

# Glen Innes

# 15

## Statement of Commitments



## 15. Statement of Commitments

This chapter of the Environmental Assessment (EA) states the commitments made by Glen Innes Wind Power (GIWP) to be integrated in the project.

**Table 15.1 – Statement of Commitments**

Issue or Section No.	Commitment
Scope of Development	GIWP will carry out the development generally in accordance with the information contained in this EA and in compliance with the Minister's Project Approval Conditions.
Minimising harm to the Environment	GIWP will implement all practicable measures to prevent and minimise any harm to the environment that may result from the construction, commissioning, operation, maintenance and decommissioning of the development.
Statutory requirements	GIWP will ensure compliance with all relevant environmental requirements and ensure that all necessary approvals and as relevant, licences and permits are obtained and kept up to date as required throughout the life of the development. Copies of these documents will be maintained at the Site Office and EMPs will include measures to ensure compliance.
Administrative Condition - Compliance	<p>GIWP will notify in writing the Director-General, Relevant Government Departments and Glen Innes Severn Council of the start of the Project's Construction and Operation phases. Such notification must be provided at least four weeks before the relevant start date unless otherwise agreed to by the Director-General.</p> <p>GIWP will bring to the Director-General's attention any matter that may require further assessment by the Director-General.</p> <p>GIWP will comply with any requirements of the Director-General arising from the Director-General's assessment of:</p> <ul style="list-style-type: none"> <li>(a) any reports, plans or correspondence that are submitted to satisfy the Conditions of Approval; and</li> <li>(b) the implementation of any actions or measures contained in such reports, plans or correspondence.</li> </ul>
Administrative Condition – Pre Construction Compliance Report	<p>GIWP will submit a Pre-Construction Compliance Report to the Director-General at least two weeks before Construction commences (or within any other time agreed to by the Director-General).</p> <p>The Pre-Construction Compliance Report will include:</p> <ul style="list-style-type: none"> <li>(a) details of how the Conditions of Approval required to be addressed before Construction were complied with;</li> <li>(b) the time when each relevant Condition of Approval was complied with, including dates of submission of any required reports and/or approval dates; and</li> <li>(c) details of any approvals or licences required to be issued by Relevant Government Departments before Construction commences.</li> </ul>

Issue or Section No.	Commitment
Administrative Condition – Pre Operation Compliance Report	<p>GIWP will submit a Pre-Operation Compliance Report to the Director-General at least two weeks before Operation commences (or within any other time agreed to by the Director-General).</p> <p>The Pre-Operation Compliance Report must include:</p> <ul style="list-style-type: none"> <li>(a) details of how the Conditions of Approval required to be addressed before Operation were complied with;</li> <li>(b) the time when each relevant Condition of Approval was complied with, including dates of submission of any required reports and/or approval dates; and</li> <li>(c) details of any approvals or licences issued by relevant Government Departments for the Project's Operation.</li> </ul>
Administrative Condition – Construction Compliance Reports	<p>GIWP will provide the Director-General, Glen Innes Severn Council and any other government department nominated by the Director-General with Construction Compliance Reports. The environmental management representative (EMR) must review the Construction Compliance Reports before they are submitted to the Director-General and bring to the Director-General's attention any shortcomings.</p> <p>The first Construction Compliance Report will report on the first six months of Construction and be submitted a maximum six weeks after expiry of that period (or at any other time interval agreed to by the Director General). The second, and subsequent, Construction Compliance Reports will be submitted at maximum intervals of six months from the date of submission of the first Construction Compliance Report (or at any other time interval agreed to by the Director General) for the duration of Construction.</p> <p>The Construction Compliance Reports will include information on:</p> <ul style="list-style-type: none"> <li>(a) compliance with the CEMP and the Conditions of Approval;</li> <li>(b) compliance with any approvals or any licences issued by relevant Government Departments for Construction;</li> <li>(c) the implementation and effectiveness of environmental controls. The assessment of effectiveness will be based on a comparison of actual impacts against performance criteria identified in the CEMP;</li> <li>(d) environmental monitoring results, presented as a results summary and analysis;</li> <li>(e) the number and details of any complaints, including a summary of main areas of complaint, action taken, response given and intended strategies to reduce recurring complaints;</li> <li>(f) details of any review and amendments to the CEMP resulting from Construction during the reporting period; and</li> <li>(g) any other matter relating to compliance with the Conditions of Approval or as requested by the Director-General.</li> </ul> <p>The Construction Compliance Reports will be made publicly available.</p>

Issue or Section No.	Commitment
Environmental Impact Audits- Environmental Impact Audit Report - Construction	<p>An Environmental Impact Audit Report - Construction will be prepared by GIWP and submitted to the Director-General a maximum three months after Construction is complete (or at any other time interval agreed to by the Director-General). The Environmental Impact Audit Report – Construction will also be submitted to other government departments upon the request of the Director-General.</p> <p>The Environmental Impact Audit Report – Construction will:</p> <ul style="list-style-type: none"> <li>(a) identify the major environmental controls used during Construction and assess their effectiveness;</li> <li>(b) summarise the main environmental management plans and processes implemented during Construction and assess their effectiveness;</li> <li>(c) identify any innovations in Construction methodology used to improve environmental management; and</li> <li>(d) discuss the lessons learnt during Construction, including recommendations for future Projects.</li> </ul>
Environmental Impact Audits- Environmental Impact Audit Report - Operation	<p>An Environmental Impact Audit Report - Operation will be submitted by GIWP to the Director-General a maximum 24 months after the Project begins Operation and at any additional periods that the Director-General may require. The Environmental Impact Audit Report - Operation must also be submitted to other government departments upon the request of the Director-General.</p> <p>The Environmental Impact Audit Report - Operation will:</p> <ul style="list-style-type: none"> <li>(a) be certified by an independent person at the Proponent's expense. The certifier must be advised to the Director-General before the Environmental Impact Audit Report – Operation is prepared;</li> <li>(b) compare the Operation impact predictions made in the EA, Submissions Report and any supplementary studies with the actual impacts;</li> <li>(c) assess the effectiveness of implemented mitigation measures and safeguards;</li> <li>(d) assess compliance with the systems for operation maintenance and monitoring;</li> <li>(e) discuss the results of consultation with the local community particularly any feedback or complaints; and</li> <li>(f) be made publicly available.</li> </ul>
Environmental Management – Construction Environmental Management Plan	<p>A Construction Environmental Management Plan (CEMP) will be prepared by GIWP and implemented in accordance with all relevant Acts and Regulations. GIWP will obtain the Director-General's Approval for the CEMP before Construction commences or within any other time agreed to by the Director-General. The CEMP must be reviewed by the EMR before GIWP seeks the Director-General's approval for the CEMP. The EMR must bring to the Director-General's attention any shortcomings.</p> <p>GIWP will ensure that the relevant mitigation measures identified in this EA are incorporated into the CEMP or the relevant Sub Plan.</p> <p>The CEMP will be prepared in accordance with the Department's publication entitled Guideline for the Preparation of Environmental Management Plans (2004).</p>

