Project Approval

Sections 75J of the *Environmental Planning and Assessment Act 1979*

I, the Minister for Planning, under section 75J of the *Environmental Planning and Assessment Act 1979*, approve the project referred to in Schedule 1, subject to the conditions in Schedule 2. These conditions are required to:

- prevent, minimise, and/or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- ensure regular monitoring and reporting; and
- provide for the ongoing environmental management of the project.

The Hon. Kristina Keneally MP
Minister for Planning

Sydney 6 Sept 2009 File No: S07/01493

SCHEDULE 1

Application No:	08_0044
Proponent:	Country Energy
Approval Authority:	Minister for Planning
Land:	Land in and between Lismore, Ballina, Lennox Head, Byron Bay and Mullumbimby.
Project:	Stage 1 of the upgrade of the Lismore to Mullumbimby Electricity Network, comprising: • Upgrade of the 66 kV transmission line from the Mullumbimby substation to the Ballina substation to 132 kV; • Upgrade of the 66 kV transmission line from the Ballina substation to join the 132 kV Lismore/Alstonville transmission line, to 132 kV; • Upgrade of the Mullumbimby 132/66/11 kV substation to 132/11 kV; • Upgrade of the Ewingsdale 66/11 kV substation to 132/11 kV; • Upgrade of the Lennox Head 66/11 kV substation to 132/11 kV; • Upgrade of the Ballina 66/11 kV substation to 132/66/11 kV; • Upgrade of the Lismore 132/66/11 kV bulk supply point substation; • Upgrade of the Lismore South 66/11 kV substation;

- Construction of a 132 kV transmission line from the Lismore 132 kV bulk supply point substation to the Ballina to Alstonville 132 kV transmission line near Alstonville;
- Construction of a 66 kV transmission line from the Lismore South 66/11 kV substation to the Lismore 66 kV switching station;
- Construction of two underground 66 kV transmission lines from the Lismore 132 kV bulk supply point substation to the Lismore South 66/11 kV substation; and
- Construction of a 132/11 kV substation at Suffolk Park.

Major Project:

Part 3A of the *Environmental Planning and Assessment Act 1979* applies to the Project by virtue of an Order made by the Minister for Planning under section 75B of that Act on 23 January 2008.

Concept Plan Authorisation:

On 23 January 2008, the Minister for Planning authorised the submission of a concept plan for the proposal.

KEY TO CONDITIONS

SCHEDULE 2

Act, the	*Environmental Planning and Assessment Act 1979*
Conditions of Approval	The Minister's conditions of approval for the project
Construction	All pre-operation activities associated with the project **other than** survey, acquisitions, fencing, investigative drilling or excavation, and building/road dilapidation surveys or other activities determined by the Environmental Representative to have minimal environmental impact such as minor access roads, minor adjustments to services / utilities, establishing temporary construction sites (in accordance with the requirements of this project approval), or minor clearing (except where threatened species, populations or ecological communities would be affected).
Council	Lismore City Council and/or Ballina Shire Council and/or Byron Shire Council as relevant.
DECCW	Department of Environment, Climate Change and Water
Department, the	Department of Planning
Director-General, the	Director-General of the Department of Planning (or delegate)
Director-General's Report	The report provided to the Minister by the Director-General of the Department under section 75I of the EP&A Act.
Dust	Any solid material that may become suspended in air or deposited.
Minister, the	Minister for Planning
Operation	When electricity begins to be transmitted along project infrastructure, but not including commissioning.
Proponent	Country Energy
Publicly Available	Available for inspection by a member of the general public (for example, available on an internet site or at a display centre).
Reasonable and feasible	Consideration of best practice taking into account the benefit of proposed measures and their technological and associated operational application in the NSW and Australian context. **Feasible** relates to engineering considerations and what is practical to build. **Reasonable** relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and nature and extent of potential improvements.
RTA	NSW Roads and Traffic Authority
Site	Land to which Major Project Application 08_0044 applies.

1. ADMINISTRATIVE CONDITIONS

Terms of Approval

1.1 The Proponent shall carry out the project generally in accordance with:

a) the Major Project Application 08_0044;

b) the *Lismore to Mullumbimby Electricity Network Upgrade – Environmental Assessment Report: Final Report, Volumes 1, 2 & 3,* prepared by Environmental Resource Management Australia and dated January 2009;

c) the *Lismore to Mullumbimby Electricity Network Upgrade – Preferred Project Report: Final Report*, prepared by Environmental Resource Management Australia and dated May 2009; and

d) the conditions of this approval.

