APPENDIX A SEARS

Environmental Assessment Requirements

Section 4.12 (8A) of the *Environmental Planning and Assessment Act 1979* Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*

Application Number	SSD 9679
Development	Hills of Gold Wind Farm which includes: The construction, operation and decommissioning of a wind farm with: • a maximum of 97 turbines, a maximum of 410 megawatts (MW) and maximum height of 220 metres (to blade tip); and • ancillary infrastructure including access tracks, road upgrades, battery storage, underground and overhead electricity cabling, substations and grid connection to the 330 kV Liddell to Tamworth transmission line.
Location	Morrisons Gap Road, Hanging Rock
Proponent	Wind Energy Partners
Date of Issue	22 November 2018
General Requirements	The Environmental Impact Statement (EIS) for the development must comply with the requirements in Schedule 2 of the *Environmental Planning and Assessment Regulation 2000.* In particular, the EIS must include: • a stand-alone executive summary; • a full description of the development, including: – details of construction, operation and decommissioning, including any proposed staging of the development or refurbishing of turbines over time; – all infrastructure and facilities, such as substations, transmission lines, construction compounds, concrete batching plants, internal access roads, and road upgrades (including any infrastructure that would be required for the development, but the subject of a separate approvals process); – plans for any buildings; – site plans and maps at an adequate scale with dimensions showing: o the location and dimensions of all project components including coordinates in latitude / longitude and maximum AHD heights of the turbines; o existing infrastructure, land use, and environmental features in the vicinity of the development, including nearby residences and approved residential developments or subdivisions within 3 km of a proposed turbine, and any other existing, approved or proposed wind farms in the region; and o the development corridor that has been assessed, including any allowance for micro-siting of turbines and identification of the key environmental constraints that have been considered in the design of the development; – details of the progressive rehabilitation of the site; • a list of any approvals that must be obtained before the development may commence; • the terms of any proposed voluntary planning agreement with the relevant local council; • an assessment of the likely impacts of the development on the environment, focusing on the specific issues identified below, including: – a description of the existing environment likely to be affected by the development using sufficient baseline data; – an assessment of the likely impacts of all stages of the development, taking into consideration any relevant legislation, environmental planning instruments, guidelines, policies, plans and industry codes of practice and including the *NSW Wind Energy Guideline for State Significant Wind Energy Development* (2016); – a description of the measures that would be implemented to avoid, mitigate and/or offset residual impacts of the development and the likely effectiveness of these measures, including details of consultation with any affected non-associated

	landowners in relation to the development of mitigation measures, and any negotiated agreements with these landowners; and – a description of the measures that would be implemented to monitor and report on the environmental performance of the development, including adaptive management strategies and contingency measures to address residual impacts; • a consolidated summary of all the proposed environmental management and monitoring measures, identifying all the commitments in the EIS; and • the reasons why the development should be approved having regard to: – relevant matters for consideration under the *Environmental Planning and Assessment Act 1979*, including the objects of the Act and how the principles of ecologically sustainable development have been incorporated in the design, construction and ongoing operations of the development; – the environmental, economic and social costs and benefits of the development, having regard to the predicted electricity demand in NSW and the National Electricity Market, the Commonwealth's Renewable Energy Target Scheme, and the greenhouse gas savings of the development; – a detailed consideration of the capability of the project to the security and reliability of the electricity system in the National Electricity Market, having regard to local system conditions and the Department's guidance on the matter; – the suitability of the site with respect to potential land use conflicts with existing and future surrounding land uses, including rural villages, rural dwellings, subdivisions, land of high scenic value, conservation areas (including National Parks / Reserves), strategic agricultural land, state forests, mineral resources, triangulation stations, tourism facilities, existing or proposed wind farms, and the capacity of the existing electricity transmission network to accommodate the development; and – feasible alternatives to the development (and its key components), including the consequences of not carrying out the development. While not exhaustive, Attachment 1 contains a list of some of the environmental planning instruments, guidelines, policies, and plans that may be relevant to the environmental assessment of this development. In addition to the matters set out in Schedule 1 of the *Environmental Planning and Assessment Regulation 2000*, the development application must be accompanied by a signed report from a suitably qualified person that includes an accurate estimate of the capital investment value of the development (as defined in Clause 3 of the *Environmental Planning and Assessment Regulation 2000*).
Key issues	The EIS must address the following specific matters for both the wind farm and associated infrastructure: **Landscape and Visual** – the EIS must include a detailed assessment of the visual impacts of all components of the project (including turbines, transmission lines, substations, and any other ancillary infrastructure) in accordance with the *Wind Energy: Visual Assessment Bulletin* (DPE, 2016); **Noise and Vibration** – the EIS must: • assess wind turbine noise in accordance with the NSW Wind Energy: Noise Assessment Bulletin (EPA/DPE, 2016); • assess noise generated by ancillary infrastructure in accordance with the NSW Noise Policy for Industry (EPA, 2017); • assess construction noise under the Interim Construction Noise Guideline (DECC, 2009); • assess traffic noise under the NSW Road Noise Policy (DECCW, 2011); and • assess vibration under the Assessing Vibration: A Technical Guideline (DECC, 2006);

Biodiversity – the EIS must:

- assess biodiversity values and the likely biodiversity impacts of the development including impacts associated with transport route road upgrades in accordance with the *Biodiversity Conservation Act 2016* (NSW), including a detailed description of the proposed regime for minimising, managing and reporting on the biodiversity impacts of the development over time, and a strategy to offset any residual impacts of the development in accordance with the *Biodiversity Conservation Act 2016* (NSW);
- assess the impact of the development on the National Estate in accordance with the *Guidelines for Development Adjoining Land and Water Managed by DECCW* (OEH 2010);
- assess the impact of the project on birds and bats from blade strikes, low air pressure zones at the blade tips (barotrauma), and alteration to movement patterns resulting from the turbines and considering cumulative effects of other wind farms in the vicinity;

Traffic and Transport – the EIS must:

- assess the construction and operational traffic impacts of the development;
- provide details of traffic volumes (both light and heavy vehicles) and transport routes during construction and operation, including traffic associated with sourcing raw materials (water, sand and gravel);
- assess the potential traffic impacts of the project on road network function including intersection performance and site access arrangements and road safety, including school bus routes;
- assess the capacity of the existing road network to accommodate the type and volume of traffic generated by the project (including over-mass / over-dimensional traffic) during construction and operation;
- provide details of measures to mitigate and / or manage potential impacts including a schedule of all required road upgrades, road maintenance contributions, and any other traffic control measures, developed in consultation with the relevant road authority;

Hazard / Risks – the EIS must include an assessment of the following:

- *Aviation Safety*:
  - assess the impact of the development under the *National Airports Safeguarding Framework Guideline D: Managing Wind Turbine Risk to Aircraft*,
  - provide associated height and co-ordinates for each turbine assessed;
  - assess potential impacts on aviation safety, including cumulative effects of wind farms in the vicinity, potential wake / turbulence issues, the need for aviation hazard lighting, considering, defined air traffic routes, aircraft operating heights, approach/departure procedures, radar interference, communication systems, navigation aids;
  - identify aerodromes within 30 km of the turbines and consider the impact to nearby aerodromes and aircraft landing areas;
  - address impacts on obstacle limitation surfaces, and
  - assess the impact of the turbines on the safe and efficient aerial application of agricultural fertilisers and pesticides in the vicinity of the turbines and transmission line;
- *Telecommunications* – identify possible effects on telecommunications systems, assess impacts and mitigation measures including undertaking a detailed assessment to examine the potential impacts as well as analysis and agreement on the implementation of suitable options to avoid potential disruptions to radio communication services; which may include the installation and maintenance of alternative sites;
- *Health* – consider and document any health issues having regard to the latest advice of the National Health and Medical Research Council, and identify potential hazards and risks associated with electric and magnetic fields (EMF) and demonstrate the application of the principles of prudent avoidance;
- *Bushfire* – identify potential hazards and risks associated with bushfires / use of bushfire prone land, including the risks that a wind farm would cause bush fire and any potential impacts on the aerial fighting of bush fires and demonstrate compliance with *Planning for Bush Fire Protection 2006* (if located on bushfire prone land);

	• *Blade Throw* – assess blade throw risks; and • *Battery Storage* – including a preliminary risk screening in accordance with *State Environmental Planning Policy No. 33 – Hazardous and Offensive Development* and *Applying SEPP 33* (DoP, 2011), and if the preliminary risk screening indicates the development is "potentially hazardous", a Preliminary Hazard Analysis (PHA) must be prepared in accordance with *Hazard Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis* (DoP, 2011) and *Multi-Level Risk Assessment* (DoP, 2011). **Heritage** – the EIS must: • assess the impact to Aboriginal cultural heritage impact under the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (*OEH, 2011) and the *Code of Practice for the Archaeological Investigation of Aboriginal Objects in NSW* (DECCW, 2010); • provide evidence of consultation with Aboriginal communities in determining and assessing impacts, developing options and selecting options and mitigation measures (including the final proposed measures), having regard to the *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (DECCW, 2010); and • assess the impact to historic heritage items under the *NSW Heritage Manual.* **Water & Soils** – the EIS must: • quantify water demand, identify water sources (surface and groundwater), including any licensing requirements, and determine whether an adequate and secure water supply is available for the development; • access potential impacts on the quantity and quality of surface and groundwater resources, including impacts on other water users and watercourses; • where the project involves works within 40 metres of the high bank of any river, lake or wetlands (collectively waterfront land), identify likely impacts to the waterfront land, and how the activities are to be designed and implemented in accordance with the *DPI Water Guidelines for Controlled Activities* (DPI, 2012) and (if necessary) *Why do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings* (DPI, 2003); and • describe the measures to minimise surface and groundwater impacts, including how works on steep gradient land or erodible soil types would be managed and any contingency requirements to address residual impacts. **Waste** – the EIS must: • identify, quantify and classify the likely waste streams to be generated during construction and operation, and describe the measures to be implemented to manage, reuse, recycle and safely dispose of this waste. **Social & Economic –** the EIS must include an assessment of the social and economic impacts and benefits of the project for the region and the State as a whole, including consideration of any increase in demand for community infrastructure services and impacts to tourism.
Consultation	During the preparation of the EIS, you must consult with relevant local, State and Commonwealth Government authorities, service providers, community groups and affected landowners. However, you must: • establish a Community Consultative Committee for the project in accordance with the *Community Consultative Committee Guidelines for State Significant Projects*, and consult with the committee during the preparation of the EIS; and • Carry out detailed consultation with the following: – Tamworth Regional Council; – Upper Hunter Shire Council; – Liverpool Plains Shire Council

	– Office of Environment and Heritage; – National Parks and Wildlife Service; – Environment Protection Authority; – Division of Resources and Geoscience; – Department of Industry – Roads and Maritime Services; – Department of Finance, Services and Innovation – Telco Authority; – Local Land Services; – Forestry Corporation; – NSW Rural Fire Service; – Department of Defence; – Civil Aviation Safety Authority; and – Airservices Australia. The EIS must include a description of what consultation was carried out during the preparation of the EIS, identify the issues raised during this consultation, and explain how these issues have been addressed in the EIS.
Further consultation after 2 years	If you do not lodge a development application and EIS for the development within 2 years of the issue date of these SEARs, you must consult further with the Secretary in relation to the preparation of the EIS.

