlands, wetlands, heathlands, shrublands, grasslands and geological features;

[10] These relate primarily to large-scale ground-mounted solar energy developments in regional areas. They are less applicable to smaller-scale solar energy developments, or roof-top solar and other solar building projects in urban settings.

[11] Applicants may consult the Renewable Energy Advocate branch within the Division of Energy, Water and Portfolio Strategy, Department of Planning and Environment, and the NSW Department of Industry who specialise in regional industry investment advice

- 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;
- residential zones or urbanised areas, with consideration for proximity to dwellings and potentially affected properties, which will increase near and within urban areas including some rural zones (such as R5 Large Lot Residential and RU5 Village)[12];
- sites with high visibility, such as those on prominent or high ground positions, or sites which are located in a valley with residences with elevated views looking toward the site[13]; and
- prospective resources developments, including areas covered by mining leases, petroleum production and exploration licences[14]. These titles do not prevent development on the land to which they apply, but consultation with the title holder(s) is important and the terms of access arrangements may be relevant.

Constraints may be early indicators of potential land use conflicts. Projects located on sites with constraints may benefit from increased public participation at the scoping stage and during the assessment process, to ensure that any community concerns are well understood. The applicant should endeavour to avoid, mitigate or offset any impacts on these areas. Any mitigation, offsets or residual impacts should be clearly identified in the EIS and during public consultation, if relevant.

Implications of site selection

While the above considerations are intended to encourage appropriate solar investment in areas that are more likely to achieve better environmental and planning outcomes, it is acknowledged that there may be specific socio-economic considerations or other factors that determine where an applicant might choose to propose a large-scale solar energy project. Sites with multiple environmental and planning constraints can still be developed in a sustainable manner with good design, innovation and appropriate mitigation measures in place.

Site selection considerations above are not determinative, and do not preclude applicants from lodging applications for solar proposals outside of the suitable sites described above.

Solar energy projects that are proposed on a site that effectively addresses the above considerations may have a more efficient assessment process, which can instead focus on addressing residual impacts (that is, impacts that cannot be avoided or mitigated). Consents for large-scale solar development on suitable sites may be able to provide greater flexibility in the description of the approved development within a set footprint. This means operator could make changes in future, without requiring further approval – provided the development remains within the footprint and risks and impacts are not increased. This will better cater for innovation and changes in technology, design and operation over the life of the project.

[12] This consideration is primarily related to large-scale ground mounted PV and solar thermal farms. Building or rooftop solar and community-scale solar projects can be incorporated into urban environments more effectively.

[13] High visibility or prominence is of particular concern if the solar infrastructure at the site would be juxtaposed against significant scenic, historic or cultural landscapes.

[14] Solar applicants should seek advice from the Department of Planning, Division of Resources and Geoscience about the coverage of resources-related licences.

Development assessment of solar energy proposals

This Part of the Guideline provides information on the assessment of development applications for solar energy SSD projects. This includes information on the assessment issues relevant to solar energy developments, and on the specific stages of the assessment process including:

- scoping and pre-lodgement of an application;
- SEARs and Scoping Report;
- preparation of an EIS; and
- assessment and determination of proposals, and conditions of consent.

Project Assessment

The Department applies a risk-based approach to the assessment of impacts arising from SSD applications, to ensure sufficient protection for the community and the environment. The development application is assessed based on its merits, which includes the suitability of the site, and other considerations outlined below.

Project context

In assessing the application, the consent authority typically considers the strategic and local context of the project, including how it contributes to government commitments and objectives.

Strategic considerations include issues such as how the project contributes to:

- the NSW Government's objective to achieve net-zero emissions by 2050;
- commitments in the NSW Renewable Energy Action Plan – including incorporating a strategic and integrated approach to assessment, and demonstrating early and effective community engagement on the project; and
- meeting energy demand and improving energy security for NSW – including consideration as to whether the project includes features that improve the incorporation of variable renewable energy generation into power systems (e.g. battery storage and power conversion facilities).

Local considerations may include State or council regional plans and relevant LEPs, but will also consider the status of local communities and industries, such as socio-economic status, employment prospects and values and aspirations of local communities.

Broader strategic influences, such as contributions to Australia's obligations under the International Paris Agreement, may also be considered.

Project design

Even if a suitable site is selected, the consent authority will still consider the proposed design of the solar development and its social, environmental and economic impacts in the locality.