1.2 In the event of an inconsistency between:

a) the conditions of this approval and any document listed in conditions 1.1a) to 1.1c) inclusive, the conditions of this approval shall prevail to the extent of the inconsistency; and

b) any document listed from condition 1.1a) to 1.1c) inclusive, the most recent document shall prevail to the extent of the inconsistency.

1.3 The Proponent shall comply with any reasonable requirement(s) of the Director-General arising from the Department's assessment of:

a) any reports, plans or correspondence that are submitted in accordance with this approval; and

b) the implementation of any actions or measures contained in these reports, plans or correspondence.

Limits of Approval

1.4 This project approval shall lapse ten years after the date on which it is granted, unless the works that are the subject of this approval are physically commenced on or before that time.

1.5 The Proponent may elect to construct the project in discrete work packages or stages. In this case, these conditions of approval may be complied with separately for each discrete work package or stage, as relevant.

Statutory Requirements

1.6 The Proponent shall ensure that all licences, permits and approvals are obtained and maintained as required throughout the life of the project. No condition of this approval removes the obligation for the Proponent to obtain, renew or comply with such licences, permits or approvals. The Proponent shall ensure that a copy of this approval and all relevant environmental approvals are available on site during the life of the project.

2. SPECIFIC ENVIRONMENTAL CONDITIONS

Noise Impacts

Hours of Construction and Operation

2.1 The Proponent shall only undertake construction, maintenance and repair activities, and operational stage truck movements that would generate an audible noise at any sensitive receiver during the following hours:

a) 7:00 am to 6:00 pm, Mondays to Fridays, inclusive;

b) 8:00 am to 1:00 pm on Saturdays; and

c) at no time on Sundays or public holidays.

This condition does not apply in the event of a direction from police or other relevant authority for safety reasons, or to prevent environmental harm, the loss of property or risk to life. Nor does it apply to emergency maintenance activities necessary to restore electrical supply to customers.

2.2 The hours referred to under condition 2.1 of this approval may be varied with the prior written approval of the Director-General. Any request to alter the hours shall be:

a) considered on a case-by-case basis; and

b) accompanied by details of the nature and need for activities to be conducted during the varied hours and any other information necessary to reasonably determine that activities undertaken during the varied hours will not adversely impact on the acoustic amenity of sensitive receivers in the vicinity of the site.

2.3 Activities resulting in impulsive or tonal noise emissions (such as rock breaking or rock hammering) shall be limited in the vicinity of sensitive receivers to 9:00 am to 12:00 pm, Monday to Saturday, and 2:00 pm to 5:00 pm, Monday to Friday.

Construction Noise

2.4 The construction noise objective for the project is to take all reasonable and feasible measures to manage noise from construction activities (as measured by a $L_{A10(15\text{-minute})}$ descriptor) so the noise level contributed by construction activities does not exceed the rating background level by more than 10 dB(A) at the nearest residential receiver.

For the purpose of this condition, rating background levels shall be those established in the document referred to under condition 1.1b) of this approval. Where rating background levels were not established in this document, the Proponent shall ensure that rating background levels are determined prior to the commencement of construction.

Any activities that have the potential to exceed the objectives must be identified and managed in accordance with the Construction Noise and Vibration Management Plan required under condition 3.4a) of this approval.

2.5 During construction, the Proponent shall minimise noise emissions from plant and equipment operated on the construction sites, including bulldozers, cranes, graders, excavators and trucks, by installing and maintaining where reasonable and feasible, efficient silencers, low-noise mufflers (residential standard), and screening of worksites.

Construction Vibration

2.6 The Proponent shall ensure that any vibration resulting from construction of the project does not exceed the preferred values for vibration (for low probability of adverse comment) presented in *Assessing Vibration: A Technical Guideline* (Department of Environment and Climate Change, 2006), at any affected residential dwelling.

Operational Noise

2.7 The Proponent shall design, construct, operate and maintain the project to ensure that the noise contributions from the substations to the background acoustic environment do not exceed the project specific noise criteria specified in Table 1 at any sensitive receiver during the periods indicated. The noise criteria apply under the following meteorological conditions:

a) wind speeds up to 3 m/s at 10 metres above ground; and/or

b) temperature inversion conditions of up to 3°C/100 m and source to receiver gradient winds of up to 2 m/s at 10 m above ground level.

