



Proposed Infrastructure SEPP Amendments: Renewable Energy and Regional Cities

Explanation of Intended Effect

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Acknowledgment of Country

The Department of Planning, Industry and Environment acknowledges the Traditional Owners and Custodians of the land on which we live and work and pays respect to Elders past, present and future.

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Introduction

The *State Environmental Planning Policy (Infrastructure) 2007* (the Infrastructure SEPP) facilitates planning pathways for essential infrastructure in NSW, including renewable energy-related infrastructure. It provides regulatory certainty and efficiency and identifies the approval process and assessment requirements for infrastructure proposals.

In March 2020, the NSW Government released the first stage of its Net Zero Plan which outlines a clear objective to achieve net zero emissions by 2050 while also creating new jobs, reducing household costs and attracting investment to NSW.

To achieve these targets, four of five coal-fired power stations will come to their scheduled end of life in the next 15 years. This means an increasing supply of renewable energy generation, particularly solar and wind power, will be required to meet the Government's targets over the coming decades.

The NSW Government's Electricity Infrastructure Roadmap sets out a 20-year plan to deliver this generation infrastructure, as well as storage, firming and transmission infrastructure that will also be needed to power NSW into the future. This is estimated to attract \$32 billion of private sector investment in electricity infrastructure by 2030, supporting 6,300 construction jobs and 2,800 ongoing jobs, most of which will be in regional NSW.

As part of this Roadmap, the NSW Government has introduced Renewable Energy Zones (REZ) which will expand transmission and generation capabilities in strategic areas across NSW including the Central-West Orana, Illawarra, New England, South-West and Hunter-Central Coast regions of NSW.

The NSW Government will be encouraging development in these areas to support a transition to renewable energy and to ensure that development occurs in appropriate areas that are close to existing transmission and distribution infrastructure and have less environmental, heritage and land-use constraints than some other parts of NSW.

Notwithstanding, a large portion of existing solar and wind development is currently located outside REZs (approximately 70%) and continued development outside of the REZs will be required to support a transition to renewable energy.

The substantial and rapid investment in renewable energy infrastructure has the potential to create or exacerbate land use conflicts in regional NSW. While this also has the potential to support jobs and investment in NSW, it is important to balance the use of land to ensure NSW can benefit from its renewable energy sources whilst also minimising impacts on its regional communities and future land uses.

The Government's Regional Plans identify regional cities that are strategically important to the ongoing growth and development of regional NSW. It is important to invest in these areas given their importance as major centres for housing, education, health and other regional infrastructure and services.

These cities also underpin the regional economies providing a wide range of retail and business activity and they offer a wide variety of employment opportunities. They also support diverse visitor and tourist economies.

Significant population growth is predicted in regional NSW over the next few decades, most of which is expected to be concentrated in regional cities such as Bathurst, Orange, Tamworth, Dubbo and Wagga Wagga given the lifestyle and employment opportunities. Consequently, the growth and success of these cities is vital to the success of regional NSW.

Whilst there is relatively broad public support and social licence in NSW for the adoption of renewable, low emission energy generation, the increasing number of utility-scale solar and wind energy projects required to support the transition to renewable energy generation has the potential to create and exacerbate land use conflicts with land surrounding some of the State's regional cities. Solar and wind energy developments also have unique visual characteristics that can impact on the scenic qualities of an area.

Proposed Amendments

To manage the emerging land use conflicts associated with utility-scale solar and wind energy developments, the NSW Government is proposing to amend the Infrastructure SEPP to include specific matters of consideration for utility-scale solar and wind energy development near certain regional cities.

These matters would apply to regional cities at risk of encroaching solar and wind development and would seek to protect land identified for future growth and the character and visual landscape qualities of these areas.

The proposed amendment would also include new definitions for utility-scale solar and wind energy development. This would ensure that the matters of consideration could be restricted to these types of development without affecting other electricity generating works such as pumped-hydro and battery energy systems.

These amendments are discussed under separate heading below.