As such, the applicant will need to consider the location of project infrastructure, which should be designed to minimise and avoid environmental and amenity impacts. For example, this might include the proposed location of the solar arrays, access points, ancillary infrastructure, including construction compounds, internal roads and car parks, onsite substation/s and the transmission line route. Design consideration should also be given to operational and decommissioning impacts, such as the burial depth and or removal of any pipes or cables, which may affect potential future uses of the site.

Where the project cannot be designed to avoid environmental and amenity impacts, the applicant must identify measures to mitigate or manage such impacts.

Key assessment issues

The assessment process for SSD solar energy proposals is generally the same as it is for other types of SSD projects. However, there are some issues that are particularly relevant to solar energy proposals, and will need to be considered throughout each stage of the process (see also Areas of constraint).

The Department's standard SEARs for solar energy SSD require consideration of:

- **biodiversity**: impacts on biodiversity values should be avoided, minimised or offset to an acceptable level in accordance with the Biodiversity Conservation Act[15].

  Biodiversity impacts may be a key assessment issue in instances where the proposed site contains native vegetation, habitat of threatened species, or ecological communities and requires clearing. Direct and indirect impacts on biodiversity should be considered during the construction and operation phases of the project. Impacts on wildlife from high temperatures around towers may also be a relevant issue for solar thermal plants. Such considerations, where relevant, should factor in what species may be present or pass the project site during migration[16], and what threats these populations already face.

- **heritage**: the likely impacts on cultural and archaeological objects, places and heritage (in particular Aboriginal) must be considered. Specific consultation with the Aboriginal community will be important. Consideration should also be given to any native title or Aboriginal land claims over or adjacent to the site.

- **land use compatibility**: the suitability of the site for the development, including compatibility with existing uses and approved uses of land in the vicinity of the site must be considered. Consideration will also be given to any measures proposed to avoid or minimise any incompatibility.

  Appropriate site selection may address most compatibility issues upfront. However, solar energy developments are not a traditional rural land use and further issues may arise during assessment (such as impacts on rural landscapes, scenic and heritage values, mineral exploration, aerial spraying and weed and pest infestation). Co-location with other industries or combining agricultural uses on site, traffic

[15] Unless the project is a transitional project that can rely on the former legislation and can offset in accordance with the *NSW Biodiversity Offsets Policy for Major Projects*, having regard to the advice of the Office of Environment and Heritage for terrestrial biodiversity or the Department of Primary Industries (Fisheries) for aquatic biodiversity.

[16] For example, 'lake effects', where migratory birds mistake the solar development for a water body may be a consideration for developments that are under migratory bird flight paths.

and noise management, and property vegetation screening may help to mitigate potential land use conflict.

Consideration should also be given to decommissioning and rehabilitation. Solar energy projects developed on agricultural lands should aim to be reversible, to allow for land capability to be restored to its pre-development use.

- **visual impacts**: the acceptability of impacts on landscape character and values, the amenity of landholders and communities, and the adequacy of the measures which are proposed to avoid, reduce or otherwise manage these impacts.

  The visual impact of solar energy development will depend on the scale and type infrastructure, the prominence and topography of the site relative to the surrounding environment, and any proposed measures to screen or otherwise reduce visibility of the site. Solar thermal projects may have greater off-site visibility due to the presence of tower infrastructure. Greater off-site visibility of the site will increase the chances of impacts such as glint, glare, reductions in visual amenity, and detraction from the surrounding landscape character including natural, scenic, historic or cultural landscapes. There may also be road safety impacts from glint and glare.

- **noise**: operation and maintenance of solar generators is not noise intensive and is unlikely to disturb local residents or communities. However, similar to other developments, construction noise can have an impact on amenity. An assessment of the construction noise impacts should be undertaken in accordance with the Interim Construction Noise Guideline and operational noise impacts in accordance with the *NSW Noise Policy for Industry*.

- **transport**: an assessment will be required of the extent to which the local and classified road network can accommodate the type and volume of traffic generated by the construction of the solar energy project, including the adequacy of any proposed road upgrades and maintenance commitments, having regard to the advice of relevant road authorities. Traffic impacts should also be considered for operational and decommissioning stages of the project. Considerations may include the site's access points and road connections, options for managing traffic, and road dilapidation monitoring.