Table 1: Project Specific Noise Criteria for Substations

Substation Site	Project Specific Noise Criteria $L_{Aeq\ (15\ minute)}$		
	Day 7:00 am to 6:00 pm	Evening 6:00 pm to 10:00 pm	Night 10:00 pm to 7:00 am
Lismore Bulk Supply Point Substation	35 dB(A)	35 dB(A)	35 dB(A)
Lismore South Substation	44 dB(A)	44 dB(A)	40 dB(A)
Ballina Substation	38 dB(A)	38 dB(A)	38 dB(A)
Lennox Head Substation	35 dB(A)	35 dB(A)	35 dB(A)
Ewingsdale Substation	42 dB(A)	45 dB(A)	41 dB(A)
Mullumbimby Substation	35 dB(A)	35 dB(A)	35 dB(A)
Suffolk Park Substation*	30 dB(A)	30 dB(A)	30 dB(A)

Ecological Impacts

2.8 The Proponent shall ensure that all feasible and resonable measures are taken to rehabilitate all temporary access areas to pre-construction conditions within six months of the completion of construction.

2.9 The Proponent shall take all feasible and reasonable measures to avoid disturbance to threatened fauna that may potentially inhabit the project area during their breeding season.

2.10 The Proponent shall conduct pre-clearance fauna surveys in areas where potential fauna habitat is identified and removal is required.

2.11 The Proponent shall ensure that clearing of native vegetation is limited to the minimal extent required for the construction of the project and shall undertake all reasonable and feasible measures to avoid the clearing of Koala feed tree species (including *Eucalyptus robusta*, (Swamp Mahogany), *Eucalyptus tereticornis* (Forest Red Gum) and *Eucalyptus microcorys* (Tallowwood)). All cleared areas shall be stabilised with local native grasses and ground cover plants as soon as practicable to minimise soil erosion.

2.12 The Proponent shall ensure that there is no vegetation clearing or land disturbance in any wetland identified under *State Environmental Planning Policy No. 14 – Coastal Wetlands* during the construction and operation of the project.

Biodiversity Offsets

2.13 At least one month prior to the commencement of construction, the Proponent shall prepare and submit to the Director-General a report detailing the extent of clearing of any native vegetation within all new easements or corridors, with particular emphasis on threatened species or endangered ecological communities (as listed in the *Threatened Species Conservation Act 1995*), as a result of the final project design. The report shall include a program for offsetting the biodiversity impacts resulting from the removal of native vegetation comprising, but not necessarily limited to:

a) measures for encouraging the natural regeneration of vegetation along the transmission line corridor (excluding areas that are required to remain clear or are restricted with respect to the types of plantings for safety, access and maintenance purposes), including weed management measures;
b) compensatory plantings (at a ratio of at least 2:1) and rehabilitation measures; and
c) measures for replacing specific habitat values impacted by the project (e.g. provision of roost/nest boxes where significant habitat trees such as hollow bearing trees are impacted).

The Proponent shall consider the habitat quality and conservation value of both the land proposed to be lost and the land to be revegetated and/or regenerated. Any offsets shall be of equal or greater conservation value to that which will be lost or impacted and compensatory plantings shall involve the use of locally native flora species grown from locally sourced seed stock. The offset program shall include details of a timeline for the implementation of the

identified measures, ongoing monitoring and maintenance measures, and demonstrate how the program would achieve the outcome of maintaining or improving biodiversity values in the local area.

The program for offsetting biodiversity impacts shall be prepared in consultation with the DECCW.

Heritage Impacts

Indigenous Heritage

2.14 The Proponent shall undertake all reasonable and feasible efforts to avoid impacts to Aboriginal cultural heritage values at all stages of the project. If impacts are unavoidable, mitigation measures are to be negotiated with Aboriginal community representatives and the DECCW.

2.15 Where ground disturbance is proposed (such as excavation, removal of vegetation or trenching) outside existing transmission line corridors in areas identified in the documents referred to in conditions 1.1b) and c) as being of archaeological sensitivity, the Proponent shall undertake further archaeological surveying and assessment with the aim of identifying any Aboriginal cultural heritage values which may be impacted by the project. The Proponent shall ensure monitoring by Local Aboriginal Land Council representatives during such works.