<b>Issue or Section No.</b>	<b>Commitment</b>
Environmental Management – Operation Environmental Management Plan	<p data-bbox="472 302 1406 465">An Operation Environmental Management Plan (OEMP) will be prepared by GIWP and implemented in accordance with these Conditions and all relevant Acts and Regulations. GIWP will obtain the approval of the Director-General for the OEMP before Operation commences or within any other time agreed to by the Director-General.</p> <p data-bbox="472 501 1366 566">GIWP will ensure that the mitigation measures identified in this EA are incorporated into the OEMP or the relevant Sub Plan.</p> <p data-bbox="472 604 1398 672">The OEMP must be prepared in accordance with the Department's publication entitled Guideline for the Preparation of Environmental Management Plans (2004).</p>

Issue or Section No.	Commitment
Environmental Management – Environmental Management Representative	<p>GIWP will request the Director-General's Approval for the appointment of an Environmental Management Representative (EMR) at least eight weeks before Construction commences (or within any other time agreed to by the Director-General). In its request GIWP will provide the following information, the:</p> <ul style="list-style-type: none"> <li>(a) qualifications and experience of the EMR including demonstration of general compliance with relevant Australian Standards for environmental auditors;</li> <li>(b) authority and independence (from the Proponent or its contractors) of the EMR including details of the Proponent's internal reporting structure; and</li> <li>(c) resourcing of the EMR role. The EMR will be available: <ul style="list-style-type: none"> <li>(i) for sufficient time to undertake the EMR role. This timing shall be agreed between GIWP and the EMR and advised to the Director-General in the request for approval;</li> <li>(ii) at any other time requested by the Director-General;</li> <li>(iii) during any Construction activities identified in the CEMP to require the EMR's attendance; and</li> <li>(iv) for the duration of Construction.</li> </ul> </li> </ul> <p>The Director-General may at any time immediately revoke the approval of an EMR appointment by providing written notice to GIWP. Interim arrangements for EMR responsibility following the revocation must be agreed in writing between the Director-General and GIWP.</p> <p>The Director-General may at any time conduct an audit of any actions undertaken by the EMR.</p> <p>GIWP will:</p> <ul style="list-style-type: none"> <li>(a) facilitate and assist the Director-General in any such audit; and</li> <li>(b) include in the conditions of the EMR's appointment the need to facilitate and assist the Director-General in any such audit.</li> </ul> <p>The EMR is authorised to:</p> <ul style="list-style-type: none"> <li>(a) consider and advise the Director-General and GIWP on matters specified in the Conditions of Approval and compliance with such;</li> <li>(b) determine whether work falls within the definition of Construction where clarification is requested by GIWP;</li> <li>(c) review the CEMP;</li> <li>(d) periodically monitor GIWP's activities to evaluate compliance with the CEMP. Periodic monitoring must involve site inspections of active work sites at least fortnightly;</li> <li>(e) provide a written report to GIWP of any non-compliance with the CEMP observed or identified by the EMR. Non compliance must be managed as identified in the CEMP;</li> </ul>

Issue or Section No.	Commitment
	<p>(f) issue a recommendation to GIWP to stop work immediately if in the view of the EMR an unacceptable impact on the environment is occurring or is likely to occur. The stop work recommendation may be limited to specific activities causing an impact if the EMR can easily identify those activities. The EMR may also recommend that GIWP initiate reasonable actions to avoid or minimise adverse impacts;</p> <p>(g) review corrective and preventative actions to monitor the implementation of recommendations made from audits and site inspections;</p> <p>(h) certify that minor revisions to the CEMP are consistent with the approved CEMP; and</p> <p>(i) provide regular (as agreed with the Director-General) reports to the Director-General on matters relevant to carrying out the EMR role including notifying the Director-General of any stop work recommendations.</p> <p>The EMR must immediately advise GIWP and the Director-General of any incidents relevant to these Conditions resulting from Construction that were not dealt with expediently or adequately by GIWP.</p>
Community and Consultation - Advice of Construction Activities	<p>GIWP will ensure that the local community and businesses are advised of Construction activities that could cause disruption. Methods to disseminate this information will be identified in the CEMP. Information to be provided will include:</p> <p>(a) details of any traffic disruptions and controls;</p> <p>(b) construction of temporary detours; and</p> <p>(c) work approved to be undertaken outside standard Construction hours, in particular noisy works, before such works are undertaken.</p>
Community and Consultation – Establishment of a Project Internet Site	<p>GIWP will establish a Project internet site before Construction commences and maintain the internet site until Construction ends. This internet site will contain:</p> <p>(a) periodic updates of work progress, consultation activities and planned work schedules. The site will indicate the date of the last update and the frequency of the internet site updates;</p> <p>(b) a description of relevant approval authorities and their areas of responsibility;</p> <p>(c) a list of project reports and plans that are publicly available and details of how these can be accessed;</p> <p>(d) contact names and phone numbers of relevant communications staff; and</p> <p>(e) the 24 hour toll-free complaints contact telephone number.</p> <p>Updates of work progress, construction activities and planned work schedules will be provided where significant changes in noise or traffic impacts are expected and will be reviewed progressively by GIWP.</p>

<b>Issue or Section No.</b>	<b>Commitment</b>
Community and Consultation – Complaints Management	<p>Prior to the commencement of Construction, GIWP will ensure that the following is available for the construction and operation period:</p> <ul style="list-style-type: none"> <li>(a) a postal address to which written complaints may be sent;</li> <li>(b) an e-mail address to which electronic complaints may be transmitted; and</li> <li>(c) a 24-hour telephone contact line.</li> </ul> <p>GIWP will keep a legible record of all complaints received in an up-to-date Complaints Register. The Complaints Register will record, but not necessarily be limited to:</p> <ul style="list-style-type: none"> <li>(a) the date and time, where relevant, of the complaint;</li> <li>(b) the means by which the complaint was made (telephone, mail or e-mail);</li> <li>(c) any personal details of the complainant that were provided, or if no details were provided, a note to that effect;</li> <li>(d) the nature of the complaint;</li> <li>(e) any action(s) taken by GIWP in relation to the complaint, including any follow-up contact with the complainant; and</li> <li>(f) if no action was taken by GIWP in relation to the complaint, the reason(s) why no action was taken.</li> </ul> <p>The Complaints Register will be made available for inspection on request of the Director-General. The record of a complaint must be kept for at least four years after the complaint was made.</p>