ATTACHMENT 2

Environmental Planning Instruments, Policies, Guidelines & Plans	
Consultation	
	Community Consultative Committee Guidelines for State Significant Projects (DPE)
Landscape and Visual	
	NSW Wind Energy: Visual Assessment Bulletin (DPE)
Noise and Vibration	
	NSW Wind Energy: Noise Assessment Bulletin (EPA/DPE)
	NSW Noise Policy for Industry (EPA)
	Interim Construction Noise Guidelines (EPA)
	NSW Road Noise Policy (EPA)
	Assessing Vibration: A Technical Guideline (EPA)
	Technical Basis for Guidelines to Minimise Annoyance Due to Blasting Overpressure and Ground Vibration (ANZEC)
Biodiversity	
	Biodiversity Assessment Method 2017 (OEH)
	Threatened Species Assessment Guidelines – Assessment of Significance (OEH)
	Guidelines for Developments Adjoining Land and Water Managed by DECCW (OEH)
	Why Do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings (DPI)
	Policy and Guidelines for Fish Habitat Conservation and Management (DPI)
	NSW State Groundwater Dependent Ecosystem Policy (DPI Water)
	Risk Assessment Guidelines for Groundwater Dependent Ecosystems (DPI Water)
Transport	
	Guide to Traffic Generating Developments (RMS)
	Road Design Guide (RMS) & relevant Austroads Standards
	Austroads Guide to Traffic Management Part 12: Traffic Impacts of Development
Hazard/Risks	
	National Airports Safeguarding Framework Guideline D: Managing Wind Turbine Risk to Aircraft (NASAG)
	Aviation Assessments for Wind Farm Developments (Airservices Australia)
	Guidelines for limiting exposure to Time-varying Electric, Magnetic and Electromagnetic Fields (ICNIRP)
	Planning for Bushfire Protection (NSW RFS)
	Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis (DPE)
	Multi-Level Risk Assessment (DPE)
	Work Health and Safety (WHS) Act 2011
Heritage	
	Aboriginal Cultural Heritage Consultation Requirements for Proponents (OEH)
	Code of Practice for Archaeological Investigations of Objects in NSW (OEH)
	Guide to investigating, assessing and reporting on aboriginal cultural heritage in NSW (OEH)
	NSW Heritage Manual (OEH)
Soils	
	Soil and Landscape Issues in Environmental Impact Assessment (OEH)
	Landslide Risk Management Guidelines (AGS)

	Site Investigations for Urban Salinity (OEH)
Water	
	Managing Urban Stormwater: Soils & Construction (Landcom)
	Guidelines for Controlled Activities on Waterfront Land (DPI Water)
	Water Sharing Plans (DPI Water)
	Guidelines for Watercourse Crossings on Waterfront Land (DPI Water)
Waste	
	Waste Classification Guidelines (EPA)
Electromagnetic Interference	
	ICNIRP Guidelines for limiting exposure to Time-varying Electric, Magnetic and Electromagnetic Fields

ANS Strategic Demand Management
Tower Road, Melbourne Airport
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To Whom It May Concern

Airservices Aviation Assessments for Wind Farm Developments

Guidelines to manage the risk to aviation safety from wind turbine installations (Wind Farms/Wind Monitoring Towers) have been developed by the National Airports Safeguarding Advisory Group (NASAG). NASAG is comprised of high-level Commonwealth, State and Territory transport and planning officials and has been formed to develop a national land use planning regime to apply near airports and under flight paths.

The wind farm guidelines provide information to proponents and planning authorities to help identify any potential safety risks posed by wind turbine and wind monitoring installations from an aviation perspective.

Potential safety risks include (but are not limited to) impacts on flight procedures and aviation communications, navigation and surveillance (CNS) facilities which require assessment by Airservices.

To facilitate these assessments all wind farm proposals submitted to Airservices must include an Aviation Impact Statement (AIS) prepared by an aeronautical consultant in accordance with the AIS criteria set out below.

AIS must be undertaken by an aeronautical consultant with suitable knowledge and capabilities to provide a reliable and comprehensive report. All data is to be supplied in electronic form. If you are not familiar with any aeronautical consultants, you may wish to view the member directory on the Australian Airports Association (AAA) website:

https://www.airports.asn.au/public/member-directory

AIS Criteria

The AIS must provide a detailed analysis covering, as a minimum:

Airspace Procedures:

1. Obstacles
   - Co-ordinates in WGS 84 (to 0.1 second of arc or better)
   - Elevations AMSL (to 0.3 metres)
2. Drawings
   - Overlayed on topographical base not less that 1:250,000. Details of datum and level of charting accuracy to be noted.
   - Electronic format compatible with Microstation version 8i.

3. Aerodromes
    - Specify all registered/certified aerodromes that are located within 30nm (55.56km) from any obstacle referred to in (1) above.
    - Nominate all instrument approach and landing procedures at these aerodromes.
    - Confirmation that the obstacles do not penetrate Annex 14 or OLS for any aerodrome. If an obstacle does penetrate, specify the extent.
4. Air Routes
    - Nominate air routes published in ERC-L & ERC-H which are located near/over any obstacle referred to in (1) above.
    - Specify two waypoint names located on the routes which are located before and after the obstacles.
5. Airspace
    - Airspace classification – A, B, C, D, E, G etc where the obstacles are located.

Navigation/Radar:

1. Detect the presence of dead zones
2. False target analysis
3. Target positional accuracy
4. Probability of detection
5. Radar coverage implications
6. We would expect the analysis to follow the guidelines outlined in the latest version of the EUROCONTROL Guidelines on How to Assess the Potential Impact of Wind Turbines on Surveillance Sensors:

    https://www.eurocontrol.int/tags/guidelines

NOTE: Within the Eurocontrol Guidelines there are specific assumptions about the type of wind turbine for which the Guidelines are applicable (i.e. 3 blades, 30-200 m height, and horizontal rotation axis). For any deviations to the wind turbine characteristics listed within the Eurocontrol Guidelines, the proponent should justify to Airservices why these Guidelines are still applicable.

Airservices Review of AIS

Airservices will review the quality and completeness of an AIS and will undertake limited modelling and analysis to confirm the findings and recommendations of the report.

Provided the AIS is of sound quality and is complete in accordance with the above criteria, there is currently no charge for the review or limited modelling and analysis.

If the AIS is not of sound quality or is not complete in accordance with the above criteria, no modelling or analysis will be undertaken. Airservices will advise the proponent that the AIS does not meet the requirements and that the proposal cannot be assessed by Airservices.

If Airservices review of an AIS confirms impacts identified in the report (or identifies additional impacts), Airservices will advise the proponent of the impacts and the required mitigating actions (where mitigation is feasible). The proponent will also be advised that there will be charges for any mitigation actions to be undertaken by Airservices.

These charges may be advised at the time but it is likely that a detailed quote will be needed and this will only be provided on request from the proponent.

Please contact the Airport Developments Team on 03 9339 2182 or airport.developments@airservicesaustralia.com if you have any questions.

Current as at January 2017

NSW GOVERNMENT Department of Industry

OUT18/16430

Mr Anthony Ko
Senior Environmental Assessment Officer
Resource & Energy Assessments
NSW Department of Planning and Environment

Anthony.ko@planning.nsw.gov.au

Dear Mr Ko

Hills of Gold Wind Farm (SSD 9679)
Comment on the Secretary's Environmental Assessment Requirements (SEARs)

I refer to your email of 23 October 2018 to the Department of Industry (DoI) in respect to the above matter. Comment has been sought from relevant branches of Lands & Water and Department of Primary Industries (DPI), and the following requirements for the proposal are provided:

DoI – Water and Natural Resources Access Regulator (NRAR)

- The identification of an adequate and secure water supply for the life of the project. This includes confirmation that water can be sourced from an appropriately authorised and reliable supply. This is also to include an assessment of the current market depth where water entitlement is required to be purchased.
- A detailed and consolidated site water balance.
- Assessment of impacts on surface and ground water sources (both quality and quantity), related infrastructure, adjacent licensed water users, basic landholder rights, watercourses, riparian land, and groundwater dependent ecosystems, and measures proposed to reduce and mitigate these impacts.
- Proposed surface and groundwater monitoring activities and methodologies.
- Consideration of relevant legislation, policies and guidelines, including the NSW Aquifer Interference Policy (2012), the Guidelines for Controlled Activities on Waterfront Land (2018) and the relevant Water Sharing Plans (available at https://www.industry.nsw.gov.au/water).

DPI – Fisheries

- Assess the impact of the design, construction and operation of waterway crossings on access roads across the site in accordance with *NSW Fisheries (2013) Fisheries Policy and Guidelines Fish Habitat Conservation and Management (2013 update)* and *Why do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings.*

DPI Agriculture

- Develop Rehabilitation and Decommissioning/Closure Management Plans that outlines the rehabilitation objectives and strategies. This includes, but is not limited to, describing the design criteria of the final landuse and landform, indicators to be used to guide the return of the land back to agricultural production, along with the expected timeline for the rehabilitation program

- Outline monitoring and mitigation measures to be adopted for rehabilitation remedial actions.
- Any land with a cropping history or land with a capability for cropping cables/pipes to be buried at a depth >500mm to allow greater opportunity for agricultural activities to continue over the top, particularly for non-decommissioning cables/pipes once restoration is complete.
- Trenching through sodic soils during construction must include soil amendment with Gypsum at a minimum rate of 10t/ha. Actual rates to be determined following soil testing (Clay content, ECEC and EC)

DoI – Lands

- All Crown land within and affected by the project area, including Crown roads and waterways, should be identified and intended uses outlined.
- Works must not be undertaken on crown lands without the appropriate leases, licences or permits, or purchase of the affected crown land.
- Consultation with Department of Industry – Lands should be undertaken in relation to proposed works that may affect crown land, including identifications of alternatives if crown lands permits cannot be obtained.
- The EIS should address the requirements of the *Crown Lands Management Act 2016.*

Any further referrals to Department of Industry can be sent by email to landuse.enquiries@dpi.nsw.gov.au.

Yours sincerely

Alison Collaros
A/Manager, Assessment Advice
Lands and Water - Strategy and Policy
09 November 2018

Our reference: : SF18/83508; DOC18/848532
Contact: : Rebecca Scrivener – 02 6773 7000 – armidale@epa.nsw.gov.au
Date : 6 November 2018

Resource and Energy Assessments
Planning Services
Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Email: anthony.ko@planning.nsw.gov.au **BY EMAIL**

Attention: Mr Anthony Ko

Dear Mr Ko,

RE: ENVIRONMENTAL ASSESSMENT REQUIREMENTS FOR 'HILLS OF GOLD' WINDFARM (SSD 9679)

I refer to your request for the Environment Protection Authority's (EPA) requirements for the Environmental Assessment (EA) regarding the above proposal, received by EPA on 23 October 2018.

The EPA has considered the details of the proposal as provided by the Department of Planning and Environment (DPE) and has identified the information it requires to issue its general terms of approval in **Attachment A.** In summary, the EPA's key information requirements for the proposal include an adequate assessment of:

1. **Noise** - Proximity to sensitive receptors and impacts of any sources associated with the project.

2. **Air** - Dust generation and management of potential impacts on adjacent rural residences during the construction and operational phases of the project.

3. **Water** - Water management systems and the implementation of adequate erosion and sediment controls to control runoff from the Windfarm.

In carrying out the assessment, the proponent should refer to the relevant guidelines as identified in **Attachment A** and any relevant industry codes of practice and best practice management guidelines.

Based on the information provided to the EPA, the proponent will require an Environment Protection Licence to construct and operate the proposed windfarm if approval is granted. The proponent will need to make a separate application to the EPA at the completion of the assessment process. General information on licence requirements can be obtained from the EPA's Environment Line by calling 131 555 or on the EPA's website at www.epa.nsw.gov.au/licensing/licencePOEO.htm.

To assist the EPA in assessing the EA it is requested that the EA document follow the format of DPE's EIS guidelines and addresses the EPA's specific requirements outlined in the following attachments.

Email: armidale@epa.nsw.gov.au
PO Box 494 Armidale NSW 2350
85 Faulkner Street, Armidale NSW 2350
Tel: (02) 6773 7000 Fax: (02) 6772 2336
ABN 30 841 387 271
www.epa.nsw.gov.au

If the necessary information is not adequately addressed in the EA then delays in the development assessment process may occur.

The Proponent should be made aware that any commitments made in the Environmental Assessment (EA) may be formalised as approval conditions and may also be placed as formal licence conditions.

The Proponent should be made aware that, consistent with provisions under Part 9.4 of the *Protection of the Environment Operations Act 1997* ("the Act") the EPA may require the provision of a financial assurance and/or assurances. The amount and form of the assurance(s) would be determined by the EPA and required as a condition of an Environment Protection Licence ("EPL").

In addition, as a requirement of an EPL, the EPA will require the Proponent to prepare, test and implement a Pollution Incident Response Management Plan and/or Plans in accordance with Section 153A of the Act.

Please note that this response does not cover biodiversity or Aboriginal cultural heritage issues, which are the responsibility of the Office of Environment and Heritage.

The EPA requests that the proponent provide one (1) electronic copy of the EA when lodging it application with the EPA. These documents should be sent to the EPA's Armidale office by email to: armidale@epa.nsw.gov.au.

If you have any queries regarding this matter, please contact me on (02) 6773 7000 or by email to armidale@epa.nsw.gov.au.

Yours Sincerely

REBECCA SCRIVENER
Acting Head Regional Operations Unit - Armidale
Environment Protection Authority

ATTACHMENT A: Environmental Assessment Requirements – EAR (SSD 9679) – 'Hills of Gold' Windfarm.

1. Environmental impacts of the project

1.1. The EA must address the requirements of Section 45 of the Protection of the Environment Operations Act 1997 (POEO Act) by determining the extent of each impact and providing sufficient information to enable the EPA to determine appropriate conditions, limits and monitoring requirements for an Environment Protection Licence (EPL).

1.2. Impacts related to the following environmental issues need to be assessed, quantified and reported on:

- **Air Issues**: air quality including dust generation from the operation on the surrounding landscape and/or community;
- **Noise and vibration impacts** associated with blasting, and operational noise particularly machinery, turbines and plant movements;
- **Waste** including hazardous materials and radiation. Consideration needs to be given to disposal options for general waste, sanitary waste as well as hazardous materials and radiation, where relevant.
- **Water and Soils** including site water balance and sediment and erosion controls during construction and operation phases.