2.16 If during the course of construction or operation of the project the Proponent uncovers any previously unidentified Aboriginal cultural objects, all works likely to affect the object(s) shall cease in the immediate area to prevent any further impact to the find(s) and the DECCW informed. A suitably qualified archaeologist and Aboriginal community representatives shall be contacted to determine the significance of the find(s) and appropriate management measures. The Proponent shall register the site and management outcome in the AHIMS in accordance with the *National Parks and Wildlife Act 1974.* Works are not to resume until written authorisation from the DECCW advising otherwise is received by the Proponent.

2.17 If human remains are located during construction, all works must halt in the immediate area to prevent any further impact to the find(s). If the remains are found to be of Aboriginal origin and the police consider the site not an investigation site for criminal activities, the Proponent shall notify the DECCW and Local Aboriginal Land Council representatives. Works are not to resume in the designated area until approval in writing is provided by the DECCW. In the event that a criminal investigation ensues, works are not to resume until approval in writing from the police and the DECCW.

Non-Indigenous Heritage

2.18 The Proponent shall prepare separate archival recordings of the Mullumbimby and Lismore Power Stations at least one month prior to the commencement of construction. The recordings shall be in accordance with the guideline *How to Prepare Archival Records of Heritage Items* (Heritage Office, 1998), or any superseding document, and shall include copies of current and/or historical plans or drawings. Copies of the recordings are to be lodged with the Brunswick Valley Historical Society, State Library of NSW, and NSW Heritage Branch of the Department of Planning.

2.19 The Proponent shall ensure that the Mullumbimby Power Station building and all of its associated machinery and equipment are retained in situ and prepare a Conservation Management Plan addressing the ongoing conservation, care and maintenance requirements for the building and associated plant and equipment. The Plan shall be prepared within 12 months of the date of this project approval.

2.20 The Proponent shall prepare, in consultation with an industrial archaeology specialist, an options analysis of the feasibility of retaining the Lismore Power Station building and its associated plant, equipment, and signage on site. The options analysis shall be submitted to the Director-General at least one month prior to the commencement of construction.

2.21 In the event that a decision regarding the Lismore Power Station is deferred, the Proponent shall prepare a Conservation Management Plan addressing the ongoing conservation, care and maintenance requirements for the building and associated plant and equipment. The Plan shall be prepared within 12 months of the date of this project approval.

2.22 In the event that the Lismore Power Station is to be demolished, the Proponent shall prepare a Moveable Heritage Management Plan which outlines the measures for conserving and relocating the buildings, associated equipment, tools, control panels and signage of the power station. The Plan is to be submitted to the Director-General at least one month prior to the commencement of construction. The Proponent shall also erect outside of the power station site appropriate signage outlining the heritage significance of the site.

2.23 The Proponent shall ensure that all construction contractors, subcontractors and personnel are inducted prior to commencing construction works on site as to their obligations and requirements in respect of the protection of non-indigenous heritage items and relics.

2.24 If during the course of construction the Proponent becomes aware of any previously unidentified significant non-indigenous heritage items or relics, all work likely to affect the items or relics shall cease immediately and the Heritage Council, or its delegate, informed. Relevant works shall not recommence until written authorisation from the Heritage Council, or its delegate, advising otherwise is received by the Proponent.

Traffic and Access Impacts

Roadworks and Traffic Management

2.25 The Proponent shall ensure that construction vehicles associated with the project:

a) minimise idling and queuing in local residential streets and town centres;
b) minimise the use of local roads (though residential streets and town centres) to gain access to construction sites;
c) adhere to any nominated haulage routes identified in the Construction Traffic Management Plan as referred to in condition 3.4e) of this approval; and
d) adhere to a Construction Vehicle Code of Conduct prepared to manage driver behaviour along the local road network to address traffic impacts (and associated noise) along nominated haulage routes.

2.26 Prior to commencement of construction and after construction is complete, the Proponent shall commission road dilapidation reports for all roads nominated in the Construction Traffic Management Plan (as required under condition 3.4e)of this approval) that are likely to be used by construction traffic. Copies of the reports shall be provided to the relevant road authority(ies). Any road/footpath damage, aside from that resulting from normal wear and tear, shall be repaired to a standard at least equivalent to that existing prior to the damage, in accordance with the requirements and to the satisfaction of the relevant road authority(ies), and at the full expense of the Proponent.

