

Essential Energy Review of Environmental Factors Guideline

prepared for Essential Energy

by Environmental Resources Management

September 2011

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Approved by:	<u>William Weir</u>
Position:	Project Manager
Signed:	
Date:	20 September, 2011
Approved by:	<u>Murray Curtis</u>
Position:	Partner Director
Signed:	
Date:	20 September, 2011

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Revision A (Final)

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By Environmental Resources Management

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Environmental Resources Management Australia
Suite 3, 146-150 Gordon Street
Port Macquarie NSW 2444
Ph: (02) 6584 7155
Email: william.weir@erm.com
Web: www.erm.com



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1 Introduction

Almost every new activity undertaken by, or on behalf of Essential Energy requires some form of environmental impact assessment under the Environmental Planning and Assessment Act 1979 (EP&A Act) as well as potentially requiring a concurrence or approval under a range of state and Commonwealth legislation.



This Review of Environmental Factors (REF) Guide has been specifically prepared to assist network connection applicants in the preparation of a REF which will be assessed by Essential Energy under Part 5 of the EP&A Act. It has been developed to provide information and a framework for applicants to use when preparing a REF and supporting documentation to an acceptable standard to allow Essential Energy to determine the REF in a timely manner.

This REF Guide is set out in the following way:

- **Chapter 1** provides an introduction to the REF Guide;
- **Chapter 2** discusses the NSW legislative framework in regards to Part 5 environmental impact assessment;
- **Chapter 3** provides an explanation of what a REF is; and
- **Chapter 4** outlines the content that Essential Energy expects to be covered within REFs submitted to them for assessment.

A number of Annexure are also provided with this report containing:

- a Glossary of Terms (*Annex A*);
- an example REF Table of Contents (*Annex B*);
- a REF Style Guide (*Annex C*);
- a REF Content Checklist (*Annex D*); and
- EE Consultant Checklist for Preparation of REF (*Annex E*).



2 NSW Legislative Framework

2.1 Environmental Planning and Assessment Act 1979

There are three applicable environmental planning approval pathways under the EP&A Act, including:

- Part 4 - 'development' proposals which require consent, usually by the local council, but by the Minister in limited circumstances. Part 4 also incorporates State Significant Development;
- Part 5 - proposals which do not fall under Part 4 or Part 5.1. These are often infrastructure 'activity' proposals that do result in significant environmental impacts that are approved by the public authorities which are undertaking them; and
- Part 5.1 – proposals which qualify as State Significant Infrastructure.

A 'determining authority' means a Minister or public authority and, in relation to any activity, means the Minister or public authority by or on whose behalf the activity is or is to be carried out or any Minister or public authority whose approval is required in order to enable the activity to be carried out. (EP&A Act, s110).

Essential Energy, in their role as a determining authority, has a statutory obligation under Section 111 of the EP&A Act to assess to the fullest possible extent the environmental impacts of projects undertaken by, or on behalf of them. Projects that can be undertaken without consent are assessed under Part 5 of the EP&A Act. Determining authorities usually decide if a full Environmental Impact Statement (EIS) or Species Impact Statement (SIS) is necessary by considering a preliminary environmental assessment which is called a 'Review of Environmental Factors' (REF).

2.2 State Environmental Planning Policy (Infrastructure) 2007

State Environmental Planning Policy (Infrastructure) 2007 (SEPP Infrastructure) facilitates the delivery of infrastructure in NSW.

In most cases, SEPP Infrastructure overrides the provisions of Local Environmental Plans (LEPs), in particular the need for development consent, which

apply across the state for each infrastructure sector. SEPP Infrastructure aims to:

- improve regulatory certainty and efficiency through a consistent planning regime for infrastructure and the provision of services;
- provide greater flexibility in the location of infrastructure and service facilities; and
- identify the environmental assessment category into which different types of infrastructure and services development fall (including identifying certain development of minimal environmental impact as exempt development).

SEPP Infrastructure identifies exempt and complying development. Activities that meet this definition therefore do not require an environmental impact assessment. In regards to electricity infrastructure Clause 21A and Clause 45 provide guidance for exempt development.

Division 5 of SEPP Infrastructure provides development controls for 'electricity transmission or distribution networks'. Most activities that require approval by Essential Energy are likely to be identified in Division 5 of SEPP Infrastructure.

In certain circumstances, depending on the nature of the proposed activity, SEPP Infrastructure requires proponents to consult/notify with local council's, occupiers of adjoining land or other state authorities in relation to activity proposals.

SEPP Infrastructure determines whether a proposed activity requires:

- no assessment (exempt or complying development);
- Part 4 assessment (no REF); or
- Part 5 assessment (REF required).

Note: This guide applies only to activities being assessed under Part 5 of the EP&A Act. Also, SEPP Infrastructure does not apply in State Environmental Planning Policy 14 – Coastal Wetlands (SEPP 14) or State Environmental Planning Policy 26 – Littoral Rainforests (SEPP 26) areas if restricted activities are triggered. Triggering restricted activities in SEPP 14 or SEPP 26 requires assessment under Part 4 of the EP&A Act and therefore this guide does not apply.

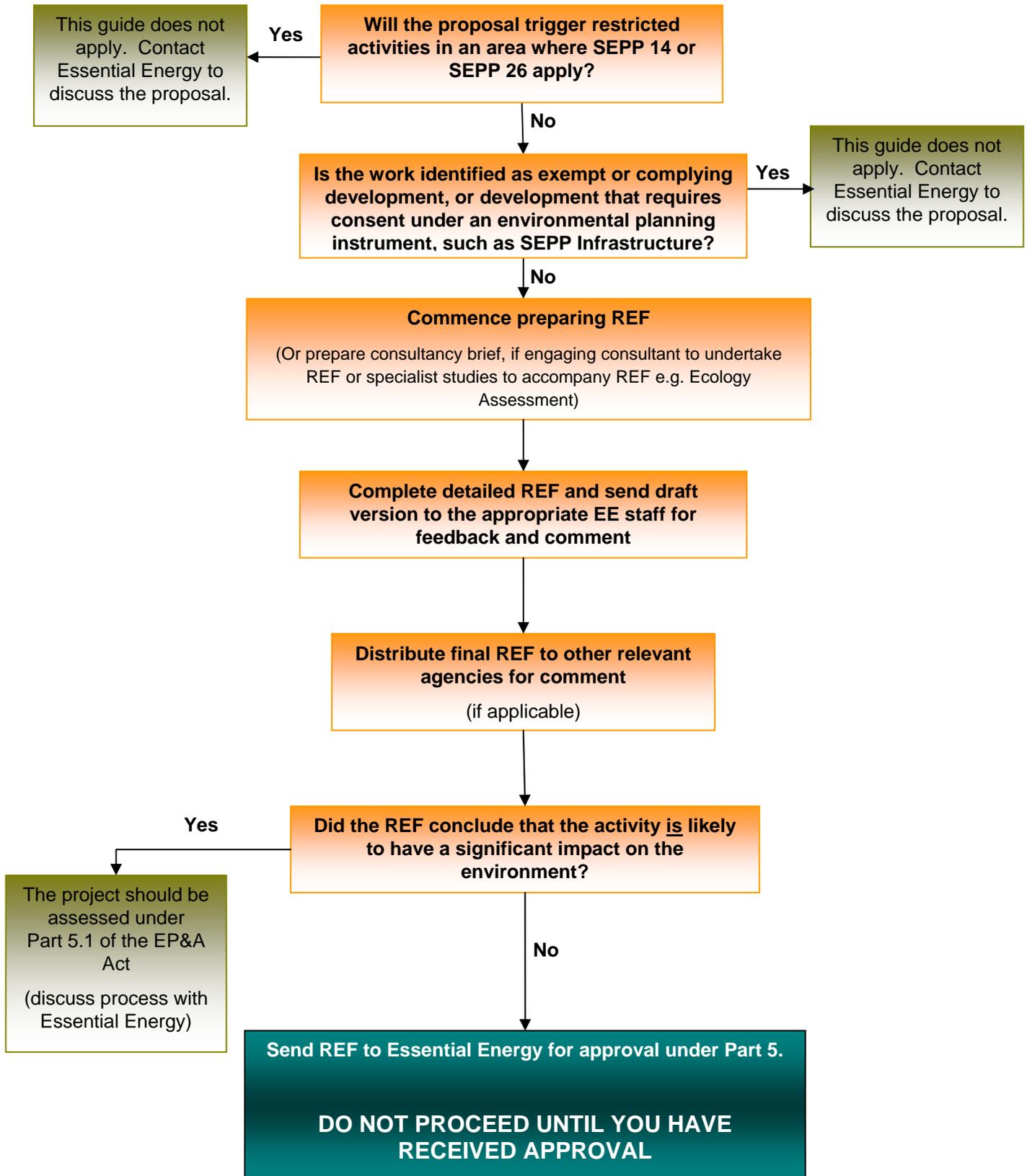


Figure 2.1 Part 5 Approvals Process

3 Environmental Impact Assessment

An environmental impact assessment (EIA) is a specialised part of the decision making processes, where the environmental impact is considered in detail, together with social and economic aspects of a proposal or ongoing activity.