Issue or Section No.	Commitment
Flora and Fauna Management Sub Plan (7.6.1, 7.6.2, 7.6.3)	<p>A Flora and Fauna Management Sub Plan will be prepared by GIWP as a sub plan of the CEMP. This sub plan will include:</p> <ul style="list-style-type: none"> <li>(a) plans showing sensitive terrestrial vegetation communities; important flora and fauna habitat areas; locations where threatened species, populations or ecological communities were recorded; and limits of areas to be cleared;</li> <li>(b) methods to manage impacts on flora and fauna species (terrestrial and aquatic) and their habitat which may be directly or indirectly affected by the Project. These will include: <ul style="list-style-type: none"> <li>(i) procedures for vegetation clearing, soil management and managing other habitat damage during Construction;</li> <li>(ii) methods to protect vegetation both retained within, and also adjoining, the Project from damage during Construction;</li> <li>(iii) a habitat tree management program including fauna recovery procedures and habitat maintenance (e.g. relocating hollows or installing nesting boxes);</li> <li>(iv) where possible, and where consistent with DECC or DPI requirements, strategies for re-using in rehabilitation works individuals of any threatened plant species that would be otherwise be destroyed by the Project;</li> <li>(v) performance criteria against which to measure the success of the methods</li> </ul> </li> <li>(c) rehabilitation details including: <ul style="list-style-type: none"> <li>(i) identification of locally native species to be used in rehabilitation and landscaping works, including flora species suitable as a food resource for threatened fauna species;</li> <li>(ii) methods to remediate affected aquatic habitats;</li> <li>(iii) the source of all seed or tube stock to be used in rehabilitation and landscaping works including the identification of seed sources within the Project. Seed of locally native species within the Project will be collected before Construction commences to provide seed stock for revegetation;</li> <li>(iv) methods to re-use topsoil (and where relevant subsoils) and cleared vegetation;</li> <li>(v) measures for the management and maintenance of all preserved, planted and rehabilitated vegetation;</li> </ul> </li> <li>(d) a Weed Management Strategy including: <ul style="list-style-type: none"> <li>(i) identification of weeds within the Project and adjoining areas;</li> <li>(ii) methods to treat and re-use weed infested topsoil;</li> <li>(iii) strategies to control the spread of weeds during Construction;</li> </ul> </li> <li>(e) a program for reporting on the effectiveness of flora and fauna management measures against the identified performance criteria. Management methods must be reviewed where found to be ineffective;</li> <li>(f) the mitigation measures in Chapter 7 of the EA. This includes the following:</li> </ul>

Issue or Section No.	Commitment
Flora and Fauna Management Sub Plan (7.6.1, 7.6.2, 7.6.3)	<ul style="list-style-type: none"> <li>• Construction vehicles will access the site via the former Gwydir Highway alignment and will not use the Sinclair Lookout Road</li> <li>• Clearing of the few trees to gain access to the wind farm site from the former Gwydir Highway alignment within the Wattle Vale Travelling Stock Route will be undertaken in consultation with the Rural Lands Protection Board to ensure that clearing of native vegetation is minimised</li> <li>• In the event that construction vehicles access the site via Rose Hill Road it may be necessary to trim or clear some of the 12 Ribbon Gums overhanging the northern end of the road as well as impacting the grassy understorey and numerous dead trees in the area. Accordingly, the former Gwydir Highway alignment is the preferred site access for large construction vehicles</li> <li>• The substation and Turbine 1 will be sited on cleared land and avoid the patches of remnant woodland at this location.</li> <li>• The rock outcrop at the site of Turbine 2 will be relocated nearby to retain habitat for reptiles. Similarly where the access route disturbs rock outcrop at other locations, the rock will be relocated and reptile habitat retained.</li> <li>• The large old Kurrajong tree on the access route between Turbine 2 and Turbine 3 will be retained.</li> <li>• The access route between Site 10B and Site 12B will be designed to avoid the scattered woodland remnants and rock outcrop scrub</li> <li>• Clearing for the access route to Turbine 11 and for the hardstand at the site of Turbine 11 will be constrained and guided by a suitably qualified ecologist</li> <li>• The micro siting of Turbines 14B and 13 will avoid impact on the large scattered trees present at these locations</li> <li>• The route between Turbine 14B and Turbine 15 will follow the cleared corridor beside the fence line and where it crosses the westerly continuation of Hillside Road it will follow the existing farm track to the east of Turbine 15</li> <li>• Turbine 15 will be located in the cleared area to the west of the existing farm track and to the south of the stand of remnant woodland</li> <li>• Turbine 17 will be located in cleared land and not require clearing of the scattered woodland vegetation</li> <li>• Both Turbines 18 and 19 will be located on cleared land that is mainly exotic pasture. Dead trees in close proximity to the turbines will be removed to avoid birds roosting close to the turbines</li> <li>• Clearing to gain access to Turbine 10 will be minimised by utilising an access route comprising the existing track and existing clearings on the upper slopes</li> <li>• Access to Turbines 20B, 21B and 22B will be from the northern end of the ridge which has been cleared and will avoid further clearing of remnant woodland</li> <li>• The dead trees near Turbine 22B on the eastern side of the hill will be removed</li> <li>• Clearing woodland will be avoided wherever possible. Where avoidance is not possible, clearing and lopping will be kept to the bare minimum to maximise conservation of the woodland.</li> <li>• A soil and water management plan will be prepared for the project, in consultation with the Department of Planning and Department of Environment and Climate Change.</li> <li>• The environmental representative appointed for the construction phase of the project, will ensure that appropriate environmental safeguards are implemented including the mitigation measures set out here.</li> </ul>