2.27 The Proponent shall undertake upgrade works along Skinners Shoot Road and Yagers Lane to the standard necessary to provide all-weather access, including a trafficable surface suitable to accommodate heavy vehicles movements associated with the construction and operation of the project.

2.28 Following the completion of construction works involving full or partial road closures within the project area, the Proponent shall, as soon as practicable, remove local traffic detours and reinstate pre-existing road network and access arrangements to the satisfaction of the relevant road authority(ies).

2.29 Where transmission lines are proposed to be constructed along Council-owned roads, road reserves or footpaths, the Proponent shall provide the following information to the relevant council at least one month prior to the commencement of construction:

a) detailed plans of the transmission line route including vertical, horizontal and/or underground alignment;
b) construction schedule and hours of construction;
c) mitigation measures proposed to reduce impacts to traffic and pedestrian safety; and
d) evidence of compliance with council's road opening conditions and the Institute of Public Works Engineering Australia (2004) *Specification 306U: Road Openings and Restorations.*

Property Access

2.30 Prior to the commencement of construction, the Proponent shall consult with each landholder whose property is directly impacted by the project regarding the terms and conditions relating to access arrangements for construction activities on their land.

2.31 The Proponent shall ensure that primary access routes to and from properties are kept open for the duration of construction works or alternative access is provided.

Soil and Water Quality Impacts

2.32 Except as specified by an Environment Protection Licence for the project, the Proponent shall comply with section 120 of the *Protection of the Environment Operations Act 1997* which prohibits the pollution of waters.

2.33 The Proponent shall employ soil and water management controls to minimise soil erosion and the discharge of sediment and other pollutants to lands and/or waters during construction and operation of the project, in accordance with *Managing Urban Stormwater: Soils and Conservation* (Landcom, 2004), or any future guideline that may supersede that document.

2.34 The Proponent shall, where practicable, avoid constructing temporary watercourse crossings for heavy vehicles and machinery.

2.35 The Proponent shall ensure that any construction activities within 40 metres of the bank of a watercourse are consistent with *Controlled Activity Guidelines* (Department of Water and Energy, 2008) including, but not limited to, 'In-stream Works', 'Outlet Structures', 'Riparian Corridors', 'Vegetation Management Plans', and 'Watercourse Crossings', or any guidelines which supersede these documents.

2.36 The Proponent shall ensure that any construction activities in identified areas of acid sulfate soil risk are undertaken in accordance with *Acid Sulfate Soil Manual* (Acid Sulfate Soil Management Advisory Committee, 1998).

Contaminated Land

2.37 The Proponent shall, where practicable, ensure that any proposed excavation works associated with the construction of the project do not disturb former cattle dip sites. If a former cattle dip site(s) cannot be avoided, the Proponent shall prepare a Soil Contamination Report detailing the level and extent of contamination, the proposed remediation and/or removal measures, and how any environmental and health risks will be appropriately mitigated and managed during the disturbance of contaminated soil. The recommendations of the Soil Contamination Report shall be incorporated into the Construction Environmental Management Plan required under condition 3.3 of this approval.

Air Quality Impacts

2.38 The Proponent shall construct the project in a manner that minimises dust emissions from construction sites, including wind-blown and traffic-generated dust. All construction activities shall be undertaken with the objective of preventing visible emissions of dust from construction

sites. Should such visible dust emissions occur at any time, the Proponent shall identify and implement all practicable dust mitigation measures, including cessation of relevant works, as appropriate, such that emissions of visible dust cease.

2.39 The Proponent shall not permit any offensive odour, as defined under section 129 of the *Protection of the Environment Operations Act 1997*, to be emitted beyond the boundary of the substations.

Waste Generation and Management

2.40 The Proponent shall ensure that all waste materials removed from construction and operational sites shall only be directed to a waste management facility lawfully permitted to accept the materials.

2.41 The Proponent shall not cause, permit or allow any waste generated outside the construction and operational sites to be received for storage, treatment, processing, reprocessing, or disposal on the construction and operational sites, except as expressly permitted by a licence under the *Protection of the Environment Operations Act 1997*, if such a licence is required in relation to that waste.