The Environmental Assessment (EA) should address the specific requirements outlined under each heading below and assess impacts in accordance with the relevant guidelines mentioned.

2. Licensing requirements

2.1. The development is a scheduled activity under the *Protection of the Environment Operations Act 1997* (POEO Act) and will therefore require an Environment Protection Licence (EPL) if approval is granted.

2.2. Should project approval be granted, the proponent will need to make an application to the EPA for its EPL for the proposed facility prior to undertaking any on site works. Additional information is available through the *EPA Guide to Licensing* document available from our website at: www.epa.nsw.gov.au/licensing/licenceguide.htm.

SPECIFIC ISSUES

3 Air issues

3.1. The EA must demonstrate the proposal's ability to comply with the relevant regulatory framework, specifically the *Protection of the Environment Operations (POEO) Act (1997)* and the *POEO (Clean Air) Regulation (2002)*. Particular consideration should be given to section 129 of the POEO Act concerning control of "offensive odour".

3.2. The EA must include an air quality impact assessment (AQIA).

3.3. The AQIA must be carried out in accordance with the document, *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW* (2005) http://www.epa.nsw.gov.au/resources/air/ammodelling05361.pdf.

3.4. The EA must detail emission control techniques/practices that will be employed at the site and identify how the proposed control techniques/practices will meet the requirements of the POEO Act, *POEO (Clean Air) Regulation* and associated air quality limits or guideline criteria.

4. Noise and Vibration

The EA must assess the following noise and vibration aspects of the proposed development

4.1. Construction noise associated with the proposed development should be assessed using the *Interim Construction Noise Guideline (*DECC, 2009). These are available at:https://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/interim-construction-noise-guideline

4.2. Vibration from all activities (including construction and operation) to be undertaken on the premises should be assessed using the guidelines contained in the *Assessing Vibration: a technical guideline* (DEC, 2006). These are available at: https://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/assessing-vibration

4.3. If blasting is required for any reasons during the construction or operational stage of the proposed development, blast impacts should be demonstrated to be capable of complying with the guidelines contained in *Australian and New Zealand Environment Council – Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration* (ANZEC, 1990).These are available at: https://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/interim-construction-noise-guideline

Industry

4.4. Operational noise from all industrial activities (including private haul roads) to be undertaken on the premises should be assessed using the guidelines contained in the *NSW Noise Policy for Industry* (EPA, 2017). https://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/noise-policy-for-industry-(2017)

Wind Farms

4.5. Operational noise activities from Wind Farms should be accessed against the South Australian EPA's *Wind Farm- Environmental Noise Guidelines* (2009) and the DPE's *Wind Energy: Noise Assessment Bulletin* (2016), available at: www.planning.nsw.gov.au/~/media/Files/DPE/Bulletins-and-Community-Updates/wind-energy-noise-assessment-bulletin-2016-12.ashx

Roads

4.6. Noise on public roads from increased road traffic generated by land use developments should be assessed using the guidelines contained in the *NSW Road Noise Policy* and associated application notes (EPA, 2011).https://www.epa.nsw.gov.au/your-environment/noise/transport-noise

5 Waste, chemicals and hazardous materials and radiation

5.1. The EA must assess all aspects of waste generation, management and disposal associated with the proposed development.

5.2. The EA must demonstrate compliance with all regulatory requirements outlined in the POEO Act and associated waste regulations.

5.3. The EA must identify, characterise and classify the following in accordance with the EPA's *Waste Classification Guidelines (2014)* and associated addendums:

(i) all waste that will be generated onsite through excavation, demolition or construction activities, including proposed quantities of the waste;
(ii) all waste that is proposed to be disposed of to an offsite location, including proposed quantities of the waste and the disposal locations for the waste. This includes waste that is intended for re-use or recycling.

Note: The EPA's W*aste Classification Guidelines (2014)* and associated addendums are available at: https://www.epa.nsw.gov.au/your-environment/waste/classifying-waste

5.4. The EA must outline contingency plans for any event that may result in environmental harm, such as excessive stockpiling of material, or dirty water volumes exceeding the storage capacity available on-site.

5.5. The EA must demonstrate that appropriate spill containment will be provided for storage, filling and loading of all fuels and other chemicals to be used on site, in accordance with the relevant Australian Standard.

6 Water

6.1. The EA must demonstrate how the proposed development will meet the requirements of section 120 of the POEO Act.

6.2. The EA must include a water balance for the development including water requirements (quantity, quality and source(s)) and proposed storm and wastewater disposal, including type, volumes, proposed treatment and management methods and re-use options.

6.3. If the proposed development intends to discharge waters to the environment, the EA must demonstrate how the discharge(s) will be managed in terms of water quantity, quality and frequency of discharge and include an impact assessment of the discharge on the receiving environment. This should include:

- Description of the proposal including position of any intakes and discharges, volumes, water quality and frequency of all water discharges.
- Description of the receiving waters including upstream and downstream water quality as well as any other water users.
- Demonstration that all practical options to avoid discharge have been implemented and environmental impact minimised where discharge is necessary.

6.4. The EA must refer to Water Quality Objectives for the receiving waters and indicators and associated trigger values or criteria for the identified environmental values of the receiving environment. This information should be sourced from the ANZECC (2000) Guidelines for Fresh and Marine Water Quality (http://www.environment.gov.au/water/policy-programs/nwqms/).

6.5. The EA must describe how stormwater will be managed in all phases of the project, including details of how stormwater and runoff will be managed to minimise pollution. Information should include measures to be implemented to minimise erosion, leachate and sediment mobilisation at the site. The EA should consider the guidelines *Managing urban stormwater: soils and construction,* vol. 1 (Landcom 2004) and vol. 2 (A. Installation of services; C. Unsealed roads; D. Main Roads; E. Mines and quarries) (DECC, 2008).

6.6. The EA must describe any water quality monitoring programs to be carried out at the project site. Water quality monitoring should be undertaken in accordance with the *Approved Methods for the Sampling and Analysis of Water Pollutant in NSW* (2004) which is available at: http://www.epa.nsw.gov.au/resources/legislation/approvedmethods-water.pdf.

7 Soils

7.1. The EA should include:
An assessment of the potential impacts on soil and land resources should be undertaken, being guided by the Soil and Landscape Issues in Environmental Impact Assessment (DLWC 2000). The nature and extent of any significant impacts should be identified. Particular attention should be given to:

a. Soil erosion and sediment transport- in accordance with *Managing urban stormwater: Soils and construction,* vol. 1 (Landcom 20) and vol. 2 (A. Installation of services; B Waste landfills; C Unsealed Roads; D Main Roles) (DECC2008).
b. Mass movement (landslides) – in accordance with *Landslide risk management guidelines* presented in the Australian Geomechanics Society (2007).
c. Urban and regional salinity – guidance given in the Local Government Salinity Initiative booklets which includes *Site Investigation for Urban Salinity* (DLWC, 2002).

7.2. A description of the mitigation and management options that will be used to prevent, control, abate or minimise identified soil and land resource impacts associated with the project. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented. Where required, add any specific assessment requirements relevant to the project.

DOC18/743312

Mr Anthony Ko
Senior Environmental Assessment Officer
Resource & Energy Assessments
Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001
Anthony.ko@planning.nsw.gov.au

Dear Mr Ko

Hills of Gold 'Nundle' Wind Farm

I refer to your email dated 23 October 2018 seeking input into the Department of Planning and Environment Secretary's Environmental Assessment Requirements (SEARs) for the preparation of an Environmental Impact Assessment (EIS) for the Hills of Gold, 'Nundle' Wind Farm.

Due to the prevalence of native woodland and forest on and directly adjacent to the project site (including national park and state forest), the Office of Environment and Heritage (OEH) has concerns regarding potential impacts of the proposal on fauna, particularly birds and bats. These include numerous threatened fauna species known to be present in the area. As such, we request that OEH be consulted on fauna survey methodology prior to surveys commencing.

OEH has considered your request and provides our standard SEARs for the proposed development in **Attachment A**. Additional SEARs specific to the proposal are provided in **Attachment B**, and a list of guidance material is contained in **Attachment C**.

OEH recommends the EIS needs to appropriately address the following:

1. Biodiversity and offsetting
2. Aboriginal cultural heritage
3. Historic heritage
4. Water and soils
5. Flooding
6. Impact to NPWS estate

Please note that for projects **not** defined as pending or interim planning applications under Part 7 or the *Biodiversity Conservation (Savings and Transitional) Regulation 2017* the Biodiversity Assessment Methodology (BAM) **must** be used to assess impacts to biodiversity in accordance with the *Biodiversity Conservation Act 2016* (BC Act**). For this project the BAM must be used.**

If you have any questions regarding this matter please contact Liz Mazzer, Conservation Planning Officer on 02 6883 5325 or email liz.mazzer@environment.nsw.gov.au.

Yours sincerely

PETER CHRISTIE
Director, North West
Conservation and Regional Delivery

29 October 2018

Contact officer: LIZ MAZZER
6883 53325

Attachment A - Environmental Assessment Requirements

Attachment B - Guidance Material

ATTACHMENT A

Standard Environmental Assessment Requirements

Biodiversity

1. Biodiversity impacts related to the proposed development are to be assessed in accordance with Section 7.9 of the Biodiversity Conservation Act 2017 the Biodiversity Assessment Method and documented in a Biodiversity Development Assessment Report (BDAR). The BDAR must include information in the form detailed in the *Biodiversity Conservation Act 2016* (s6.12), *Biodiversity Conservation Regulation 2017* (s6.8) and Biodiversity Assessment Method, unless OEH and DPE determine that the proposed development is not likely to have any significant impacts on biodiversity values.
2. The BDAR must document the application of the avoid, minimise and offset framework including assessing all direct, indirect and prescribed impacts in accordance with the Biodiversity Assessment Method.
3. The BDAR must include details of the measures proposed to address the offset obligation as follows;
   - The total number and classes of biodiversity credits required to be retired for the development/project;
   - The number and classes of like-for-like biodiversity credits proposed to be retired;
   - The number and classes of biodiversity credits proposed to be retired in accordance with the variation rules;
   - Any proposal to fund a biodiversity conservation action;
   - Any proposal to conduct ecological rehabilitation (if a mining project);
   - Any proposal to make a payment to the Biodiversity Conservation Fund.

   If seeking approval to use the variation rules, the BDAR must contain details of the reasonable steps that have been taken to obtain requisite like-for-like biodiversity credits.
4. The BDAR must be submitted with all spatial data associated with the survey and assessment as per Appendix 11 of the BAM.
5. The BDAR must be prepared by a person accredited in accordance with the Accreditation Scheme for the Application of the Biodiversity Assessment Method Order 2017 under s6.10 of the *Biodiversity Conservation Act 2016*.

Aboriginal cultural heritage

6. The EIS must identify and describe the Aboriginal cultural heritage values that exist across the whole area that will be affected by the development and document these in an Aboriginal Cultural Heritage Assessment Report (ACHAR). This may include the need for surface survey and test excavation. The identification of cultural heritage values must be conducted in accordance with the Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW (OEH 2010), and guided by the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (DECCW, 2011) and consultation with OEH regional branch officers.
7. Consultation with Aboriginal people must be undertaken and documented in accordance with the Aboriginal cultural heritage consultation requirements for proponents 2010 *(DECCW).* The significance of cultural heritage values for Aboriginal people who have a cultural association with the land must be documented in the ACHAR.

8. Impacts on Aboriginal cultural heritage values are to be assessed and documented in the ACHAR. The ACHAR must demonstrate attempts to avoid impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the ACHAR must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to OEH.

Historic heritage

9. The EIS must provide a heritage assessment including but not limited to an assessment of impacts to *State and local heritage* including conservation areas, natural heritage areas, places of Aboriginal heritage value, buildings, works, relics, gardens, landscapes, views, trees should be assessed. Where impacts to State or locally significant heritage items are identified, the assessment shall:
   a. outline the proposed mitigation and management measures (including measures to avoid significant impacts and an evaluation of the effectiveness of the mitigation measures) generally consistent with the NSW Heritage Manual (1996),
   b. be undertaken by a suitably qualified heritage consultant(s) (note: where archaeological excavations are proposed the relevant consultant must meet the NSW Heritage Council's Excavation Director criteria),
   c. include a statement of heritage impact for all heritage items (including significance assessment),
   d. consider impacts including, but not limited to, vibration, demolition, archaeological disturbance, altered historical arrangements and access, landscape and vistas, and architectural noise treatment (as relevant), and
   e. where potential archaeological impacts have been identified develop an appropriate archaeological assessment methodology, including research design, to guide physical archaeological test excavations (terrestrial and maritime as relevant) and include the results of these test excavations.

