



NSW GOVERNMENT
Department of Planning

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Mr Martin Poole
Director
Silverton Wind Farm Developments Pty Ltd
Level 11, 75 Miller Street
NORTH SYDNEY NSW 2060

Our ref: S07/01462
Your ref:

Dear Mr Poole

Proposed Silverton Wind Farm, Unincorporated Area, and Broken Hill and Wentworth Local Government Areas (Application Reference: MP 08_0022)

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

I note that you are seeking Concept Approval for the whole proposal and Project Approval for stage 1 of the proposal. For your information, on 23 January 2008, the Minister for Planning authorised the submission of a Concept Plan.

The Director-General's Environmental Assessment Requirements are attached, pursuant to section 75F(2) of the *Environmental Planning and Assessment Act 1979*. They have been prepared following the Planning Focus Meeting held on 14 and 15 November, 2007 and in consultation with relevant government agencies. 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.

Given the length of the grid connection transmission lines, the Environmental Assessment should present, with respect to each relevant transmission line impact, a considered screening of potential impacts along the length of the lines, to identify areas of potentially significant impact for further, more detailed assessment. In addition to detailed assessment of areas of potentially significant impact, other areas along the length of the lines should be assessed in a more general manner, with a particular focus on the development of frameworks for the mitigation, management and monitoring of more minor and generic environmental issues.

If your proposal contains any actions that are 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, Heritage, Water and the Arts 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.

I also note that a small portion of the project may be located in Victoria. You should ensure that sufficient information is provided in the Environmental Assessment to demonstrate the likelihood of the necessary Victorian approvals being obtained. In addition, this would affect the operation of the Bilateral Agreement between NSW and the Commonwealth, which only operates for projects located wholly in NSW.

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 to the Department's website.

You should keep the contact officer for this project, Neville Osborne ((02) 9228 6337, neville.osborne@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.

Yours sincerely



13.2.09

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	<p>Silverton Wind Farm</p> <p>Concept Plan Application: Construction, operation and decommissioning of up to 500 wind turbines with likely capacities ranging between 1.75-3 MW each. Associated infrastructure includes up to four substations, cabling between turbines and substation(s), on site control building(s) and equipment storage facilities, temporary concrete batching plant(s)/other construction facilities, access roads/road upgrades, wind monitoring masts and grid connection. Grid connection will include transmission lines from the wind farm site to Broken Hill substation and from Broken Hill substation to Buronga and Red Cliffs (Victoria) substations.</p> <p>Project Application: Stage 1 of the wind farm, including construction, operation and decommissioning of wind turbines with likely capacities ranging between 1.75-3 MW each (likely to be in the order of 150-185 turbines). Associated infrastructure includes a substation, cabling between turbines and substation, on site control building(s) and equipment storage facilities, temporary concrete batching plant(s)/other construction facilities, access roads/road upgrades, wind monitoring masts and grid connection. Grid connection will include a transmission line from the wind farm site to Broken Hill substation.</p> <p>(Application reference MP 08_0022).</p>
Site	<p>Wind Farm – Barrier Ranges, about 25km north west of Broken Hill, within the Unincorporated Far West area of NSW;</p> <p>Transmission Lines - within the Unincorporated Far West area of NSW, and the Broken Hill and Wentworth Local Government Areas.</p>
Proponent	<p>Silverton Wind Farm Developments Pty Ltd</p>
Date of Issue	<p>13th February 2008</p>
Date of Expiration	<p>13th February 2010</p>
General Requirements	<p>The Environmental Assessment (EA) must include:</p> <ul style="list-style-type: none"> • an executive summary and glossary; • a detailed description of Stage 1 of the proposal, including construction (and including sources of raw materials and need for electricity supply), operation, decommissioning, detailed description of locations and dimensions of all project components (including co-ordinates and AHD heights for turbines), details of all cabling/grid connections and infrastructure (including access tracks) 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. Sufficient information must be provided on the remaining stages to enable a clear understanding of these project components; • consideration of any relevant statutory provisions and guidelines, including consistency with the objects of the <i>Environmental Planning and Assessment Act 1979</i> and assessment against the Department's draft <i>NSW Wind Energy Environmental Impact Assessment Guidelines 2002</i> and draft <i>Network Electricity Systems and Facilities Guidelines 2002</i>; • consideration of Auswind's <i>Best Practice Guidelines for Implementation of Wind Energy Projects in Australia</i> (2006 or as updated); • 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