2.42 The Proponent shall maximise the treatment, reuse and/or recycling on the construction and operational sites of any excavated soils, vegetation, or solid waste materials associated with the construction and operation of the project, to minimise the need for treatment or disposal of those materials.

2.43 The Proponent shall ensure that all liquid and/or non-liquid waste generated from the construction and operation of the project are assessed and classified in accordance with *Waste Classification Guidelines* (Department of Environment and Climate Change, 2008), or any future guideline that may supersede that document.

Lighting Emissions

2.44 The Proponent shall take all practicable measures to mitigate off-site lighting impacts from substations and ensure all external lighting associated with the project complies with *Australian Standard AS4282 1997 – Control of the Obtrusive Effects of Outdoor Lighting.*

Bunding and Spill Management

2.45 The Proponent shall store and handle all dangerous goods, as defined by the Australian Dangerous Goods Code, strictly in accordance with:

a) all relevant Australian Standards;
b) for liquids, a minimum bund volume requirement of 110% of the volume of the largest single stored volume within the bund; and
c) the DECCW Environment Protection Manual Technical Bulletin *Bunding and Spill Management.*

In the event of an inconsistency between the requirements listed from a) to c) above, the most stringent requirement shall prevail to the extent of the inconsistency.

3. ENVIRONMENTAL MONITORING AND MANAGEMENT

Substation Noise Performance Verification

3.1 Within 30 days of the commencement of operation of a new or upgraded substation, unless otherwise agreed to by the Director-General, the Proponent shall submit for the approval of the Director-General an **Operational Noise Review** to confirm the operational noise impacts of the substations. The Review shall be undertaken for all substations and:

a) identify the operational project specific noise criterion for each substation;
b) describe the methodologies for noise monitoring at each site including the frequency of measurements and location of monitoring sites;

c) document the operational noise levels at sensitive receivers as ascertained by the noise monitoring program;
d) assess the noise performance of each substation against its operational project specific noise criterion and the predicted noise levels as detailed in the report referred to under condition 1.1b) of this approval; and
e) provide details of any entries in the Complaints Register (as required under condition 4.3 of the concept approval) relating to noise impacts.

Where monitoring indicates noise levels in excess of the operational project specific noise criterion for a substation (as specified under condition 2.7 of this approval), the Proponent shall prepare and submit to the Director-General for approval a report including, but not limited to:
a) an assessment of all reasonable and feasible physical and other mitigation measures for reducing noise at the source;
b) identification of the preferred measure(s) for reducing noise at the source; and
d) location, type, timing and responsibility for implementation of the noise mitigation measure(s).

The report is to be submitted to the Director-General within 60 days of undertaking noise monitoring at a substation which has identified exceedances of the operational project specific noise criterion, unless otherwise agreed to by the Director-General. The Proponent shall implement all reasonable and feasible mitigation measures in accordance with the requirements of the Director-General.

Environmental Representative

3.2 Prior to the commencement of construction, or as otherwise agreed by the Director-General, the Proponent shall nominate for the approval of the Director-General a suitably qualified and experienced Environmental Representative(s) independent of the design, construction and operation personnel. The Proponent shall engage the Environmental Representative(s) during any construction activities, or as otherwise agreed by the Director-General. The Environmental Representative(s) shall:
a) oversee the implementation of all construction-related environmental management plans and monitoring programs required under this approval, and advise the Proponent upon the achievement of these plans/programs;
b) consider and advise the Proponent on its compliance obligations against all matters specified in the conditions of this approval, the documents referred to under condition 1.1 of this approval, and all other applicable permits, approvals and licences required and obtained in relation to the project;
c) have the authority and independence to recommend to the Proponent reasonable steps to be taken to avoid or minimise unintended or adverse environmental impacts associated with the construction of the project, and;
d) have the authority to recommend to the Proponent cessation of activities if there is a significant risk that adverse environmental impacts are likely to occur.