Water and soils

10. The EIS must map the following features relevant to water and soils including:
    a. Acid sulfate soils (Class 1, 2, 3 or 4 on the Acid Sulfate Soil Planning Map).
    b. Rivers, streams, wetlands, estuaries (as described in s4.2 of the Biodiversity Assessment Method).
    c. Wetlands as described in s4.2 of the Biodiversity Assessment Method.
    d. Groundwater.
    e. Groundwater dependent ecosystems.
    f. Proposed intake and discharge locations.

11. The EIS must describe background conditions for any water resource likely to be affected by the project, including:
    a. Existing surface and groundwater.
    b. Hydrology, including volume, frequency and quality of discharges at proposed intake and discharge locations.
    c. Water Quality Objectives (as endorsed by the NSW Government http://www.environment.nsw.gov.au/ieo/index.htm) including groundwater as appropriate that represent the community's uses and values for the receiving waters.

d. Indicators and trigger values/criteria for the environmental values identified at (c) in accordance with the ANZECC (2000) Guidelines for Fresh and Marine Water Quality and/or local objectives, criteria or targets endorsed by the NSW Government.
e. Risk-based Framework for Considering Waterway Health Outcomes in Strategic Land-use Planning Decisions http://www.environment.nsw.gov.au/research-and-publications/publications-search/risk-based-framework-for-considering-waterway-health-outcomes-in-strategic-land-use-planning

12. The EIS must assess the impacts of the development on water quality, including:
    a. The nature and degree of impact on receiving waters for both surface and groundwater, demonstrating how the project protects the Water Quality Objectives where they are currently being achieved, and contributes towards achievement of the Water Quality Objectives over time where they are currently not being achieved. This should include an assessment of the mitigating effects of proposed stormwater and wastewater management during and after construction.
    b. Identification of proposed monitoring of water quality.

13. The EIS must assess the impact of the project on hydrology, including:
    a. Water balance including quantity, quality and source.
    b. Effects to downstream rivers, wetlands, estuaries, marine waters and floodplain areas.
    c. Effects to downstream water-dependent fauna and flora including groundwater dependent ecosystems.
    d. Impacts to natural processes and functions within rivers, wetlands, estuaries and floodplains that affect river system and landscape health such as nutrient flow, aquatic connectivity and access to habitat for spawning and refuge (e.g. river benches).
    e. Changes to environmental water availability, both regulated/licensed and unregulated/rules-based sources of such water.
    f. Mitigating effects of proposed stormwater and wastewater management during and after construction on hydrological attributes such as volumes, flow rates, management methods and re-use options.
    g. Identification of proposed monitoring of hydrological attributes.

Flooding

14. The EIS must map the following features relevant to flooding as described in the Floodplain Development Manual 2005 (NSW Government 2005) including:
    a. Flood prone land.
    b. Flood planning area, the area below the flood planning level.
    c. Hydraulic categorisation (floodways and flood storage areas).
    d. Flood hazard

15. The EIS must describe flood assessment and modelling undertaken in determining the design flood levels for events, including a minimum of the 5% Annual Exceedance Probability (AEP), 1% AEP, flood levels and the probable maximum flood, or an equivalent extreme event.

16. The EIS must model the effect of the proposed development (including fill) on the flood behaviour under the following scenarios:

a. Current flood behaviour for a range of design events as identified in 14 above. This includes the 0.5% and 0.2% AEP year flood events as proxies for assessing sensitivity to an increase in rainfall intensity of flood producing rainfall events due to climate change.

17. Modelling in the EIS must consider and document:
18. Existing council flood studies in the area and examine consistency to the flood behaviour documented in these studies.
19. The impact on existing flood behaviour for a full range of flood events including up to the probable maximum flood, or an equivalent extreme flood.
20. Impacts of the development on flood behaviour resulting in detrimental changes in potential flood affection of other developments or land. This may include redirection of flow, flow velocities, flood levels, hazard categories and hydraulic categories.
21. Relevant provisions of the NSW Floodplain Development Manual 2005.
22. The EIS must assess the impacts on the proposed project on flood behaviour, including:
    a. Whether there will be detrimental increases in the potential flood affectation of other properties, assets and infrastructure.
    b. Consistency with Council floodplain risk management plans.
    c. Consistency with any Rural Floodplain Management Plans.
    d. Compatibility with the flood hazard of the land.
    e. Compatibility with the hydraulic functions of flow conveyance in floodways and storage in flood storage areas of the land.
    f. Whether there will be adverse effect to beneficial inundation of the floodplain environment, on, adjacent to or downstream of the site.
    g. Whether there will be direct or indirect increase in erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses.
    h. Any impacts the development may have upon existing community emergency management arrangements for flooding. These matters are to be discussed with the NSW SES and Council.
    i. Whether the proposal incorporates specific measures to manage risk to life from flood. These matters are to be discussed with the NSW SES and Council.
    j. Emergency management, evacuation and access, and contingency measures for the development considering the full range or flood risk (based upon the probable maximum flood or an equivalent extreme flood event). These matters are to be discussed with and have the support of Council and the NSW SES.
    k. Any impacts the development may have on the social and economic costs to the community as consequence of flooding.

ATTACHMENT B

Specific Environmental Assessment Requirements

1. Fauna survey is to be conducted in native vegetation adjacent to the development site, including Ben Halls Gap Nature Reserve and Ben Halls Gap State Forest.
2. Assessment of impact is to include all components of the proposal, including any road/track widening to enable transport of turbines to the site.
3. Hollow-bearing trees are to be quantified on the development site and in adjacent native vegetation.
4. A candidate list of species that may use the development site as a flyway or migration route must be included in the EIS, including: (a) resident threatened aerial species (b) resident raptor species (c) nomadic and migratory species that are likely to fly over the project area.
5. Bird and bat flight paths are to be identified and assessed. Maps of habitual flight paths for nomadic and migratory species likely to fly over the site and maps of likely habitat for threatened aerial species resident on the site are to be included in the EIS.
6. The cumulative effect of wind farms in the broader area should be considered in relation to migratory birds.
7. Copies of all raw data sheets for flora and fauna studies are to be included in the EIS or provided to OEH.
8. ArcGIS compatible spatial data is to be provided including (but not limited to) vegetation mapping, plot locations, transect locations and the locations of turbines and other infrastructure.

ATTACHMENT C

Guidance Material

Title	Web address
Relevant Legislation	
Biodiversity Conservation Act 2016	https://www.legislation.nsw.gov.au/#/view/act/2016/63/full
Coastal Management Act 2016	https://www.legislation.nsw.gov.au/#/view/act/2016/20/full
Commonwealth Environment Protection and Biodiversity Conservation Act 1999	http://www.austlii.edu.au/au/legis/cth/consol_act/epabca1999588/
Environmental Planning and Assessment Act 1979	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+203+1979+cd+0+N
Fisheries Management Act 1994	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+38+1994+cd+0+N
Marine Parks Act 1997	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+64+1997+cd+0+N
National Parks and Wildlife Act 1974	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+80+1974+cd+0+N
Protection of the Environment Operations Act 1997	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+156+1997+cd+0+N
Water Management Act 2000	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+92+2000+cd+0+N
Wilderness Act 1987	http://www.legislation.nsw.gov.au/viewtop/inforce/act+196+1987+FIRST+0+N
Biodiversity	
Biodiversity Assessment Method (OEH, 2017)	https://biodiversity-ss.s3.amazonaws.com/Uploads/1494298079/Biodiversity-Assessment-Method-May-2017.pdf
Biodiversity Development Assessment Report	https://www.legislation.nsw.gov.au/#/view/act/2016/63/part6/div3/sec6.12
Guidance and Criteria to assist a decision maker to determine a serious and irreversible impact (OEH, 2017)	https://biodiversity-ss.s3.amazonaws.com/Uploads/1494298198/Serious-and-Irreversible-Impact-Guidance.PDF
Accreditation Scheme for Application of the Biodiversity Assessment Method Order 2017	https://www.legislation.nsw.gov.au/regulations/2017-471.pdf
Biodiversity conservation actions	www.environment.nsw.gov.au/resources/bcact/ancillary-rules-biodiversity-actions-170496.pdf
Reasonable steps to seek like-for-like biodiversity credits for the purpose of applying the variation rules	www.environment.nsw.gov.au/resources/bcact/ancillary-rules-reasonable-steps-170498.pdf
OEH Threatened Species Website	www.environment.nsw.gov.au/threatenedspecies/
NSW BioNet (Atlas of NSW Wildlife)	www.bionet.nsw.gov.au/
OEH guidelines for carrying out a survey	https://www.environment.nsw.gov.au/surveys/GuidelinesForCarryingOutASurvey.htm
NSW guide to surveying threatened plants (OEH 2016)	www.environment.nsw.gov.au/resources/threatenedspecies/160129-threatened-plants-survey-guide.pdf

Title	Web address
OEH threatened species survey and assessment guideline information	www.environment.nsw.gov.au/threatenedspecies/surveyassessmentgdlns.htm
BioNet Vegetation Classification - NSW Plant Community Type (PCT) database	www.environment.nsw.gov.au/research/Vegetationinformationsystem.htm
OEH Data Portal (access to online spatial data)	http://data.environment.nsw.gov.au/
Fisheries NSW policies and guidelines	http://www.dpi.nsw.gov.au/fisheries/habitat/publications/policies,-guidelines-and-manuals/fish-habitat-conservation
List of national parks	http://www.environment.nsw.gov.au/NationalParks/parksearchatoz.aspx
Revocation, recategorisation and road adjustment policy (OEH, 2012)	http://www.environment.nsw.gov.au/policies/RevocationOfLandPolicy.htm
Guidelines for developments adjoining land and water managed by the Department of Environment, Climate Change and Water (DECCW, 2010)	http://www.environment.nsw.gov.au/protectedareas/developmntadjoiningdecc.htm
Heritage	
The Burra Charter (The Australia ICOMOS charter for places of cultural significance)	http://australia.icomos.org/wp-content/uploads/The-Burra-Charter-2013-Adopted-31.10.2013.pdf
Statements of Heritage Impact 2002 (HO & DUAP)	http://www.environment.nsw.gov.au/resources/heritagebranch/heritage/hmstatementsofhi.pdf
NSW Heritage Manual (DUAP) (scroll through alphabetical list to 'N')	http://www.environment.nsw.gov.au/Heritage/publications/
Aboriginal Cultural Heritage	
Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW, 2010)	http://www.environment.nsw.gov.au/resources/cultureheritage/commconsultation/09781ACHconsultreq.pdf
Code of Practice for the Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW, 2010)	http://www.environment.nsw.gov.au/resources/cultureheritage/10783FinalArchCoP.pdf
Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW (OEH 2011)	http://www.environment.nsw.gov.au/resources/cultureheritage/20110263ACHguide.pdf
Aboriginal Site Recording Form	http://www.environment.nsw.gov.au/resources/parks/SiteCardMainV1_1.pdf
Aboriginal Site Impact Recording Form	http://www.environment.nsw.gov.au/resources/cultureheritage/120558asirf.pdf
Aboriginal Heritage Information Management System (AHIMS) Registrar	http://www.environment.nsw.gov.au/contact/AHIMSRegistrar.htm
Care Agreement Application form	http://www.environment.nsw.gov.au/resources/cultureheritage/20110914TransferObject.pdf

Water and Soils	
Acid sulphate soils	
Acid Sulfate Soils Planning Maps via Data.NSW	http://data.nsw.gov.au/data/
Acid Sulfate Soils Manual (Stone et al. 1998)	http://www.environment.nsw.gov.au/resources/epa/Acid-Sulfate-Manual-1998.pdf
Acid Sulfate Soils Laboratory Methods Guidelines (Ahern et al. 2004)	http://www.environment.nsw.gov.au/resources/soils/acid-sulfate-soils-laboratory-methods-guidelines.pdf This replaces Chapter 4 of the Acid Sulfate Soils Manual above.
Flooding	
Floodplain development manual	http://www.environment.nsw.gov.au/floodplains/manual.htm
NSW Climate Impact Profile	http://climatechange.environment.nsw.gov.au/
Climate Change Impacts and Risk Management	Climate Change Impacts and Risk Management: A Guide for Business and Government, AGIC Guidelines for Climate Change Adaptation
Water	
Water Quality Objectives	http://www.environment.nsw.gov.au/ieo/index.htm
ANZECC (2000) Guidelines for Fresh and Marine Water Quality	www.environment.gov.au/water/publications/quality/australian-and-new-zealand-guidelines-fresh-marine-water-quality-volume-1
Applying Goals for Ambient Water Quality Guidance for Operations Officers – Mixing Zones	http://deccnet/water/resources/AWQGuidance7.pdf
Approved Methods for the Sampling and Analysis of Water Pollutant in NSW (2004)	http://www.environment.nsw.gov.au/resources/legislation/approvedmethods-water.pdf

NSW RURAL FIRE SERVICE

The Secretary
NSW Planning & Environment
GPO Box 39
SYDNEY NSW 2001

Your Ref: SSD 9679
Our Ref: D18/7808
DA18102515764 AB

ATTENTION: Anthony Ko **1 November 2018**

Dear Mr Ko

Agency Comment - SEARs Significant Development Application - Hills Of Gold Wind Farm, Morrisons Gap Road Hanging Rock Tamworth Regional Council and Upper Hunter Shire LGA's

I refer to your letter dated 23 October 2018 seeking NSW Rural Fire Service (NSW RFS) input to the Secretary's environmental assessment requirements for the above State Significant Development proposal.

