Schedule 1: Conditions of Approval Development Permit for a Material Change of Use - Code Assessment

Timing Condition General / Planning Requirements While site / operational / Undertake the development generally in accordance 1. with the approved plans and documents referred to in building work is occurring and then to be Table 1, as modified by the conditions of this approval. maintained **Table 1: Approved Plans and Documents** Date Plan/Document Plan/Document number name 18-11-2013 Mount Emerald PR100246-170 Wind Farm Issue A Turbine Location and Development Footprint March 2012 Statement of Appendix A Commitments in **RPS** Development Application Material Change of Use Report November PR100246/R72893 Preliminary 2013 Environmental Management Plan 29/08/2014 Technical Note 2 -CB24504 Rev 1 Traffic Impact Assessment Engineering Response prepared by Jacobs

Loca	tion an	d Design	
2.	Submit to the chief executive administering SPA, a revised Turbine Location and Development Footprint Plan identifying the final position of:		Prior to seeking approval for any site, operational or building work
	• all proposed turbines; and		WOIK
	the operations and maintenance depots		
	1	e: Micro-siting of turbines, prior to the submission of above mentioned reports, is permitted.	
	by n iden Turl	ro-siting means an alteration to the siting of a turbine of more than 100 metres beyond the siting of turbines tified in approved plan Mount Emerald Wind Farm pine Location and Development Footprint PR100246-Issue A, dated 18-11-2013.	
3.	(a) The wind farm must be designed and constructed in accordance with the following:		(a) Prior to the commencement of use
	i.	The maximum number of turbines must not exceed 63;	and then to be maintained
	ii.	All turbines must be setback a minimum of 1,500 metres from any existing and approved dwelling at the date of this approval;	
	iii.	All turbines and the operations and maintenance depot are to be located in accordance with the revised Turbine Location and Development Footprint Plan required by condition 2 of this approval;	
	iv.	The overall maximum height of any turbine (measured to the tip of the rotor blade at their highest point above ground level) must not exceed 1179.5 metres AHD;	
	v.	The hub height of any turbine must not exceed 90 metres above ground level;	
	vi.	All cabling must be provided underground, except where the approved Environmental Management Plan recommends an alternative method in environmentally sensitive locations.	
	(b) Submit certification to the chief executive administering SPA from an Registered Professional		(b) Prior to the commencement of use

Engineer Queensland (RPEQ) that the wind farm as
constructed complies with the design specifications
indicated in part (a) of this condition.

Acoustic Amenity

- 4. The wind farm development must be designed and operated to ensure that:
 - (a) The outdoor night-time (10pm to 6am) equivalent noise level (L_{Aeq,10 minutes}) at existing and approved sensitive land uses at the date of this approval, does not exceed the higher of:
 - (i) 35dB(A); or
 - (ii) the background noise level (L_{A90}) plus 5dB(A); and
 - (b) The outdoor day-time equivalent noise level (L_{Aeq} _{,10 minutes}) at existing and approved sensitive land uses at the date of this approval, does not exceed the higher of:
 - (i) 37dB(A); or
 - (ii) the background noise level (LA90) plus 5dB(A).
 - (c) The equivalent noise levels (L_{Aeq}) are to be assessed at all existing and approved sensitive land uses at the date of this approval for all integer hub height wind speeds from cut-in to rated power of the wind turbine generator.
 - (d) Measurements of background noise or operational noise from wind turbine generators for the operation shall be in accordance with Australian Standard AS4959-2010 Acoustics Measurement, prediction and assessment of noise from wind turbine generators (AS4959-2010) at any existing and approved sensitive land uses at the date of this approval. If an alternative standard or guideline to AS4959-2010 is to be followed for the assessment of Special Audible Characteristics, then reasons for the selection of the alternative are to be provided.