Issue or Section No.	Commitment
Flora and Fauna Management Sub Plan (7.6.1, 7.6.2, 7.6.3)	<ul style="list-style-type: none"> <li>• To reduce the potential impact on birds of prey: <ul style="list-style-type: none"> <li>- the towers will be smooth, with no perching sites</li> <li>- dead animals, e.g. sheep carcasses and road kills, will be removed as soon as possible within a 200 metre radius of each turbine</li> <li>- lambing will not be allowed to occur in paddocks containing turbines</li> <li>- no lights, other than safety lights for aircraft, will be installed on the turbines in case they attract owls. Lighting at the substation facilities will also be minimised due to its proximity to turbine sites</li> <li>- no buildings, poles or other structures apart from meteorological masts should be constructed within 200 metres of a turbine because they provide perching opportunities for birds of prey</li> <li>- any dead trees near turbines will be removed for the same reason</li> <li>- no trees should be planted near turbines</li> </ul> </li> <li>• An avifauna impact monitoring program will be implemented once the project is operational. The monitoring program will be developed through reference to the Australian Wind Energy Association (AWEA) July 2005 report 'Wind Farms and Birds: Interim Standards for Risk Assessment' and relevant specialists. Prior to its implementation, the proposed monitoring program will be submitted to the Department of Environment and Climate Change to assess its adequacy.</li> <li>• In the event of bird or bat strike becoming a significant issue, installation of deterrent devices on the turbines will be considered. Should the proposed monitoring reveal substantial evidence of bird or bat strike, Glen Innes Wind Power will engage an appropriate specialist to assess the incidences and identify practical and effective mitigation measures.</li> <li>• No large dams will be constructed on wind farmer properties within a one kilometre radius of a turbine; large dams could attract flocks of waterfowl and thereby increase their susceptibility to blade-strike.</li> <li>• The exact location of the turbines and access tracks will be micro-sited in conjunction with the Environmental Representative during the construction phase of the project to avoid unnecessary impacts on native vegetation, flora and fauna. All turbine sites should avoid the need to clear large mature trees.</li> <li>• The Environmental Representative will ensure that barriers are erected around sensitive vegetation to be retained and which may be impacted by construction works at nearby turbine sites or access tracks</li> <li>• Rock outcrops will be avoided where practicable. Where there is a need to disturb rock outcrop the disturbed rock will be relocated and similar rocky habitat reconstructed nearby. Where batters are constructed using rock then these will be left in this form to provide reptile habitat and locations where rocky scrub can develop</li> <li>• Measures must be incorporated in the Project Environmental Management Plan to restrict the introduction of weeds to the wind farm site and for post construction weed control measures to be applied for all areas disturbed by the project.</li> </ul> <p>GIWP will consult with the landowners involved with the project to identify a suitable area of woodland that could be fenced off for the duration of the project.</p> <p>A pre-clearance survey of trees to be cleared to identify any potential bat roosts. Where applicable, the clearing will be undertaken to lay trees down with potential roosts facing skywards to enable bats or other fauna to depart at a later time.</p>

Issue or Section No.	Commitment
Flora and Fauna Management Sub Plan (4.5.6)	Once the project layout has been confirmed an ecologist, if necessary, will revisit the site to ensure that impacts on areas of high conservation value are minimised. Barriers will be installed where necessary to avoid movements beyond defined work areas.
Cultural Heritage Sub Plan (4.2.4.8, 8.2, 8.7)	<p>A Cultural Heritage Management Sub Plan will be prepared by GIWP as part of the CEMP. The sub plan must incorporate the mitigation measures identified in Chapter 8 of the EA, which includes the following:</p> <ul style="list-style-type: none"> <li>• It is noted that all Aboriginal Objects and Places are protected in NSW. As such, in the event that Aboriginal archaeological material or deposits are encountered that is not described in this report, works within a 100 metre radius of the find will cease immediately. The DECC, a qualified archaeologist and the Glen Innes Local Aboriginal Land Council will be notified to make an assessment of the find</li> <li>• Any further investigations and development of mitigation measures associated with the wind farm planning will include consultation with the Glen Innes Local Aboriginal Land Council and the DECC</li> <li>• Creek lines will be avoided where possible, but where creek crossings are necessary for access tracks and/or trenches for underground cables the zone of impact will be minimised</li> <li>• While the site has been assessed as having low potential for undetected archaeological sites, the proposed access tracks and cabling corridors will as far as possible follow existing vehicle tracks to minimise disturbance to the landscape and reduce potential for disturbance of any sensitive archaeological and cultural zones. Where this is not viable, then cabling will aim to avoid areas of greater archaeological sensitivity such as higher order creek lines and tributary confluences</li> <li>• Should the final design require works in the vicinity of Site GIWF no. 1 then salvage would be undertaken prior to the construction proceeding. The salvage would be undertaken by an archaeologist in consultation with the Glen Innes Local Aboriginal Land Council and the assessment report distributed to the Glen Innes Local Aboriginal Land Council, the Department of Planning and the DECC</li> </ul>

Issue or Section No.	Commitment
Non Indigenous Object (4.5.9, 8.8.7)	<p>In the event that a non-indigenous heritage item is uncovered during Construction, all work in the vicinity of the object will cease and GIWP will contact the NSW Heritage Council to determine an appropriate course of action prior to the re-commencement of work in the vicinity of the item. Non Aboriginal heritage items to be protected from damage by the project include:</p> <ul style="list-style-type: none"> <li>• The Ross Hill Trig Station site and its associated reference marks. These will be protected by fencing erected by the contractor prior to any works at Turbine site 7 or on Ross Hill generally. The fencing will be maintained for the duration of the construction works. Such fencing would be at least 5 metres in each direction from the Trig Station or any reference marks in its vicinity and no construction activities will occur within the fenced area. Site monitoring will routinely ensure that the fences are secure.</li> <li>• Glen Innes Wind Power will, prior to commencement of construction, arrange for the preparation of a photographic record of the section of the former highway to be used to access the wind farm site. The photographic register of the former highway will be prepared generally in accordance with the Heritage Office guidelines for preparation of photographic registers.</li> <li>• While the former highway alignment will be used for access it will not be subject to excavation or disturbance other than minor maintenance to ensure the safe use by vehicles to reach the wind farm site and suitable drainage. The trees along each side of the road will be maintained apart from minor lopping of any overhanging branches and removal of a few smaller trees at a single location to gain access to the gate providing entry to the northern end of the wind farm site.</li> </ul>