The NSW RFS notes that the land is mapped bush fire prone by Council's.

The NSW RFS has reviewed the submitted documentation and the draft SEARs and supports the inclusion of a requirement for the preparation of a bush fire hazard assessment as outlined in Key Issues - Hazards of the draft SEARs. The bush fire hazard assessment shall include flame length modelling for all turbines, ancillary buildings, internal roads and transmission lines and identify required vegetation management practices to achieve asset protection zone standard that will prevent flame contact on the proposed infrastructure components.

For any queries regarding this correspondence please contact Alan Bawden on 6691 0400.

Yours sincerely,

John Ball
Manager – Planning and Environment Services North
The RFS has made getting information easier. For general information on 'Planning for Bush Fire Protection, 2006', visit the RFS web page at www.rfs.nsw.gov.au and search under 'Planning for Bush Fire Protection, 2006'.

Postal address
Records
NSW Rural Fire Service
Locked Bag 17
GRANVILLE NSW 2142

Street address
NSW Rural Fire Service
Planning and Environment Services (North)
Suite 1, 129 West High Street
COFFS HARBOUR NSW 2450

T (02) 6691 0400
F (02) 6691 0499
www.rfs.nsw.gov.au
Email: pes@rfs.nsw.gov.au

File No: NTH18/00147
Your Ref: SSD 9679

The Manager
Department of Planning and Environment
Resource & Energy Assessments
GPO Box 39
SYDNEY NSW 2001

Attention: Anthony Ko

Dear Anthony,

Secretary's Environmental Assessment Requirements for SSD 9679 – Hills of Gold Wind Farm, Hanging Rock

I refer to your email of 23 October 2018 requesting input to the Secretary's Environmental Assessment Requirements (SEARs) for the abovementioned state significant development.

Roles and Responsibilities

The key interests for Roads and Maritime Services are the safety and efficiency of the road network, traffic management, the integrity of infrastructure and the integration of land use and transport.

New England Highway [HW9] is a classified (State) road (a highway) under the *Roads Act 1993* (Roads Act). Liverpool Plains Shire Council and Tamworth Regional Council are the roads authorities for all public roads (other than freeways or Crown roads) in the respective local government areas pursuant to Section 7 of the Roads Act. Roads and Maritime is the roads authority for freeways and can exercise roads authority functions for classified roads in accordance with the Roads Act. Any proposed works on a classified (State) road will require the consent of Roads and Maritime. Consent is provided under the terms of a Works Authorisation Deed (WAD).

Lindsay's Gap Road [MR106] and Nundle Road [MR105] are classified (Regional) roads. Roads and Maritime's concurrence is required prior to Council's approval to works on these roads in accordance with S138 of the Roads Act.

Roads and Maritime Response

Roads and Maritime requests that the Environmental Assessment be supported by a Traffic Impact Assessment (TIA) and Construction Traffic Access Management Plan (CTAMP) prepared by a suitably qualified person in accordance with the Austroads Guide to Traffic Management Part 12, Roads and Maritimes Supplements and RTA Guide to Traffic Generating Developments. The TIA and CTAMP should to address the following;

- The total impact of existing and proposed development on the road network with consideration for construction, operation and decommission of the wind farm.
- The volume and distribution of traffic generated by the proposed development.
- Sight distances at key intersections, consideration of turning lane warrants and details of proposed intersection treatments on the road network and at site access locations based on

Austroads Part 6 Intersections, Interchanges and Crossings and Guide to Road Design Part 4A Un-signalised and Signalised Intersections.

- Capacity analysis using SIDRA or similar, if required, to identify Level of Service (LOS) at key intersections with the classified road network.
- An assessment of the proposed transport route, including swept paths of the largest vehicle requiring access from port to site. Current advice indicates the largest blade that can be conventionally transported along the New England Highway is 65m.
- Impacts on rail corridors along the transport routes and details of proposed interface treatments.
- Details of existing and proposed site access, servicing and parking arrangements.
- Impact on public transport (public and school bus routes) and consideration for alternative transport modes such as walking and cycling.
- Impacts of road traffic noise and dust generated along the primary transport routes.
- Preparation of a Construction Traffic Access Management Plan (CTAMP) to identify and manage the impact of construction, operation and decommission traffic on the safety and efficiency of the road network. The CTAMP may include temporary measures such as Traffic Control Plans (TCPs) to address construction and decommission related traffic at specific locations.

  The CTAMP should include a Driver Code of Conduct which may include, but not be limited to, the following:

  - A map of the primary transport routes highlighting critical locations.
  - Consideration of coordination of construction traffic with seasonal agricultural activities.
  - Safety initiatives for haulage through residential areas, school zones and along school bus routes.
  - An induction process for vehicle operators and regular toolbox meetings.
  - A complaint resolution and disciplinary procedure.
  - Any community consultation measures for peak construction periods.

If road works are identified on a classified (State) road the Developer would be required to enter into a Works Authorisation Deed (WAD) with Roads and Maritime. Current Austroads Guidelines, Australian Standards and Roads and Maritime Supplements are to be adopted. The developer would be responsible for all costs associated with the works and administration for the WAD. Further information on undertaking private developments adjacent to classified roads can be accessed at:

http://www.rms.nsw.gov.au/projects/planning-principles/index.html

Advice to the Consent Authority

Roads and Maritime highlights the Consent Authority is responsible for considering the environmental impacts of any road works which are ancillary to the development. This includes any road works which form part of the proposal and/or any road works deemed necessary to include as requirements in the conditions of development consent.

If you have any further enquiries regarding the above comments please contact Liz Smith, Manager Land Use Assessment on (02) 6640 1362 or via email at development.northern@rms.nsw.gov.au

Yours faithfully,

for Monica Sirol
Network & Safety Manager, Northern Region

NSW Department of Planning and Infrastructure
PO BOX 550
TAMWORTH NSW 2340

Dear Sir/Madam,

SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS – PROPOSED HILLS OF GOLD WIND FARM – MORRISONS GAP ROAD, HANGING ROCK

I refer to your correspondence received 23 October 2018 requesting Council's input into the Secretary's Environmental Assessment Requirements to the subject proposal and to nominate any issues to be addressed in the Environmental Impact Assessment (EIS). In this regard, the following information is provided:

Public Exhibition

- The public notice should be placed in the Northern Daily Leader and Nundle community newsletters.

- The EIS should be displayed for public perusal at Tamworth Regional Council (both Ray Walsh House in Tamworth and Nundle branch office).

- Public notification should include the provision of all documentation on USBs or CDs to any person who requests a copy, at the locations where the EIS is displayed.

General

- The application should detail any public consultation, including any issues identified by the public and the manner in which the issues have been addressed prior to the submission of the application.

- The construction period is approximately 24 months. Consideration must be given to the likely impact vehicles relating to the construction period will have on the Nundle village, Hanging Rock and any other affected communities which are on the proposed haulage route.

Traffic & Access

- A Traffic Impact Assessment (TIA) report, including traffic movements into and out of the site (during construction and ongoing operations phases), is to be provided as part of the EIS. The report needs to address vehicle movements (including trucks, cars etc.) both in and out of the site on a 24 hours/day, 7 days a week basis and should also consider existing, proposed and predictive (when running at full capacity) traffic volumes.

- Proposed haulage routes to and from the site are also to be clearly identified in the report. The Traffic Impact Assessment report should address the relevant RMS, AUSTROADS, and Council guidelines/standards.

- The identified haulage routes (Head of the Peel, Lindsay Gap Road, Old Wallabadah Road) are also used for existing logging operations. Coordinating movements up and down the road between Nundle and Hanging Rock with the logging companies who currently operate in this area and have multiple truck movements each day must occur. Blocking the range for an hour or more each day will have an effect the logging operations.

- Consideration must also be given to the impact any road and bridge upgrade works will have on existing logging industries.

- The Proponent shall consult with Tamworth Regional Council as the local roads authority to determine the adequacy of existing roads, bridges and culverts. The length, width and weight of trucks transporting wind turbine components are required.

- If wind turbine components are to be transported vertically to navigate certain sections of the road between Nundle and Hanging Rock, this may necessitate tree removal/trimming. Furthermore, altering the load configuration will add to the time to navigate this section of road.

Biodiversity

- Consideration should be given to the proximity of the site being directly adjacent to the Ben Halls Gap National Park. Details regarding any vegetation retention/removal are to be provided and a full biodiversity assessment must address how this proposal impacts flora and fauna communities and natural watercourses.

Nearby Residential Receptors

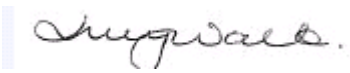
- Consideration must be given to all existing adjoining and nearby properties most likely to be affected by noise, traffic, visual impact and dust. It is noted that a Development Application for a dwelling has recently been lodged with Tamworth Regional Council on Lots 46 and 47 DP 752722 Morrisons Gap Road, Hanging Rock (DA2019-0097). This application has not yet been determined.

Voluntary Planning Agreement (VPA)

- There should be further discussion between Council, the Proponent and the Department on the a VPA for the community fund. The VPA shall take into consideration all neighbouring properties and nearby communities.

Should you require any clarification in relation to the matters raised above, please contact Coordinator, Development Assessment, Lucy Walker on the number below.

Yours faithfully,



Lucy Walker,
Coordinator Development Assessment

Contact: (02) 6767 5530 or l.walker@tamworth.nsw.gov.au

Reference: *SF8621*

15 November 2018

Contact Name: Mr Mathew Pringle
Contact No: (02) 6540 1139
Our Reference: OUT-12644/18

31 October 2018

Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Attention: Anthony Ko

Dear Sir/Madam,

Hills of Gold Wind Farm (SSD 9679) - Secretary's Environmental Assessment Requirements (SEARs)

Thank you for the opportunity to comment on the Secretary's Environmental Assessment Requirements (SEARs) for the Hills of Gold Wind Farm (SSD 9679) proposed at Hanging Rock.

It is understood that the proposal involves the construction and operation of a wind farm including:

- Up to 97 turbines with a maximum tip height of 220 m;
- Ancillary infrastructure including switchyards, substations, battery storage;
- Connection to the 330 kV Liddell to Tamworth transmission line via a 23 km overhead powerline.

Council has reviewed the draft SEARs in relation to the proposed development and is satisfied that all relevant environmental issues have been included.

It would be appreciated if Council could be kept updated on the progress of the proposal and we would welcome further consultation with the proponent.

Should you have any questions, please contact Council's Director Environmental & Community Services, Mathew Pringle on 6540 1139.

Yours faithfully

Mathew Pringle
DIRECTOR ENVIRONMENTAL & COMMUNITY SERVICES

Commonwealth Department of Agriculture, Water and the Environment assessment requirements

Guidelines for preparing assessment documentation relevant to the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) for proposals being assessed under an Accredited NSW Assessment Process

Hills of Gold Wind Farm (EPBC 2019/8535) (SSD 9679)

Introduction

1. On 23 December 2019, a delegate of the Federal Minister for the Department of Agriculture, Water and the Environment (formerly Department of Environment and Energy) determined that the Hills of Gold Wind Farm Project was a controlled action under section 75 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The EPBC Act controlling provisions for the proposed action are:
    i. listed threatened species and communities (sections 18 and 18A)
    ii. listed migratory species (sections 20 and 20A)

2. The proposed action will be assessed in accordance with the *NSW Bilateral Agreement relating to environmental assessment 2015* and as such, is required to be assessed in the manner specified in Schedule 1 to that Agreement including, addressing the matters outlined in Schedule 4 of the *Environment Protection and Biodiversity Conservation Regulations 2000* (EPBC Regulations).

3. The proponent must undertake an assessment of all protected matters that may be impacted by the development under the controlling provision identified in paragraph 1. The Commonwealth Department of Agriculture, Water and the Environment considers that the proposed action is likely to have a significant impact on threatened species and communities and migratory species listed in **Appendix A**.

