1 PLANNING ATTACHMENTS

1.1	Director General's Requirements (DGRs) for this proposal



Contact: Ricardo Prieto-Curiel Phone: (02) 9228 6112 Fax: (02) 9228 6366 Email: ricardo.prieto-

curiel@planning.nsw.gov.au

Mr Andrew Durran Executive Director Epuron Pty Ltd 349 Pacific Highway NORTH SYDNEY NSW 2060 Our ref: S07/00846

Your ref:

Dear Mr Durran

Proposed Gullen Range Wind Farm, Upper Lachlan Local Government Area (Application Reference: 07_0118)

I refer to your request for the Director-General's requirements for the preparation of an Environmental Assessment for the proposed Gullen Range wind farm.

The Director-General's Environmental Assessment Requirements are attached, pursuant to section 75F (2) of the *Environmental Planning and Assessment Act 1979*. It should be noted that the Director-General's requirements have been prepared based on the information provided to date. Under section 75F (3) of the Act, the Director-General may alter or supplement these requirements if necessary and in light of any additional information that may be provided prior to the proponent seeking approval for the project.

If your proposal contains any actions that is likely to significantly impact matters of National Environmental Significance, it will require an additional approval under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act). This approval is in addition to any approvals required under NSW legislation. It is your responsibility to contact the Department of the Environment and Water Resources in Canberra (6274 1111 or http://www.environment.gov.au) to determine if the proposal is likely to significantly impact on matters of National Environmental Significance, and would require an approval under the EPBC Act. The Commonwealth Government has accredited the NSW environmental assessment process for assessing any impacts on matters of National Environmental Significance. As a result, if it is determined that an approval is required under the EPBC Act, please contact the Department immediately as supplementary Director General's requirements will need to be issued.

You should ensure that you consult with the Department at least two weeks before you propose to submit the Environmental Assessment for the project to determine:

- the fees applicable to the application;
- whether the proposal requires an approval under the EPBC Act and any assessment obligations under that Act;
- consultation and public exhibition arrangements that will apply; and
- number and format (hard-copy or CD-ROM) of the Environmental Assessments that will be required.

As you may know, the Department will review the Environmental Assessment in consultation with the relevant authorities to determine if it adequately addresses the Director-General's requirements. If the Director-General considers the Environmental Assessment to be inadequate, you will be required to revise it prior to public exhibition.

The Director General's requirements will be placed on the Department's website along with other relevant information which becomes available during the assessment of the project. As a result, the Department would appreciate it if the documents submitted to the Department are in a suitable format for the web, and if you would arrange for an electronic version of the Environmental Assessment for the project to be hosted on a suitable website with a link the Department's website.

You should keep the contact officer for this project, Ricardo Prieto-Curiel ((02) 9228 6112, ricardo.prieto-curiel@planning.nsw.gov.au), up to date with the progress of preparation of the Environmental Assessment, and seek clarification of any issues that may be unclear or may arise during this process.