- **water**: solar developments may have an impact on water resources, due to requirements for cleaning solar panels or lenses. The source of water needs to be addressed and water access licences may need to be acquired if the project is approved. Other water-related impacts that may need to be considered include flooding and erosion, discharge/runoff to surface water and groundwater resources, sediment control, and impacts on basic landholder rights.

- **hazards and risks**: any hazards or risks associated with the construction, operation and decommissioning of the solar energy project should be identified (e.g. bushfire and transmission lines), along with suitable management approaches. Hazardous materials should also be considered, particularly for solar thermal energy or battery storage. The project would also need to comply with the National Health and Medical Research Council standards for electro-magnetic fields. The *State Environment Planning Policy No 33 (Hazardous and Offensive Development)* regulates dangerous goods and outlines policy relating to the safe storage and use of hazardous materials[17]; and

- **socio-economic**: as outlined earlier, the application should consider the impacts, both positive and negative, of the proposed development on potentially affected people and groups, and consider the

[17] There is currently limited policy guidance around the safe construction, use and decommissioning of large-scale battery infrastructure. Work may be conducted by the Council of Australian Governments in response to the Finkel Review.

economic impact of the project, including job creation opportunities, workforce accommodation, and flow-on economic impacts to local communities[18]. Consideration should also be given to how impacts (both positive and negative) are distributed between affected people and groups.

The applicant should consider any cumulative impacts from other developments (proposed, approved and operating), especially biodiversity[19], visual impacts, socio-economic and construction traffic impacts. For example, multiple solar developments in close proximity to each other may have a cumulative impact on other rural industries or adjacent land uses, social acceptance, biodiversity, visual effects or scenic landscapes.

The Department may identify other issues of concern, which require assessment, as part of SEARs that are tailored to the project proposal and scoping report.

Public interest consideration

Under section 79C of the EP&A Act the consent authority is required to consider the public interest when evaluating the merits of a proposed development. This is a relatively broad consideration and can include issues such as social impacts, direct regional benefits and public concerns identified during exhibition.

For solar SSD, the public interest can extend to the broader benefits of the development. Solar SSD provides strategic value through low emission electricity generation that can contribute to environmental outcomes and Government commitments, such as the International Paris Agreement. It also diversifies the energy mix in the market, supports energy security objectives and places downward pressure on prices by increasing electricity supply that does not require fuel costs to be met (such as coal, oil or gas). Solar energy is one of the lowest cost energy generation options for new generators making it an attractive energy alternative.

Projects that include large-scale battery storage can provide additional strategic benefits to improve the security and reliability of the National Electricity Market and allow renewable energy generation to be stored for use at peak times, which can place further downward pressure on electricity prices.

Assessment Process

The flow chart in Figure 1 outlines the statutory assessment and approval process for SSD proposals. During the scoping, environmental assessment and determination process, key issues will need to be addressed in consultation with the community and other stakeholders.

The SEARs for a solar energy project will provide detail on the assessment requirements for the proposal consistent with this Guideline.

It is important to note that this is an iterative process, and the applicant may need to revisit aspects of its proposal, as relevant environmental issues become known. This may include amending the proposal in response to issues identified through community consultation.