4. The proponent must consider each of the protected matters under the triggered controlling provisions that may be impacted by the action. Note that this may not be a complete list and it is the responsibility of the proponent to undertake an analysis of the significance of the relevant impacts and ensure that all protected matters that are likely to be significantly impacted are assessed for the Commonwealth Minister's consideration.

General Requirements

Relevant Regulations

5. The Environmental Impact Statement (EIS) must address all matters outlined in Schedule 4 of the EPBC Regulations and all the matters outlined below in relation to the controlling provisions.

Project Description

6. The title of the action, background to the action of the action and current status.

7. The precise location and description of all works to be undertaken (including associated offsite works and infrastructure), structures to be built or elements of the action that may have impacts on Matters of National Environmental Significance (MNES).

8. How the action relates to any other actions that have been, or are being taken in the region affected by the action.

9. How the works are to be undertaken and design parameters for those aspects of the structures or elements of the action that may have relevant impacts on MNES.

Impacts

10. The EIS must include an assessment of the relevant impacts of the action on the matters protected by the controlling provisions, including:
    i. a description and detailed assessment of the nature and extent of the likely direct, indirect and consequential impacts, including short term and long term relevant impacts;

    ii. a statement whether any relevant impacts are likely to be unknown, unpredictable or irreversible;

    iii. analysis of the significance of the relevant impacts; and

    iv. any technical data and other information used or needed to make a detailed assessment of the relevant impacts.

Avoidance, mitigation and offsetting

11. For each of the relevant matters protected that are likely to be significantly impacted by the action, the EIS must provide information on proposed avoidance and mitigation measures to manage the relevant impacts of the action including:
    i. a description, and an assessment of the expected or predicted effectiveness of the mitigation measures,

    ii. any statutory policy basis for the mitigation measures;

    iii. the cost of the mitigation measures;

    iv. an outline of an environmental management plan that sets out the framework for continuing management, mitigation and monitoring programs for the relevant impacts of the action, including any provisions for independent environmental auditing;

    v. the name of the agency responsible for endorsing or approving each mitigation measure or monitoring program.

12. Where a significant residual adverse impact to a relevant protected matter is considered likely, the EIS must provide information on the proposed offset strategy, including discussion of the conservation benefit associated with the proposed offset strategy.

13. For each of the relevant matters likely to be impacted by the action the EIS must provide reference to, and consideration of, relevant Commonwealth guidelines and policy statements including any:
    i. conservation advice or recovery plan for the species or community,

    ii. relevant threat abatement plan for a process that threatens the species or community

    iii. wildlife conservation plan for the species

    iv. any strategic assessment.

[Note: the relevant guidelines and policy statements for each species and community are available from the Department of Agriculture, Water and the Environment Species Profile and Threats Database. http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl]

Key Issues

Biodiversity (threatened species and communities and migratory species)

Assessment Requirements

14. The EIS must identify each EPBC Act listed threatened species and community and migratory species likely to be impacted by the action. For any species and communities that are likely to be impacted, the proponent must provide a description of the nature, quantum and consequences of the impacts. For species and communities potentially located in the project area or in the vicinity that are not likely to be impacted, provide evidence why they are not likely to be impacted.

15. For each of the EPBC Act listed threatened species and communities and migratory species likely to be impacted by the action the EIS must provide a separate:

    a. description of the habitat (including identification and mapping of suitable breeding habitat, suitable foraging habitat, important populations and habitat critical for survival), with consideration of, and reference to, any relevant Commonwealth guidelines and policy statements including listing advice, conservation advice and recovery plans;

    b. details of the scope, timing and methodology for studies or surveys used and how they are consistent with (or justification for divergence from) published Australian Government guidelines and policy statements;

    c. description of the relevant impacts of the action having regard to the full national extent of the species or community's range; and

    d. description of the specific proposed avoidance and mitigation measures to deal with relevant impacts of the action;

    e. identification of significant residual adverse impacts likely to occur after the proposed activities to avoid and mitigate all impacts are taken into account;

    f. description of any offsets proposed to address residual adverse significant impacts and how these offsets will be established.

    g. details of how the current published NSW Biodiversity Assessment Methodology has been applied in accordance with the objects of the EPBC Act to offset significant residual adverse impacts; and

    h. details of the offset package to compensate for significant residual impacts including details of the credit profiles required to offset the action in accordance with the NSW Biodiversity Assessment Methodology and/or mapping and descriptions of the extent and condition of the relevant habitat and/or threatened communities occurring on proposed offset sites;

    [Note: For the purposes of approval under the EPBC Act, it is a requirement that offsets directly contribute to the ongoing viability of the specific protected matter impacted by a proposed action and deliver an overall conservation outcome that improves or maintains the viability of the MNES i.e. 'like for like'. Like-for-like includes protection of native vegetation that is the same ecological community or habitat being impacted (preferably in the same region where the impact occurs), or funding to provide a direct benefit to the matter being impacted e.g. threat abatement, breeding and propagation programs or other relevant conservation measures.

16. Any significant residual impacts not addressed by the NSW Biodiversity Assessment Methodology may need to be addressed in accordance with the Environment Protection and Biodiversity Conservation Act 1999 Environmental Offset Policy.

http://www.environment.gov.au/epbc/publications/epbc-act-environmental-offsets-policy.

Other approvals and conditions

17. Information in relation to any other approvals or conditions required must include the information prescribed in Schedule 4 Clause 5 (a) (b) (c) and (d) of the EPBC Regulations 2000.

Environmental Record of person proposing to take the action

18. Information in relation to the environmental record of a person proposing to take action must include details as prescribed in Schedule 4 Clause 6 of the EPBC Regulations 2000.

Information Sources

19. For information given in the EIS, the EIS must state the source of the information, how recent the information is, how the reliability of the information was tested; and what uncertainties (if any) are in the information.

REFERENCES

- *Environment Protection and Biodiversity Conservation Act 1999* - section 51-55, section 96A(3)(a)(b), 101A(3)(a)(b), section 136, section 527E
- *Environment Protection and Biodiversity Conservation Regulations 2000 Schedule 4*
- NSW Assessment Bilateral Agreement (2015) - Item 18.1, Item 18.5, Schedule 1
- *Matters of National Environmental Significance - Significant impact guidelines 1.1* (2013) EPBC Act
- *Environment Protect and Biodiversity Conservation Act 1999* Environmental Offsets Policy October 2012

Appendix A

Proposed site

Based on the information in the referral documentation, the location of the action, species records and likely habitat present in the area, there are likely to be significant impacts to:

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland ecological community listed as **critically endangered**.
- Regent Honeyeater (*Anthochaera phrygia*) listed as **critically endangered**.
- Swift Parrot (*Lathamus discolor*) listed as **critically endangered**.
- Booroolong Frog (*Litoria booroolongensis*) listed as **endangered**.
- Fork-tailed Swift (*Apus pacificus*) which is listed as **migratory**.

In addition, there is some risk that there may be significant impacts on the following matters and levels of impact should be further investigated.

- Small Snake Orchid (*Diuris pedunculata*) listed as **endangered**.
- Blackbutt Candlebark (*Eucalyptus rubida* subsp. *barbigerorum*) listed as **vulnerable**.
- Fragrant Pepperbush (*Tasmannia glaucifolia*) listed as **vulnerable**.
- Austral Toadflax (*Thesium australe*) listed as **vulnerable**.
- Spotted-tailed Quoll (*Dasyurus maculatus maculatus*) (SE mainland population) listed as **endangered**.
- Koala (*Phascolarctos cinereus*) (combined populations of Qld, NSW and the ACT) listed as **vulnerable**.
- White-throated Needletail (*Hirundapus caudacutus*) listed as **vulnerable**.
- *Euphrasia arguta* listed as **critically endangered**.

Transport route

Further information is required during the assessment stage to determine the extent of potential impacts to the following protected matters from impacts associated with transporting project components to the proposed site:

- New England Peppermint (*Eucalyptus nova-anglica*) Grassy Woodlands ecological community listed as **critically endangered**.
- Lowland Rainforest of Subtropical Australia ecological community listed as **critically endangered**.
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland ecological community listed as **critically endangered**.
- Regent Honeyeater (*Anthochaera phrygia*) listed as **critically endangered**.
- *Euphrasia arguta* listed as **critically endangered**.
- Small Snake Orchid (*Diuris pedunculata*) listed as **endangered**.
- *Zieria lasiocaulis* listed as **endangered**.
- *Diuris eborensis* listed as **endangered**.
- White-flowered Wax Plant (*Cynanchum elegans*) – **endangered.**

- Milky Silkpod (*Parsonsia dorrigoensis*) – **endangered.**
- *Grevillea guthrieana* listed as **endangered**.
- Craven Grey Box (*Eucalyptus largeana*) listed as **endangered**.
- *Solanum sulphureum* listed as **endangered**.
- Blackbutt Candlebark (*Eucalyptus rubida* subsp. *barbigerorum*) listed as **vulnerable**.
- Koala (*Phascolarctos cinereus*) (combined populations of Old, NSW and the ACT) listed as **vulnerable**.
- Earp's Gum (*Eucalyptus parramattensis* subsp. *decadens*) listed as **vulnerable**.
- Austral Toadflax (*Thesium australe*) listed as **vulnerable**.
- Greater Glider (*Petauroides volans*) listed as **vulnerable**.
- Leafless Tongue-orchid (*Cryptostylis hunteriana*) listed as **vulnerable**.
- Fragrant Pepperbush (*Tasmannia glaucifolia*) listed as **vulnerable**.
- Narrow-leaved Peppermint (*Eucalyptus nicholii*) listed as **vulnerable**.
- Long-nosed Potoroo (SE Mainland) (*Potorous tridactylus tridactylus*) listed as **vulnerable**.
- Tall Velvet Sea-berry (*Haloragis exalata* subsp. *velutina*) listed as **vulnerable**.
- *Hakea archaeoides* listed as **vulnerable**.

Note: uncertainty around the extent and number of protected matters that may be impacted will need to be resolved through the assessment process once final alignment and construction plans have been completed.

Note: this may not be a complete list and it is the responsibility of the proponent to ensure any protected matters under these controlling provisions are assessed for the Commonwealth decision-maker's consideration.

Table A-1 – SEARs - Agency Requirements

Agency	Issue	Requirements	Document Reference
Airservices Australia	AIS Criteria	To facilitate these assessments all wind farm proposals submitted to Airservices must include an Aviation Impact Statement (AIS) prepared by an aeronautical consultant in accordance with the AIS criteria set out below. **Airspace Procedures:** ■ Obstacles - Co-ordinates in WGS 84 (to 0.1 second of arc or better). - Elevations AMSL (to 0.3 metres). ■ Drawings - Overlayed on topographical base not less than 1:250,000. Details of datum and level of charting accuracy to be noted. - Electronic format compatible with Microstation version 8i. ■ Aerodromes - Specify all registered/certified aerodromes that are located within 30nm (55.56km) from any obstacle referred to in (1) above from any obstacle referred to in (1) above. - Nominate all instrument approach and landing procedures at these aerodromes. - Confirmation that the obstacles do not penetrate Annex 14 or OLS for any aerodrome. If an obstacle does penetrate, specify the extent. ■ Air Routes - Nominate air routes published in ERC-L & ERC-H which are located near/over any obstacle referred to in (1) above. - Specify two waypoint names located on the routes which are located before and after the obstacles. ■ Airspace - Airspace classification – A, B, C, D, E, G etc where the obstacles are located. Navigation/Radar: ■ Detect the presence of dead zones ■ False target analysis ■ Target positional accuracy ■ Probability of detection ■ Radar coverage implications ■ We would expect the analysis to follow the guidelines outlined in the latest version of the EUROCONTROL *Guidelines on How to Assess the Potential Impact of Wind Turbines on Surveillance Sensors*.	Chapter 13 and Appendix H