20.9.07

Yours sincerely

Chris Wilson

Executive Director

Major Project Assessments

As delegate of the Director-General

Director-General's Requirements

Section 75F of the Environmental Planning and Assessment Act 1979

Project	Construction, operation and decommissioning of up to 93 wind turbines with capacities ranging between 1.75-3 MW each. Associated infrastructure includes a substation and transmission connection to the existing 330 kV transmission system, cabling between turbines and substation, on site control room and equipment storage, temporary concrete batching plant(s), and access roads (Application reference 07_0118)
Site	Kialla, Bannister, Pomeroy and Gurrundah, Upper Lachlan Local Government Area
Proponent	Epuron Pty Ltd
Date of Issue	21 September 2007
Date of Expiration	21 September 2009
General Requirements	 The Environmental Assessment (EA) must include: an executive summary and glossary; a detailed description of the proposal, including construction, operation, decommissioning, detailed description of locations and dimensions of all project components (including coordinates and AHD heights for turbines), details of all cabling connections and infrastructure and a timeline which clearly identifies the proposed commencement of construction and operation of the project components, their envisaged lifespan and arrangements for decommissioning and staging; consideration of any relevant statutory provisions and guidelines, including assessment against the Department's draft NSW Wind Energy Environmental Impact Assessment Guidelines 2002; consideration of Auswind's Best Practice Guidelines for Implementation of Wind Energy Projects in Australia (2006); an assessment of the environmental impacts of the project, with particular focus on the key assessment requirements specified below, and including a description of measures proposed to avoid, minimise, mitigate, offset, manage and/or monitor the impacts of the project; justification for undertaking the project with consideration of the benefits and impacts of the proposal; a draft Statement of Commitments detailing measures for environmental mitigation, management and monitoring for the project; and certification by the author of the EA that the information contained in the Assessment is neither false nor misleading.
Key Assessment Requirements	 Strategic Justification - the EA must include a strategic assessment of the need, scale, scope and location for the project in relation to predicted electricity demand, predicted transmission constraints and the strategic direction of the region and the State in relation to electricity supply, demand and electricity generation technologies. It must also include a clear demonstration of quantified and substantiated greenhouse gas benefits, taking into consideration sources of electricity that could realistically be replaced and the extent of their replacement. The EA must include a strategic planning consideration of the project and an analysis of the suitability of the proposed sites with respect to potential land use conflicts particularly subdivision potential with existing and future surrounding land uses. Visual Amenity Impacts - the EA must provide a comprehensive assessment of the landscape character/values of the areas potentially affected by the project. The EA must identify the zone of visual influence and assess the visual impact of all project components on this landscape (including existing and approved dwellings) for a distance of at least 10 kilometres from the turbines, taking into consideration the impact of shadow "flicker" and blade "glint", and having particular regard to the local communities and significant public areas (eg. Pejar Dam). Cumulative visual impacts of existing and approved wind farms must be assessed

in the EA. The EA must describe community and stakeholder values of the local and regional visual amenity and quality, and perceptions of the proposal based on surveys and consultation. The EA must include photomontages of the proposal taken from strategic vantage points, including potentially affected residences and significant public view points, and clear description of proposed visual amenity mitigation and management measures. An assessment of the feasibility, effectiveness and reliability of proposed measures and any residual impacts after these measures have been implemented must be included. The visual impact assessment should be prepared with regard to the Australian Wind Energy Association and Australian Council of National Trust's Wind Farms and Landscape Values: Stage One Final Report - Identifying Issues, March 2005.

- Noise Impacts the EA must include a comprehensive assessment of the predicted noise impacts resulting from all phases and components of the project. The assessment must identify noise sensitive locations, describe baseline conditions based on monitoring results, determine noise criteria and determine noise impacts of the project (levels and character) under operating meteorological conditions (ie. wind speeds from cut in to rated power), which may include impacts under meteorological conditions that exacerbate impacts as well as calm conditions. The probability of such occurrences must be quantified. If any noise agreements with residents are proposed for areas where noise criteria cannot be met, sufficient information must be provided to enable a clear understanding of what has been agreed and what criteria have been used to frame any such agreements. The assessment must be undertaken in accordance with the following guidelines (or as otherwise agreed with the DECC):
 - → Wind Turbines The South Australian Environment Protection Authority's Wind Farms Environmental Noise Guidelines, 2003;
 - → Site Establishment and Construction undertaken in accordance with the Environmental Noise Control Manual (EPA, 2004);

The EA must clearly outline the noise mitigation, monitoring and management measures the Proponent intends to apply to the project. This must include an assessment of the feasibility, effectiveness and reliability of proposed measures and any residual impacts after these measures have been implemented. The EA must include contingency measures that provide for additional noise attenuation should higher noise levels than those predicted result following commissioning.

Flora and Fauna - the EA must address:

→ the impact of the proposal on critical habitats, threatened species, populations or ecological communities, or their habitats, under both State and Commonwealth legislation, in accordance with section 5A of the Environmental Planning and Assessment Act 1979;

the impact of the proposal on birds and bats from strikes and alteration to movement patterns resulting from the turbines and transmission lines. An

adaptive management program must be outlined;

 vegetation clearing during construction and maintenance, including details on the location, composition and quantity and likelihood of disturbance; and

→ measures to avoid, mitigate or compensate (in accordance with DECC's vegetation off-set principles) impacts on flora and fauna aiming to achieve the principle of "improve or maintain environmental outcomes".