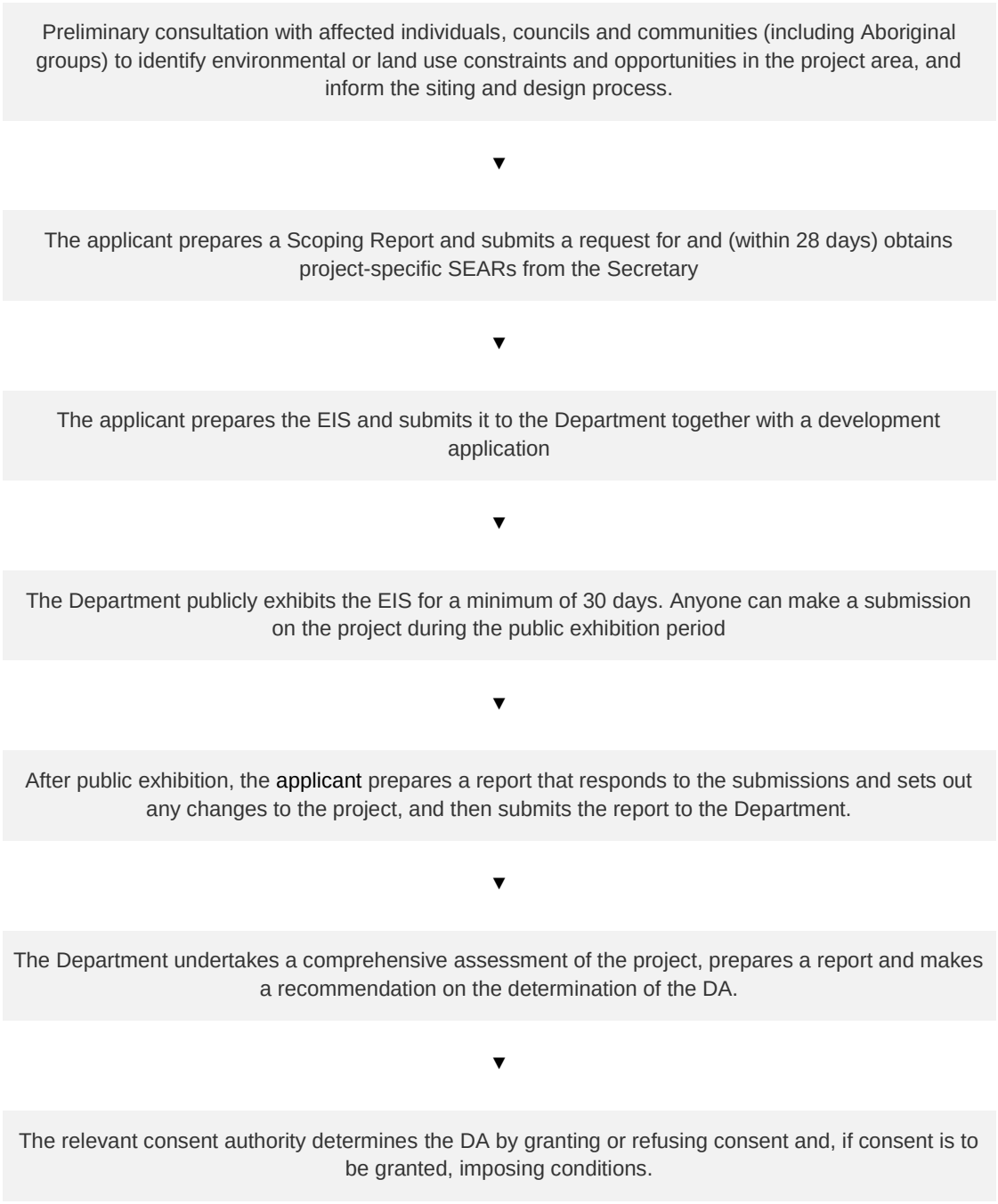
The Department's Planning Circular PS 11-014 Assessment of State significant development and infrastructure (2011) contains additional information on SSD processes.

---

[18] The Department has recently published *Social Impact Assessment Guidelines for Mining, Petroleum and Extractive Industry Developments*. While this Guideline is not focused on solar development the principles and processes outlined should be considered.

[19] Under the *Biodiversity Conservation Act 2016* a Biodiversity Development Assessment Report is required for the application, as such it will not be listed in the SEARs.

Figure 1 – Summary of the typical assessment and approval process for SSD



Scoping

Scoping is the first phase of the SSD process. It involves identifying the environmental, social, and economic matters and impacts from the project that are likely be important to the community and stakeholders. The scoping stage is also about identifying what issues require detailed examination in the EIS, including the extent, severity and duration of the impacts in addition to the sensitivity of who or what is being affected.

Applicants typically undertake an iterative design process to identify the most appropriate locations for the final siting of the project (e.g. panel arrays, towers, battery storage, buildings, substations and transmission lines), based on their constraints mapping, preliminary research and consultation. This should also involve preliminary impact identification and the development of mitigation options.

Preliminary consultation with stakeholders, affected landholders and the local community may result in a more responsive solar energy development and can minimise or avoid issues arising during the assessment process. Applicants are also encouraged to consult with relevant government agencies during the scoping stage of the development to consider development impacts[20].

As part of the scoping stage, the applicant prepares a Scoping Report. This report must describe the project, justify the preferred design for the project, and identify impacts and matters for consideration. A summary of community and stakeholder perspectives should also be included.