Issue or Section No.	Commitment
Construction Noise Management Sub Plan (10.10, Table 10.7 and 10.8)	<p>A construction noise management sub plan will be implemented as part of the Project CEMP for the construction stage of the project to mitigate potential adverse noise impacts that could affect nearby residents. Key components of the construction noise management sub-plan will include:</p> <ul style="list-style-type: none"> <li>• Prior to commencement of construction, neighbours to the wind farm site will be informed of the construction works, the nature and duration of components of the construction phase, the potential impacts and contact details for registering complaints or enquiries.</li> <li>• Construction activities associated with the Development, including heavy vehicles entering and exiting the Site, will only be carried out between 7 am and 6 pm, Monday to Friday inclusive, and between 7 am and 1 pm on Saturdays if inaudible at neighbouring occupied residences and 8am to 1pm if audible. The following activities may be carried out in association with Construction outside of these hours: <ul style="list-style-type: none"> <li>(a) any works that do not cause noise emissions to be audible at any nearby residences not located on the Premises</li> <li>(b) the delivery of materials as requested by Police or other authorities for safety reasons</li> <li>(c) emergency work to avoid the loss of lives, property and/or to prevent environmental harm</li> <li>(d) completion of a concrete pour that extends beyond normal working hours due to unforeseen delays</li> <li>(e) conduct of some lifting operations to install turbine components during periods of low wind speed for safety reasons</li> </ul> </li> <li>• Any work undertaken outside the specified construction hours, other than those specified in (a) – (e) above, will not be undertaken without prior approval of the Department of Planning</li> <li>• All vehicles to have the required noise control devices suitable for use on public roads.</li> <li>• Blasting operations will be avoided where practicable but if required will only take place between 9:00am and 5:00pm Monday to Friday inclusive and between 9:00am and 1:00pm Saturday; and at such other times or frequency as may be approved by the DECC and will comply with the following: <ul style="list-style-type: none"> <li>a) The air-blast overpressure level from blasting when assessed at the closest occupied residential sites surrounding the wind farm will not exceed 115dB (Lin Peak) for more than 5% of the total number of blasts during each reporting period; and 120dB (Lin Peak) at any time</li> <li>b) The ground vibration peak particle velocity from blasting operations when assessed at the closest occupied residential sites surrounding the wind will not exceed 5mm/s for more than 5% of the total number of blasts carried out on the Site during each reporting period; and 10mm/s at any time.</li> <li>c) Should any instances of elevated noise levels arising from construction works impact surrounding relevant receivers as indicated by receipt of complaints, then the matter will be investigated by the proponent and where practicable measures will be implemented to reduce the impact. A response will be provided to the complainant as to the findings and any modifications to reduce the impact.</li> </ul> </li> </ul>

Issue or Section No.	Commitment
Operational Noise Management Sub Plan (10.10)	<p>To ensure that the noise impacts of the operations phase of the Glen Innes Wind Farm complies with the applicable noise criteria as outlined in the Environmental Assessment the following measures will be integrated in the project's Noise sub plan included in the Operations Environmental Management Plan (OEMP):</p> <ul style="list-style-type: none"> <li>• Prior to commencement of construction the proponent will develop a noise compliance assessment protocol to be implemented following commissioning of the wind farm. The protocol will be developed by an acoustic engineer and in consultation with the DoP</li> <li>• Prior to commissioning of the wind farm, neighbours to the wind farm will be provided with details of the commissioning and contact details in the event that disturbance occurs at their neighbouring residence</li> <li>• Within three months of commissioning of the wind farm compliance checks will be undertaken for the closest relevant receiver residence 'Highfields' to confirm that wind farm noise levels do not exceed criteria at this location and verify reliability of predictions. If complaints are received in the first month of operation then the assessment must be implemented within two weeks of a complaint being received</li> <li>• If the measured noise levels exceed predictions at the 'Highfields' residence, compliance checks will also be undertaken at relevant receiver residences 'Cherry Tree' (Eungai) and 'Illparran' to confirm that wind farm noise levels do not exceed criteria at these locations</li> <li>• If complaints in respect of noise impact are received from more distant relevant receivers following the wind farm commissioning then these complaints will also be investigated and if warranted compliance checks will also be undertaken for these residences where the initial investigation has indicated that the complaint may relate to an exceedance of criteria</li> <li>• Prior to the compliance assessment and if the complaint can be reasonably judged to be related to exceedance of relevant criteria then the proponent will modify the operation of the wind farm to reduce the noise levels experienced at the affected residence while the investigation is being undertaken</li> <li>• Where the compliance assessment identifies exceedance of criteria for specific wind speeds or under certain atmospheric conditions then the proponent will limit the operation of the contributing turbines and provide a plan to the DoP indicating how compliance will be ensured for the operation where exceedance occurs</li> <li>• Subject to DoP approval of the plan for mitigation of a confirmed exceedance, GIWP will implement the necessary measures to achieve compliance and demonstrate the effectiveness of the measures implemented and that compliance has been achieved</li> <li>• If agreeable to an owner of a relevant receiver residence, GIWP may provide improvements to the affected residence in place of or in addition to modification to the wind farm operation to reduce the impact for the specific neighbour</li> <li>• For the closest wind farmer residence to the wind farm (Hillside) Glen Innes Wind Power will establish an agreement with the landowner in respect of predicted noise impacts above criteria established in accordance with the SA EPA Guideline. This will include a statement of the likely noise impacts and an agreement by the landowner accepting the predicted impacts. This is only required in the case of the Hillside residence that is at a distance of 0.76 kilometres from the nearest turbine and is surrounded by turbine sites.</li> </ul>

Issue or Section No.	Commitment												
	<ul style="list-style-type: none"> <li>• In the event that Mayvona is restored and becomes occupied then GIWP will discuss noise mitigation measures that could be incorporated in relation to the Mayvona residence. If required, the wind farm operation will be modified to ensure compliance at Mayvona should it become occupied.</li> <li>• The criteria that the wind farm will comply with (Table 10.3) are shown below for each of the above relevant receiver residences</li> </ul>												
	Noise level $L_{A90-10min}$ dB(A) relative to wind speed at reference mast M2 at 80 metres height												
Wind speed	4	5	6	7	8	9	10	11	12	13	14	15	
'Highfields'	35	35	35	35	35	37	38	40	42	44	47	49	
'Cherry Tree' (Eungai)	35	35	35	35	35	35	37	38	40	43	45	48	
'Illparran' A	35	35	35	35	36	37	38	39	41	42	44	46	