The flora and fauna assessment, including field surveys, must be prepared in accordance with the *Draft Guidelines for Threatened Species Assessment* (DEC & DPI, 2005), and have regard to the Commonwealth Department of Environment and Heritage's *Cumulative Risk for Threatened and Migratory Species, March 2006*, Auswind's *Wind Farms and Birds: Interim Standards for Risk Assessment*, July 2005 and the Australian Wind Energy Association's *Assessing the Impacts on Birds – Protocols and Data Set Standards*.

Aboriginal Heritage - the EA must include an assessment of the potential impact
on Aboriginal heritage values/items and proposed mitigation measures in
accordance with the *Draft Guidelines for Aboriginal Cultural Heritage Impact*Assessment and Community Consultation (DEC, 2005). The EA needs to
demonstrate that effective consultation with Aboriginal communities has been
undertaken in determining and assessing impacts, developing options and
selecting options and mitigation measures.

Aviation/Communications/EMFs - the EA must assess potential impacts of the

project on telecommunications, radars and flight safety, including (but not limited to) Department of Defence operations. The assessment must consider any impacts on the operation of regional and local airports, including Crookwell airstrip, and any private landing fields. In reference to aircraft, the assessment must consider the Civil Aviation Safety Authority's Advisory Circular AC 139-18(0) Obstacle Marking and Lighting of Wind Farms, December 2005. The EA must address potential exposure to electric and magnetic fields in consideration of relevant ARPANSA's Guidelines on Radiation Protection Standard for Exposure Limits to Electric and Magnetic Fields.

- Land Values Impacts the EA must assess the potential impacts of the proposal on surrounding land values, including a prediction of any land value changes as a result of the proposal in both the short and long term, and impacts on subdivision potential of all adjacent land.
- Traffic and Transport The EA must assess the impact of traffic generated by the proposal and must include: details of the nature/mode of traffic generated; transport routes; traffic volumes and potential impacts on local and regional roads, bridges and intersections, including any proposed road upgrades and repairs. Details regarding site access and parking must also be provided;
- Bushfire Risk the EA must address the potential for the proposed wind farm to start/influence the pattern of bushfires, and must include bushfire management strategies and measures, in consultation with the NSW Rural Fire Service and Upper Lachlan Council. The Proponent must meet the requirements of *Planning for Bush Fire Protection 2006*.
- Water Quality the EA must assess the water quality impacts of the project and detail management practices with the goal of achieving neutral or beneficial effects on water quality in accordance with the Drinking Water Catchments Regional Environmental Plan. The EA must assess potential water quality and ecology impacts and detail measures to avoid/minimise impacts at creek crossings.
- Mineral Resource The EA must assess the impact of the project on mineral exploration and mining, including impact on existing leases.
- General Environmental Risk Analysis notwithstanding the above key assessment requirements, the EA must include an environmental risk analysis to identify potential environmental impacts associated with the project, proposed mitigation measures and potentially significant residual environmental impacts after the application of proposed mitigation measures. Where additional key environmental impacts are identified through this environmental risk analysis, an appropriately detailed impact assessment of the additional key environmental impact(s) must be included in the EA.

Consultation Requirements

The Proponent must undertake an appropriate and justified level of consultation with the following parties during the preparation of the EA:

- Department of Environment and Climate Change:
- Department of Water and Energy;
- · Department of Primary Industries;
- Upper Lachlan and Goulburn Mulwaree Councils;
- Sydney Catchment Authority;
- Hawkesbury-Nepean Catchment Management Authority;
- Country Energy / TransGrid;
- NSW Rural Fire Service;
- Civil Aviation Safety Authority (CASA) and Airservices Australia;
- Department of Defence
- Department of Lands
- Relevant Aboriginal communities and the Pejar Local Aboriginal Land Council;
- Relevant holders of Mine Exploration Licences; and
- the local community

The EA must clearly describe the consultation process and indicate the issues raised by stakeholders during consultation and how these matters have been addressed.

Deemed refusal period

120 days