When considering whether an activity should proceed, the determining authority (i.e. Essential Energy) must examine and take into account to the fullest extent possible all matters affecting or likely to affect the environment by reason of that activity.

3.1 What is a Review of Environmental Factors?

Proponents are required to prepare an environmental impact assessment for all activities that will be assessed under Part 5 of the EP&A Act. When being assessed under Part 5 of the EP&A Act, the environmental impact assessment is referred to as a 'Review of Environmental Factors' or abbreviated to 'REF'. A proposal which is being assessed under Part 5 of the EP&A Act is referred to as an 'activity'. The definition of an 'activity' is provided within Section 110 of the EP&A Act (see also 'Glossary of Terms' in Annex A).

A REF is a document used by determining authority to make an assessment of the environmental impacts of a proposal under Part 5 as required by the EP&A Act. The process under Part 5 is distinguished from Part 4 as it is a test of significance. A REF should contain sufficient information to address the criteria in the Department of Planning publication entitled 'Is an EIS required?' which are applied in order to determine whether there is likely to be a significant impact on the environment.

A REF is a document that examines the significance of likely environmental impacts of a proposal, and the measures required to mitigate any adverse impacts to the environment. A REF primarily serves two purposes:

- It assists and documents the determination process as to whether an activity should be approved, taking into account to the fullest extent possible all matters affecting or likely to affect the environment (s.111 EP&A Act).
- It assists the determination of whether the activity is likely to have a significant impact on the environment or significantly impact threatened

species, populations or ecological communities or their habitats.

- A REF is an environmental assessment that precedes the granting of an approval (i.e. lease, licence, easement) for an activity. An approval cannot be granted until the REF is determined. The term REF is not a statutory term, but a colloquial expression derived from clause 228 of the EP&A Regulations.
- If the REF concludes that a proposal will result in significant environmental impacts than the provisions under Part 5.1 of the EP&A Act must be followed (and therefore Essential Energy is no longer the determining authority and the proposal no longer falls under Part 5 of the EP&A Act).

3.2 Who prepares a REF?

REFs are prepared by person/company/authority that is proposing the works. Alternatively, the proponent may engage and fund a consultant, or consultants, to prepare the REF and any associated specialist studies required (such as ecology assessments or acoustic assessments). The REF must be certified by the proponent as well as by the consultant(s) where consultant(s) are used.

3.3 Timing of REFs

A REF must be prepared as part of the approval process for an activity. A REF, and requests for any other associated approvals, need to be submitted sufficiently in advance of when an activity is proposed to allow time for the REF to be appropriately considered and determined.

It is recommended that proponents consult with Essential Energy representatives during the preparation of the REF.

3.4 Format and Style Guide

All REF reports are to be prepared in accordance with these guidelines. An example REF Table of Contents (TOC) is provided as *Annex B. Chapter 4* provides an outline of the expected content.

Essential Energy's REF Style Guide is provided as *Annex C* to provide guidance on formatting and presentation of the REF.

4 REF Content Requirements

This section contains a guide on the content Essential Energy expects in a REF submitted to them for assessment. It was developed taking into consideration the following documents:

- Department of Environment and Climate Change (2008) Proponents Guidelines for the Review of Environmental Factors;
- Department of Primary Industries (Mineral Resources Division) (2006) Guidelines for Review of Environmental Factors; and
- Department of Urban Affairs and Planning Guideline (1996) Is an EIS required? - Best Practice Guidelines for Part 5 of the Environmental Planning and Assessment Act 1979.

Whilst it is recognised that the content of any individual REF may vary depending on the nature and scale of the project, the following content material should be considered as a minimum requirement for most REF reports.

A REF Content Checklist is provided as *Annex D*, which should also be consulted to ensure the basic content requirements have been addressed. Further to this EE's Consultant Checklist for Preparation of REF (provided as Annex E), which EE use when employing consultants, can also be consulted.

It is also recommended that Essential Energy's Safety Security Health & Environment: Handbook (2010) is consulted during the preparation of the REF.

4.1 Contact Information and Declaration

The REF must contain the following information:

- the name, address and contact details of the person making the application;
- the name, address and professional qualifications of the person who prepared the REF; and
- a declaration by the proponent that the information contained in the REF is neither false nor misleading.

4.2 Executive Summary

An executive summary is different from an introduction. The executive summary should provide a succinct explanation of the project as well as a brief summary (a sentence or short paragraph) on each of the main

sections and the findings of the REF. The executive summary should be provided at the beginning of the REF, between the table of contents and introduction.

4.3 Chapter 1 – Introduction

The introduction should be the first chapter of the REF and should introduce the proposed activity and provide its context. Any relevant background information should be in the introduction as well as the objectives of the activity.

4.3.1 Need/Justification for the Proposed Activity

The REF should provide justification of the need for the activity. The features that make the activity viable should be clear, and include a description of the biophysical, economic and social costs and benefits of the activity.

Whilst not essential, any reasonable alternatives that are considered can be outlined. The alternatives should include different technologies, locations, design, construction methods and operational management, as well as the 'do nothing' option. Negative outcomes resulting from the 'do nothing' option should be reflected in the reasons for undertaking the activity.

4.3.2 Site Locality / Study Area Description

Provide site locality/study area identification details including Local Government Area, nearest town and regional overview.

A general broad description of the site and locality in terms of physical geography, vegetation cover, land use and built environment should be provided. The environmental sensitivity of the site and surrounds should be discussed. The purpose is to paint a picture of the site for a person who is not familiar with the site.

The relationship between the site and surroundings should also be noted. This should include proximity to native bushland, national parks or other conservation areas, watercourses, wetlands, estuaries or coastlines, schools, hospitals, churches or other noise sensitive sites, heritage sites, homes, residential areas, shopping centres or other significant built or natural features.

A site locality plan and adequate photographic record, including an aerial photograph, if available, should be included. Plans and photographs should illustrate the

location of the proposed activity within the context of the area.

4.3.3 Confirmation of Part 5

A statement confirming that the project is to be determined under Part 5 of the EP&A Act should be included.

4.4 Chapter 2 – The Proposed Activity

All relevant details of the proposed activity must be included in the project description. The description should scope out works and include details of disturbance, such as clearing of vegetation, removal of soil, construction of buildings, the machinery to be used, the final dimensions of the area of disturbance and visual aspects including materials used. As a minimum the following should be included:

- a description of the primary activity;
- a description of any ancillary activities, for example, water storages, additional roads for access or other works, infrastructure, clearing or bush fire hazard reduction works which are ancillary to the activity; and
- a description of all stages of a project, including an estimate of employee numbers and project duration. Anticipated commencement and completion dates;
- a statement is to be included in the project description that the mitigation measures outlined in Chapter 7 of the REF form part of the proposed activity, and would be implemented as required; and
- maps, photographs (including aerial photographs where available), diagrams, and a site plan, should be used to assist with the site description. The site plan should show the proposed activity, access routes and existing structures (including dimensions and alignments).

4.5 Chapter 3 – Consultation

Consultation is an important part of the REF process as it assists in the identification of impacts and can also assist in minimising disputes. Details of consultation activities are to be specified in the REF, including who was consulted, a summary of the issues raised and the results of the consultation.

When preparing a REF, consultation with the following stakeholders may be necessary depending on the project:

- adjoining and/or affected landowners or occupiers;
- leaseholders;
- local councils;
- other government agencies where appropriate;
- community; and
- local Aboriginal stakeholders.

Essential Energy notes that consultation with all or any of the above may not be required for certain projects.

4.6 Chapter 4 – Statutory Considerations

Consideration should be given to all relevant Commonwealth and State environmental planning instruments that may apply to the project, including, but is not, limited to the following:

- Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth);
- Environmental Planning and Assessment Act 1979;
- National Parks and Wildlife Act 1974;
- Local Government Act 1993;
- Wilderness Act 1987;
- Electricity Supply Act 1995;
- Roads Act 1993;
- Water Management Act 2000;
- Rural Fires Act 1997;
- Crown Lands Act 1989;
- Heritage Act 1977;
- Water Act 1912;
- Protection of the Environment Operations Act 1997;
- Native Vegetation Act 2003;
- Forestry Act 1916;
- Fisheries Management Act 1994;
- Threatened Species Conservation Act 1995;
- State Environmental Planning Policy (Major Development) 2005;

- State Environmental Planning Policy (Infrastructure) 2007;
- State Environmental Planning Policy 14 – Coastal Wetlands; and
- State Environmental Planning Policy 26 – Littoral Rainforests.