Prior to the commencement of use and then to be maintained

- The wind farm development must be designed and operated to ensure that that the low frequency noise level does not exceed:
 (a) 60dB(C) for the outdoor C-Weighted equivalent noise level (L_{Ceq, 10 minutes}) during the outdoor night-time (10pm to 6am); and
- Prior to the commencement of use and then to be maintained
- (b) 65dB(C) for the outdoor C-Weighted equivalent noise level ($L_{\text{Ceq, 10 minutes}}$) during the day-time (6am to 10pm).

The C-Weighted noise levels (L_{Ceq}) are to be assessed at all existing and approved sensitive land uses at the date of this approval for all integer hub height wind speeds from cut-in to rated power of the wind turbine generator.

Measurements of operational noise from wind turbine generators for the operation shall be in accordance with Australian Standard AS4959-2010 Acoustics – Measurement, prediction and assessment of noise from wind turbine generators at any existing and approved sensitive land uses at the date of this approval.

- 6. (a) Submit to the chief executive administering the SPA a revised noise assessment report, certified by a suitably qualified acoustic **consultant**, demonstrating that the proposed wind farm can meet the noise levels specified in conditions 4 and 5 of this approval. The report is to:
- (a) Prior to the commencement of site / operational / building work
- Model the acoustic impacts of the wind farm based on the revised Turbine Location and Development Footprint Plan submitted in accordance with condition 2 of this approval.

The noise modelling should take into account the varied topography between the turbine locations and existing and approved sensitive land use receptors at the date of this approval and any impacts that may have on predicted noise levels, and include an assessment of Special Audible Characteristics including tonality, impulsivity and amplitude modulation.

ii. Identify any design specifications or operational restrictions that may be necessary to ensure compliance with the noise levels specified in conditions 4 and 5, such as turbine types or limitations on hours of operation of specific turbines.

- (b) Submit to the chief executive administering the SPA a compliance noise assessment report, certified by a suitably qualified acoustic consultant, demonstrating that the proposed wind farm meets the noise levels specified in conditions 4 and 5 of this approval. The report is to:
 - i. Measure the acoustic impacts of the wind farm based on the final Turbine Location and Development Footprint Plan submitted in accordance with condition 2 of this approval.

The noise measurements should take into account the turbine locations and any existing and approved sensitive land use receptors at the date of this approval; and include an assessment of Special Audible Characteristics including tonality, impulsivity and amplitude modulation. Assessment of Special Audible Characteristics should be carried out using an appropriate international standard or guideline. Reasons for selection of the standard or guideline are to be provided with the noise assessment report. The assessment should determine whether the Special Audible Characteristics are excessive and require an adverse character adjustment (adj) to specific measurement period.

(b) Within twelve (12) months of the completion of construction and then to be maintained

Visual Amenity

- 7. (a) Submit to the chief executive administering SPA a revised shadow flicker assessment report certified by a suitably qualified and experienced person demonstrating that the shadow flicker from the turbines will not exceed 10 hours per annum at any dwelling existing at the date of this approval.
 - The report is to model the shadow flicker of the wind farm, based on the revised Turbine Location and Development Footprint Plan submitted in accordance with condition 2 of this approval.
 - (b) The wind farm is to be constructed and operated in accordance with the revised shadow flicker assessment report required in part (a) of this condition. In particular, any design specifications or operational restrictions required to ensure that shadow flicker from the constructed turbines does not exceed 30 hours per annum and 30 minutes per day at any dwelling existing at the date of this approval.

