WELLINGTON POWER PROJECT

Preliminary Project Outline

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EXECUTIVE SUMMARY

ERM Power Pty Ltd proposes to develop an open-cycle gas turbine power station and associated transmission and gas supply infrastructure near Wellington, NSW.

The power station will consist of four low NOx gas turbo-generators of approximately 160MW rating, with total station capacity in the range 600MW to 660MW. The power station will operate as a peaking plant with an annual capacity factor of approximately 4%, producing 220 GWh of electricity per annum.

The proposed site for the power station is 4km north-east of Wellington on Mudgee Road. The site is adjacent to TransGrid's 330kV/132kV Wellington sub-station. The power station will connect directly to the sub-station and no other transmission infrastructure will be required.

Gas will be supplied by a new pipeline connecting to the Central West Pipeline near Parkes, a distance of approximately 90km from the power station site. A proposed route for the pipeline has been identified.

Besides providing new peak generation capacity within the National Electricity Market, this development will qualify for NSW Greenhouse Abatement Certificates (NGACs), with more than 50,000 NGACs expected to be produced each year.

Preliminary discussions on the project have been held with Wellington Shire Council. The Council recognises the potential economic and employment opportunities presented by the project and has expressed support for the development. The power station is permissible within the current zoning for the site.

The capital investment value for the Wellington Power Project is around $350 million and, as such, the project is eligible for Major Project Status under Schedule 1 of the *State Environmental Planning Policy (Major Projects) 2005*. ERM seeks authorisation for concept approval for the project under the provisions of Part 3A of the *Environmental Planning and Assessment Act 1979*.

ERM has extensive experience in the business development, approvals and licensing processes associated with the construction and operation of gas-fired power stations, having obtained approval in NSW for the proposed Uranquinty Power Station, in Queensland for the Oakey and Braemar Power Stations and in Western Australia for the NewGen Kwinana Power Station.

Application is made to the Minister for Planning to declare the proposal to be a project to which Part 3A of the Environmental Planning and Assessment Act applies and to authorise submission of a concept plan for the project.

1. INTRODUCTION

This document provides a preliminary overview of the proposed Wellington Power Project for the information of the Department of Planning and other interested parties. The purpose of this document is to support an application to the Minister for Planning to declare that Part 3A of the EP&A Act applies and to authorise preparation of a concept plan for the project.

ERM has commenced consultation with the Department of Planning, the Department of Environment and Conservation, Wellington Shire Council and TransGrid. Extensive community consultation will be undertaken as part of the development assessment process.

While the information is based on and drawn from ERM's extensive experience in similar developments, all information contained herein is subject to refinement as project planning progresses, detailed studies are undertaken and manufacturers' specifications are confirmed.

2. PROPONENT

ERM Power is an energy solution specialist, with a proven track record of planning, developing, project managing, owning and operating electricity generation projects designed to meet customer needs in a competitive market.

ERM Power's consulting and management track record of over 20 years has brought together a wealth of experience in energy planning, fuel utilization, and electricity generation in Australia and overseas advising governments, multinational electricity generators, resource developers and plant manufactures.

In recent years ERM Power, in association with investment bank "Babcock & Brown", has developed 750MW of open cycle gas-fired generation in Queensland and is constructing a future 320MW of combined cycle gas-fired generation in Western Australia with a aggregate enterprise value in excess of $1 billion.

ERM is currently pursuing projects with a combine generating capacity in excess of 4000MS's in Queensland, New South Wales and Western Australia.

Babcock & Brown is recognised as a world leader in its field and since its inception has successfully completed more than US$200 billion of innovative financings for some of the world's largest corporate and government bodies.

Established in Australia in 1982, the company is listed on the Australian Stock Exchange and has its worldwide head office in Sydney. Babcock & Brown's major business areas include property investment and finance, corporate finance, and infrastructure development and finance. Babcock & Brown has an extensive portfolio of power assets in Australia.

Babcock & Brown and ERM Power have successfully worked together for over ten years on gas-fired generation developments in Australia, including the 300MW Oakey Power Station (commissioned in 1999) and the 450MW Braemar Stage I Power Station (commissioned in 2006).

3. PROJECT DESCRIPTION

ERM proposes to construct a 660MW open cycle gas turbine power plant and associated infrastructure near Wellington, NSW. The capital investment value of the project is expected to be around $350 million.