An assessment of the implications of each piece of legislation or planning instrument should be provided in this section.

4.7 Chapter 7 – Environmental Impact Assessment

The following sections provide an outline of the environmental issues that should be considered when preparing a REF, including relevant searches and assessments that must be undertaken as a minimum to quantify impacts. It should be noted that these issues are provided as a guide only and represent a general list of items that would be expected to be covered in a standard REF. Additional issues may need be considered depending on the nature and scale of an individual project. Conversely some issues may not need consideration.

4.7.1 Environmental Impact Assessment Chapter Format

For each issue, a description of the existing environment, potential impacts and proposed mitigation measures must be provided as described below (refer also to the example Table of Contents provided as Annex B). It is further noted that a REF is a test of significance and as such a summary/conclusive statement about significance is required (e.g. *The proposal is not expected to have any adverse impacts in relation to [aspect]* OR *The proposed activity will be minor and of short duration. Given the mitigation measures outlined in this assessment the overall risk is considered low*).

Existing Environment

The REF must include a comprehensive description of the existing environment and surrounds that are likely to be affected by the proposed activity. The description of the existing environment must provide enough detail to place the proposal in its local and regional environmental context.

Impact Assessment

The REF must include an assessment of the impacts of the proposal on the environment including the

cumulative impact of the proposal on the receiving environment. The extent and nature of the impacts will assist in determining whether or not there will be a significant impact.

The assessment should consider impacts at all phases of the project cycle including construction, routine operation, start-up operations and maintenance.

Mitigation Measures

The REF must describe any mitigation measures and management options proposed to prevent, control, abate or mitigate identified environmental impacts associated with the proposal and to reduce risks to human health and prevent the degradation of the environment. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented.

4.7.2 Landforms, Geology and Soils

The REF should include a general description of the landforms in the vicinity of the project site and/or study area. This includes a discussion of such features as ridges, hills, gorges, rivers and alluvial plains. A description of the geological setting of the proposal should also be provided.



The REF should identify soil type and discuss erosion hazard through analysis of type and texture of soils. The potential for salinisation, acidification, contamination, or loss of structural integrity should be discussed. The potential for mass movement, subsidence or slips should also be discussed.

Reference to relevant topographic, geological and soils maps (including acid sulphate soil risk maps) should be made. Information from any previous geological, geotechnical and soils assessment (where available) should also be included in the REF.

4.7.3 Flooding and Stormwater (if relevant)

An assessment of the project site and/or study area in relation to local flooding may be required. Review of local environmental planning instruments and available flooding information from local councils should be used to determine if the site or surrounds is flood prone. The REF should also include a discussion on whether the proposed activity will impact on local flood ways, flooding, or tidal inundation of surrounding lands.



The REF should also provide a description of the natural and built drainage systems within and surrounding the boundaries of the proposed activity. Potential impacts on both surface and groundwater, including quality and quantity, should be considered.

4.7.4 Aboriginal Heritage

Aboriginal cultural heritage consists of places and items that are of significance to Aboriginal people because of their traditions, observances, customs, beliefs and history. The National Parks and Wildlife Act 1974 (NP&W Act), administered by the NSW Office of Environment and Heritage (OEH) is the primary legislation for the protection of Aboriginal cultural heritage in NSW.

As a minimum, OEH due diligence guidelines must be followed in determining the potential to impact upon Aboriginal objects or places. This includes a search of the OEH Aboriginal Heritage Information Management System (AHIMS) to determine if there are any Aboriginal sites or places within or in close proximity of the project area, consideration of existing land use and nature of the proposed activities and likely impacts. This information can then be used to make a judgment on the likelihood of encountering any artefacts in the project area. It is important to note, however, that a report from AHIMS does not represent a comprehensive list of all Aboriginal objects or Aboriginal places in a specified area. A report lists



recorded sites only. In any given area there may be a number of undiscovered and/or unrecorded objects or places which hold Aboriginal heritage significance.

If the proposed activity is likely to impact on Aboriginal objects or Aboriginal places an Aboriginal Heritage Impact Permit (AHIP) under Section 90 of the National Parks and Wildlife Act 1974 will be required. The AHIP application must be accompanied by an impact assessment. The key purpose of the Aboriginal heritage impact assessment is to determine the cultural heritage significance of the Aboriginal object or place of concern in consultation with the Aboriginal community, and seek to avoid impact on the item.

In applying for an AHIP the local Aboriginal community who hold cultural knowledge relevant to determining the significance of Aboriginal objects and/or places as relevant to the subject site and/or study area are to be involved in consultation. The main phases of consultation with Aboriginal stakeholders are:

- Stage 1 – Notification of project proposal and registration of interest;
- Stage 2 – Presentation of information about the proposed project;
- Stage 3 – Gathering information about cultural significance; and
- Stage 4 – Review of draft cultural heritage assessment report.

Where an AHIP is required consultation must be undertaken in accordance with the OEH publication Aboriginal Cultural Heritage Consultation requirements for proponents (2010).

It should be noted that if impacts to objects or places with Aboriginal heritage significance will occur as a result of an activity the consultation process required by the OEH, and detailed in Aboriginal Cultural Heritage Consultation requirements for proponents (2010), takes a minimum of 15 weeks to complete before an AHIP application can be lodged. This can therefore potentially cause significant delays to project timelines.

4.7.5 Non-Aboriginal Heritage

The REF should describe the nature of any impact on historic, cultural or natural heritage and how it relates to the purpose of the proposed activity. As a guide, a search of the following heritage lists or databases should be undertaken:

- Australian Heritage Database;

- NSW State Heritage Inventory;
- Regional Environmental Plans (REPs); and
- Local Environmental Plans (LEPs).

This will determine if there are any items of local, state or national heritage significance that will be impacted upon as a result of the proposed activity.

If the proposed activity is likely to impact on an item of historic, cultural or natural heritage significance then additional detailed assessment on heritage impacts may be required.

4.7.6 Ecology

The REF should include a discussion of the potential impacts on all flora and fauna species (including fish and aquatic vegetation) and impacts should be assessed in accordance with Section 5A of the EP&A Act. Impacts may include clearing native vegetation (including trees, shrubs, grasses, herbs or aquatic species), displacing flora and fauna or creating a barrier to their movement, or introducing noxious weeds, vermin or feral species.



To determine the potential for threatened species, population and/or ecological communities to be present at the subject site and/or study area, the following searches should be conducted as a minimum:

- EPBC Protected Matters Search Tool (for matters of National Environmental Significance (NES) listed under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act));
- NSW OEH (National Parks and Wildlife Service) Atlas of NSW Wildlife (for threatened species, populations and communities under the NSW Threatened Species Conservation Act 1995); and
- consideration of vegetation community mapping (where available from local council or state agencies such as Catchment Management Authorities).

If the proposed activity is likely to impact on a threatened species, population and/or community, then a detailed ecological assessment must be undertaken to determine extent of impact and identify mitigation

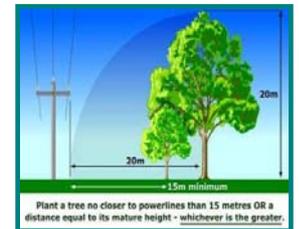
measures to prevent, control, abate or mitigate potential impacts.

The REF must include a statement as to whether or not threatened species, populations and ecological communities and their habitats are likely to occur in the proposed subject site and study area and whether impacts will occur. If it is found that threatened species, populations and/or endangered ecological communities occur or are likely to occur in the study area then an Assessment of Significance in accordance with Section 5A of the EP&A Act and/or EPBC Policy Statement and Significant Impact guidance must be included with the REF. Following on from the assessment in accordance with the NSW and Commonwealth threatened species legislation a statement of significance **MUST** be provided.

If there is likely to be a significant impact on threatened species, populations or communities or critical habitat, then a Species Impact Statement (SIS) is required.

4.7.7 Bushfire Risk

It may be prudent for the REF to include an assessment of bushfire risk to the project site and study area. This may include reference to bushfire hazard mapping undertaken by local councils or state agencies. In the case of an electricity powerline which is situated within vegetated land, this should include an assessment of the risk of causing bushfires and appropriate mitigation measures to prevent this.



4.7.8 Visual Amenity

The REF should include a description of the existing visual environment and impacts of the proposed activity. Issues to consider include:

- destruction or obscuring of existing views;
- creation of unattractive views such as clearings, stockpiles of materials, or erection of infrastructure (particularly for nearby properties); and
- impacts of shading another property.