Amendment 1 – Matters of consideration for utility-scale solar and wind

An important foundation of the NSW planning system are requirements placed on consent authorities to consider specific matters in the determination of a development application.

These matters of consideration are broadly outlined in [Section 4.15](#) of the EP&A Act and apply to the consideration of all development applications that require consent under Part 4 of the EP&A Act including State and regionally significant development. Examples of these matters of consideration include:

- the likely impacts of the development, including environmental impacts on the natural and built environments, and social and economic impacts in the locality;
- the suitability of the site for the development;
- any submissions made in accordance with the EP&A Act or regulation; and
- the public interest.

In addition to these broad matters of consideration, other EPIs may prescribe additional matters that need to be considered that may be tailored to the impacts of specific development types or locations.

Examples of such matters are included in the Infrastructure SEPP, including considerations that a consent authority must be satisfied of for health services facilities, development adjacent to pipelines, road and rail corridors, and telecommunications and other communication facilities.

The NSW Government is proposing to amend the Infrastructure SEPP to include matters of consideration for utility-scale solar and wind energy developments. These matters of consideration are aimed at ensuring regional cities are not impacted by utility-scale solar and wind energy development that may prevent the expansion and growth of these cities into the future and could impact on important scenic qualities of these areas.

These matters of consideration would apply to utility-scale solar and wind energy development that are identified in the NSW Government's Department's regional plans and are at risk of encroaching solar and wind development due to their proximity to areas of relatively high solar and wind resource potential.

These regional cities include:

- Albury
- Armidale
- Bathurst
- Dubbo
- Griffith
- Orange
- Tamworth
- Wagga Wagga

The matters of consideration would apply to land within 10 kilometres of land zoned B3 - Commercial Core, and within 5 kilometres of any residential land zoned R1 – General Residential, R2 – Low Density Residential and R3 – Medium Density Residential.

Because the other regional cities, which include Coffs Harbor, Gosford, Lismore, Nowra, Port Macquarie, Shellharbour and Tweed Heads, have relatively low solar and wind energy resource potential, they are not at risk of encroaching solar and wind development and therefore the matters of consideration would not apply to these areas.

The proposed matters of consideration would apply only to utility-scale solar and wind energy developments which would be separately defined in the Infrastructure SEPP. They are:

- Whether the development is located so as to avoid land use conflicts with existing and approved uses of land;
- whether the proposed development is likely to have a significant impact on, or conflict with, land that would be required to support the growth of a regional city having regard to any future growth areas identified in Regional Plans and Local Strategic Planning Statements and advice from Council; and
- whether the proposed development would significantly impact the scenic quality and landscape character of a regional city, including on any approaches to the city, taking into consideration any values identified by the community and Council.

In evaluating these considerations, the consent authority would be required to consider any mitigation measures that are proposed to avoid and minimise the incompatibility of land uses and any scenic and landscape values of the area.

The matters would not apply to small-scale solar and wind turbine systems, such as those used to produce electricity for household use.

Amendment 2 - Standalone definitions for utility-scale solar and wind

The technology used for the generation of electricity is undergoing constant change, particularly as emerging renewable technologies become increasingly viable and accessible. It is important that the NSW planning system be updated regularly to ensure it remains in step with this rate of change so that land use and development can continue to be managed effectively.

The Department is currently exhibiting a [separate EIE](#) that proposes an amendment to the Infrastructure SEPP to exclude utility-scale solar energy systems from the existing definition for solar energy system.

This change will ensure there is a clear distinction between those solar energy systems that are designed for *in situ* or localised use as opposed to commercial grade solar energy developments that feed energy into the grid.

This means that all utility-scale solar and wind energy development, which have a primary purpose of exporting electricity to the grid, would fall under the definition of **electricity generating works**.

Electricity generating works are defined as meaning a building or place used for the purpose of making or generating electricity or electricity storage and include other types of development including pumped-hydro and energy storage systems. Relevant definitions in the Infrastructure SEPP are summarised in **Table 1**.