Request for SEARs

The Scoping Report should be submitted to the Department with a request for SEARs to be issued. SEARs are developed by the Department in consultation with relevant government agencies, to ensure key impacts and issues are assessed.

For more information on the scoping stage and the preparation of the scoping report, applicants should refer to the Department's *Guideline for Scoping an Environmental Impact Statement* (2017), which includes guidance on preparing a Scoping Report.

Environmental Impact Statement

An EIS is required to be prepared for all large-scale solar energy developments that are SSD (and also those that are not SSD but comprise designated development under the EP&A Act). The EIS builds on the scoping report to provide detailed information on the project, its environmental impacts and proposed mitigation measures. It is a key document for communicating with stakeholders, and is used to inform development consent decisions. It must address all matters identified in the SEARs and may be referenced by consent conditions as an operational baseline. Schedule 2 of the EP&A Regulation sets out requirements for the form and content of an EIS. The Department's *Preparing an Environmental Impact Statement Guideline* further guides EIS development.

Outlined below is key information that an EIS for a solar energy development should include. Project-specific SEARs will provide a more detailed list of required EIS content.

Describing the design of the project

The EIS must provide a full description of their project, including:

- all development to be undertaken as part of the project, including ancillary infrastructure (including those that are not part of the application, but necessary to support the project);
- details of construction, operation and decommissioning; and

[20] May include the Department of Planning and Environment, Roads and Maritime Services, Office of Environment and Heritage, Department of Primary Industries

- the timing of each key phase of the project.

The preferred design and layout of the project should be detailed and justified, including placement of ancillary infrastructure (arrays, towers, substations etc). The EIS should:

- respond to matters, such as landscape values and other environmental considerations, identified through community consultation and studies undertaken in the scoping and pre-lodgement stage;
- address the site constraints; and
- balance the broader social, economic and environmental impacts of the project.

The project description should include a narrative describing the iterative design process which led to the preferred design and layout of the development.

Describing likely impacts and mitigation and management options

The EIS for a solar energy SSD project should also contain:

- completed technical studies (e.g. biodiversity and visual assessments);
- an analysis of the likely impacts of the project at each stage of development;
- descriptions of the measures that will be used to avoid, minimise, mitigate, offset or otherwise manage direct and indirect impacts associated with the project;
- a description of any residual impacts along with an analysis of acceptability;
- details of community consultation undertaken (including with traditional owners and local Aboriginal groups);
- consultation with landowners regarding impacts and mitigation; and
- descriptions of proposed maintenance, modifications, refurbishment and rehabilitation.

Development footprint, new technology and site design

For technical and practical reasons, there may be the need to reconsider the elements of the preferred site design and layout during construction. For example, it may be necessary to change the solar panel array, heliostat or tower configurations, or the location of supporting minor infrastructure and buildings (such as storage) onsite.

Given the continuous advances being made in the solar industry, there may also be valid reasons for some post-approval variation of infrastructure, energy capacity, or technology used at the site (e.g. fixed and tracking panels, central and string inverters, or changes in energy output due to improved efficiencies).

The Department may consider granting consent a flexible consent that allows changes in the placement of solar infrastructure within the development footprint. This approach can allow for variations in technology, design and operation over time, without necessarily requiring further approval. However, this flexibility would only apply where the adverse environmental and social impacts and risks are not increased as a result of the changes[21].

[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.

If an applicant is seeking a consent which permits such flexibility, the EIS must:

- demonstrate how the proposed site meets the preferable site selection criteria;
- demonstrate that, based on the site constraints, that there is still a range of layout configurations there remain within acceptable environmental impacts;
- demonstrate how the primary parameters of the footprint address any concerns raised during consultation and provide adequate certainty for stakeholders;
- assess the effect of the footprint approach (including the proposed parameters) based on the highest impact scenario in the EIS; and
- demonstrate that an appropriate monitoring and management framework will be implemented.

Unless specified in the consent conditions, the infrastructure and technology used onsite must be consistent with the consent.

Assessment

SSD applications are placed on public exhibition as soon as practicable after an application is received. The exhibition must be for a period not shorter than 30 days. During the submission period, any person may make written submissions to the consent authority about the proposed development.

The consent authority will undertake a comprehensive assessment of the specific impact of each proposed solar energy project on its merits, having regard to relevant considerations under section 79C of the EP&A Act.