A visual impact matrix should be referenced, which assesses the existing visual environment (the viewshed) against proposed visual changes/modifications and the sensitivity of the change.

If the proposed activity is likely to impact on the visual amenity of nearby properties, a detailed visual amenity assessment should be undertaken.

4.7.9 Noise and Vibration

The proposed activity may have the potential to generate noise and vibration impacts to nearby sensitive receivers.

If the proposed activity is likely to result in noise and/or vibration impacts, a noise (and vibration if required) impact assessment should be conducted to identify potential impacts associated with construction and operational phases of the proposed activity. Noise and vibration impacts should be discussed in terms of impacts on neighbours or sensitive land uses.

A noise assessment would generally only be expected to be required for switching/substations that contain noise generating equipment (e.g. transformers, capacitor banks load control cells etc). Construction noise impacts should also be considered where relevant (e.g. in close proximity to sensitive receivers).

The assessment should be undertaken in accordance with the relevant policies and guidelines published by the NSW OEH.

4.7.10 Air Quality

The proposed activity may have the potential to affect local and regional air quality, resulting from soil disturbance creating dust, vehicle movements and use of equipment. Consideration should also be given to climatic factors affecting local air quality such as seasonal weather conditions.

In most situations, a qualitative, rather than quantitative, discussion of impacts (e.g. construction phase dust emissions) will be sufficient. However, if the proposed activity is likely to significantly impact on air quality, a detailed air quality assessment should be undertaken to determine impacts and to identify appropriate control and mitigation measures.

4.7.11 Waste Disposal

The REF should identify major waste streams and methods for their management. Consideration should be given to disposal of cleared vegetation and excess spoil material.

Where the proposed activity includes the replacement or decommissioning of old timber poles, consideration should be



given to the waste streams generated by this activity and likely waste classification.

4.7.12 Chemical and Hazardous Substance Management (if relevant)

The REF should describe any activities which use, store or transport hazardous substances or use other chemicals which may build up residues in the environment such as oils, greases, fuels, drilling fluids, fertilisers, pesticides or herbicides. A description of the potential impacts associated with the use of these materials and the methods for minimising any impact should be provided.

4.7.13 Contaminated Land (if relevant)

Consideration may be required as to whether the proposed activity may cause contamination or may be located on contaminated land. A baseline study to identify the nature and extent of contamination may be necessary prior to undertaking the project. Responsibility for remediation of any contaminated areas should be identified.

If a contaminated land investigation is required this should be undertaken in accordance with the relevant policies and guidelines published by the NSW Office of Environment and Heritage (OEH).

4.7.14 Traffic

The REF should include a discussion on any impact to local traffic conditions as a result of the proposed activity. A description of the traffic generated from the proposed activity should be included. If the proposed activity is likely to impact on local traffic conditions, a detailed traffic impact assessment should be undertaken. A traffic management plan may be required, particularly when approval under the NSW Roads Act is required.

4.7.15 Social and Economic

The REF should provide details on any adverse or beneficial effects on the local community, businesses, agriculture, tourism, labour and industry. Consideration should also be given to the:

- impact on community services or infrastructure including roads, power, water, drainage, waste management, education, medical, social services;
- potential for the activity to change the demographics of an area; and

- potential for the activity to change the transport requirements of an area.

4.7.16 Electric and Magnetic Fields

The REF should include a brief discussion of electromagnetic fields (EMF) that are generated by electricity transmission lines and/or substations. The REF should assess the potential impacts of EMF from the proposed infrastructure on the surrounding environment and reference should be made to the Energy Supply Association of Australia (ESAA) Policy Statement on EMF as well as any guidelines on EMF criteria both domestically and internationally.

4.7.17 Ecologically Sustainable Development

The REF is to include reference to the principles of ecologically sustainable development (ESD) including:

- precautionary principle;
- intergenerational equity;
- protecting biodiversity; and
- improved valuation.

A discussion of the above is to be included to outline how the proposed activity meets the principles of ESD.

4.7.18 Climate Change (if relevant)

A brief discussion on the potential impacts on the proposed infrastructure resulting from climate change should be included in the REF. This is particularly relevant if the infrastructure is to be located in low lying areas near the coast that may be impacted by sea level rise or floods, or in areas likely to be impacted by more frequent extreme weather events or bushfires.

4.8 Chapter 6 – Summary and Conclusions

4.8.1 Clause 228 Checklist

It is a requirement of Section 111 of the Environmental Planning and Assessment Act 1979 that determining authorities give consideration to the environmental impact of activities. Clause 228 of the Environmental Planning and Assessment Regulation 2000 provides a list of factors that should be considered in determining the likely impacts of activities on the natural and built environment.

These factors along with nature of impact (such as positive, negative, or no change), magnitude and

duration of impact referenced to the relevant sections in the REF should be provided.

4.8.2 Summary of Mitigation Measures

Various sections of the REF should describe in detail the safeguards and mitigation measures to be implemented during the project. A summary of these measures should be provided.

The mitigation measures proposed within an REF become part of the activity once the REF is approved and therefore must be implemented.

4.8.3 Conclusion

To conclude a REF, a decision is required as to whether:

- there is likely to be a significant impact on the environment (if so, an EIS is required); and/or
- there is likely to be a significant effect on threatened species, populations, ecological communities or their habitats (if so, a SIS is required); and/or
- the activity is in respect of land that is, or is part of, critical habitat (if so, a SIS is required).

A concluding statement should be included stating if the proposed activity will or will not result in significant impacts on the environment. The conclusion should also identify if an EIS or SIS needs to be prepared in regards to the proposed activity.





5 References

- Department of Environment and Climate Change (DECC), 2008, Proponents Guidelines for the Review of Environmental Factors, DECC, July 2008
- Department of Primary Industries (DPI - Mineral Resources Division), 2006, Guidelines for Review of Environmental Factors, DPI, June 2006
- Department of Urban Affairs and Planning Guideline (DUAP), 1996 Is an EIS required? - Best Practice Guidelines for Part 5 of the Environmental Planning and Assessment Act 1979, DUAP, 2006



Annex A

Glossary of Terms



GLOSSARY OF TERMS

Activity means:

- (a) the use of land, and
- (b) the subdivision of land, and
- (c) the erection of a building, and
- (d) the carrying out of a work, and
- (e) the demolition of a building or work, and
- (f) any other act, matter or thing referred to in section 26 that is prescribed by the regulations for the purposes of this definition,

but does not include:

- (g) any act, matter or thing for which development consent under Part 4 is required or has been obtained, or
- (h) any act matter or thing that is prohibited under an environmental planning instrument, or
- (i) exempt development, or
- (j) development carried out in compliance with an order under Division 2A of Part 6, or
- (k) any development of a class or description that is prescribed by the regulations for the purposes of this definition. (s110 of EP&A Act).

Approval includes:

- (a) a consent, licence or permission or any form of authorisation, and
- (b) a provision of financial accommodation by a determining authority to another person, not being a provision of such financial accommodation, or financial accommodation of such class or description, as may be prescribed for the purposes of this definition by a determining authority so prescribed. (s110 of EP&A Act).

AHIMS – Aboriginal Heritage Information Management System.

Cth – Commonwealth legislation.

Determining authority means a Minister or public authority and, in relation to any activity, means the Minister or public authority by or on whose behalf the activity is or is to be carried out or any Minister or public authority whose approval is required in order to enable the activity to be carried out. (s110 of EP&A Act).

DoPI - Department of Planning and Infrastructure.



EIA – Environmental Impact Assessment.

EIS – Environmental Impact Statement.

EP&A Act – *Environmental Planning and Assessment Act 1979.*

EPBC Act – *Environment Protection and Biodiversity Conservation Act 1999.*

LEP – Local Environmental Plan.

Nominated determining authority, in relation to an activity, means the determining authority nominated by the Minister in accordance with section 110A in relation to the activity. (s110 of EP&A Act).

NOW – NSW Office of Water.

NP&W Act – *National Parks and Wildlife Act 1974.*

NSW – New South Wales.

OEH – Office of Environment and Heritage.

Part 3A – Part 3A of the EP&A Act.

Part 4 - Part 4 of the EP&A Act.

Part 5 - Part 5 of the EP&A Act.

Proponent – the person/company/authority that is proposing the works.

REF – Review of Environmental Factors.

REP – Regional Environmental Plan.

SEPP – State Environmental Planning Policy.

SEPP Infrastructure – *State Environmental Planning Policy (Infrastructure) 2007.*

SIS – Species Impact Statement.