Issue or Section No.	Commitment
Soil and Water Management Sub Plan (5.3.3.1, 5.5.4, 5.6.3)	<p>As part of the CEMP, a Soil and Water Management Sub Plan will be prepared by GIWP in consultation with relevant government departments and Glen Innes Severn Council. The Sub Plan will:</p> <ul style="list-style-type: none"> <li>(a) where relevant, be consistent with the RTA's Guidelines for the Control of Erosion and Sedimentation in Roadworks;</li> <li>(b) identify the Construction activities that could cause soil erosion or discharge sediment or water pollutants from the site;</li> <li>(c) describe management methods to minimise soil erosion or discharge of sediment or water pollutants from the site including a strategy to minimise the area of bare surfaces during Construction;</li> <li>(d) describe the location and capacity of erosion and sediment control measures;</li> <li>(e) identify the timing and conditions under which Construction stage controls will be decommissioned;</li> <li>(f) identify how the effectiveness of the sediment and erosion control system will be monitored, reviewed and updated;</li> <li>(g) include contingency plans to be implemented for events such as fuel spills; and</li> <li>(h) include the mitigation measures in Ch 5.3.3.1, 5.5.4 and 5.6.3 of the EA, including measures to minimise dust on Rose Hill Road if it is used for some access.</li> </ul> <p>Measures will include:</p> <ul style="list-style-type: none"> <li>- Where cable trenches or drainage lines are oriented down slopes, measures will be incorporated to slow stormwater flows and prevent scouring of the open trench, drainage line or disturbed ground prior to re-establishment of grass cover or stabilisation</li> <li>- rolling and possibly wetting of access tracks with water to compact loose soil exposed during initial track formation</li> <li>- if necessary, application of approved wetting agent to exposed soil during dry and windy periods</li> <li>- capping of access tracks with gravel to suit the track usage requirements, limit dust generation and ensure safety for users</li> <li>- stabilisation of exposed soils, temporary batters and stockpiles</li> <li>- where necessary, placement of stockpiles in locations sheltered from wind and surface flows</li> <li>- construction of drains and check dams</li> <li>- construction of diversion banks, perimeter banks and level spreader sills</li> <li>- sediment fences around stockpiles and areas of earthworks</li> <li>- use of straw bale, geotextile filter fabric sediment traps and filters</li> <li>- design of earthworks to minimise erosion and sedimentation</li> <li>- excavations kept open for a minimal period</li> <li>- disturbed areas to be stabilised and revegetated promptly after works are undertaken</li> <li>- where possible, timing of earth works to target favourable weather conditions</li> <li>- sediment detention ponds will be installed at the Site Office and the temporary laydown areas. The ponds will be sized in accordance with the CALM Method for sediment basin design that includes consideration of the extent of the disturbed area, soil characteristics, rainfall intensity, ground cover and slope. In practice, the site office and laydown areas will be compacted by vehicle movements and have a lesser potential for erosion and sediment transfer than would otherwise be the case.</li> </ul>

Issue or Section No.	Commitment
Soil and Water Management Sub Plan (5.3.3.1, 5.5.4, 5.6.3)	<p>All erosion and sediment control devices will be maintained in satisfactory working order until such time as the disturbed areas have been stabilised to the satisfaction of Glen Innes Wind Power and the respective landowners. Erosion and sediment devices will be inspected regularly after each rain period and during periods of prolonged heavy rain and any defects rectified promptly.</p> <p>Disturbed areas will be required to be stabilised in accordance with the following principles:</p> <ul style="list-style-type: none"> <li>• temporary vegetation, mulch or other stabiliser will be applied to all disturbed areas, including soil stockpiles that remain exposed for a period of 30 days or more</li> <li>• all temporary earth diversion banks and sediment basin embankments will be seeded and fertilised as soon as practicable after construction and take into account the growing seasons</li> <li>• stabilisation of all batters will be commenced within ten days of completion of formation</li> </ul> <p>All temporary control measures will be removed when revegetation has established on formerly disturbed areas and will be disposed of in a satisfactory manner.</p> <p>Stockpile sites will be clearly identified and selected to be free from traffic and away from drainage lines and watercourses. They will be managed to minimise erosion and loss of topsoil.</p> <p>At the conclusion of construction, all temporary tracks and areas disturbed by construction work including cable routes and hardstand areas surrounding the wind turbines will be reinstated and revegetated. Follow up maintenance will be undertaken until the areas are satisfactorily stabilised and restored.</p> <p>An appropriately qualified soil scientist will be consulted according to a schedule identified in the Soil and Water Management Sub Plan to:</p> <ol style="list-style-type: none"> <li>(a) undertake inspections of temporary and permanent erosion and sedimentation control devices;</li> <li>(b) ensure that the most appropriate controls are being implemented;</li> <li>(c) check that controls are being maintained in an efficient condition; and</li> <li>(d) check that controls meet the requirements of any relevant approval condition.</li> </ol> <p>The results of these inspections and any follow-up actions will be reported in the Construction Compliance Reports.</p>

Issue or Section No.	Commitment
Chemical Management Sub Plan	<p>As part of the CEMP, a Fuel and Oil Management Sub Plan will be prepared by GIWP in consultation with relevant Government Departments and Glen Innes Severn Council. The Sub Plan will include mitigation measures such as:</p> <ul style="list-style-type: none"> <li>• If oil filled generator transformers are used, containment measures will be incorporated to prevent any oil loss reaching local watercourses</li> <li>• GIWP will require the design of the substation to incorporate provision for containment of any oil spillage or leakage from the 33,000/132,000 volt or 66,000 volt transformer(s) including secondary containment.</li> <li>• In the case of areas of oil or fuel storage on-site, GIWP will provide sufficient containment to contain any spillage that may occur at the location. Such sites will be monitored periodically for integrity of containment and adequacy of handling procedures. For the substation, containment measures will also include a secondary containment dam down-slope of the substation.</li> </ul> <p>Once operational,</p> <ul style="list-style-type: none"> <li>• regular inspection of the transformers and associated turbine equipment will be carried out to ensure that they remain in good working condition and are leak free.</li> <li>• Procedures for maintenance will be documented and followed by maintenance staff</li> </ul>
Spoil and Fill Management	<p>For the purposes of the development, GIWP will ensure any imported fill:</p> <ul style="list-style-type: none"> <li>• will be Virgin Excavated Natural Material as defined in the Environment Protection Authority's guideline <i>Assessment, Classification and Management of Liquid and Non-Liquid Wastes</i>.</li> <li>• will not introduce weeds that are not currently present at the locations where the fill be used.</li> </ul>
Greenhouse and Energy Management Strategy	<p>A <i>Greenhouse and Energy Management Strategy</i> will be prepared by GIWP prior to construction commencing, to ensure the use of non-renewable <i>resources</i> from Construction and Operation is minimised.</p>