This proposed amendment intends to add standalone definitions for utility-scale solar and wind energy developments as follows:

- **Utility-scale Solar Energy System** – means a photovoltaic electricity system used for the purpose of generating electricity for export to the electricity grid.
- **Utility-scale Wind Turbine System** - means a system comprising wind turbines used for the purpose of generating electricity for export to the electricity grid.

The addition of these definitions will allow the proposed matters for consideration to be applied to utility-scale solar and wind development without impacting other electricity generating works.

This approach would also allow for the application of appropriate planning pathways, permissibility and other development controls to these development types should these be needed in the future.

Table 1. Existing definitions of relevant developments provided in the Infrastructure SEPP

Term	Definition
Electricity generating works	Means a building or place used for the purpose of – a) making or generating electricity; or b) electricity storage.
Solar energy system*	Means any of the following systems: a) a photovoltaic electricity generating system, b) a solar hot water system, c) a solar air heating system.
Small wind turbine	Means a wind turbine that has a generating capacity of no more than 100kW.
Small wind turbine system	Means a system comprising one or more small wind turbines each of which feed into the same grid of battery bank.

Strategic Justification

Avoiding Land Use Conflicts

The increasing number of utility-scale solar and wind energy projects required to support the transition to renewable energy has the potential to create new or exacerbate existing land use conflicts.

Although many of these projects will be located in the NSW Government's REZs, there will continue to be a need for development outside these areas to support a transition to renewable energy.

Utility-scale solar farms and wind farms can have significant visual impacts and can contrast with the natural environments in which they are situated. This can alter the character, scenic quality, and people's enjoyment of the landscape.

These projects are often proposed in particular locations because of proximity to substations and transmission infrastructure, which are commonly located close to existing populated areas. Particularly in the case of solar, these developments can also occupy large areas which can preclude the use of land for any other purpose for several decades.

The Department's Regional Plans identify regional cities that are strategically important to the ongoing growth and development of regional NSW. It is important to invest in these areas given their importance as major centres for housing, education and other regional infrastructure and services.

Regional cities are the key population and employment centres for regional NSW and are the primary location for retail, education, health and other infrastructure and services including hospitals.

Strong growth is predicted in regional cities as a result of these attributes.

A large portion of these cities, including Albury, Armidale, Bathurst, Dubbo, Griffith, Orange, Tamworth and Wagga Wagga are bounded by rural land uses, near transmission assets, and have relatively high solar and wind resource potential.

Consequently, these regional cities are at risk of encroaching renewable energy development which is currently permissible with consent on rural zoned land under the Infrastructure SEPP and requires a connection to the transmission network.

The NSW Government's regional plans identify the need to avoid conflict between existing and potential future uses and require buffers to separate incompatible uses. Consequently, it is important to preserve land on the outskirts of regional cities from potentially incompatible development, such as solar and wind farms, that could preclude growth and development of these cities in the future.

Given that there is some flexibility in the location and layout of solar and wind farms, land immediately surrounding regional cities should be afforded additional protections in the planning process.

The proposed amendments to the Infrastructure SEPP would ensure that:

- consent authorities consider land use conflicts in the assessment and decision-making process that may be caused by utility-scale solar and wind farm development near regional cities.
- land identified for future uses in Regional Plans and Local Strategic Planning Statements is protected from long term use and land use conflicts from utility-scale solar and wind development.

- regional cities can continue to grow to support ongoing growth and development needs including housing, industrial uses, and infrastructure and services.

These amendments would apply to land within 10 kilometres of the commercial centre and 5 kilometres from residential land. This would preserve land on the fringe of regional cities for future residential expansion and would provide a buffer to limit any land use conflicts with other important land uses in the commercial centre of the regional cities.

Visual elements and landscape features of these regional cities are also an important contributor to the social and economic value of these areas and provide a vital contribution to the rural character of these areas. This character is important to the identity of the communities and can help strengthen and promote the growth of tourism and the economy.