Annex B

Example Table of Contents



EXAMPLE TABLE OF CONTENTS

- 1 INTRODUCTION
 - 1.1 BACKGROUND AND OBJECTIVES
 - 1.2 JUSTIFICATION FOR THE PROPOSED ACTIVITY
 - 1.3 SITE LOCALITY/ STUDY AREA DESCRIPTION
 - 1.4 CONFIRMATION OF PART 5

- 2 THE PROPOSED ACTIVITY
 - 2.1 PROPOSED INFRASTRUCTURE
 - 2.2 SITE PREPARATION
 - 2.3 ANCILLARY DEVELOPMENT
 - 2.4 LANDSCAPING AND SITE REHABILITATION
 - 2.5 MAINTENANCE AND ACCESS

- 3 CONSULTATION
 - 3.1 PUBLIC AUTHORITY CONSULTATION
 - 3.2 COMMUNITY CONSULTATION

- 4 STATUTORY CONSIDERATIONS
 - 4.1 COMMONWEALTH LEGISLATION
 - 4.2 STATE LEGISLATION
 - 4.3 STATE ENVIRONMENTAL PLANNING POLICIES



5 ENVIRONMENTAL IMPACT ASSESSMENT

5.1 LANDFORMS, GEOLOGY AND SOILS

5.1.1 Existing Conditions

5.1.2 Potential Impacts

5.1.3 Mitigation Measures

5.1.4 Conclusion

5.2 FLOODING AND STORMWATER

5.2.1 Existing Conditions

5.2.2 Potential Impacts

5.2.3 Mitigation Measures

5.2.4 Conclusion

5.3 ABORIGINAL HERITAGE

5.3.1 Existing Environment

5.3.2 Potential Impacts

5.3.3 Mitigation Measures

5.3.4 Conclusion

5.4 EUROPEAN HERITAGE

5.4.1 Existing Environment

5.4.2 Potential Impacts

5.4.3 Mitigation Measures

5.4.4 Conclusion



5.5 ECOLOGICAL IMPACT

5.5.1 Existing Environment

5.5.2 Potential Impacts

5.5.3 Mitigation Measures

5.5.4 Conclusion

5.6 BUSHFIRE RISK (if relevant)

5.6.1 Existing Conditions

5.6.2 Potential Impacts

5.6.3 Mitigation Measures

5.6.4 Conclusion

5.7 VISUAL IMPACT

5.7.1 Existing Conditions

5.7.2 Potential Impacts

5.7.3 Mitigation Measures

5.7.4 Conclusion

5.8 NOISE AND VIBRATION

5.8.1 Existing Conditions

5.8.2 Potential Impacts

5.8.3 Mitigation Measures

5.8.4 Conclusion



5.9 AIR QUALITY

5.9.1 Existing Conditions

5.9.2 Potential Impacts

5.9.3 Mitigation Measures

5.9.4 Conclusion

5.10 WASTE DISPOSAL

5.10.1 Existing Conditions

5.10.2 Potential Impacts

5.10.3 Mitigation Measures

5.10.4 Conclusion

5.11 CHEMICAL AND HAZARDOUS SUBSTANCE MANAGEMENT (if relevant)

5.11.1 Existing Conditions

5.11.2 Potential Impacts

5.11.3 Mitigation Measures

5.11.4 Conclusion

5.12 CONTAMINATED LAND (if relevant)

5.12.1 Existing Conditions

5.12.2 Potential Impacts

5.12.3 Mitigation Measures

5.12.4 Conclusion



5.13 TRAFFIC IMPACTS

5.13.1 Existing Conditions

5.13.2 Potential Impacts

5.13.3 Mitigation Measures

5.13.4 Conclusion

5.14 SOCIAL RESOURCES

5.14.1 Existing Conditions

5.14.2 Potential Impacts

5.14.3 Mitigation Measures

5.14.4 Conclusion

5.15 ELECTROMAGNETIC FIELDS

5.15.1 Existing Conditions

5.15.2 Potential Impacts

5.15.3 Mitigation Measures

5.15.4 Conclusion

5.16 ECOLOGICALLY SUSTAINABLE DEVELOPMENT

5.16.1 Principles of ESD

5.16.2 Achieving ESD

5.16.4 Conclusion

5.17 CLIMATE CHANGE (if relevant)

5.17.1 Existing Conditions



5.17.2 Potential Impacts

5.17.3 Mitigation Measures

5.17.4 Conclusion

6 SUMMARY AND CONCLUSION

6.1 COMPLIANCE WITH CLAUSE 228 OF EP&A REGULATION

6.2 SUMMARY OF MITIGATION MEASURES

6.3 CONCLUSION



Annex C

Style Guide



ESSENTIAL ENERGY REVIEW OF ENVIRONMENTAL FACTORS STYLE GUIDE

1 INTRODUCTION

All Review of Environmental Factors (REF) reports prepared to be submitted to Essential Energy for approval should be written in accordance with this style guide to allow Essential Energy to assess the proposal in a timely manner.

This style guide provides guidance on Essential Energy's expectation in regards to punctuation, formatting and typography in REF's submitted for approval.

1.1 TABLE OF CONTENTS

A Table of Contents (ToC) should be provided at the beginning of the REF between the front cover and Chapter 1. The ToC should list each of the headings and the page numbers they appear. The ToC should also include a 'List of Figures/Tables/Photographs' and a list of the Appendices (if applicable).

1.2 PUNCTUATION

1.2.1 Grammar

Grammatical Aspect	Preferred Style
Apostrophes	The golden rule is Essential Energy is a singular term and hence should carry an apostrophe and 's' e.g. Essential Energy's infrastructure.
Singular	Essential Energy is (<i>not are</i>) undertaking a study, or Essential Energy was (<i>not were</i>) involved in a study.
Numbers	The rule is in almost all correspondence spell out numbers less than ten, and write numbers ten and above.



1.3 ABBREVIATIONS AND ACRONYMS

Any abbreviations or acronyms used should be spelled out in full at the first mention and in the REF and can then simply be used in the abbreviated form from that point forward in the report e.g. Review of Environmental Factors (REF) or Office of Environment and Heritage (OEH) can then be REF or OEH respectively going forward.

When using e.g. or i.e. always write as e.g. and i.e. or, e.g.: and i.e.:

1.4 HEADINGS

1. Level One Heading (Should be the Chapter heading).

The level one heading should be Arial size 11, **bold**, aligned left and automatic or black in colour. The first letter of each word within a level one heading should be capitalised.

1.1 Level Two Heading

The level two heading should also be Arial size 11, **bold**, aligned to the left of the page and automatic or black in colour. The first letter of each word within a level two heading should be capitalised.

1.1.1 Level three heading (or)

1.1.1 State Environmental Planning Policy (Infrastructure) 2007

Level three headings should also be size 11, **bold**, aligned to the left of the page and automatic or black in colour. Level 3 headings and below should only have the first letter of the first word capitalised. However, if referring to a title or legislation then each first letter of each word should be capitalised.

The normal body text should be Arial, size 11 and justified. There should always be two spaces after full stops. When referencing figures, photos, tables and/or annexes, the text should be in *italics* i.e. refer to *Figure 1.1*.

1.5 TABLES AND FIGURES

Table and Figure Headings

Both tables and figures headings should be presented in **bold** including the table/figure reference. The words 'Table' and 'Figure' are to be capitalised as well as the first word (only) of the title heading (unless referencing legislation etc that require capitals) e.g. **Table 6-3: Threatened flora within a 2km radius**, or **Figure 1-1: Overview of the study area**.



The required style guide for tables and figures is to reference the chapter and then sequentially the table or figure in bold. For example the third figure in chapter six would be written as follows:

Figure 6-3:

The layout of headings for tables and figures is different. Headings for tables should always be on top of the table and to the left, whilst for figures and plates the heading should be at the bottom left hand corner.

Figures

The following guide is to be adhered to for the development of figure or map legends.

In referring to the existing network the legend should be presented in the following way:

Existing / voltage kV / powerline - e.g. Existing 11kV powerline. A capital letter is used for the first word only.

If dealing with underground powerlines then it should be presented in the following manner:

Existing / voltage kV / powerline (underground) - e.g. Existing 11kV powerline (underground).

Proposed new powerlines should be referenced in the following manner:

Proposed / voltage kV / powerline - e.g. Proposed 66kV powerline

Substations should be referenced only as a 'Substation'.

Each figure or map should contain the following:

- Legend;
- Scale bar; and
- North arrow.

It is preferred for figures and maps to be in shown in 'portrait' orientation.

Photographs

All photographs presented within the REF should be at least 1/3 of a page in size and be appropriately labelled. Alternatively a photo log may be provided as an appendix at the end of the REF.



1.6 FOOTERS

Footers should contain the name of your business/company, the name of the report, the version (i.e. draft or final) and the date. The page number should also appear in the footer.

