

Director-General's Requirements

Section 75F of the *Environmental Planning and Assessment Act 1979*

Project	<p>Construction and operation of an approximately 270 megawatt wind farm including up to 127 wind turbines and associated infrastructure including access roads, internal cabling and transmission lines, substations and temporary construction facilities.</p> <p>Note: a new 132Kv transmission line between the project and the existing Country Energy transmission network (approximately 25 kilometres to the east) is required to connect the electricity generated by the project to the grid. Whilst this component of the development is proposed to be progressed separately from the project under Part 5 of the <i>Environmental Planning and Assessment Act 1979</i>, sufficient information must be provided on this component to provide context to the project and its likely impacts.</p>
Site	Approximately 10 kilometres south west of Nimmitabel in the Bombala and Cooma-Monaro local government areas.
Proponent	Wind Prospect CWP Pty Ltd
Date of Issue	1 June 2009
Date of Expiration	1 June 2011
General Requirements	<p>The Environmental Assessment (EA) must include:</p> <ul style="list-style-type: none"> • an executive summary; • a detailed description of the project including: <ul style="list-style-type: none"> → the location and dimensions of all project components including the wind turbines (including map coordinates and AHD heights), the above ground transmission connection to the existing 132kV transmission network, electrical sub stations, underground cabling between turbines, on site control room and equipment storage, temporary concrete batching plant(s), construction compounds and access roads; → a timeline identifying the proposed construction and operation of project components, their envisaged lifespan and arrangements for decommissioning and staging; → supporting maps/plans clearly identifying existing environmental features (e.g. watercourses, vegetation), infrastructure and landuse (including nearby residences and approved residential developments or subdivisions) and the location/ siting of the project (including associated infrastructure) in the context of this existing environment; → resourcing requirements (including, but not limited to, water supply and gravel); and → an overview of the approvals process for the above ground transmission connection to the existing 132kV transmission network, including timing and responsibilities and how this process would fit in with the planning and development of the project. • consideration of any relevant statutory provisions including the consistency of the project with the objects of the <i>Environmental Planning and Assessment Act 1979</i>; • an assessment of the key issues outlined below, during construction, operation and decommissioning (as relevant). The EA shall assess the worst case and representative impact for all key issues considering the alternate turbine layouts proposed (as relevant). Sufficient information on the siting and likely impacts of the transmission line must be presented to demonstrate that the cumulative impacts of the development as a whole is acceptable and justified; • a draft Statement of Commitments detailing measures for environmental mitigation, management and monitoring for the project. A detailed description of how issues which would have cumulative impacts for the project and the connection to the existing 132kV transmission network (e.g. biodiversity offsets and visual) would be managed including timing and responsibilities; • a conclusion justifying the project taking into consideration the environmental, social and economic impacts of the project; the suitability of the site; and the public interest; and • certification by the author of the EA that the information contained in the assessment is neither false nor misleading.

Key Assessment Requirements

The EA must include assessment of the following key issues:

- **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;
 - 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; and
 - include an analysis of the suitability of the project with respect to potential land use conflicts with existing and future land uses (including existing and approved rural-residential development, known development proposals in the surrounding area of a sensitive land use, land of significant scenic or visual value, land of high agricultural value, mineral reserves and conservation areas), taking into account local and strategic land use objectives; and
 - describe the alternatives considered (location and/or design) for all project components, and provide justification for the preferred project demonstrating its benefits including community benefits on a local and strategic scale and how it achieves stated objectives.
- **Visual Impacts** - the EA must:
 - provide a comprehensive assessment of the landscape character and values and any scenic or significant vistas of the area 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 project based on surveys and consultation;
 - assess the impact of shadow "flicker", blade "glint" and night lighting from the wind farm on residents and road users;
 - identify the zone of visual influence (no less than 10 kilometres) and assess the visual impact of all project components on this landscape;
 - include photomontages of the project taken from potentially affected neighbouring residences (both existing and approved dwellings) where the occupant is assessed as likely to experience a high level of visual impact as well as from settlements and significant public view points; and
 - provide a clear description of proposed visual amenity mitigation and management measures and provide an assessment of the feasibility, effectiveness and reliability of proposed mitigation measures and any residual impacts after these measures have been implemented.
- **Noise Impacts** - the EA must:
 - include a comprehensive noise assessment of all phases and components of the project including, but not limited to, turbine operation, the operation of the electrical substation, construction, and traffic noise. The assessment must identify noise sensitive locations (including approved but not yet developed dwellings), baseline conditions based on monitoring results, the levels and character of noise (e.g. tonality, impulsiveness etc) generated by noise sources, noise criteria, modelling assumptions and worst case and representative noise impacts;
 - in relation to wind turbine operation, determine the noise impacts under operating meteorological conditions (i.e. wind speeds from cut in to rated power), including impacts under meteorological conditions that exacerbate impacts (including varying atmospheric stability classes). The probability of such occurrences must be quantified;
 - include monitoring to ensure that there is adequate wind speed/profile data and ambient background noise data that is representative for all sensitive receptors;
 - provide justification for the nominated average background noise level used in the assessment process, considering any significant difference between daytime and night time background noise levels;
 - include an assessment of vibration impacts associated with the project;

- 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 that would be applied 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 incorporated; and
- include a contingency strategy that provides for additional noise attenuation should higher noise levels than those predicted result following commissioning and/or noise agreements with landowners not eventuate.