(a) Prior to seeking approval for any site, operational or building work

(b) Prior to the commencement of use and then to be maintained

8.	The turbines and blades must have a low reflectivity finish.	Prior to the commencement of use and to be maintained
9.	External lighting of infrastructure associated with the wind farm is not permitted other than:	Prior to the commencement of use and to be maintained
	(a) low-level, low-intensity security lighting;	and to be manualled
	(b) aviation obstacle lighting where required by the Civil Aviation and Safety Authority;	
	(c) lighting necessary in the case of an emergency or for operational call-outs at reasonable times.	
	Any external lighting, excluding aviation obstacle lights, is to comply with Australian Standard <i>AS</i> 4282-1993 <i>Control of the obtrusive effects of outdoor lighting</i> .	
10.	(a) Submit to the chief executive administering the SPA an on-site landscaping plan prepared by a suitably qualified landscape architect. The plans must be fully dimensioned and drawn to a recognised scale.	(a) Prior to the commencement of site / operational / building work
	(b) The on-site landscaping plan must include but not limited to:	(b) Prior to the commencement of use and to be
	(i) landscaping to screen the substation, switchyard and maintenance depots and other associated buildings (excluding the turbines);	maintained at all times
	(ii) details of plant species proposed to be used in the landscaping, including height and spread at maturity;	
	(iii) a timetable for implementation of all on-site landscaping works;	
	(iv) a maintenance and monitoring program to ensure the ongoing health of the landscaping.	
	(c) Carry out and maintain the development in accordance with the submitted on-site landscaping plan prepared in accordance with part (a) of this condition.	(c) Prior to the commencement of use
	(d) Submit certification to the chief executive from a suitably qualified landscape architect that the works have been carried out in accordance with part (a) of this condition.	(d) Prior to the commencement of use

Television and Radio Reception

- (a) Undertake an assessment of the television and radio reception strength in the area within 5 km of any proposed turbine and in which any existing and approved dwellings are located as at the date of this approval.
- (a) Prior to the commencement of site/ operational / building work
- The pre-construction assessment must be undertaken by a television and radio monitoring specialist, and include testing at selected locations to enable the average television and radio reception strength in the area within 5 km of the site to be determined. The specific locations of testing must be determined by a television and radio monitoring specialist.
- (b) Within one (1) month of receiving a complaint
- (b) If, following commencement of the operation of the wind farm, a complaint is received regarding the wind farm having an adverse effect on television or radio reception at any existing and approved dwelling within 5 km of the site which existed at the date of this approval, a post-construction assessment of the television and radio reception strength must be carried out at, or in close proximity to, any existing and approved dwelling at the date of this approval by a television and radio monitoring specialist.
- (c) Within two (2) months of the post-construction assessment
- (c) If the post-construction assessment establishes an unacceptable increase in interference to reception as a result of the wind farm, measures to restore the affected reception to pre-construction quality must be undertaken.
- (d) Within (2) months of the post-construction assessment
- (d)Provide to the chief executive administering the SPA, on request, the results of the pre-construction assessment and any post-construction assessment carried out in response to a complaint and evidence that the appropriate restoration measures have been undertaken to address television and radio reception strength where required.

Traffic Management

- 12. (a) Submit to the chief executive administering the SPA a Construction Traffic Management Plan (CTMP) prepared by an RPEQ and in consultation with the Department of Transport and Main Roads, Cairns Regional Council, Tablelands Regional Council and
- (a) Prior to the commencement of site/ operational / building work

Mareeba Shire Council.

The CTMP must relate to the roads proposed to be used in transporting material, personnel and equipment related to the construction and decommissioning of the wind farm.

The CTMP must include but not limited to:

- (i) an existing conditions survey of Hansen Road, Springmount Road and Kippen Drive including details of the suitability, design, condition and construction standard of the relevant public roads;
- (ii) the designation of all vehicle access points to the site from surrounding roads. Vehicle access points must be designed and located to ensure safe sight distances, turning movements, and avoid potential through traffic conflicts;
- (iii) the designation of appropriate pre-construction, construction/decommissioning and transport vehicle routes to and from the site;
- (iv) engineering plans demonstrating whether, and if so how, truck movements to and from the site can be accommodated on sealed roadways and turned without encroaching onto the incorrect side of the road;
- (v) recommendations regarding the need for road and intersection upgrades to accommodate any additional traffic or site access requirements (whether temporary or ongoing). Where upgrades are required, the traffic management plan must include:
 - (a) detailed engineering plans showing the required works;
 - (b) the timing of when the works are to be undertaken;
 - (c) a program of regular inspections to be carried out during the construction of the wind farm to identify maintenance works necessary as a result of construction traffic;
- (vi) measures to be taken to manage traffic impacts

associated with the ongoing operation of the wind farm on the traffic volumes and flows on surrounding roads.