	<ul style="list-style-type: none"> certification by the author of the EA that the information contained in the Assessment is neither false nor misleading.
<p>Key Assessment Requirements</p>	<p>The EA must include assessment of the following key issues:</p> <ul style="list-style-type: none"> Strategic Justification - the EA must: <ul style="list-style-type: none"> 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; 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; provide a lifecycle energy use analysis of the project, including the grid connection components; identify other potential benefits, such as tourism; address transmission line electrical losses; and identify and consider feasible alternative transmission line routes for the grid connection. Visual Impacts - the EA must: <ul style="list-style-type: none"> provide a comprehensive assessment of the landscape character/values of the areas potentially affected by the project. This should describe community and stakeholder values of the local and regional visual amenity and quality, and perceptions of the proposal based on surveys and consultation; identify the zone of visual influence and assess the visual impact of all project components (including the transmission lines, access roads etc in addition to the turbines) on this landscape (including existing and approved dwellings); in the case of the wind farm site, assess impacts for a distance of at least 10 kilometres from the turbines; assess the impact of shadow "flicker" and blade "glint" from the wind farm; have particular regard to the local communities and significant public areas (eg. Silverton Village, the Scenic Lookout on the edge of the Mundi Mundi Plains, sculpture site, Daydream Tourist Mine, Barrier and Silver City Highways, Murray River crossing); consider implications for heritage values, tourism, the artistic community and the film industry; include photomontages of the proposal taken from strategic vantage points, including potentially affected residences and significant public view points, and provide a clear description of proposed visual amenity mitigation and management measures; provide an assessment of the feasibility, effectiveness and reliability of proposed mitigation measures and any residual impacts after these measures have been implemented; and address the cumulative effects of the transmission line with the existing TransGrid Broken Hill – Buronga/Red Cliffs line. <p>The visual impact assessment should be prepared with regard to the Australian Wind Energy Association and Australian Council of National Trust's <i>Wind Farms and Landscape Values: National Assessment Framework</i> June 2007.</p> Noise Impacts - the EA must: <ul style="list-style-type: none"> include a comprehensive assessment of the predicted noise impacts resulting from all phases and components of the project; for the wind farm site, 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, provide sufficient information to enable a clear understanding of what has been agreed and what criteria have been used to frame any such agreements; clearly outline the noise mitigation, monitoring and management measures the Proponent intends to apply to the project;

- include an assessment of the feasibility, effectiveness and reliability of proposed measures and any residual impacts after these measures have been implemented;
- include contingency measures that provide for additional noise attenuation should higher noise levels than those predicted result following commissioning; and
- address the potential for corona noise from the transmission lines.

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 (consideration should also be given to *Wind Farms - Environmental Noise Guidelines (interim)*, 2007); and
- Site Establishment and Construction - undertaken in accordance with the *Environmental Noise Control Manual* (EPA, 2004).

- **Flora and Fauna** - the EA must address:

- the impact of the proposal on critical habitats, threatened species, populations or ecological communities, or their habitats, in accordance with section 5A of the *Environmental Planning and Assessment Act 1979*. Threatened species and ecological communities under Commonwealth legislation must also be addressed;
- 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 programme must be outlined;
- vegetation clearing during construction and maintenance, including details on the location, composition and quantity and likelihood of disturbance;
- impacts on groundwater dependent ecosystems;
- any impacts on Property Vegetation Plans approved under the Native Vegetation Act 2003, and the means of offsetting any such impacts;
- weed and feral animal control; 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*.