Construction Environmental Management Plan

3.3 The Proponent shall prepare and implement a **Construction Environmental Management Plan** to detail environmental management practices and procedures to be followed during construction. The Plan shall be consistent with *Guideline for the Preparation of Environmental Management Plans* (Department of Infrastructure, Planning and Natural Resources, 2004) and shall include, but not necessarily be limited to:

a) a description of all relevant activities to be undertaken on the site during construction;
b) details of the measures to be installed to separate construction areas from publicly accessible areas;
c) statutory and other obligations that the Proponent is required to fulfil during construction including all relevant approvals, licences and consultations;
d) a description of the roles and responsibilities for all relevant employees involved in the construction of the project;
e) a description of all relevant activities to be undertaken on the site during construction (including staging and scheduling);
f) details of any construction compounds and the management of these sites (including personnel parking);
g) details of how the environmental performance of the construction works will be monitored, and what actions will be taken to address identified potential adverse environmental impacts. In particular, the following environmental issues shall be addressed in the Plan –
    i) measures to monitor and manage dust emissions,
    ii) spoil management including cut and fill volumes,
    iii) groundwater management including dewatering procedures where excavation is likely to intercept the groundwater table, and
    iv) measures for avoiding and or managing non-indigenous heritage items, including those listed on draft Local heritage registers; and
h) the issue-specific management plans required under condition 3.4 of this approval.

The Plan shall be submitted for the approval of the Director-General no later than one month prior to the commencement of construction, or within such period otherwise agreed by the Director-General. Construction shall not commence until written approval has been received from the Director-General.

3.4 As part of the Construction Environmental Management Plan for the project, required under condition 3.3 of this approval, the Proponent shall prepare and implement the following:

a) a **Construction Noise and Vibration Management Plan** to manage noise and vibration impacts during construction. The Plan shall include, but not necessarily be limited to -
    i) the construction noise and vibration objectives for the project,
    ii) maps showing the location of all potentially affected sensitive receivers,
    iii) monitoring measures to assess compliance against the construction noise objective stipulated in condition 2.4 of this approval,
    iv) details of the reasonable and feasible mitigation and management measures and procedures that will be implemented to control construction noise and vibration impacts where the objectives are measured and/or predicted to be exceeded, and
    v) where the construction noise and vibration objectives are predicted to be exceeded, provisions for consultation with affected sensitive receivers including procedures for notifying such receivers of the nature and duration of construction activities that are likely to affect their noise and vibration amenity, and
    vi) details of all reasonable and feasible mitigation measures incorporated into the detailed design of the substations to control operational noise emissions to within the specified project specific noise criteria;
b) a **Construction Aboriginal Cultural Heritage Management Plan** to manage potential Aboriginal cultural heritage impacts during construction. The Plan shall include, but not necessarily be limited to -
    i) transmission line route alignment sheets and substation layout plans showing the location of all identified Aboriginal cultural heritage sites within the project area,

including any sites identified during the targeted surveys required under condition 2.15 of this approval,

ii) outcomes of the targeted cultural heritage assessments required under condition 2.15 of this approval,

iii) procedures for the management of all recorded Aboriginal cultural heritage sites within the project area,

iv) identification and management of any proposed conservation area(s),

v) details of an appropriate keeping place agreement with local Aboriginal community representatives for any Aboriginal objects salvaged through the construction process,

vi) a Burial Management Plan which sets out the protocols to be undertaken in the event that Aboriginal skeletal material is uncovered,

vii) an Aboriginal Cultural Education Program for the induction of personnel and contractors involved in the construction of the project, and

viii) evidence that Aboriginal community representatives have been consulted regarding the Construction Aboriginal Cultural Heritage Management Plan and procedures for their ongoing involvement;

c) a **Construction Flora and Fauna Management Plan** to manage flora and fauna impacts during construction. The Plan shall be prepared in consultation with the DECCW and shall include, but not necessarily be limited to -

i) transmission line route alignment sheets and substation layout plans showing the location of any endangered ecological communities, threatened flora species, threatened fauna species habitat, SEPP 14 wetlands and Koala feed trees,

ii) details of specific management procedures for all impacted threatened flora and fauna species, endangered ecological communities and koala feed trees,

iii) general management procedures for the construction of the project within vegetated corridors, including the procedures for clearing vegetation and minimising the extent of clearing,

iv) measures to be undertaken to control weed spread,

v) measures to avoid adverse impacts on SEPP 14 wetlands,

vi) staging of vegetation clearing processes to allow sufficient warning to fauna,

vii) staging of works to avoid disturbance to threatened fauna that may potentially inhabit the area during their breeding season e.g. koala, and

viii) proposed revegetation and rehabilitation measures, including completion criteria and monitoring.