Matters that a consent authority will likely consider when determining a solar energy SSD application include:

- suitability of the site for the solar energy project;
- development in the vicinity of the project, such as dwellings and other sensitive land uses, including developments that have been constructed, are under construction, have been approved but construction has not commenced, and developments for which an application has been lodged but not determined;
- development within the vicinity of a solar energy project for which a development application has been lodged, including with councils, but a determination is yet to be made;
- submissions made by the local community, stakeholders and government authorities;
- likely environmental, social and economic impacts of the construction, operation and decommissioning;
- relevant provisions of any environmental planning instrument which applies to the development;
- any planning agreement or draft planning agreement that the developer has agreed to enter into under the EP&A Act;
- the public interest, including regarding increasing the supply of renewable energy;
- the strategic context and alignment with relevant Government policies; and
- all assessment issues relevant to the project (including those outlines earlier).

Determination and conditions of consent

Following a merit-based assessment of a solar energy development application, the consent authority will determine whether consent for the project should be granted or refused. If consent is granted, it will be subject to a range of conditions for managing and mitigating the impacts of the project. The conditions may require the applicant to:

- meet performance outcomes or objectives;
- implement specific mitigation measures (such as providing biodiversity offsets);
- monitor actual impacts against the predicted impacts;
- monitor the effectiveness and outcomes of any mitigation strategies in accordance with agreed performance indicators and implement adaptive management strategies where required;
- meet reporting and auditing requirements, including the reporting of data; and
- fulfil obligations associated with decommissioning and rehabilitation.

Further details about conditions of consent are outlined below under the section titles ‘Post-approval regulation and compliance’.

Community and Stakeholder Engagement

State significant projects, including solar energy developments, can have major economic, social and environmental impacts over a long time. Applicants are encouraged to engage with impacted and interested stakeholders at all stages of these projects, including at the scoping stage. Engagement should always be conducted in a manner that is genuine, informative, inclusive and honest. It should aim to be flexible and highlight the potential impacts of the development (both positive and negative). Applicants should engage in consultation with the intent to inform, and to listen. It can also be important for the applicant to be able to explain to the community what they have done with feedback received from consultation, and why.

Community and stakeholder consultation should aim to assist landholders and communities to understand the solar energy development and how it may affect them. It should also outline the development assessment process and further opportunities for consultation.

The Department's *Guideline for Engaging Stakeholders* (2017) ('Engagement Guide') and the *Community Consultative Committee Guidelines* (2016) provide direction to applicants on stakeholder AND COMMUNITY engagement. It aims to improve the quality of engagement throughout the lifecycle of development, from scoping to decommissioning. The following information on community engagement is intended to supplement the Engagement Guide. It also highlights key components of consultation particular to solar energy developments. Table 1 below provides some guidance for applicants to structure community and landholder consultation.

Importance of consultation

As outlined previously, site selection is an important element of any solar energy development, as a suitable site can lead to a streamlined assessment process and potentially greater flexibility in the development footprint. Early consultation with the local community and stakeholders is critical to facilitating this. Even a site with very low environmental impacts facilitating an ideal design may not have a straightforward assessment process if the local community is strongly opposed to the project.

Involving the community early, and demonstrating a genuine intent to respond to feedback and influence the project design and mitigation decisions, can help to build 'social licence', long before a development application is lodged. Once a site is selected, continuing consultation can help craft a project design that minimises environmental impacts, with mitigation that is responsive to community concerns.

Consultation should aim to identify and consider options for eliminating, reducing or otherwise managing impacts, not merely informing communities on the proposed project and design. Innovative approaches to achieve these outcomes are encouraged.

Social cohesion is important in any community, and can be more important for regional communities, where the distances from major centres can encourage tighter community bonds. Applicants may wish to consider integrating their business and development into the local community, driving better social outcomes for the project, community and the solar industry.

At a minimum, applicants should seek, as far as practicable, to address local landowner issues before lodging a development application. This should include agreements in relation to land access and appropriate responses to the concerns and impacts on other potentially affected landowners. This alone, however, is unlikely to build social licence and may miss opportunities to improve community and industry relationships.