Gas-fired power stations offer significant environmental benefits over coal-fired power stations, with minimal water requirements and substantially lower greenhouse gas emissions.

The power station will be operated as a peaking plant with an annual capacity factor of around 4% or 350 station hours, with total energy production of 220 GWh per annum.

The Wellington power station will:

- contribute to new generation requirements identified in the National Electricity Market, which show reserves below minimum requirements beyond 2007/08;
- qualify for NSW Greenhouse Abatement Certificates (NGACs), with more than 50,000 NGACs expected to be produced each year;
- improve reliability of supply to Wellington and the western region of NSW; and
- create employment and other economic benefits in the Wellington region.

3.1 Power station

The proposed power station will consist of four 'E' Class gas turbo-generators operating in open-cycle configuration. Each gas turbine will have a capacity in the range 150MW to 165MW depending on manufacturer's specifications and detailed technical planning. The E Class gas turbine is a widely-used economical generator with proven high reliability performance.

Additional major components of the power station include:

- generator-transformers
- demineralised water treatment plant
- air cooled condensers
- evaporation pond
- plant control system
- monitoring and protection systems
- starting and emergency diesel generator
- water tanks
- exhaust stacks and silencers
- office building and workshop

The gas turbines will use low NOx technology and during normal mode of operation are expected to achieve best-practice NOx emissions for gas-fired power stations of 25 ppm.

ERM will also consider incorporating provision for water injection in the power station design. This is an efficient means of increasing maximum power output by up to 10% at times of concurrent high ambient temperatures and high energy demand. Under this mode of operation, to be used for a maximum of 100 hours per annum, NOx emissions would not exceed 35 ppm.

The exhaust stacks will have a maximum height of 35m and ancillary plant and buildings will not exceed 20m in height.

Once operational, the power station will require 5 full-time on-site staff.

3.2 Fuel supply

The power station will use natural gas as fuel, with an annual requirement of approximately 3 PJ.

Gas will be sourced from the Moomba gas fields and transported via the Moomba-Sydney Gas Pipeline, the Central West pipeline, and a new pipeline to be constructed from the Central West pipeline to the proposed Wellington power station site (refer section 4.2)

No bulk fuel will be stored on site.

3.3 Water

Water will be required for evaporative inlet cooling, water injection (if adopted), fire services and domestic use. Total annual water consumption will be less than 20ML. Subject to Council approval, water will be sourced from a Council water pipeline passing the proposed site.

On-site water storage tanks will be provided for demineralised water and for town water for fire and domestic use.

The environmental impact assessment will identify any potential impacts on the surface and ground water quality as a result of the construction and operation of the power station. All liquid wastes will be controlled in accordance with a zero liquid waste effluent policy through evaporation and stormwater ponds and appropriate waste removal practices.

3.4 Transmission connection

The power station will connect directly to a TransGrid substation on the adjacent block. Other than minor modifications to the sub-station, no further transmission infrastructure will be required.

4. PROPOSED SITE AND PIPELINE ROUTE

ERM has identified potential site and route/easement localities for the power station and gas pipeline.

4.1 Power station

Desktop and field studies were undertaken to assess potential sites for construction of the power station in the Wellington area. Potential sites were identified based on existing and surrounding land uses, distance to residential dwellings, town planning considerations, proximity to substation and transmission network infrastructure, visual and environmental constraints and commercial acquisition availabilities.

Based on these investigations, ERM considers that the optimal site is located 4km north of Wellington town centre on the eastern side of Goolma Road, adjacent to a TransGrid 330kV/132kV substation on part of land described as Lot 101 DP606457, Parish of Nanima, County of Bligh.

ERM has an option to purchase approximately 100 acres (45 ha) subject to securing approval for subdivision and development approval for the power station. Approximately 80 acres will be retained for the power station, which will have a footprint of less than 20 acres. The site is undulating grazing land with sparse vegetation. ERM will arrange for flora/fauna and archaeological assessments to be carried out as part of detailed investigations. These studies are not seen to be necessary prior to concept approval because if needed the power station footprint can be varied within the property to avoid any significant findings.

The land is currently zoned Rural 1(a) under Wellington LEP 1995. Development of the power station is permissible with consent under the LEP. Wellington Shire Council has advised that a draft LEP is being prepared to rezone the land surrounding the substation from Rural to Industrial.