d) an **Electric and Magnetic Field Management Protocol** detailing the measures incorporated in the final design of the project components to ensure that the levels of electric and magnetic fields surrounding the transmission lines, conductors, transformers, switchgear and reactive plant are minimised during operation, including details on the application of Prudent Avoidance Principles. The Protocol shall include, but not necessarily be limited to -

i) identification of the electric and magnetic field reduction strategies, technologies and design measures, already used and proposed to be used, to minimise the exposure of sensitive receivers surrounding the substations, and

ii) review and certification by an appropriately qualified independent expert that the strategies, technologies and design measures provide the best possible outcome for reducing electric and magnetic field levels;

e) a **Construction Traffic Management Plan** prepared in consultation with the RTA, relevant local councils and emergency services to manage the construction traffic and access impacts of the project including, but not necessarily limited to -

i) details of how construction of project infrastructure will be managed in proximity to local and regional roads,

ii) details of traffic routes for heavy vehicles, including any necessary route or timing restrictions for oversized loads,

iii) construction vehicle volumes (construction personnel, heavy vehicle movements and oversized loads),

iv) measures to ensure traffic volume, acoustic and amenity impacts along construction vehicle routes are minimised,
v) details of construction activities that would require disruption to traffic such as road closures and measures to minimise impacts,
vi) a Construction Vehicle Code of Conduct to set driver behaviour controls to minimise impacts on land uses along haulage routes, and
vii) evidence that all statutory responsibilities with regard to road traffic impacts have been complied with; and

f) a **Construction Soil and Water Management Plan** to detail management of potential soil and water impacts during construction. The Plan shall include, but not necessarily be limited to -
i) details of the short- and long-term measures to be employed to minimise soil erosion and the discharge of sediment to land and/or waters,
ii) a programme for reporting on the effectiveness of the sediment and erosion control system against performance goals,
iii) contingency plans to be implemented in the event of major fuel spills or other chemicals,
iv) protocols for construction works in areas of potential or actual acid sulfate soils, including procedures for the investigation, handling, treatment and management of such soils and water seepage, and
v) measures for the handling, treatment and management of contaminated soils, including cattle dip sites and soils around the base of redundant treated timber power poles; and

f) a **Landscape/Revegetation Plan** to outline measures to minimise the visual impacts of the project and ensure the visual compatibility of the project components with the surrounding land fabric and land use. The Plan shall identify the design objectives and standards based on local environmental values and vistas, describe and illustrate the proposed landscape design treatments and indicate the proposed timing of landscaping works.

Operation Environmental Management Plan

3.5 The Proponent shall prepare and implement an **Operation Environmental Management Plan** to detail environmental management practices and procedures to be followed during operation. The Plan shall be consistent with *Guideline for the Preparation of Environmental Management Plans* (Department of Infrastructure, Planning and Natural Resources, 2004) and shall include, but not necessarily be limited to:
a) a description of all relevant activities to be undertaken on the site during operation;
b) a description of the roles and responsibilities for all relevant employees involved in the operation of the project;
c) details of measures to be installed to separate operation areas from publicly accessible areas;
d) statutory and other obligations that the Proponent is required to fulfil during operation including all relevant approvals, licences and consultations;
e) overall environmental policies, guidelines and principles to be applied to the operation of the project;
f) relevant standards to be applied to the project and details of how the environmental performance of the operation of the project will be monitored and managed to meet the standards. Environmental performance issues shall include, but not be limited to -
i) measures to monitor and maintain biodiversity offset measures implemented in accordance with condition 2.13 of this approval,
ii) methods to monitor and maintain revegetated areas during the establishment phase and long term,
iii) ongoing measures to monitor and control the spread of weeds,
iv) noise management including monitoring and reporting procedures for the periodic assessment of noise impacts at sensitive receivers against the noise criteria specified in Table 1 of this approval, procedures and corrective actions to be

undertaken in the event of non-compliance, and protocols for dealing promptly with any noise complaints, including investigation and response procedures,

v) measures to control soil erosion and sedimentation; and

g) a means by which environmental performance can be periodically reviewed and improved, where appropriate and what actions will be taken to address identified potential adverse environmental impacts.

The Plan shall be submitted for the approval of the Director-General no later than one month prior to the commencement of operation, or within such period otherwise agreed by the Director-General. Operation shall not commence until written approval has been received from the Director-General.

Nothing in this approval precludes the Proponent from incorporating the requirements of the OEMP into existing environmental management systems and plans administered by the Proponent.
