

Lithgow City Council



Development Control Plan No. 11

Wind Energy Generation Facilities

Draft



Renewable Energy Systems Ltd

1. Citation

This plan shall be cited as “Development Control Plan No 11 - Wind Energy Generation Facilities”.

2. Land to Which Plan Applies

This development control plan applies to all land in the City of Lithgow.

3. Purpose of the Plan

This plan specifies the requirements for Wind Energy Generation facilities designed for the purpose of commercial electricity generation within the City of Lithgow.

4. Associated Planning Instruments

This development control plan shall be read in conjunction with Greater Lithgow Local Environmental Plan 1994.

Objectives for wind energy facilities:

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- ξ To promote the use of wind energy generation as a sustainable alternative energy source when appropriately sited and managed.
- ξ To ensure the development of wind energy facilities that minimise negative impacts on the natural and human environment, in particular local residential amenity is to be protected.
- ξ To provide the opportunity for the development of suitably sized and located wind energy generation facilities within Lithgow.
- ξ To recognise the contribution of human activity to the increase in greenhouse gas emissions, and the need to develop innovative responses to minimise these emissions.
- ξ To achieve outcomes from wind energy generation development that reflect the current and future objectives of Greater Lithgow Local Environmental Plan 1994.

Information to be submitted with application:

The following information will be required to support an application for wind energy facilities. Developers are encouraged to submit information in suitable GIS format, in addition to required hard copy documents, if this aids understanding of the proposal:

- ξ A description of the current use of the site and surrounding locality.
- ξ A map of 1:25000 scale showing the location of the proposed development, the route of power lines connecting the wind farm to the electricity grid and the proximity of the development to significant features, such as housing,

urban areas, heritage items, aircraft facilities, National Parks and nature reserves etc.

- ξ A plan or plans (typically 1:1000) showing the positions of the proposed wind turbine/s, site boundaries, native vegetation, roads, internal access roads, existing and proposed buildings and structures (including control rooms and electrical substations), power lines and fences.
- ξ Setbacks to housing should be indicated on a separate suitably scaled map to ensure clarity for interested stakeholders.
- ξ A description of the proposed wind turbine/s, including all relevant details such as number, make, model number, dimensions, materials and colour.
- ξ A comprehensive acoustical report including a statement indicating the level of noise likely to be generated and adherence to EPA noise criteria. Where setbacks to housing/potential housing sites are less than 500m noise modeling will be required. Background data should be obtained to provide a baseline.
- ξ A description of the visual effect of the proposed wind energy facility on the locality. This to include photomontages, computer-assisted photo simulations or other graphic representations of the appearance of the wind farms and transmission lines (where applicable). These to be provided from all significant vantage points including local scenic lookouts, residences, tourist roads or facilities, nature reserves, heritage items and other locations as necessary. Early public participation is likely to identify required locations.
- ξ Viewshed modeling via the use of a suitable Geographical Information System. Particular regard should be given to visual impacts of the proposal in relation to residences, public roads and vantage points within the City of Lithgow.

- ξ The existing landscape should be described and the potential visual impact of the proposal assessed. Details of methods to reduce the visual impact of the connection of the wind farm to the grid are to be provided; underground cabling is to be installed between turbines.

- ξ An evaluation of the effect of electromagnetic interference generated by the turbines, and from the deflection and reflection of transmitted electromagnetic signals. This to relate dwelling locations to transmitters/relay stations. This may best be indicated on a separate map sheet.

- ξ Access to the site must be assessed to determine the suitability of existing public and private roads. The tourism potential needs to be recognized and factors such as public rights of way, traffic and visitor parking should be identified. Estimations of traffic movements at all stages of the project are to be included.

- ξ An indication of whether the proposed development will proceed in stages and, if so, the timing of each stage.

- ξ A geotechnical report dealing with turbine footings, and any other necessary matters.

- ξ A Statement of Environmental Effects (or Environmental Impact Statement if required under Schedule 3 of the Environmental Planning and Assessment Regulation). This to include detail concerning clearing of native vegetation, consideration of fauna (in particular birds and bats) and other necessary matters.

- ξ An Environmental Management Plan including the principles of environmental management, environmental mitigation measures, standards to be achieved, monitoring timetable and decommissioning and rehabilitation requirements.

- ξ A statement outlining: the potential environmental benefits, with regard to resource use and greenhouse gas emissions.
- ξ A statement outlining the measured wind resource, comparative information from other local sites (as available) and the reasoning for location choice.
- ξ A statement outlining potential effects on aircraft operation, including detail of consultation with the Civil Aviation Safety Authority if located within fifteen kilometres of an airfield.
- ξ A statement regarding the likely effects of shadow flicker, blade glint, overshadowing or other potentially negative visual effects.
- ξ A statement of heritage impact on indigenous and non-indigenous sites, as required.
- ξ A statement detailing bushfire hazard and mitigation measures.
- ξ A statement detailing the projected life expectancy of turbines and plans for refurbishment or removal following this period.

Controls and Criteria

The following controls and criteria will apply to all wind energy facilities in the Lithgow Local Government Area:

1. Wind energy facilities should not be sited in areas identified as environmentally sensitive under LEP 1994, or in the area defined as the viewshed for Lithgow in DCP 5.
2. Wind energy facilities should be sited outside the viewshed of items of environmental heritage, unless Lithgow City Council is satisfied that visual impact on these sites or areas will not result in loss of scenic amenity. Photomontages and other visual aids, and a landscape analysis will be required at application stage.
3. Wind energy facilities should be sited at least 500 metres from an existing dwelling unless that dwelling is situated on a land parcel associated with the development proposal.
4. All applications for wind energy facilities will require notification of all landowners within a 5 kilometre radius.
5. All applications for wind energy facilities will be examined and assessed with regard to visual impacts of the proposal in relation to residences, public roads and vantage points within the City of Lithgow.
6. Wind energy facilities should be sited a minimum of 5 kilometres from any designated Residential 2 (a), 2(V), Rural 1(c) or Rural 1 (d) zoning as identified under Greater Lithgow Local Environmental Plan 1994.