- **Water Quality/Quantity** – the EA must:

- assess the water quality and quantity impacts of the project and detail management practices/mitigation measures;
- assess potential water quality and ecological impacts and detail measures to avoid/minimise impacts at stream crossings, including the Murray and Darling Rivers, and Great Darling Anabranch, and identify any changes to flow patterns;
- assess impacts on water quality in the Umberumberka Creek Special Area/ Umberumberka Reservoir, and any implications for town water supply, and mitigation measures;
- assess impacts on groundwater, and mitigation measures; and
- identify any relevant water sharing plans, and consider the project's implications.

- **Traffic and Transport** – the EA must:

- assess the impact of traffic generated by the proposal; and
- include details of the nature of traffic generated; transport routes; traffic volumes and potential impacts on local and regional roads (including Silverton Road), bridges and intersections, including risk analysis and any proposed road upgrades and repairs; safety analysis; and towns that might be affected and traffic noise; and
- provide site access details.

- **Aboriginal Heritage** - the EA must:

- include an assessment of the potential impact on Aboriginal heritage

	<p>values/items and proposed mitigation measures in accordance with the Draft <i>Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation</i> (DEC, 2005); and</p> <ul style="list-style-type: none"> ○ demonstrate that effective consultation with Aboriginal communities has been undertaken in determining and assessing impacts, developing options and selecting options and mitigation measures. • Non Indigenous Heritage - the EA must include an assessment of the potential impact on non indigenous heritage values/items and proposed mitigation measures. The assessment should be undertaken in accordance with the updated guidelines in the <i>NSW Heritage Manual</i> and a Statement of Heritage Impact prepared. Reference should also be made to the draft <i>Heritage Study of the Unincorporated Area of NSW</i> (River Junction Research, Nov 2006 – contact the Department of Lands) and <i>Wind Farms and Heritage</i> (Heritage Council of NSW 2003). • Socio-Economic Impacts – the EA must: <ul style="list-style-type: none"> ○ demonstrate the ability of local areas to handle the number of construction workers that will be employed, given the available social infrastructure such as housing; and ○ identify potential impacts (and mitigation measures) on existing leaseholders, Silverton Village and Broken Hill. • Land Use Issues – including potential impacts (and mitigation measures) on property values, development opportunities, agriculture and mineral resources. • Hazards/Risks – including potential impacts (and mitigation measures) on aviation (and with reference to the Civil Aviation Safety Authority's Advisory Circular AC 139-18(0) <i>Obstacle Marking and Lighting of Wind Farms</i>, July, 2007 (or as updated)), bushfires and electric and magnetic fields. • Utilities – including potential impacts (and mitigation measures) on communications systems, transmission lines and water supply assets. • 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.
<p>Consultation Requirements</p>	<p>The Proponent must undertake an appropriate and justified level of consultation with the following parties during the preparation of the EA:</p> <ul style="list-style-type: none"> • Department of Environment and Climate Change; • Department of Lands; • Department of Primary Industries; • Department of Water and Energy; • Roads and Traffic Authority; • Broken Hill and Wentworth Councils; • Mildura Rural City Council; • Lower Murray Darling and Western Catchment Management Authorities; • Country Energy (including Country Water) / TransGrid; • NSW Rural Fire Service; • Civil Aviation Safety Authority (CASA) and Airservices Australia; • Department of Defence; • Relevant Aboriginal communities; • Relevant holders of Mineral Exploration Licences; and • the local community, including the Silverton Village Committee. <p>The EA must clearly describe the consultation process and indicate the issues raised by stakeholders during consultation and how these matters have been addressed.</p>
<p>Deemed refusal period</p>	<p>Under clause 8E(2) of the <i>Environmental Planning and Assessment Regulation 2000</i>, the applicable deemed refusal period is 120 days from the end of the proponent's environmental assessment period for the project.</p>