This may include, as recommended in the "Technical Note 2 – Traffic Impact Assessment Engineering Response" prepared by Jacobs dated 29/08/14:

- a) providing a 30 seat shuttle bus service for construction workers arriving and departing the site, servicing the key townships where the construction workers live;
- b) providing minimal or restricted on-site parking to discourage workers arriving to and departing the site via private vehicles
- (vii) a program to rehabilitate Hansen Road,
 Springmount Road and Kippen Drive to the preconstruction condition identified by the surveys
 required under sub-section (a) of this condition,
 at the conclusion of the construction of the wind
 farm.
- (b) Carry out the development in accordance with the CTMP.
- (c) Submit to the chief executive administering SPA certification from an RPEQ that all works identified in the CTMP have been carried out in accordance with the CTMP.
- (b) In accordance with the timeframes specified in the CTMP
- (c) Within three (3) months of the completion of construction

Environmental Management

- 13. (a) Submit to the chief executive administering the SPA an Environmental Management Plan (EMP) prepared by a suitably qualified person(s). The EMP must:
 - be generally in accordance with the Preliminary Environmental Management Plan prepared by RPS and dated November 2013 and the draft Statement of Commitments contained within Appendix A of the RPS Development Application Material Change of Use Report dated March 2012;
- (a) Prior to seeking approval for any site, operational or building work

ii.	be based on the revised Turbine Location and Development Footprint Plan submitted in accordance with condition 2 of this approval;	
iii.	include the following components, as further detailed in Attachment 1:	
	a construction and work site operational management plan	
	a sediment, erosion and storm water management plan	
	a hydrocarbon and hazardous substances plan	
	a bushfire risk management plan and emergency evacuation plan	
	a significant species management plan	
	a weed and pest management plan	
	a rehabilitation plan	
	a habitat clearing and management plan	
	an ecological fire management plan	
	1. 11 1.	

- a cultural heritage management plan
- an environmental management plan training program
- an environmental management plan reporting program
- an implementation plan
- (b) The development must be carried out in accordance with the EMP.

(b) During site /
operational / building
work and to be
maintained

Community Engagement

- 14. (a) Submit to the chief executive administering SPA a
 Community Engagement Strategy (CES) that
 includes at a minimum:

 (i) A Community Consultation Plan that
 demonstrates and includes:
 - (a) Five (5) months prior to construction commencing

- a. consultation methods
- b. consultation calendar that identifies activities that must be carried out at least on a quarterly basis and during:
 - three (3) months prior to construction commencing
 - during construction
 - once operational for at least one year from the commencement of stage 1
- (ii) A Complaints Management Plan / Register (CMPR) that demonstrates and includes:
 - a. how contact details will be communicated to the public
 - b. a toll free telephone number and email contact for complaints and queries
 - c. a register outlining complaint information for each complaint received
 - d. the processes for investigation and actions undertaken to resolve the complaint
- (b) All community consultation and complaints must be managed in accordance with the CES.
- (c) Provide to the chief executive administering SPA and Council, on request, a copy of the CMPR, in particular the processes of investigation and actions undertaken to resolve the complaint.

(b) - (c) Prior to construction / during construction and once operational

Decommissioning and Rehabilitation

15. Submit to the chief executive administering SPA a decommissioning and rehabilitation plan prepared by a suitably qualified person(s).

The decommissioning and rehabilitation plan must address the actions to be undertaken where any or all turbines have permanently ceased to generate electricity. The plan must include a program for:

- (a) removal of above ground non-operational equipment;
- (b) removal and clean up any residual contamination;
- (c) rehabilitation/revegetation of storage areas, construction areas, access tracks and other areas affected by the decommissioning of the turbines, if those areas are not otherwise useful to the on-going

Prior to decommissioning

use or decommissioning of the wind farm;	

(d) notification to the relevant authorities of the turbines ceasing operation. Such notification should be given no later than two months after the turbine(s) cease operation.