Page Numbers

Page numbers should be kept as simple as possible and only refer to the current page number. Please avoid the use of complicated page numberings, such as 'Page 1 of 25.' The first page of Chapter 1 must start with page number 1.

1.7 CAPITALISATION

General: do not capitalise 'state', 'department', 'minister', or 'government' unless it is part of a name e.g. 'The Australian Heritage Commission Act ensures that...', 'Approval must be received from Commonwealth and state authorities...', 'The Commonwealth Government...', 'The Commonwealth and New South Wales governments...', 'The minister must then send a copy to the department.....', 'The Minister for Environment and Heritage must then send a copy to the Department of Infrastructure.....'

1.8 LEGISLATION

Legislation names should always be introduced in full in the first instance and be written in italics. Afterwards, if an acronym or abbreviation has been introduced, then the abbreviated form is acceptable e.g. *Environmental Planning and Assessment Act 1979* (EP&A Act).

However, if only one act will be referred to then after writing the title in full and italics, it is acceptable to write (The Act) e.g. *Environmental Planning and Assessment Act 1979* (The Act).

1.9 BULLET POINTS

Begin each bullet or sub-bullet with a capital letter. Each bullet point should end with a semi-colon with the second last point including the word 'and' to connect it to the last point. The last point has a full stop to conclude the list. For example:

- Excavator;
- Dump trucks and graders; and
- Light to medium vehicles.

Also please keep the bullets aligned with the text with no indentation unless it is a sub-bullet.



1.10 REFERENCE LIST

A reference list should be provided at the end of the REF (before the appendices). All documents cited in the REF should be referenced using the Harvard Style (or author/date style). The reference list should be presented in alphabetical order. Books, journals, websites and personal communications should all be referenced.

1.11 APPENDICES OR ANNEXURES

Appendices or annexures should be used for information supporting the REF, such as plans, technical assessments (such as ecology assessments) and photograph logs. Each appendix should have a cover page. The order of the appendices should reflect where reference to that appendix is made within the REF (i.e. the first item referenced in the REF as appearing in an appendix should appear in Appendix A and so on).

1.12 PRINTING GUIDELINES

All REF's should be set up for double sided printing. Where REF's are provided to Essential Energy electronically, they should be in .pdf format with all covers, figures and appendices inserted in the correct place.

Fonts, footers, numbering, heading style and body text style is to remain consistent throughout the REF.



Annex D

REF Content Checklist



CONTENT CHECKLIST FOR THE PREPARATION OF A REVIEW OF ENVIRONMENTAL FACTORS

The content checklist below is intended as a guide only and is not an exhaustive list of matters that should be addressed within a Review of Environmental Factors (REF). The particular issues will vary with each project and it is the proponent's responsibility to ensure that all relevant matters, including legal requirements, have been considered and addressed. The objective of Section 111 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) is to consider all matters affecting or likely to affect the environment.

Project
Draft Date
Author

Subject	Yes /No	REF Reference
Introduction	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Background and project objectives provided?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Need/Justification for project provided?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Site locality / project area description provided?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Site locality / project area plan included?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Confirmation of Part 5 of the EP&A Act provided?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Proposed Activity		
Description of those activities of the project which are being assessed under Part 5 of the EP&A Act provided? (including ancillary activities such as future maintenance, street lighting, access tracks, fences, tree trimming, etc)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Description of timing, phasing and schedules provided?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Description of any mitigation measures or environmental safeguards which have been incorporated into the proposal to mitigate likely or potential impacts provided?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Consultation		
Details of consultation activities provided? Should include who was consulted, a summary of the issues raised, and the results of the consultation.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Statutory Requirements		
Consideration given to all relevant legislation and environmental planning instruments that may apply to the project?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Existing Environment		
Has a comprehensive description of the existing environment and surrounds that is likely to be affected by the proposed activity been provided?	<input type="checkbox"/> Yes <input type="checkbox"/> No	

Subject	Yes /No	REF Reference
Impact Assessment		
Has an assessment of the impacts of the proposed activity on the environment, including the cumulative impact of the proposal on the receiving environment been provided?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Mitigation Measures		
Have mitigation measures and management options been provided to prevent, control, abate or mitigate identified environmental impacts associated with the proposed activity?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Environmental Issues To Be Considered		
<i>Aboriginal Heritage</i>		
Has a search of the Aboriginal Heritage Information Management System (AHIMS) been undertaken to determine if there are any objects or places of Aboriginal heritage significance located within, or in close proximity to, the study area?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Have the results of the AHIMS Search been included in the REF?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
If the proposed activity is likely to impact on Aboriginal objects or Aboriginal places has an application been lodged for an Aboriginal Heritage Impact Permit (AHIP) under Section 90 of the <i>National Parks and Wildlife Act 1974</i> ?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Has appropriate consultation with the Aboriginal community been undertaken?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Has the consultation been undertaken in accordance with the OEH publication - <i>Aboriginal Cultural Heritage Consultation requirements for proponents (2010)</i> .	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
<i>Non-Aboriginal Heritage</i>		
Has a search of the Australian Heritage Database, State Heritage Inventory and relevant local and regional environmental planning instruments been undertaken?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Have the results of these searches been included in the REF?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
If the proposed activity is likely to impact on an item of historic, cultural or natural heritage significance, has a detailed heritage study and impact assessment been undertaken?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
<i>Ecology</i>		
Has a search of the EPBC Protected Matters Search Tool been undertaken and results presented in REF?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Has a search of the NSW National Parks and Wildlife Service Atlas of NSW Wildlife been undertaken and results presented in the REF?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Has a search of relevant vegetation community mapping been undertaken and results presented in REF (where available from local council or State agencies such as Catchment Management Authorities)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Has the REF included a statement as to whether or not threatened species, populations and ecological communities are likely to occur in the proposed subject site and study area?	<input type="checkbox"/> Yes <input type="checkbox"/> No	

Subject	Yes /No	REF Reference
If it is found that threatened species, populations and/or endangered ecological communities occur, or are likely to occur, in the subject site and/or study area then has an Assessment of Significance been included with the REF?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
If the proposed activity is likely to impact on a threatened species, population and/or community, then has detailed ecological assessment been undertaken to determine extent of impact and identification of appropriate mitigation measures.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Did the impact assessment indicate there is likely to be a significant impact on threatened species, populations or communities or critical habitat? (If so, a Species Impact Statement (SIS) is required.)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
<i>Landform, Geology and Soils</i>		
Does the REF include a general description of the landforms in the vicinity of the project site and/or study area?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Does the REF include a description of the geological setting of the project site and/or study area?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Does the REF identify soil type and discuss erosion hazard through analysis of soil type and texture? The potential for salinisation, acidification, contamination, or loss of structural integrity should be discussed.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Has reference to relevant topographic, geological and soils maps (including acid sulphate soil risk maps) as well as any previous geological, geotechnical and soils assessment (where available) been made?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
<i>Flooding and Stormwater</i>		
Has an assessment of project site and/or study area in relation to local flooding been undertaken? (this should include review of local environmental planning instruments and available flooding information from local councils).	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Has a discussion on whether the proposed activity will impact on local flood ways, flooding, or tidal inundation been undertaken?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Has a description of the natural and built drainage systems within and surrounding the boundaries of the proposed activity been provided? Potential impacts on both surface and groundwater, including quality and quantity, should be considered.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
<i>Visual Amenity</i>		
Has a description of the existing visual environment and impacts of the proposed activity been provided?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Where the proposed activity is likely to impact on the visual amenity of nearby properties has a detailed visual amenity assessment been undertaken?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
<i>Noise and Vibration</i>		
Where the proposed activity is likely to result in noise and/or vibration impacts to nearby sensitive receivers, has a detailed noise (and vibration if required) impact assessment been undertaken?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	

