



Department of Planning,
Lands and Heritage



Draft Position Statement: Renewable energy facilities

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1. Policy intent

To ensure that renewable energy facilities are located in areas that minimise potential impact upon the natural landscape and the environment while maximising energy production returns and operational efficiency.

2. Renewable energy facilities in Western Australia

This Position Statement supersedes *Planning Bulletin 67 Guidelines for Wind Farm Development* (2004).

The local planning framework principally administered by local government and development assessment panels can effectively manage the development assessment of renewable energy facilities.

Renewable energy facilities in Western Australia are principally wind turbine and solar array systems. Other systems include geothermal, biogas, ocean power and hydro-electric power for on-grid and off-grid locations.

Renewable energy can enhance local economies and easily connect into the network grid. The contribution that renewable energy facilities make to the reduction in carbon emissions is an important consideration for the growth of the industry.

This Position Statement:

- provides guidance to local governments on the role of State and local planning frameworks in the planning and development of renewable energy facilities; and
- outlines key planning measures for renewable energy facility proposals within Western Australia for inclusion in the local planning frameworks and assessment of renewable energy facilities in Western Australia.

3. Application of this policy

This policy applies state-wide and is particularly relevant to local governments in regional areas given large areas of cleared land are most suitable for renewable energy facility development.

For the purposes of this policy a renewable energy facility means premises used to generate energy from a renewable energy source and includes any building or other structure used in, or in connection with, the generation of energy by a renewable resource. It does not include anemometers, solar panels, wind turbines or other infrastructure used to generate energy located on a lot with a private rural use, single house or commercial premises where the energy produced principally supplies that use.

4. Policy objectives

The objectives of this Position Statement are to:

- outline key planning and environmental considerations for the location, siting and design of renewable energy facilities;
- facilitate appropriate development of renewable energy facilities while minimising any potential impact upon the environment, and valued landscapes; and
- encourage informed public engagement early in the renewable energy facility planning process.

5. Policy measures

Key planning considerations for the location, siting and design of renewable energy facilities include:

5.1 Environmental impact

An environmental survey of the site may need to be conducted prior to the commencement of the renewable energy facility design. The type, location and significance of flora and fauna, particularly rare endangered or threatened communities that may be impacted, should be described and mapped so that remnant native vegetation and sensitive areas can be avoided.

Facilities should be located near the grid to minimise clearing of vegetation for grid connection power lines. Solar arrays over a large area may have a significant effect on the clearing of native vegetation. Already cleared farming land may offer a practical solution to any environmental impact.

Proposals that affect the environment must be referred to the Department of Water and Environmental Regulation (DWER) and the Environmental Protection Authority (EPA) by the decision-making authority and examined against the:

- *Environmental Protection Authority Factor Guideline - Flora and vegetation.*
- *Environmental Protection Authority Factor Guideline - Social Surroundings.*

DWER/EPA will determine whether the proposal should be subject to an environmental impact assessment (see *EPA Guidance Statement No.33 Environmental Guidance for Planning and Development*). Referral to the Commonwealth Minister for the Environment and Energy through the Department of the Environment and Energy, under the *Environment Protection and Biodiversity Conservation Act 1999*, may also be required for matters of national environmental significance.

To understand the impact of wind turbines on birds and bats, the following matters should be considered in relation to migratory species stopover sites, local bird species' roosting and nesting sites:

- bat colonies and areas of high raptor activity are unsuitable sites for wind turbines; and
- the cumulative impact of wind turbines on migration routes.

The positioning of wind turbines outside of migratory routes may reduce the risk of avian strikes. An avian study should be undertaken when an avian risk is identified.

5.2 Visual and landscape impact

The location and siting of a renewable energy facility may require a visual and landscape impact assessment that addresses:

- landscape significance and sensitivity to change, site earthworks, topography, extent of cut and fill, the extent and type of vegetation, clearing and rehabilitation areas, land use patterns, built form character, public amenity and community values;
- likely impact of the renewable energy facility on views including the visibility of the facility using view shed analysis and simulations of views from significant viewing locations including residential areas, major roads and lookouts;
- layout of the facility including the number, height, scale, spacing, colour, surface reflectivity and design of components, including any ancillary buildings, signage, access roads, and incidental facilities; and
- measures proposed to minimise unwanted, unacceptable or adverse visual impacts.

Detailed guidance should be sought from *Visual Landscape Planning in WA: a manual for evaluation, assessment, siting and design*, (November 2007) and the Australian Wind

Energy Association and the Australian Council of National Trusts publication *Wind Farms and Landscape Values* (2005).

5.3 Noise impact

The minimum distance between sensitive land uses and a wind turbine is 1.5 kilometres*. Noise emissions from wind turbines are required to meet the standards prescribed under the *Environmental Protection (Noise) Regulations 1997*.

5.4 Construction impact

It is important to accommodate the full scope of works in the development of a renewable energy facility. Consideration needs to be given to potential staging that may occur including one type of renewable energy being subsequently complemented by a second type of renewable energy to supplement continuity of feed into the grid, for example, wind turbines supplemented by solar arrays.

Key matters during the construction phase are:

- a site construction management plan that identifies standards and procedures for the construction of the development including the management of environmental emissions such as dust and noise;

- site disturbance should be minimised during construction through careful siting and measures to address erosion, drainage run-off, flooding, water quality, retention of remnant vegetation, stabilisation of top soil, and weed and disease hygiene; and
- vehicle and machinery access and movement.