The assessment must be undertaken consistent 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 on advice from DECC who are currently reviewing their appropriateness for NSW);
- Electrical Substation – *NSW Industrial Noise Policy* (EPA, 2000);
- Traffic Noise – *Environmental Criteria for Road Traffic Noise* (NSW EPA, 1999);
- Site Establishment and Construction - *Environmental Noise Control Manual* (EPA, 2004); and
- Vibration – *Assessing Vibration: A Technical Guideline* (DECC, 2006).

• **Flora and Fauna** - the EA must:

- include an assessment of all project components on flora and fauna and their habitat consistent with the *Draft Guidelines for Threatened Species Assessment* (DEC, 2005), including identifying the condition and extent of existing vegetation and habitat on site and the likely extent of disturbance associated with the project (including quantification of impacts on a local and regional context);
- specifically consider impacts to: threatened species and communities listed under both State and Commonwealth legislation that have been recorded on the site and surrounding land (including but not necessarily limited to the natural Temperate Grassland EEC and Grassland Earless Dragon), demonstrating that impacts to these species and communities have been minimised as far as reasonable and feasible;
- specifically consider impacts to native vegetation (including fragmentation and impacts to biodiversity corridors) and to significant habitat (including riparian and/or instream habitat in the case of disturbance of waterways);
- specifically assess the impact of the project on birds and bats from blade strikes, low air pressure zones at the blade tips, and alteration to movement patterns, roost sites and nesting areas resulting from the turbines and any above ground transmission lines, including demonstration of how the project has been sited to avoid and/or minimise such impacts. If any of the bat and bird species likely to be impacted by the wind turbines are also listed species under State and Commonwealth legislation, then the significance assessment for each of these species must consider impacts from the wind turbines as well as impacts from habitat loss;
- provide details of how flora and fauna impacts would be managed during construction and operation of all project components, including adaptive management and maintenance protocols and monitoring programs; and
- describe the measures to avoid, mitigate or offset impacts associated with the construction and operation of all project components consistent with "improve or maintain" principles. Sufficient details must be provided to demonstrate the availability of viable and achievable options to offset the impacts of the project.

- **Indigenous Heritage** - the EA must include an assessment of the potential impact of the project components on indigenous heritage values (archaeological and cultural). The EA must demonstrate effective consultation with indigenous stakeholders during the assessment and in developing mitigation options (including the final recommended measures) consistent with the draft *Guidelines for Aboriginal Cultural Impact Assessment and Community Consultation* (DEC, July 2005). The EA must describe the actions that will be taken to avoid, mitigate or offset impacts.
- **Traffic and Transport** – the EA must assess the construction and operational traffic impacts of the project including:
 - details of the nature 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; and
 - details of site access roads including how these would connect to the existing road network and any operational maintenance or handover requirements.
- **Hazard/Risks**– the EA must include an assessment of the potential impacts on aviation safety considering nearby aerodromes and aircraft landing areas, defined air traffic routes, aircraft operating heights, radar interference, communication systems, and navigation aids. In addition, the EA must assess the impact of the turbines on the safe and efficient aerial application of agricultural fertilisers and pesticides in the vicinity of the turbines. Potential hazards and risks associated with electric and magnetic fields and bushfires must also be assessed.
- **Water Supply and Waterways** – The EA must identify the construction water sources for the project and their statutory (licensing) context, and assess potential environmental impacts associated with the identified sources. Where the project would cross significant waterways, the EA must identify likely impacts to the waterways and measures to minimise hydrological, aquatic and riparian impacts.
- **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** – the Proponent must undertake a consultation program as part of the environmental assessment process, including consultation with, but not necessarily limited to, the following parties:
 - Bombala Council;
 - Cooma-Monaro Shire Council;
 - NSW Department of Environment and Climate Change;
 - NSW Department of Water and Energy;
 - NSW Department of Primary Industries;
 - NSW Roads and Traffic Authority;
 - Country Energy;
 - NSW Rural Fire Service;
 - Southern Rivers Catchment Management Authority;
 - Commonwealth Department of Defence;
 - Civil Aviation Safety Authority;
 - Airservices Australia;
 - Aerial Agricultural Society of Australia;
 - titleholders of mineral exploration leases and mining licences within the project area; and

→ the local community and landowners.

The consultation process shall include measures for disseminating information to increase awareness of the project as well as methods for actively engaging stakeholders on issues that would be of interest/concern to them. The EA must:

- demonstrate effective consultation with stakeholders, and that the level of consultation with each stakeholder is commensurate with their degree of interest/concern or likely impact;
- clearly describe the consultation process undertaken for each stakeholder/group including details of the dates of consultation and copies of any information disseminated as part of the consultation process (subject to confidentiality); and
- describe the issues raised during consultation and how and where these have been addressed in the EA.