Subject	Yes /No	REF Reference
Was the NIA assessment undertaken in accordance with the relevant policies and guidelines published by the NSW OEH?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
<i>Air Quality</i>		
Has a discussion of likely air quality impacts, such generation of dust, particulate matter and/or greenhouse gas emissions been provided?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Where the proposed activity is likely to impact considerably on air quality, has a detailed air quality assessment been undertaken?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
<i>Waste Disposal</i>		
Have all major waste streams and methods for their management been identified? (consideration should be given to disposal of cleared vegetation and excess spoil material etc)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Where the proposed activity includes the replacement or decommissioning of old timber poles, has consideration been given to the waste streams generated by this activity (with reference to CCA treatment)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
<i>Chemical and Hazardous Substance Management</i>		
Does the REF include a description of any activities which use, store or transport hazardous substances or use other chemicals which may build up residues in the environment? (such as oils, greases, fuels, drilling fluids, fertilisers, pesticides, or herbicides).	<input type="checkbox"/> Yes <input type="checkbox"/> No	
<i>Contaminated Land</i>		
Has consideration been given to the potential for contamination land to be present on site?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Where a contaminated land investigation is required, has this been undertaken in accordance with the relevant policies and guidelines published by the NSW OEH?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
<i>Traffic</i>		
Has a discussion on any impact to local traffic conditions as a result of the proposed activity been provided?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Where the proposed activity is likely to impact on local traffic conditions, has a detailed traffic impact assessment been undertaken and a traffic management plan prepared?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
<i>Social and Economic</i>		
Has the REF provided details on any adverse or beneficial effects on local community, businesses, agriculture, tourism, labour, and industry structure?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
<i>Bushfire Risk</i>		
Has the REF included an assessment of bushfire risk to the project site and/or study area? (this may include reference to bushfire hazard mapping undertaken by local councils or State agencies)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
In the case of electricity transmission lines which are situated within vegetated land, has an assessment of the risk of causing bushfires and appropriate mitigation measures to prevent this been provided?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	



Subject	Yes /No	REF Reference
<i>Electric and Magnetic Fields</i>		
Has the REF included a discussion of electric and magnetic fields (EMF) that are generated by electricity infrastructure?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Has reference been made to the Energy Supply Association of Australia (ESAA) Policy Statement on EMF?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
<i>Human Safety</i>		
Has a discussion of relevant Occupational Health and Safety legislation and any training that may be required to undertake the proposed activity been included in the REF?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Has a description of the various safety features which have been included as part of the proposed activity been provided in the REF? (Examples may include intruder resistant perimeter fence, appropriate signage and hazard warning tape).	<input type="checkbox"/> Yes <input type="checkbox"/> No	
<i>Ecologically Sustainable Development</i>		
Has the REF included a discussion to outline how the proposed activity meets the principles of ESD?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
<i>Climate Change</i>		
Has the REF detailed the potential impacts of climate change on the proposed infrastructure?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Summary and Conclusion		
Has the REF addressed the list of factors that should be considered in determining the likely impacts of activities on the natural and built environment according to Clause 228 of the <i>Environmental Planning and Assessment Regulation 2000</i> ?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Has a summary of the proposed safeguards and mitigation measures project been provided?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Has a conclusion been provided, which includes a statement of whether or not: <ul style="list-style-type: none"> • there is likely to be a significant impact on the environment? (If so, an EIS is required). • there is likely to be a significant impact on threatened species, populations, ecological communities or their habitats? (If so, a SIS is required); and • the activity is in respect of land that is, or is part of, critical habitat? (If so, a SIS is required). 	<input type="checkbox"/> Yes <input type="checkbox"/> No	



Annex E

**EE Consultants Checklist
for Preparation of REF**

CONSULTANT CHECKLIST FOR PREPARATION OF REF

Project	
Draft date	
Author	

The checklist below is to be used as a guide only. The checklist is not an exhaustive list of matters to be considered in the REF. The particular matters that need to be considered will vary depending on the project and the Consultant must ensure that all relevant matters, including all legal requirements, are properly considered and addressed. The overriding objective under section 111 of the ***Environmental Planning and Assessment Act 1979*** (EPA Act) is to consider all matters affecting or likely to affect the environment by reason of the project.

Matter	Considered	REF Reference
1 Is the proposal clearly described?		
Are all the components of the proposal identified and described in sufficient/appropriate detail including without limitation reference to the construction, access for construction and operation of the relevant infrastructure and the interaction with existing infrastructure (eg removal/relocation of existing assets)?		
What works are required for the proposal?		
Location of site/description of locality including map?		
Location of the proposal (route/access routes/works) including: <ul style="list-style-type: none"> • a clear description of any line route • the areas to be cleared • the areas assessed by the REF (including the width of the corridor assessed); and • a map clearly showing the route/access routes/works by reference to an overlay of the lots and deposited plans affected? 		
What use will follow construction?		
What maintenance work will be required?		
Who owns the land affected by the proposal (by reference to a schedule indicating owners, titles, watercourses, roads and roads authorities) and: <ul style="list-style-type: none"> • are there other easements that could impact the proposal • are there native title claims over Crown land affected by the proposal • have searches been undertaken with Land & Property Management Authority (LPMA), and the Office of Registrar, <i>Aboriginal Land Rights Act 1983</i> for possible Aboriginal land claims under the <i>Aboriginal Land Rights Act 1983</i> and if so, what was the date of the claim; [Note: If an aboriginal land claim exists this must be referred to Essential Energy immediately]; and • is there any land that is acquired, dedicated or reserved under the relevant National Park's legislation[Note: If any land falls within this category, this must be referred to Essential Energy immediately]. 		

Matter	Considered	REF Reference
What mitigation measures are proposed (the impact of these measures should be considered as part of the project itself)? Are they clearly described as being part of the proposal?		
Does the REF and all supporting studies (eg. flora and fauna assessment) describe the proposal consistently and have all activities the subject of the proposal been adequately considered?		
2 Confirm a project approval is not required under Part 3A of the EPA Act?		
Does SEPP (Major Development) apply and/or has the Minister declared in the gazette that Part 3A applies to the development or class of development?		
Or has the Minister declared the project as a Part 3A project on the basis that an Environmental Impact Statement would otherwise be required under Part 5 of the EP&A Act (see Section 75B(2)(b) of the EP&A Act)		
3 Confirm development consent is not required under Part 4 of the EPA Act for all or part of the project?		
Does the Infrastructure SEPP mean that development consent is/is not required?		
Are the Model provisions, Standard LEP or other relevant exemptions included in the applicable EPI in relation to electricity works?		
Have necessary inquiries been made and consideration given as to all applicable environmental planning instruments?		
Do any State Environmental Planning Policies (SEPPs) apply (including SEPP 4 – Development Without Consent, SEPP 14 – Coastal Wetlands, SEPP 26 – Littoral Rainforest, SEPP 71 – Coastal Protection or SEPP (Exempt and Complying Development Codes) 2008)?		
If so, how do they apply?		
Have assessments/studies/referrals required under applicable SEPPs/REPs been undertaken/met?		
4 Is there adequate consideration of all environmental impacts including construction and operation specific impacts?		
5 Duty to consider the environmental impact under sections 5B, 111 and Part 5 of the EPA Act - Have all matters in Section 111 of EP&A Act been dealt with adequately?		
Examine and take into account to the fullest extent possible all matters affecting or likely to affect the environment by reason of the activity (ie. the proposal as described) {section 111(1)}?		
The effect of the activity on any conservation agreement under the <i>National Parks and Wildlife Act 1974</i> (NPW Act) {sections 5B and 111 (2) (a)}?		
The effect of the activity on any plan of management under NPW Act {section 111 (2) (b)}?		
The effect of the activity on any joint management agreement under <i>Threatened Species Conservation Act 1995</i> (TSC Act){section 111(2) (c)}?		
The effect of the activity on any bio banking agreement entered into under Part 7A of the TSC Act {section 111 (2) (d)}?		

Matter	Considered	REF Reference
Any impact on wilderness area within the meaning of the <i>Wilderness Act 1987</i> {section 111 (3)}?		
The effect of the activity on impact on critical habitat {sections 5B and 111 (4) (a)}?		
Is there likely to be a significant effect on threatened species, populations or ecological communities or their habitats {sections 5A, 5C and 111 (4) (b)}?		
Any impact on protected fauna or protected native plants under the NPW Act {section 111(4) (c)}?		
6 Has flora and fauna been adequately considered?		
Adequate desktop analysis and literature review to identify threatened species, populations etc. likely or known to occur in the study area including searches of relevant Department of Environment, Climate Change and Water (DECCW) and Department of Environment, Water, Heritage and the Arts (DEWHA) databases?		
Are fieldwork/surveys required/completed and have sampling techniques and study methodologies been documented and was the timing of surveys appropriate (ie breeding cycles/flowering)?		
Has an "Assessment of Significance" under sections 5A and 5C of the EP&A Act (consistent with the requirements of the TSC Act and the <i>Fisheries Management Act 1994</i>) been undertaken for each threatened species, population, ecological community and their habitats?		
Have the above assessments been completed in accordance with the DECCW ' <i>Threatened species assessment guidelines – the assessment of significance</i> ' dated August 2007?		
Is a Species Impact Statement (SIS) required? (is the activity in respect of land that is critical habitat or is the activity likely to have a significant effect on threatened species, populations, ecological communities or their habitats?).		
Has the impact of the proposal on flora and fauna generally been addressed (other than threatened flora and fauna)?		
7 Has cultural heritage been adequately considered?		
Adequate desktop analysis and literature review to identify Aboriginal places or object etc. likely or known to occur in the study area including searches of relevant DECCW and DEWHA databases?		
Has consideration been given to the NPWS ' <i>Aboriginal Cultural Heritage - Standards and Guidelines Kit</i> ' dated September 1997 and the draft ' <i>Revised Consultation Draft Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW</i> ' dated 24 February 2010?		
8 Clause 228(1) of the Environmental Planning and Assessment Regulation 2000 (the EPA Reg)		
Are there specific guidelines under clause 228 that apply to the project and if so have the factors in those guidelines been taken into account (noting what inquiries have been made in relation to guidelines)?		
Has consideration been given to any general guidelines in force under clause 228(1)(b)? or		