Table 1 – Community and landholder consultation stages

Project Stage	Consultation
Site selection	In addition to consultation and negotiation with specific landowners (e.g. owners of the subject land or land required to access the site), it is recommended that an element of broader stakeholder engagement be undertaken, including with neighbouring landholders, before the project site is selected and further pursued. This could include consultation with the relevant council and Chambers of Commerce. These bodies can also assist in identifying other key local interest groups that could also input into the site selection decision. The results of any broader industry-scale market research can also inform this stage when regions and localities are first being identified for closer inspection and site identification.
Scoping stage	Consult with potentially affected stakeholders to identify the constraints and opportunities of the project area. Consultation could involve engagement on the values the wider community place on those attributes, and should inform the scoping and design process. Engage with landholders about the proposed project area, likely infrastructure layout, access routes and potential location of ancillary infrastructure. Listen to the community's concerns and suggestions. Discuss noise, visual impact, proposed siting and alternatives. Discuss issues for landholder agreement if the project is approved, including siting, access, compensation, responsibility for decommissioning and rehabilitation.
EIS preparation	Identify and appropriately respond to community concerns in the EIS. Public exhibition will provide a formal opportunity for stakeholders to express their views on the proposed project. Further collaborate with the community regarding solutions and management options for any key issues raised. Seek to reach an agreed position with relevant landholders.
Post-determination (if approved) -	Ongoing consultation with affected landholders and the community to manage issues regarding construction noise and disturbance. Community complaints line to be maintained. Comply with any requirements to publish performance results via the project website.

When and whom to consult

Applicants should engage in consultation at all stages of solar energy project assessment and development, including scoping and design, planning and EIS, construction, operation, decommissioning, and rehabilitation phases. The nature and extent of consultation that is appropriate will depend on the circumstances of the project and the stage of development that the solar energy project has reached. Applicants will need to specifically report

consultation outcomes to the Department in the Scoping Report and the EIS. The SEARs issued for solar energy SSD projects will generally indicate the minimum consultation requirements during the assessment process.

Consultation should be well planned, with consideration given to the following:

- identifying affected people and groups – an inclusive approach should be taken that recognises that different perspectives may exist within a community (such as by age or income demographic);
- whether there are stakeholders who are hard to consult and if so how best to do so;
- how different stakeholder groups may wish to be consulted, including the timeframe, process and opportunities for feedback;
- what information can be provided during the consultation that can build on stakeholders' understanding of the project and what information might be sought from the community in consultation.

The Department will expect that, prior to lodging a development application, the applicant has consulted with directly affected stakeholders identified in the scoping stage including:

- owners and occupiers of land proposed to include solar infrastructure or related works; and
- owners and occupiers of land required for access during construction and/or maintenance.

This includes local indigenous groups, and traditional land owners of sites to be used or accessed as part of the project. Community and other stakeholders who should be consulted during the scoping and assessment stages of the proposal may include:

- owners and occupiers of adjacent land and those in the vicinity of the solar farm;
- members of the local Aboriginal community[22];
- organisations representing local, regional, State, national and international interests regarding business, community, indigenous and environmental issues;
- relevant local council(s), including neighbouring councils where proposals are located in or affect more than one local government area;
- stakeholders of other significant infrastructure near the proposed solar energy site; and
- any other persons or groups identified as a stakeholder through the scoping and assessment stages.

[22] This consultation should be undertaken in accordance with the *Aboriginal cultural heritage consultation requirements for proponents* (Department of Environment, Climate Change and Water, 2010).

Private agreements with stakeholders

In some instances, a private agreement may be negotiated and voluntarily entered into between an applicant and a stakeholder, for example a local landowner or council, to help manage certain impacts. Such agreements are common for other types of SSD, like mining or wind energy, but are rare for low-impact solar developments.

To address broader impacts, such as construction noise, road or bridge impacts, applicants could consider agreements with local councils or community groups, which may provide opportunities to enhance the community support for a project. This might comprise a voluntary planning agreement (VPAs) with relevant local council(s)[23], where there are significant impacts on community infrastructure[24]. Applicants could also consider a community enhancement fund to sponsor community projects or groups. These sorts of options may be helpful in building social licence, but are not assessment requirements. Consultation with the local community will be important in establishing the best options for individual projects.

There may also be opportunities for solar energy developments to establish power purchase agreements with local or regional industries or other stakeholders. This would be dependent to the commercial decisions of the proponent and market conditions.

Industry-scale public engagement

In addition to the efforts of individual companies when undertaking site selection, the solar energy industry could undertake broader research into the NSW market to determine the best localities and regions for expanding solar energy development.