Issue or Section No.	Commitment
Construction Traffic Management Sub Plan (3.4.1, 3.9.4, 9.5, 12.6)	<p>As part of the CEMP, a Construction Traffic and Transport Management Sub Plan will be prepared by GIWP in consultation with Glen Innes Severn Council, the RTA and NSW Police. The sub plan will:</p> <ul style="list-style-type: none"> <li>(a) identify designated transport routes for heavy vehicles to the Development Site;</li> <li>(b) include measures to minimise traffic disruption through Glen Innes and in the vicinity of the development site;</li> <li>(c) include measures to minimise disturbance from traffic noise;</li> <li>(d) include measures to manage Construction traffic to ensure the safety of: <ul style="list-style-type: none"> <li>(i) livestock and limit disruption to livestock movement;</li> <li>(ii) school children and limit disruption to school bus timetables;</li> </ul> </li> <li>(e) include a community information program to inform the community of traffic disruptions resulting from the construction program; and</li> <li>(f) include the mitigation measures outlined in Chapter 9 of the EA. This includes the following measures: <ul style="list-style-type: none"> <li>• Prior notification to the Glen Innes Severn community of construction works and potential impacts for the local community</li> <li>• The site access from public roads will be via entrances constructed as agreed by GIWP, the property owners and Glen Innes Severn Council to ensure safe negotiation by large vehicles access and minimise disruption to local traffic. A lockable gate will be installed at a point set back from the road at each entrance point.</li> <li>• The routing of access tracks will take into account the following considerations: <ul style="list-style-type: none"> <li>- minimise the length of tracks</li> <li>- locate along the routes of existing tracks where possible</li> <li>- locate where clearing of vegetation is minimised</li> <li>- construct with due regard to safety, erosion, sediment control and drainage</li> <li>- position and design, as far as possible, to reduce visual impacts</li> <li>- if not required for the ongoing operation and maintenance of the works, removal and revegetation on completion of the construction phase</li> </ul> </li> <li>• General signposting of the access roads with appropriate heavy vehicle and construction warning signs shall also be undertaken in consultation with local authorities.</li> <li>• Specific warning signs will be located adjacent to the entrances to the site to warn existing road users of entering and exiting traffic. The use of day warning notices where signs are activated on a specific day to warn local road users of construction activities will also be considered. Particular attention can be given to traffic control and warning signs where the geometry of the road dictates that a potential safety issue exists. On-site access will be restricted to defined tracks to ensure minimal environmental impact.</li> <li>• Improvements to any public roads impacted by the project in consultation with the Council. Any improvements adjacent the Gwydir Highway such as an exit lane from the Gwydir Highway must only be undertaken after consultation with and agreement of the RTA and in accordance with any associated conditions. Provision of traffic control personnel where large vehicles are required to execute difficult or potentially unsafe manoeuvres on public roads</li> <li>• Concurrence with permit requirements for over-size and over-mass vehicles including the use of escort vehicles as required</li> </ul> </li> </ul>

Issue or Section No.	Commitment
Construction Traffic Management Sub Plan (3.4.1, 3.9.4, 9.5, 9.6, 12.6)	<ul style="list-style-type: none"> <li>• Restrictions on the timing of some large equipment and materials deliveries to site to mitigate specific impacts. In particular the following measures will be adopted:               <ul style="list-style-type: none"> <li>- restriction of traffic movements to avoid RAVs passing schools at Glen Innes during the school zone periods and to avoid RAV movements conflicting with school bus operations</li> <li>- local deliveries to the site during daylight hours or as specified by RTA, Police or Council to mitigate safety problems on local roads and to reduce disturbance for residences near to the access roads</li> </ul> </li> <li>• Confirmation of access track routes in proximity to any environmentally sensitive areas to be guided by relevant specialists</li> <li>• Establishment of an inspection and maintenance program for any local road access network to ensure condition of roads are maintained in a safe state</li> <li>• Maintenance program for on-site access tracks to ensure safe access</li> <li>• Implementation of a pro-active erosion and sediment control plan for on-site roads and laydown areas</li> <li>• At the conclusion of the construction phase, any tracks not required for subsequent operation and maintenance of the wind farm will be restored and revegetated.</li> </ul>

Issue or Section No.	Commitment
Bushfire Risk Management Sub Plan (12.5.1, 12.5.2)	<p>As part of the Construction and Operation EMPs, GIWP will prepare, in consultation with the Rural Fire Service, a Bushfire Risk Management Sub Plan based on the guidelines 'Planning for Bushfire Protection' (RFS, 2006 or its latest edition). The sub plan will include:</p> <ul style="list-style-type: none"> <li>(a) details of the bushfire hazards and risks associated with the Development;</li> <li>(b) mitigation measures including contingency plans;</li> <li>(c) procedures and programs for liaison and regular drills with the Rural Fire Service;</li> <li>(d) procedures for regular fire prevention inspections by the Rural Fire Service and implementation of any recommendations; and</li> <li>(e) include the mitigation measures in Chapters 12.5.1 and 12.5.2 of the EA.</li> </ul> <p>During the construction phase the following measures will be implemented to manage any bushfire risk:</p> <ul style="list-style-type: none"> <li>• The contractor will be required to comply with all relevant sections of the Bush Fires Act and the Fire Brigade Act and all Regulations thereto and will be required to liaise with the Rural Fire Service</li> <li>• Where necessary, access tracks and work sites will be slashed to remove vegetation in excess of 100 mm high</li> <li>• All construction vehicles will use diesel fuel</li> <li>• A mobile 1,000 litre tanker unit complete with motor-driven pump, hose and nozzle will remain at the site during construction work</li> <li>• Knapsack sprays and McLeod tools will be kept on hand at each actual work site</li> <li>• In the event of welding, flame cutting or grinding being carried out in the open during periods of fire danger, an observer holding a knapsack spray will be on hand</li> <li>• The contractor will be required to maintain the exhaust systems of all vehicles on site in sound condition and to avoid any build up of dry vegetation under vehicles</li> <li>• The use of explosives will not be allowed during periods of high bushfire risk</li> </ul> <p>The potential fire risk associated with electrical failure will be managed by the following measures:</p> <ul style="list-style-type: none"> <li>• Use of fully enclosed electrical equipment on turbine structures and padmount transformers</li> <li>• Extensive use of underground cabling between turbines</li> <li>• Design of any overhead lines in accordance with industry standards</li> <li>• Exclusion of vegetation from within the substation enclosure</li> <li>• Use of circuit breakers and fuses to interrupt any electrical fault</li> <li>• Adoption of lightning protection measures described in Chapter 12</li> </ul>

Issue or Section No.	Commitment
Waste Management and Re-use Sub Plan	<p>As part of the CEMP and OEMP, GIWP will prepare a Waste Management and Re-use Sub Plan to address the management of wastes during the Construction and Operation stages respectively in accordance with the NSW Government's Waste Reduction and Purchasing Policy. The Sub Plan will identify requirements for:</p> <ul style="list-style-type: none"> <li>(a) the application of the waste minimisation hierarchy principles of avoid/reduce/reuse/recycle/dispose;</li> <li>(b) waste handling and storage;</li> <li>(c) disposal of wastes. Specific details must be provided for cleared vegetation, contaminated materials, glass, metals and plastics, hydrocarbons (lubricants and fuels) and sanitary wastes; and</li> <li>(d) any waste material that is unable to be re-used, re-processed or recycled must be disposed at a facility approved to receive that type of waste; and will include the mitigation measures in Chapter 3.10.7, which incorporates the following: <ul style="list-style-type: none"> <li>- Surplus topsoil will be spread on the site to blend in with the natural landform and will be revegetated</li> <li>- Surplus excavated material will be disposed of on the relevant property at one or more locations as agreed with the property owner. Disposal sites will be finished with topsoil and revegetated. Where feasible, existing erosion areas will be selected for backfill and treatment.</li> <li>- Subject to the Council's agreement, it is proposed to dispose of packaging material, general construction debris and all other waste at the Glen Innes waste disposal area. Where feasible, recyclable items such as metals, glass or timber will be separated and directed to an appropriate local facility. Any putrescible general waste material will be stored in sealed containers until it is removed from site.</li> <li>- Disposal of sullage from any of the contractor's pump out toilet facilities will be to the local Glen Innes treatment plant or other suitable facility as agreed with Council.</li> <li>- Any waste oil arising from equipment servicing will be stored in sealed containers in a covered and bunded area until it can be removed off site to a suitable waste oil facility.</li> </ul> </li> </ul>
<b>Specific additional measures as indicated in specific sections of the Environmental Assessment</b>	
3.1 Adjustments to design	GIWP's project design is based on the layout shown in Figure 1.4 and incorporates 27 turbines. The actual turbine model and number to be installed may vary slightly dependent on the final design site conditions. Micro-siting of individual turbine locations is proposed, however any micrositing changes will be consistent with the project approval, otherwise a modification will be sought. Any such adjustment will take into account relevant sensitivities for the location and be subject to review by the EMR as to consistency with the Project Approval. The final design will be subject to Approval Authority review as part of the Construction Certificate Application process.
3.3.2 Cable routes	The cable routes will be generally between turbines and where possible would be located alongside access tracks to minimise site disturbance.
3.3.4 Facilities buildings	GIWP will require the design of the facilities and auxiliary services buildings to incorporate collection of roof drainage and have a small septic system or composting toilet that complies with Council requirements.