Agency	Issue	Requirements	Document Reference
NSW Department of Industry	DoI – Water and Natural Resources Access Regulator (NRAR)	■ The identification of an adequate and secure water supply for the life of the project. This includes confirmation that water can be sourced from an appropriately authorised and reliable supply. This is also to include an assessment of the current market depth where water entitlement is required to be purchased. ■ A detailed and consolidated site water balance. ■ Assessment of impacts on surface and ground water sources (both quality and quantity), related infrastructure, adjacent licensed water users, basic landholder rights, watercourses, riparian land, and groundwater dependent ecosystems, and measures proposed to reduce and mitigate these impacts. ■ Proposed surface and groundwater monitoring activities and methodologies. ■ Consideration of relevant legislation, policies and guidelines, including the NSW Aquifer Interference Policy (2012), the Guidelines for Controlled Activities on Waterfront Land (2018) and the relevant Water Sharing Plans (available at https://www.industry.nsw.gov.au/water).	Chapter 16 and Appendix O
	DPI – Fisheries	■ Assess the impact of the design, construction and operation of waterway crossings on access roads across the site in accordance with NSW Fisheries *Fisheries Policy and Guidelines Fish Habitat Conservation and Management* (2013 update) and *Why do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings*.	Chapter 16 and Appendix O
	DPI – Agriculture	■ Develop Rehabilitation and Decommissioning/Closure Management Plans that outline the rehabilitation objectives and strategies. This includes, but is not limited to, describing the design criteria of the final land use and landform, indicators to be used to guide the return of the land back to agricultural production, along with the expected timeline for the rehabilitation program. ■ Outline monitoring and mitigation measures to be adopted for rehabilitation remedial actions. ■ Any land with a cropping history or land with a capability for cropping cables/pipes to be buried at a depth >500mm to allow greater opportunity for agricultural activities to continue over the top, particularly for non-decommissioning cables/pipes once restoration is complete. ■ Trenching through sodic soils during construction must include soil amendment with Gypsum at a minimum rate of 10t/ha. Actual rates to be determined following soil testing (Clay content, ECEC and EC).	Chapter 4 Chapter 21
	DoI – Lands	■ All Crown land within and affected by the project area, including Crown roads and waterways, should be identified and intended uses outlined. ■ Works must not be undertaken on Crown lands without the appropriate leases, licences or permits, or purchase of the affected Crown land. ■ Consultation with Department of Industry – Lands should be undertaken in relation to proposed works that may affect Crown land, including identifications of alternatives if Crown lands permits cannot be obtained. ■ The EIS should address the requirements of the Crown Lands Management Act 2016.	Chapter 4 Chapter 6 Chapter 7

Agency	Issue	Requirements	Document Reference
Environment Protection Authority	Environmental impacts of the project	■ The EA must address the requirements of Section 45 of the Protection of the Environment Operations Act 1997 (POEO Act) by determining the extent of each impact and providing sufficient information to enable the EPA to determine appropriate conditions, limits and monitoring requirements for an Environment Protection Licence (EPL). ■ Impacts related to the following environmental issues need to be assessed, quantified and reported on: - Air Issues: air quality including dust generation from the operation on the surrounding landscape and/or community; - Noise and vibration impacts associated with blasting, and operational noise particularly machinery, turbines and plant movements; - Waste including hazardous materials and radiation. Consideration needs to be given to disposal options for general waste, sanitary waste as well as hazardous materials and radiation, where relevant. - Water and Soils including site water balance and sediment and erosion controls during construction and operation phases. *The Environmental Assessment (EA) should address the specific requirements outlined under each heading below and assess impacts in accordance with the relevant guidelines mentioned.*	Chapter 10 and Appendix E Chapter 16 and Appendix O Chapter 17 Chapter 18
	Licensing requirements	■ The development is a scheduled activity under the Protection of the Environment Operations Act 1997 (POEO Act) and will therefore require an Environment Protection Licence (EPL) if approval is granted. ■ Should project approval be granted, the proponent will need to make an application to the EPA for its EPL for the proposed facility prior to undertaking any onsite works. Additional information is available through the EPA Guide to Licensing document available from our website at: www.epa.nsw.gov.au/licensing/licenceguide.htm.	Chapter 6
	Air Issues	■ The EA must demonstrate the proposal's ability to comply with the relevant regulatory framework, specifically the Protection of the Environment Operations (POEO) Act (1997) and the POEO (Clean Air) Regulation (2002). Particular consideration should be given to section 129 of the POEO Act concerning control of "offensive odour". ■ The EA must include an air quality impact assessment (AQIA). ■ The AQIA must be carried out in accordance with the document, Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (2005) http://www.epa.nsw.gov.au/resources/air/ammodelling05361.pdf. ■ The EA must detail emission control techniques/practices that will be employed at the site and identify how the proposed control techniques/practices will meet the requirements of the POEO Act, POEO (Clean Air) Regulation and associated air quality limits or guideline criteria.	Chapter 17
	Noise and Vibration	The EA must assess the following noise and vibration aspects of the proposed development:	Chapter 10 and Appendix E

Agency	Issue	Requirements	Document Reference
		■ Construction noise associated with the proposed development should be assessed using the Interim Construction Noise Guideline (DECC, 2009). These are available at: https://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/interim-construction-noiseguideline. ■ Vibration from all activities (including construction and operation) to be undertaken on the premises should be assessed using the guidelines contained in the *Assessing Vibration: a technical guideline* (DEC, 2006). These are available at: https://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/assessing-vibration ■ If blasting is required for any reasons during the construction or operational stage of the proposed development, blast impacts should be demonstrated to be capable of complying with the guidelines contained in Australian and New Zealand Environment Council – *Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration* (ANZEC, 1990).These are available at: https://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/interimconstruction-noise-guideline. Industry ■ Operational noise from all industrial activities (including private haul roads) to be undertaken on the premises should be assessed using the guidelines contained in the *NSW Noise Policy for Industry* (EPA, 2017). https://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/noise-policy-forindustry-(2017). Wind Farms ■ Operational noise activities from Wind Farms should be accessed against the South Australian EPA's *Wind Farm-Environmental Noise Guidelines* (2009) and the DPE's *Wind Energy: Noise Assessment Bulletin* (2016), available at: www.planning.nsw.gov.au/~/media/Files/DPE/Bulletinsand-Community-Updates/wind-energy-noise-assessment-bulletin-2016-12.ashx. Roads ■ Noise on public roads from increased road traffic generated by land use developments should be assessed using the guidelines contained in the *NSW Road Noise Policy* and associated application notes (EPA, 2011). At: https://www.epa.nsw.gov.au/your-environment/noise/transport-noise.	
	Waste, chemicals and hazardous materials and radiation	■ The EA must assess all aspects of waste generation, management and disposal associated with the proposed development. ■ The EA must demonstrate compliance with all regulatory requirements outlined in the POEO Act and associated waste regulations. ■ The EA must identify, characterise and classify the following in accordance with the EPA's Waste Classification Guidelines (2014) and associated addendums: - all waste that will be generated onsite through excavation, demolition or construction activities, including proposed quantities of the waste; and	Chapter 18

Agency	Issue	Requirements	Document Reference
		- all waste that is proposed to be disposed of to an offsite location, including proposed quantities of the waste and the disposal locations for the waste. This includes waste that is intended for re-use or recycling. ■ The EA must outline contingency plans for any event that may result in environmental harm, such as excessive stockpiling of material, or dirty water volumes exceeding the storage capacity available onsite. ■ The EA must demonstrate that appropriate spill containment will be provided for storage, filling and loading of all fuels and other chemicals to be used on site, in accordance with the relevant Australian Standard.	
	Water	■ The EA must demonstrate how the proposed development will meet the requirements of section 120 of the POEO Act. ■ The EA must include a water balance for the development including water requirements (quantity, quality and source(s)) and proposed storm and wastewater disposal, including type, volumes, proposed treatment and management methods and re-use options. ■ If the proposed development intends to discharge waters to the environment, the EA must demonstrate how the discharge(s) will be managed in terms of water quantity, quality and frequency of discharge and include an impact assessment of the discharge on the receiving environment. This should include: - Description of the proposal including position of any intakes and discharges, volumes, water quality and frequency of all water discharges. - Description of the receiving waters including upstream and downstream water quality as well as any other water users. - Demonstration that all practical options to avoid discharge have been implemented and environmental impact minimised where discharge is necessary. ■ The EA must refer to Water Quality Objectives for the receiving waters and indicators and associated trigger values or criteria for the identified environmental values of the receiving environment. This information should be sourced from the ANZECC (2000) Guidelines for Fresh and Marine Water Quality (http://www.environment.gov.au/water/policy-programs/nwqms/). ■ The EA must describe how stormwater will be managed in all phases of the project, including details of how stormwater and runoff will be managed to minimise pollution. Information should include measures to be implemented to minimise erosion, leachate and sediment mobilisation at the site. The EA should consider the guidelines Managing urban stormwater: soils and construction, vol. 1 (Landcom 2004) and vol. 2 (A. Installation of services; C. Unsealed roads; D. Main Roads; E. Mines and quarries) (DECC, 2008). ■ The EA must describe any water quality monitoring programs to be carried out at the project site. Water quality monitoring should be undertaken in accordance with the Approved Methods for the Sampling and Analysis of Water Pollutant in NSW (2004) which is available at: http://www.epa.nsw.gov.au/resources/legislation/approvedmethods-water.pdf .	Chapter 16 and Appendix O

Agency	Issue	Requirements	Document Reference
	Soils	The EA should include: ■ An assessment of the potential impacts on soil and land resources should be undertaken, being guided by the Soil and Landscape Issues in Environmental Impact Assessment (DLWC 2000). The nature and extent of any significant impacts should be identified. Particular attention should be given to: - Soil erosion and sediment transport- in accordance with Managing urban stormwater: Soils and construction, vol. 1 (Landcom 20) and vol. 2 (A. Installation of services; B. Waste landfills; C. Unsealed Roads; D. Main Roles) (DECC2008). - Mass movement (landslides) – in accordance with Landslide risk management guidelines presented in the Australian Geomechanics Society (2007). - Urban and regional salinity – guidance given in the Local Government Salinity Initiative booklets which includes Site Investigation for Urban Salinity (DLWC, 2002). ■ A description of the mitigation and management options that will be used to prevent, control, abate or minimise identified soil and land resource impacts associated with the project. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented. Where required, add any specific assessment requirements relevant to the project.	Chapter 16 and Appendix O
Office of Environment & Heritage	Biodiversity	■ Biodiversity impacts related to the proposed development are to be assessed in accordance with Section 7.9 of the *Biodiversity Conservation Act 2017* the Biodiversity Assessment Method and documented in a Biodiversity Development Assessment Report (BDAR). The BDAR must include information in the form detailed in the *Biodiversity Conservation Act 2016* (s6.12), *Biodiversity Conservation Regulation 2017* (s6.8) and Biodiversity Assessment Method, unless OEH and DPE determine that the proposed development is not likely to have any significant impacts on biodiversity values. ■ The BDAR must document the application of the avoid, minimise and offset framework including assessing all direct, indirect and prescribed impacts in accordance with the Biodiversity Assessment Method. ■ The BDAR must include details of the measures proposed to address the offset obligation as follows; - the total number and classes of biodiversity credits required to be retired for the development/project; - the number and classes of like-for-like biodiversity credits proposed to be retired; and - the number and classes of biodiversity credits proposed to be retired in accordance with the variation rules: — any proposal to fund a biodiversity conservation action; — any proposal to conduct ecological rehabilitation (if a mining project); and — any proposal to make a payment to the Biodiversity Conservation Fund. If seeking approval to use the variation rules, the BDAR must contain details of the reasonable steps that have been taken to obtain requisite like-for-like biodiversity credits. ■ The BDAR must be submitted with all spatial data associated with the survey and assessment as per Appendix 11 of the BAM.	Chapter 9 and Appendix D

Agency	Issue	Requirements	Document Reference
		■ The BDAR must be prepared by a person accredited in accordance with the Accreditation Scheme for the Application of the *Biodiversity Assessment Method Order 2017* under s6.10 of the *Biodiversity Conservation Act 2016*.	
	Aboriginal cultural heritage	■ The EIS must identify and describe the Aboriginal cultural heritage values that exist across the whole area that will be affected by the development and document these in an Aboriginal Cultural Heritage Assessment Report (ACHAR). This may include the need for surface survey and test excavation. The identification of cultural heritage values must be conducted in accordance with the *Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW* (OEH 2010), and guided by the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (DECCW, 2011) and consultation with OEH regional branch officers. ■ Consultation with Aboriginal people must be undertaken and documented in accordance with the *Aboriginal cultural heritage consultation requirements for proponents 2010* (DECCW). The significance of cultural heritage values for Aboriginal people who have a cultural association with the land must be documented in the ACHAR. ■ Impacts on Aboriginal cultural heritage values are to be assessed and documented in the ACHAR. The ACHAR must demonstrate attempts to avoid impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the ACHAR must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to OEH.	Chapter 14 and Appendix M
	Historic Heritage	■ The EIS must provide a heritage assessment including but not limited to an assessment of impacts to State and local heritage including conservation areas, natural heritage areas, places of Aboriginal heritage value, buildings, works, relics, gardens, landscapes, views, trees should be assessed. Where impacts to State or locally significant heritage items are identified, the assessment shall: - outline the proposed mitigation and management measures (including measures to avoid significant impacts and an evaluation of the effectiveness of the mitigation measures) generally consistent with the *NSW Heritage Manual* (1996); - be undertaken by a suitably qualified heritage consultant(s) (note: where archaeological excavations are proposed the relevant consultant must meet the NSW Heritage Council's Excavation Director criteria); - include a statement of heritage impact for all heritage items (including significance assessment); - consider impacts including, but not limited to, vibration, demolition, archaeological disturbance, altered historical arrangements and access, landscape and vistas, and architectural noise treatment (as relevant);and - where potential archaeological impacts have been identified develop an appropriate archaeological assessment methodology, including research design, to guide physical archaeological test excavations (terrestrial and maritime as relevant) and include the results of these test excavations.	Chapter 15 and Appendix N