Broad industry-scale research can assist in identifying communities in NSW that are actively attracting new investments and developments and supportive of new industry growth and solar energy development. Information to assist in such market research may be obtained through the Renewable Energy Advocate[25] and the Department of Industry who specialise in regional industry investment advice, as well as engaging local councils.

[23] VPAs for SSD projects are common in the mining sector. However, this is commonly due to issues such as a transitory workforce or truck movements, which can impact on the services of local councils. These impacts are less significant for solar developments.

[24] Governance arrangements for the voluntary planning agreement may be administered under section 355 of the *Local Government Act 1993*.

[25] The Renewable Energy Advocate branch is within the Department of Planning and Environment, Division of Energy Water and Portfolio Strategy.

Post-approval regulation and compliance

The regulation of SSD construction, operation, decommissioning and rehabilitation is primarily coordinated by the Department, to ensure compliance with development consent conditions.

Conditions of consent

If development consent is granted for a solar energy SSD project, the conditions of consent will continue to apply to the project and the land on which it is located until conditions in respect of decommissioning and rehabilitation are satisfied. The responsibility for compliance with the conditions of consent under the EP&A Act, including rehabilitation and decommissioning, falls to the person carrying out the development.

Development consent conditions typically cover matters such as:

- heavy vehicle restrictions, access route and road upgrade requirements
- a traffic management plan (potentially including provision for road dilapidation surveys and repair)
- a landscaping plan, including provision of vegetation buffers
- land management, including restoration of ground cover, weed control and dust suppression
- measures to avoid, minimise or offset impacts on biodiversity
- measures to manage noise during construction and operation
- visual impacts, including from glare and reflection, and off-site impacts from lighting
- measures to record and protect all heritage items on site
- measures to minimise soil erosion and manage stormwater and salinity impacts
- dangerous goods storage and handling
- preparation of an emergency response plan
- waste management (including hazardous waste, chemicals and packaging material)
- decommissioning and rehabilitation of the site

Depending on the specific nature of the site and the development, other tailored conditions may be required such as hazardous materials storage requirements for solar thermal projects. Projects that include emerging technologies or certain infrastructure (such as large-scale batteries) may require tailored conditions to manage risks or impacts. Unless the impacts and risks of specific battery storage infrastructure has been addressed in the EIS, a condition will be included that prohibits the inclusion of battery infrastructure.

Compliance

The Department's regional compliance teams are responsible for monitoring compliance with the conditions of consent for approved solar energy SSD projects, including following up suspected breaches reported by members of the public. The general email for reporting suspected breaches is compliance@planning.nsw.gov.au. Further details can be found on the Department's website at www.planning.nsw.gov.au.

The compliance team also undertakes periodic audits of approved SSD.

Applicants are also typically required, under conditions of consent, to establish and operate a complaints handling system.

Attachment A

Assessment Pathways for Solar Energy Projects

The table below provides a general overview of solar energy project categories and planning assessment pathways. Large-scale SSD solar energy developments to which this Guideline applies are bolded.

Table 2: Overview of solar energy categories and planning assessment pathways

Capital Investment Value (CIV) and output criteria	Environmental Planning Instrument	Development category	Consent authority
CIV less than $5M and output less than 30MW	Infrastructure SEPP	Local Development	Local Council
CIV $5-30M and output less than 30MW	Infrastructure SEPP Schedule 4A, EP&A Act	Regional Development	Joint Regional Planning Panel
CIV less than $5M and output 30MW +	Infrastructure SEPP Schedule 3, EP&A Reg	Local Development and Designated Development	Local Council
CIV $5-30M and output 30MW +	Infrastructure SEPP Schedule 4A, EP&A Act Schedule 3, EP&A Reg	Regional Development and Designated Development	Joint Regional Planning Panel
CIV $30M or more*	**State and Regional Development SEPP**	**State Significant Development (SSD)**	**Planning Minister or delegate (Planning Assessment Commission or senior departmental officer)**
CIV $30M or more* and output 30MW +	**SRD SEPP Schedule 3, EP&A Reg**	**SSD (with some "designated development" legal consequences)**	**Planning Minister or delegate (Planning Assessment Commission or senior departmental officer)**

* If proposed in an environmentally sensitive area of State significance, the CIV threshold is $10M or more.