Issue or Section No.	Commitment
3.9.3 / 4.5.8 Temporary Site Office	As part of the arrangements for construction, Glen Innes Wind Power will confirm arrangements for the temporary construction site office. This may include negotiation with the Rural Lands Protection Board and Glen Innes Severn Council regarding the temporary use of the area adjacent the entry to the former highway alignment that is currently used for stockpiling gravel. As part of the negotiations, a basic survey of the land and the area required for the temporary site office may be needed. Glen Innes Wind Power would if required arrange for the survey to be provided.
3.9.3 / 10.10 Concrete batch plant	If the project contractor wishes to install a temporary batch plant, the contractor will be required to select a suitable site distant from neighbouring residences, undertake environmental assessment and obtain landowner agreement and planning approval.
5.3.1.2	All vehicles delivering equipment, materials and personnel to the site during the construction stage will be registered vehicles that are required to maintain the necessary emission controls.
6.7	Permanent tracks will be located to achieve suitable grades on stable slopes and designed so that they will not exacerbate erosion at the site. As far as possible, their location will also be chosen to minimise visual impact from the surrounding countryside. Earth batters on any tracks that are benched into slopes will be revegetated to prevent erosion and to reduce visibility of the constructed track.

Issue or Section No.	Commitment
6.10 Visual impact mitigation	<p>Measures to further mitigate the visual impact that will be incorporated in the development will include:</p> <ul style="list-style-type: none"> <li>• Clearing of vegetation will be minimised</li> <li>• Earthworks will be restored as soon as possible after construction</li> <li>• Underground cables will be installed between turbines within each of the turbine groups. The choice of underground cables for the ridge top turbine locations instead of above ground transmission lines has been made to minimise the visual impact of the development.</li> <li>• Cable trenches will be backfilled so that once restored they will have no visual impact.</li> <li>• The colour of the turbines is that commonly chosen to create a more desirable visual outcome.</li> <li>• If necessary, tree planting could be undertaken on some of the closer neighbouring properties with agreement of the relevant landowners to screen parts of the development. The preferred types of plants for screening are local native varieties but it may be necessary to plant non-natives that are fast growing where expediency is essential or where property owners would prefer non-natives. Planting of trees for visual screening of the wind farm will be offered to all neighbours with residences within three kilometres of the wind farm.</li> <li>• The design and location of ancillary works will incorporate measures to reduce their visual impact. Screening of certain ancillary works, if required, can utilise vegetation planting at the location of the ancillary works</li> <li>• Access roads have been minimised and located to limit their visibility from neighbouring public areas.</li> <li>• If obstacle lighting is required the following measures can be implemented to mitigate the visual effects: <ul style="list-style-type: none"> <li>• Shielding of obstacle lights is permitted, provided it does not compromise their operational effectiveness. Shielding can restrict the downward component of light to 5% of nominal intensity is emitted at or below 5 degrees or no light is emitted at or below 10 degrees below horizontal</li> <li>• With two obstacle lights mounted on the nacelle, light extinction of one of the lights can occur when the blade passes in front of the light, provided that at least one light can be seen from every angle in azimuth</li> <li>• Lighting would not be used during daylight hours unless visibility is reduced</li> </ul> </li> </ul>

Issue or Section No.	Commitment
11.6	<p>The following mitigation measures are proposed in respect of potential impacts on existing communication services in the vicinity of the wind farm:</p> <ul style="list-style-type: none"> <li>• Prior to construction Glen Innes Wind Power will ensure that the final turbine layout is assessed in terms of their potential impact on fixed line radio links and the two communications facilities in the vicinity of Ross Hill. The design will ensure that these services are not disrupted or degraded. Where necessary, the relevant communication service operator will be contacted to confirm operational details. In particular, the siting of Turbine 7 will be undertaken in consultation with NPWS. The option to relocate the NPWS radio station to an alternate location on Ross Hill may also be discussed with NPWS and if agreement reached relocation of the radio station could occur within the area of the hilltop.</li> <li>• Due to the possibility of interference to television signals once the wind farm is operational, it is proposed that Glen Innes Wind Power investigate the status of television reception at residences immediately surrounding the wind farm following its commissioning.</li> <li>• In the event that interference occurs as a result of the wind farm operation, then Glen Innes Wind Power will rectify any interference that has been caused by the project development.</li> <li>• Rectification of reception could initially include modifications to, or replacement of the aerials being used or replacement with digital TV, where available. Experience with existing wind farms demonstrates that significant improvements can sometimes be achieved by modifying aerials. In addition, Digital TV is indicated to be less subject to ghosting, provided it is not at the limits of the service area.</li> <li>• In the event that the initial measures to rectify television reception are not satisfactory, other measures which could restore reception to a standard similar to that which existed prior to installation of the wind farm could include: <ul style="list-style-type: none"> <li>- the installation and maintenance of a parasitic antenna system</li> <li>- provision of a land line between the affected receiver and an antenna located in an area of favourable reception</li> <li>- in the event of interference to local channels not being able to be satisfactorily overcome by other means, negotiating an arrangement for the installation and maintenance of a satellite receiving antenna</li> </ul> </li> </ul>
12.2	<p>Prior to erection of the wind turbines, final details of the height and location of each wind turbine will be provided by GIWP to CASA, Department of Defence and AirServices Australia.</p>