The natural landscapes surround regional cities can also support the natural environment, create lifestyle and leisure opportunities and sustain productive agriculture.

It is therefore important to preserve any significant landscape qualities, values and features identified by the community, particularly on the entrance to regional cities, to preserve their local and visual characteristics in the face of increasing growth and development.

Solar and wind energy development can have significant visual impacts and the proposed amendments will ensure that any impact on the scenic quality, visual character and setting of regional cities is considered in the assessment process.

While it is possible to mitigate visual impacts from these developments, particularly from residential receivers, it can be difficult to mitigate impacts on broader landscape values and viewsheds, including the approach to regional cities. The proposed amendments will protect these values by requiring consent authorities to carefully consider any impacts, including those identified by the community, and the efficacy of any mitigation measures.

These changes will encourage development of large-scale infrastructure in the right locations that are away from areas suitable for the growth of regional cities and areas that are important for their scenic value. This would ensure a balance between the growing need for renewable energy supply and the future of regional cities in NSW.

In addition to these proposed amendments, the NSW Government is also reviewing and updating the existing Large-scale Solar Energy Guidelines and Wind Energy Framework. These guidelines currently aim to ensure that:

- impacts are assessed with best practice methods and in a consistent manner;
- effective stakeholder engagement is undertaken that encourages community input on solar and wind energy development; and
- there is a balance between attracting investment and considering the interests of the community.

The guidelines will be updated to address emerging land use conflicts, including visual impacts and compatibility with agricultural land, and provide guidance on benefit sharing and other key issues. The NSW Government will be seeking comments on the revised guidelines separate to the proposed amendments to the Infrastructure SEPP.

Aims of the Infrastructure SEPP

The Department considers the proposed amendments would continue to ensure the efficient delivery of electricity generating infrastructure in NSW whilst ensuring emerging land use conflict issues in regional centres of the State are appropriately considered in the planning process.

As detailed in **Table 2**, the proposed amendments would be consistent with the aims of the Infrastructure SEPP:

Table 2. Analysis of the proposed amendments against the aims of the Infrastructure SEPP

Infrastructure SEPP Aim	Analysis of Proposed Amendments
(a) improving regulatory certainty and efficiency through a consistent planning regime for infrastructure and the provision of services	The proposed amendments will improve regulatory certainty and efficiency through a consistent planning regime for infrastructure and the provision of services.
(b) providing greater flexibility in the location of infrastructure and service facilities	The proposed amendments will not alter any planning pathway or prescribed location for permissibility of utility-scale solar and wind energy developments.
(c) allowing for the efficient development, redevelopment or disposal of surplus government owned land	The proposed amendments will not alter any existing allowances for development, redevelopment or disposal of surplus government owned land.
(d) identifying the environmental assessment category into which different types of infrastructure and services development fall (including identifying certain development of minimal environmental impact as exempt development)	The proposed amendments will not alter the environmental assessment category into which the utility-scale solar and wind energy developments fall.
(e) identifying matters to be considered in the assessment of development adjacent to particular types of infrastructure development	Whilst matters of consideration are being introduced as part of the proposed amendments, these are intended to apply to the land subject of a utility-scale solar or wind energy proposal, not an adjacent property.
(f) providing for consultation with relevant public authorities about certain development during the assessment process or prior to development commencing	The proposed amendments will not impose additional, or reduce existing, requirements for consultation with public authorities in relation to utility-scale solar and wind energy developments
(g) providing opportunities for infrastructure to demonstrate good design outcomes	The proposed amendments would enhance the opportunities to demonstrate and achieve good design outcomes through the inclusion of additional matters of consideration for these development types to ensure compatibility with surrounding land uses and regional cities into the future.

How to get involved

This document is exhibited in line with the Department's Community Participation Plan. To make a submission on the proposed amendments complete the submission form at www.planningportal.nsw.gov.au/ISEPP-renewable-energy by 11 October 2021.