General advice This development permit does not constitute an approval to commence operational a. works within Powerlink easements. Prior written approval is required from Powerlink before any additional operational work is undertaken within the easement areas. All additional operational works within the easements will require separate assessment and approval by Powerlink. Development must comply with the Electrical Safety Act 2002 including any Code of b. Practice under that Act and the Electrical Safety Regulation 2002 including any safety exclusion zones defined in the Regulation. In respect to this application the exclusion zone for untrained persons and for c. operating plant operated by untrained persons is 6 metres from the 275,000 volt wires and exposed electrical parts. Should any doubt exist in maintaining the prescribed clearance to the conductors and electrical infrastructure, then the applicant is obliged under the Electrical Safety Act 2002 to seek advice from Powerlink. Any works must comply with the easement terms and conditions as per easement d. Dealing 701758510 and 713030213 Engagement must occur with Powerlink with regards to a connection to Powerlink's e. transmission line network. Further technical assessments regarding safe clearance between turbines and Powerlink infrastructure will have to be performed and must be submitted to Powerlink for approval. Works in the vicinity of Powerlink infrastructure must comply with the Management f. of Easement Co-Use Requests Guideline. The site has slight residual risk of unexploded ordnance (UXO). In the event of g. identification of UXO, the Department of Defence recommends the following procedure: do not touch or disturb the object; take action, where appropriate, to prevent it being disturbed by another person; note its approximate dimensions and general appearance; note the route to its location; and advise the Police as soon as possible.

- h. Copies of the final development plans must be provided to the following entities, to enable details of the development to be shown on aeronautical charts of the area:
 - the Civil Aviation Safety Authority;
 - the Department of Defence (RAAF Aeronautical Information Service);
 - Airservices Australia;
 - any aerodrome operator within 15 km of the outside property boundaries of the site;
 - the Aerial Agriculture Association of Australia;
 - any organisation responsible for providing air ambulance services in the area.

Attachment 1 - Components of the Environmental Management Plan

Construction and work site operational management plan

The environmental management plan must include a construction and work site operational management plan.

The construction and work site operational management plan must include:

- a) the identification of fuels, other hazardous materials and all other potential contaminants stored or used on site during the construction phase of the wind farm, and appropriate storage, construction and operational methods to control any identified contamination risks;
- b) procedures for managing potential spills and leaks and pollution incidents, including incorporation of appropriate pollution control;
- c) procedures to suppress dust emissions from construction-related activities. Appropriate measures may include water spraying of roads and stockpiles, stabilising surfaces, temporary screening and wind fences, modifying construction activities during periods of heightened winds and revegetating exposed areas as soon as practicable;
- d) procedures for managing noise emissions from construction-related activities;
- e) appropriate sanitary facilities to be provided for construction and maintenance staff;
- f) a timetable, where practicable, for the construction of turbine bases, access tracks and power cabling during warmer months, to minimise impacts on ephemeral

wetlands, local fauna and sediment mobilization;

- g) measures to minimise waste generation on site and maximising opportunities for recycling and reuse;
- h) measures for dust mitigation, control and monitoring dust gauges;
- i) procedures to ensure that construction vehicles and equipment use designated tracks and works areas to avoid impacts on native vegetation;
- j) procedures for covering trenches and holes at night, and filling trenches as soon as practical after excavation, to protect native fauna;
- k) the removal of works, buildings and staging areas on completion of the construction phase of the project.

Sediment, erosion and storm water management plan

The environmental management plan must include a sediment, erosion and storm water management plan.