Matter	Considered	REF Reference
<p>Have each of the matters referred to in clause 228(2) been adequately considered? Including:</p> <p>(a) any environmental impact on a community</p> <p>(b) any transformation of a locality</p> <p>(c) any environmental impact on the ecosystems of the locality</p> <p>(d) any reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality</p> <p>(e) any effect on a locality, place or building having aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific or social significance or other special value for present or future generations</p> <p>(f) any impact on the habitat of protected fauna (within the meaning of the NPW Act)</p> <p>(g) any endangering of any species of animal, plant or other form of life, whether living on land, in water or in the air</p> <p>(h) any long-term effects on the environment</p> <p>(i) any degradation of the quality of the environment</p> <p>(j) any risk to the safety of the environment</p> <p>(k) any reduction in the range of beneficial uses of the environment</p> <p>(l) any pollution of the environment</p> <p>(m) any environmental problems associated with the disposal of waste</p> <p>(n) any increased demands on resources (natural or otherwise) that are, or are likely to become, in short supply</p> <p>(o) any cumulative environmental effect with other existing or likely future activities</p>		
<p>9 Has assessment under Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) been dealt with adequately?</p>		
<p>Has each EPBC Act “trigger”, matter of National Environmental Significance (NES) been considered? Including:</p> <ul style="list-style-type: none"> • Declared World Heritage Properties • National Heritage Places • Declared RAMSAR wetlands • Listed threatened species and listed ecological communities • Listed migratory species • Commonwealth marine areas • Nuclear actions 		
<p>Will the proposal impact on Commonwealth land (even if taken outside Commonwealth land) – has this been considered and assessed?</p>		

Matter	Considered	REF Reference
<p>For each matter of NES triggered by the action, has significance been assessed in accordance with the relevant EPBC Act Guidelines on Significance? In particular:</p> <ul style="list-style-type: none"> • Significant Impact Guidelines 1.1 - Matters of National Environmental Significance dated 2009; and • Significant impact Guidelines 1.2 Actions on, or impacting upon, Commonwealth land, and actions by Commonwealth agencies dated 2006 		
<p>Have the relevant regulations under the EPBC Act been considered?</p>		
<p>10 Has consideration been given as to whether “notification” or “permissions” and approvals are required for the project and the likely “determining authorities”?</p>		
<p>Have notifications requirements been identified and/or satisfied, including requirements under the:</p>		
<ul style="list-style-type: none"> • <i>Electricity Supply Act 1995?</i> • Infrastructure SEPP? If yes, has consideration been given to valid responses under any notification requirements of the Infrastructure SEPP? • <i>Fisheries Management Act 1994?</i> 		
<p>Have inquiries been made of all relevant authorities, including:</p>		
<ul style="list-style-type: none"> • Roads and Traffic Authority (RTA) and/or Council regarding consent under section 138 of <i>Roads Act 1993</i> for work involving public roads (if work is within “road” and not covered by savings provision)? 		
<ul style="list-style-type: none"> • The DECCW including: <ul style="list-style-type: none"> (a) any Aboriginal heritage impact permit required under Part 6 of the <i>National Parks and Wildlife Act 1974</i> (following consideration of the “Aboriginal cultural heritage consultation requirements for proponents 2010, Part 6 <i>National Parks and Wildlife Act 1974</i>” dated April 2010) (b) any environment protection licence required under the <i>Protection of the Environment Operations Act 1997</i> (in respect of scheduled development and activities such as water pollution, discharges and storage, handling or disposal of waste); and (c) in relation to land that is acquired, dedicated or reserved under the relevant National Park’s legislation (following consideration of the DECCW guidelines titled ‘<i>Proponents Guidelines for the Review of Environmental Factors</i>’ dated July 2008 and ‘<i>Guidelines for developments adjoining Department of Environment and Climate Change land</i>’ dated May 2008). 		
<ul style="list-style-type: none"> • Forests NSW within Industry & Investment NSW in respect of State Forests? 		
<ul style="list-style-type: none"> • The LPMA : <ul style="list-style-type: none"> (a) if work is to be undertaken on Crown land (see also relevant searches below); and (b) in relation to Western Lands, it work is within the unincorporated areas of the Western Division. 		
<ul style="list-style-type: none"> • The NSW Heritage Office or local Council in respect of Heritage Items identified on the Register of the National Estate, under the <i>Heritage Act 1977</i> or in an environmental planning instrument? 		

Matter	Considered	REF Reference
<ul style="list-style-type: none"> WorkCover in respect of handling, storing, disposing of or transporting dangerous goods? 		
<ul style="list-style-type: none"> NSW Office of Water including if the proposal requires: <ol style="list-style-type: none"> A water access licence; or An approval for water use, water management works and activities (controlled and aquifer interference) under the <i>Water Management Act 2000</i>. 		
<ul style="list-style-type: none"> NSW Rural Bushfire Service including: <ol style="list-style-type: none"> Advising of or obtaining permits for works involving the use of flames Certification for bushfire hazard reduction works Bushfire safety authority for residential or rural residential subdivision of bushfire prone land in accordance with the <i>Rural Fires Act 1997</i>. 		
<ul style="list-style-type: none"> Industry & Investment NSW and NSW Office of Water if any permits or licences are required to construct pipelines in accordance with the <i>Pipelines Act 1967</i> 		
<p>Have inquiries been made as to whether the location of site is environmentally sensitive and if so, what were the results of those inquiries?</p>		
<p>11 Has necessary/desirable consultation been carried out with other relevant stakeholders, including:</p>		
<ul style="list-style-type: none"> Consultation under the Infrastructure SEPP? Landholders (including the owners of all relevant roads)? Local aboriginal land council(s) and/or NSW Aboriginal Land Council (as required) and recognised traditional owners in respect of Aboriginal cultural heritage (including consideration of the DECCW's "Aboriginal cultural heritage consultation requirements for proponents 2010, Part 6 National Parks and Wildlife Act 1974" dated April 2010) LPMA in relation to Crown land (including Crown roads, land being subject to TSRs and river crossings). Have all necessary searches been undertaken including searches with: <ol style="list-style-type: none"> LPMA to determine the status of any Aboriginal land claims under the <i>Aboriginal Land Rights Act 1983</i> [Note: If a claim has been granted the claimant must be treated as a landowner] National Native Title Tribunal and NTSCorp for any native title claims and/or determinations Livestock Health and Pest Authority (for TSRs); and Enclosure permit holders or lessees. 		
<p>12 Have conclusions been made referring to ss 5A, 5C, 111 and s112 of EP&A Act (using language of Act)?</p>		
<p>How are "mitigation of impacts" dealt with?</p>		
<p>Are there clear statements as to whether or not an SIS and/or EIS are required?</p>		

CONSULTANT SIGN OFF:

I verify that:

- I am suitably qualified to have prepared the REF for Essential Energy.
- The assessment in the REF has been adequately completed and the conclusion as to the likely environmental impact of the project is reasonable.

Signed _____
(Principal Consultant)

Date _____

DETERMINING OFFICER SIGN OFF:

NOTE: Where a REF has been prepared by a Qualified Consultant, this sign off is required to verify that the assessment in the REF has been adequately completed and to provide authority for the project to proceed.

I verify that:

- I am suitably qualified and competent to verify the completion of this checklist having completed Essential Energy's EIA training, Course No.:
- The Consultant is suitably qualified and competent to have completed this checklist and prepared the REF for Essential Energy.
- All approvals, licences and permits, identified in the REF as being required for the project, have been obtained.
- Based on the completed checklist, the completed REF and my knowledge of the project, the assessment in the REF has been adequately completed, the conclusion as to the likely environmental impact of the project is reasonable and **the project can proceed** subject to the relevant control measures and the conditions in any approvals, licences and permits.

Signed _____
(Determining Officer)

Date _____

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Environmental Resources Management

Suite 3, 146-150 Gordon Street
Port Macquarie NSW 2444
PO Box 5711,
Port Macquarie NSW 2444

T: 61 2 6584 7155
F: 61 2 6584 7160
www.erm.com