A decommissioning program should be separately developed in relation to removal of the facility and any rehabilitation requirements.

5.5 Public and aviation safety

An appropriate separation distance should be provided between the facility, particularly for wind turbines, and any public building, road or pathway including visitor facilities such as car parks, platforms, information facilities and toilets.

Wind turbines that are to be located in areas subject to cyclones need to be designed and constructed to enable safe stowage if high winds are forecast.

Areas with extensive tree coverage may not be suitable for wind turbines and solar arrays due to fire risk. Fire prevention and control is important during the construction, operation and decommissioning or refurbishment of the renewable energy facility. A bushfire attack level (BAL) assessment, BAL contour

mapping and bushfire management plan may require approval in accordance with *State Planning Policy 3.7 Planning in Bushfire Prone Areas*.

The Civil Aviation Safety Authority's (CASA), Air Services Australia and the Commonwealth Department of Defence should be consulted on wind turbines proposed near airfields and flight paths. Any potential aviation safety risks identified will require consultation with CASA. If the proposed structure is more than 150 metres tall, an aeronautical risk assessment may be requested by CASA.

5.6 Cultural heritage

Some locations may hold cultural heritage significance which may impact site suitability. Cultural assessment should address:

- local archaeological and ethnographical records; and
- the impact on architectural merits and streetscape characteristics of nearby settlements with an impact assessment of the proposal undertaken where relevant.

Consultation with Department of Planning, Lands and Heritage may be required if heritage issues are identified. Consultation should be undertaken with the traditional owners of the land with respect to Aboriginal heritage.

* Source: National Health and Medical Research Council (February 2015 ref # EH57).

5.7 Community consultation

Early consultation with the community and stakeholders by both the proponent and local government is encouraged to ensure that the proposal is compatible with existing land uses on and near the site.

A community consultation program should be endorsed by the local government before the proposal is advertised by the proponent and/or local government.

Relevant stakeholders may include:

- Air Services Australia
- Civil Aviation Safety Authority
- Electricity network provider
- Department of Biodiversity Conservation and Attractions
- Commonwealth Department of Defence
- Department of Fire and Emergency Services
- Department of Jobs, Tourism, Science and Innovation
- Department of Mines, Industry Regulation and Safety
- Department of Planning, Lands and Heritage/ Western Australian Planning Commission
- Department of Primary Industries and Regional Development
- Department of Water and Environmental Regulation
- Main Roads Western Australia

6. Implementation

6.1 State planning framework

The Western Australian Planning Commission's *State Planning Strategy 2050* promotes renewable energy initiatives.

State Planning Policy 1 State Planning Framework includes regional and sub-regional strategies that may provide objectives related to renewable energy and general principles for location in the regions and general guidance for renewable energy facilities in the local planning framework.

6.2 Local planning framework

Local governments should address renewable energy facilities in their local planning framework. Local planning frameworks comprise planning instruments applied by decision makers to guide land use planning. The planning instruments include the local planning strategy, local planning scheme and local planning policies.

6.2.1 Local planning strategy

The local planning strategy should indicate suitable locations for the renewable energy facilities subject to detailed evaluation. On and off the grid renewable energy facility considerations may be integrated into a local planning strategy. For example, areas

of high landscape and environmental value may be unsuitable for large scale wind or solar farm development. Visual landscape analysis, including view shed mapping, may be undertaken to enable important views and landscape character to be identified and protected. Measures to address issues may include setbacks and vegetation screening from sensitive land uses.

Competing land uses on rural land should be taken into consideration when determining appropriate locations for renewable energy facilities. *State Planning Policy 2.5 Rural Planning* should be given due regard in this respect.

Where appropriate, large renewable energy facilities should be located close to the network grid and preferably on cleared rural land with low agricultural value. Where practicable, the agricultural use of land should continue after installation of a renewable energy facility. The future growth of regional towns and urban growth areas should not be compromised by renewable energy facilities having a negative impact upon sensitive land uses such as residential dwellings. This should be particularly considered in relation to the urban-rural fringe.

Where the local government has not adopted a local planning strategy or scheme, consideration of the issues discussed above may be incorporated into a local planning policy.

6.2.2 Local planning scheme

It is recommended that a renewable energy facility be designated in the zoning table of a local planning scheme as an 'A' use (not permitted without discretion and special notice) of land within the appropriate zones. 'A' land uses require public advertising before the proposal can be considered.

Special Control Areas may be applied within local planning schemes to create special provisions, for example to protect air flight paths, regionally or locally significant key views, or valued landscapes from incompatible land use or development. A renewable energy facility may be specified as an 'X' use (not permitted) in these areas.

Local planning schemes should include provisions to provide direction on matters such as the location, permissibility, terms of operation and development standards of a renewable energy facility.

The local government should have due regard to the deemed provisions of clause 67 of the *Planning and Development (Local Planning Schemes) Regulations 2015* in regard to administering its local planning scheme.

6.2.3 Local planning policy

A local planning policy can be used to provide specific development standards applicable to renewable energy facilities. It may also provide additional clarification of any planning related matter.

7 Definitions

Sensitive land uses means premises used for human habitation being long and/ or short stay overnight accommodation and includes caravan park, dwelling, hospital, park home park, serviced apartment, tourist development, workforce accommodation and the like.

[Any additional terms to be defined will be identified through stakeholder consultation and inserted if necessary]