The sediment, erosion and storm water management plan must include:

- a) identification of all construction and operational processes that could potentially lead to water contamination;
- b) procedures to ensure that silt from batters, cut-off drains, table drains and road works is retained on the site during and after construction and replaced as soon as possible. To this end:
 - (i) all land disturbances must be confined to a minimum practical working area;
 - (ii) soil to be removed must be stockpiled and separate soil horizons must be retained in separate stockpiles and not mixed, and soil must be replaced as soon as possible in sequence;
 - (iii) stockpiles must be located away from drainage lines;
- c) the installation of geo-textile silt fences (with sedimentation basins where appropriate) on all drainage lines from the site which are likely to receive run-off from disturbed areas;
- d) procedures for waste water discharge management;
- e) a process for overland flow management to prevent the concentration and diversion of waters onto steep or erosion prone slopes;
- f) pollution management measures for stored and stockpiled materials including

- waste materials, litter, contaminated run-off and any other potential source of pollution to ground or surface waters;
- g) agreed program and appropriate capacity for annual inspection and regular maintenance of any on-site wastewater management system;
- h) a program of inspection and remediation of localised erosion within a specified response time.

Hydrocarbon and hazardous substances plan

The hydrocarbon and hazardous substances plan must include:

- (a) procedures for any on-site, permanent post-construction storage of fuels, lubricants, waste oil or other hazardous substances or potential contaminants to be in bunded areas;
- (b) contingency measures to ensure that any chemical or oil spills are contained onsite and cleaned up in accordance with the Council requirements.

Bushfire risk management plan and emergency evacuation plan

The bushfire risk management plan and emergency evacuation plan must include:

- (a) criteria for the provision of static water supply tanks solely for firefighting purposes, including minimum capacities, appropriate connections and signage;
- (b) procedures for vegetation management, fuel control and the provision of firefighting equipment during declared fire danger periods;
- (c) minimum standards for access roads and tracks to allow access for fire fighting vehicles, including criteria for access to static water supply tanks for fire fighting vehicles;
- (d) training of personnel of the organisations referred to above in relation to suppression of wind farm fires;
- (e) details of a lightning and earthing system to mitigate against the risk of bush-fires caused by direct lightning strikes on the turbines.

Significant species management plans

Significant species management plans must:

- (a) include plans for all wildlife species listed as Endangered, Vulnerable or Near Threatened under the provisions of the *Nature Conservation Act* 1992 that:
 - i. are currently known to occur within or periodically utilise the site; or

- ii. are detected within the site during the conduct of further baseline, construction or operational monitoring pursuant to other conditions; and
- iii. are not the subject of an equivalent management plan prepared in satisfaction of an approval issued under the provisions of the Environment Protection and Biodiversity Conservation Act 1999 (Cth).
- (b) set out key impact management strategies including:
 - i. further baseline programs;
 - ii. management targets;
 - iii. design, construction and operational impact avoidance and mitigation measures and protocols;
 - iv. quantitative performance indicators;
 - v. monitoring and reporting regimes;
 - vi. corrective actions;
 - vii. timeframes for identified actions; and
 - viii. applicant and stakeholder responsibilities.

Weed and pest management plan

The weed and pest management plan must include:

(a) protocols for the management of noxious environmental weed species on the site, with the objective of minimising the potential risk of introducing such weeds and pests.

Rehabilitation plan

The rehabilitation plan must include guidelines to incorporate appropriate landscape rehabilitation strategies and methods into the management of disturbed land.

Habitat clearing and management plan

The habitat clearing and management plan must include management strategies involved in mitigating impacts of habitat clearing on susceptible fauna, including the induction of workers and for wildlife spotters and catchers involved in habitat clearing.

Ecological fire management plan

The ecological fire management plan must include management strategies to be implemented in order to maintain an appropriate fire regime for the various faunal

and flora habitats represented on site.

Cultural heritage management plan

The cultural heritage management plan must include the procedures to be followed for impact avoidance and mitigation of impacts upon Aboriginal heritage.

Environmental management plan training program

The environmental management plan must include a training program for construction workers and permanent employees or contractors at the site, including a site induction program relating to the range of issues addressed by the environmental management plan.

Environmental management plan reporting program

The environmental management plan must include a program for reporting environmental incidents, including:

- (a) a register of environmental incidents, non-conformances and complaints, together with corrective actions taken in response to such incidents, non-conformances or complaints;
- (b) identification of the person to whom reports of environmental incidents, non-conformances and complaints should be made.

Implementation plan

The environmental management plan must include a timetable for implementation of all programs and works referred to in sections above.