Agency	Issue	Requirements	Document Reference
	Water and Soils	■ The EIS must map the following features relevant to water and soils including: - acid sulfate soils (Class 1, 2, 3 or 4 on the Acid Sulfate Soil Planning Map); - rivers, streams, wetlands, estuaries (as described in s4.2 of the Biodiversity Assessment Method); - wetlands as described in s4.2 of the Biodiversity Assessment Method; - groundwater; - groundwater dependent ecosystems; and - proposed intake and discharge locations. ■ The EIS must describe background conditions for any water resource likely to be affected by the project, including: - existing surface and groundwater; - hydrology, including volume, frequency and quality of discharges at proposed intake and discharge locations; - water Quality Objectives (as endorsed by the NSW Government (http://www.environment.nsw.gov.au/ieo/index.htm) including groundwater as appropriate that represent the community's uses and values for the receiving waters; - indicators and trigger values/criteria for the environmental values identified at (c) in accordance with the ANZECC (2000) *Guidelines for Fresh and Marine Water Quality* and/or local objectives, criteria or targets endorsed by the NSW Government; and - Risk-based Framework for Considering Waterway Health Outcomes in Strategic Land-use Planning Decisions http://www.environment.nsw.gov.au/research-andpublications/publications-search/risk-based-framework-for-considering-waterway-healthoutcomes-in-strategic-land-use-planning. ■ The EIS must assess the impacts of the development on water quality, including: - the nature and degree of impact on receiving waters for both surface and groundwater, demonstrating how the project protects the Water Quality Objectives where they are currently being achieved, and contributes towards achievement of the Water Quality Objectives over time where they are currently not being achieved. This should include an assessment of the mitigating effects of proposed stormwater and wastewater management during and after construction; and - identification of proposed monitoring of water quality. ■ The EIS must assess the impact of the project on hydrology, including: - water balance including quantity, quality and source; - effects to downstream rivers, wetlands, estuaries, marine waters and floodplain areas; - effects to downstream water-dependent fauna and flora including groundwater dependent ecosystems; - impacts to natural processes and functions within rivers, wetlands, estuaries and floodplains that affect river system and landscape health such as nutrient flow, aquatic connectivity and access to habitat for spawning and refuge (e.g. river benches);	Chapter 16 and Appendix O

Agency	Issue	Requirements	Document Reference
		- changes to environmental water availability, both regulated/licensed and unregulated/rules based sources of such water; - mitigating effects of proposed stormwater and wastewater management during and after construction on hydrological attributes such as volumes, flow rates, management methods and re-use options; and - identification of proposed monitoring of hydrological attributes.	
	Flooding	■ The EIS must map the following features relevant to flooding as described in the *Floodplain Development Manual 2005* (NSW Government 2005) including: - flood prone land; - flood planning area, the area below the flood planning level; - hydraulic categorisation (floodways and flood storage areas); and - flood hazard. ■ The EIS must describe flood assessment and modelling undertaken in determining the design flood levels for events, including a minimum of the 5% Annual Exceedance Probability (AEP), 1% AEP, flood levels and the probable maximum flood, or an equivalent extreme event. ■ The EIS must model the effect of the proposed development (including fill) on the flood behaviour under the following scenarios: - Current flood behaviour for a range of design events as identified in 14 above. This includes the 0.5% and 0.2% AEP year flood events as proxies for assessing sensitivity to an increase in rainfall intensity of flood producing rainfall events due to climate change. Modelling in the EIS must consider and document: ■ Existing council flood studies in the area and examine consistency to the flood behaviour documented in these studies. ■ The impact on existing flood behaviour for a full range of flood events including up to the probable maximum flood, or an equivalent extreme flood. ■ Impacts of the development on flood behaviour resulting in detrimental changes in potential flood affection of other developments or land. This may include redirection of flow, flow velocities, flood levels, hazard categories and hydraulic categories. ■ Relevant provisions of the *NSW Floodplain Development Manual 2005*. ■ The EIS must assess the impacts on the proposed project on flood behaviour, including: - whether there will be detrimental increases in the potential flood affectation of other properties, assets and infrastructure; - consistency with Council floodplain risk management plans; - consistency with any Rural Floodplain Management Plans;	Chapter 16 and Appendix O

Agency	Issue	Requirements	Document Reference
		- compatibility with the flood hazard of the land; - compatibility with the hydraulic functions of flow conveyance in flood ways and storage in flood storage areas of the land; - whether there will be adverse effect to beneficial inundation of the floodplain environment, on, adjacent to or downstream of the site; - whether there will be direct or indirect increase in erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses; - any impacts the development may have upon existing community emergency management arrangements for flooding. These matters are to be discussed with the NSW SES and Council; - whether the proposal incorporates specific measures to manage risk to life from flood. These matters are to be discussed with the NSW SES and Council; - emergency management, evacuation and access, and contingency measures for the development considering the full range or flood risk (based upon the probable maximum flood or an equivalent extreme flood event). These matters are to be discussed with and have the support of Council and the NSW SES; and - any impacts the development may have on the social and economic costs to the community as consequence of flooding.	
	Specific Environmental Assessment Requirements	■ Fauna survey is to be conducted in native vegetation adjacent to the development site, including Ben Halls Gap Nature Reserve and Ben Halls Gap State Forest. ■ Assessment of impact is to include all components of the proposal, including any road/track widening to enable transport of turbines to the site. ■ Hollow-bearing trees are to be quantified on the development site and in adjacent native vegetation. ■ A candidate list of species that may use the development site as a flyway or migration route must be included in the EIS, including: (a) resident threatened aerial species (b) resident raptor species (c) nomadic and migratory species that are likely to fly over the project area. ■ Bird and bat flight paths are to be identified and assessed. Maps of habitual flight paths for nomadic and migratory species likely to fly over the site and maps of likely habitat for threatened aerial species resident on the site are to be included in the EIS. ■ The cumulative effect of wind farms in the broader area should be considered in relation to migratory birds. ■ Copies of all raw data sheets for flora and fauna studies are to be included in the EIS or provided to OEH. ■ ArcGIS compatible spatial data is to be provided including (but not limited to) vegetation mapping, plot locations, transect locations and the locations of turbines and other infrastructure.	Chapter 9 and Appendix D

Agency	Issue	Requirements	Document Reference
NSW Rural Fire Service	Bush fire hazard assessment	■ The NSW RFS has reviewed the submitted documentation and the draft SEARSs and supports the inclusion of a requirement for the preparation of a bush fire hazard assessment as outlined in Key Issues – Hazards of the draft SEARS. The bush fire hazard assessment shall include flame length modelling for all turbines, ancillary buildings, internal roads and transmission lines and identify required vegetation management practices to achieve asset protection zone standard that will prevent flame contact on the proposed infrastructure components.	Chapter 13 and Appendix J
Roads and Maritime Services	Traffic	■ Roads and Maritime requests that the Environmental Assessment be supported by a Traffic Impact Assessment (TIA) and Construction Traffic Access Management Plan (CTAMP) prepared by a suitably qualified person in accordance with the *Austroads Guide to Traffic Management Part 12, Roads and Maritimes Supplements* and RTA *Guide to Traffic Generating Developments*. The TIA and CTAMP should to address the following: - the total impact of existing and proposed development on the road network with consideration for construction, operation and decommission of the wind farm; - the volume and distribution of traffic generated by the proposed development; - sight distances at key intersections, consideration of turning lane warrants and details of proposed intersection treatments on the road network and at site access locations based on Austroads *Part 6 Intersections, Interchanges and Crossings* and *Guide to Road Design Part 4A Un-signalised and Signalised Intersections*; - capacity analysis using SIDRA or similar, if required, to identify Level of Service (LOS) at key intersections with the classified road network; - an assessment of the proposed transport route, including swept paths of the largest vehicle requiring access from port to site. Current advice indicates the largest blade that can be conventionally transported along the New England Highway is 65m; - impacts on rail corridors along the transport routes and details of proposed interface treatments; - details of existing and proposed site access, servicing and parking arrangements; - impact on public transport (public and school bus routes) and consideration for alternative transport modes such as walking and cycling; - impacts of road traffic noise and dust generated along the primary transport routes; and - preparation of a Construction Traffic Access Management Plan (CTAMP) to identify and manage the impact of construction, operation and decommission traffic on the safety and efficiency of the road network. The CTAMP may include temporary measures such as Traffic Control Plans (TCPs) to address construction and decommission related traffic at specific locations. ■ The CTAMP should include a Driver Code of Conduct which may include, but not be limited to, the following: - a map of the primary transport routes highlighting critical locations; - consideration of coordination of construction traffic with seasonal agricultural activities; - safety initiatives for haulage through residential areas, school zones and along school bus routes; - an induction process for vehicle operators and regular toolbox meetings; - a complaint resolution and disciplinary procedure; and	Chapter 12 and Appendix G

Agency	Issue	Requirements	Document Reference
		- any community consultation measures for peak construction periods. ■ If road works are identified on a classified (State) road the Developer would be required to enter into a Works Authorisation Deed (WAD) with Roads and Maritime. Current Austroads Guidelines, Australian Standards and Roads and Maritime Supplements are to be adopted. The developer would be responsible for all costs associated with the works and administration for the WAD. Further information on undertaking private developments adjacent to classified roads can be accessed at: http://www.rms.nsw.gov.au/projects/planning-principles/index.html	
Tamworth Regional Council	Public Exhibition	■ The public notice should be placed in the Northern Daily Leader and Nundle community newsletters. ■ The EIS should be displayed for public perusal at Tamworth Regional Council (both Ray Walsh House in Tamworth and Nundle branch office). ■ Public notification should include the provision of all documentation on USBs or CDs to any person who requests a copy, at the locations where the EIS is displayed.	Chapter 7
	General	■ The application should detail any public consultation, including any issues identified by the public and the manner in which the issues have been addressed prior to the submission of the application. ■ The construction period is approximately 24 months. Consideration must be given to the likely impact vehicles relating to the construction period will have on the Nundle village, Hanging Rock and any other affected communities which are on the proposed haulage route.	Chapter 7 Chapter 10 Chapter 12
	Traffic and Access	■ A Traffic Impact Assessment (TIA) report, including traffic movements into and out of the site (during construction and ongoing operations phases), is to be provided as part of the EIS. The report needs to address vehicle movements (including trucks, cars etc.) both in and out of the site on a 24 hours/day, 7 days a week basis and should also consider existing, proposed and predictive (when running at full capacity) traffic volumes. ■ Proposed haulage routes to and from the site are also to be clearly identified in the report. The Traffic Impact Assessment report should address the relevant RMS, AUSTROADS, and Council guidelines/standards. ■ The identified haulage routes (Head of the Peel, Lindsay Gap Road, Old Wallabadah Road) are also used for existing logging operations. Coordinating movements up and down the road between Nundle and Hanging Rock with the logging companies who currently operate in this area and have multiple truck movements each day must occur. Blocking the range for an hour or more each day will have an effect on the logging operations. ■ Consideration must also be given to the impact any road and bridge upgrade works will have on existing logging industries. ■ The Proponent shall consult with Tamworth Regional Council as the local roads authority to determine the adequacy of existing roads, bridges and culverts. The length, width and weight of trucks transporting wind turbine components are required. ■ If wind turbine components are to be transported vertically to navigate certain sections of the road between Nundle and Hanging Rock, this may necessitate tree removal/trimming. Furthermore, altering the load configuration will add to the time to navigate this section of road.	Chapter 12 and Appendix G

Agency	Issue	Requirements	Document Reference
	Biodiversity	■ Consideration should be given to the proximity of the site being directly adjacent to the Ben Halls Gap National Park. Details regarding any vegetation retention/removal are to be provided and a full biodiversity assessment must address how this proposal impacts flora and fauna communities and natural watercourses.	Chapter 9 and Appendix D
	Nearby Residential Receptors	■ Consideration must be given to all existing adjoining and nearby properties most likely to be affected by noise, traffic, visual impact and dust. It is noted that a Development Application for a dwelling has recently been lodged with Tamworth Regional Council on Lots 46 and 47 DP 752722 Morrisons Gap Road, Hanging Rock (DA2019-0097). This application has not yet been determined.	Chapter 4
	Voluntary Planning Agreement (VPA)	■ There should be further discussion between Council, the Proponent and the Department on a VPA for the community fund. The VPA shall take into consideration all neighbouring properties and nearby communities.	Chapter 7