A location map and satellite photograph of the proposed site is at **Attachment A.**

4.2 Gas pipeline

Natural gas is proposed to be supplied from the Moomba-Sydney Pipeline via the Central West Pipeline.

A new pipeline is proposed to be installed from the Central West Pipeline at Alectown West near Parkes to the Wellington power station site. The proposed pipeline route is shown at **Attachment B**.

An existing pipeline from Dubbo to Wellington does not have sufficient capacity or pressure characteristics to deliver the required gas for the power station. ERM understands that there is no existing easement for this pipeline and a new easement will therefore be required.

The pipeline route traverses land within the local government areas of Parkes, Cabonne and Wellington. Where practicable the pipeline route follows existing shire or main roads, located within or adjacent to the road reserve. Approximately 90 per cent of the route within or adjacent to existing road reserves.

The route proceeds generally south east from Alectown proceeding across farming land on a direct line to the timbered country of Herveys Range. The route then turns east and joins the Parkes to Wellington Road. This road alignment turns north-east and is followed all the way to Wellington. There are minor deviations away from the road to take the pipeline to the west of Yeoval and Wellington. The route passes through Goobang National Park for about two kilometres within the existing road

reserve. The Macquarie River will be crossed in the deviation just west of Wellington. It is anticipated the majority of other watercourse crossings will be achieved by attaching the pipeline to road bridges, subject to agreement of the road authority.

5. KEY ISSUES

Preliminary investigations undertaken by ERM to date have identified the likely key issues to be addressed in the assessment process.

5.1 Power station

A comprehensive air quality assessment will be undertaken to determine the expected quantity and quality of emissions to the atmosphere from activities at the power station. Plume modelling of stack emissions will take into account the meteorological characteristics and topography of the region. Greenhouse gas emissions, in tonnes CO_2 equivalents, will also be assessed.

An assessment of the existing noise environment and potential impacts associated with noise emissions will be completed. Studies will be undertaken to establish baseline noise levels and predict noise levels attributable to the proposed power station. An evaluation will be made to determine whether the noise levels will exceed requirements in respect of any surrounding neighbours.

ERM proposes to design the power station so that noise would meet DEC guidelines at all sensitive receptors.

A visual impact assessment will be conducted on all components of the project and strategies adopted to limit visual effect. The assessment will consider visual impacts from sensitive locations, including existing private residences, transport routes and other developments.

A hazard analysis will be conducted to determine any significant risks presented by the project. This will include such issues as fire risk, natural gas concentrations, chemical storage and emergency procedures.

5.2 Gas pipeline

Detailed location of the pipeline will be carried out in consideration of the findings of detailed flora/ fauna and archaeological assessments.

For the majority of the route, where road reserves are followed, the detailed alignment will be determined after discussion with the relevant road authorities. Factors to be considered include remnant trees in the road reserve, separation from other services, creek crossings, traffic safety, drainage and water quality, roadside houses and future road improvements.

DEC will be consulted regarding any particular requirements where the route follows a road reserve through Goobang National Park.

Where it is necessary to traverse private property, the detailed alignment will be determined in consultation with the property owner with a view to minimising the

effects of construction and any longer term effects of the pipeline on land management practices. Councils will be consulted to ascertain any likely future use of the land that may be relevant to pipeline location.

The preferred location of the pipeline in relation to roadside villages and Wellington township will be discussed with the relevant Councils.

The visual impact assessment and hazard analysis referred to above will include the gas pipeline.

6. DEVELOPMENT ASSESSMENT

Application has been made for the development assessment to be carried out under Major Project provisions in Part 3A of the *Environmental Planning and Assessment Act* (EP&A Act). ERM requests that the Minister for Planning authorise preparation of an application for concept approval for this project.

Consultation with DoP on the proposed project requirements and specifications has been initiated. Preliminary investigation and advice have indicated that:

- as the project is for an electricity generating facility with a capital investment value of more than $30 million, it will meet the requirements for a major project to which Part 3A of the Act applies;
- The pipeline component will be classified as a linear infrastructure project under clause 8F of the EP&A Regulation and hence approval of owners of land affected by the pipeline route is not required for the application to be submitted;
- The proposal will not be designated or integrated development as Part 4 will not apply.

7. PROJECT TIMING

Detailed project timing will be determined if and when concept approval is obtained for the project.

It is expected that financial close on the project and commencement of construction would occur within six months of the Minister granting approval.

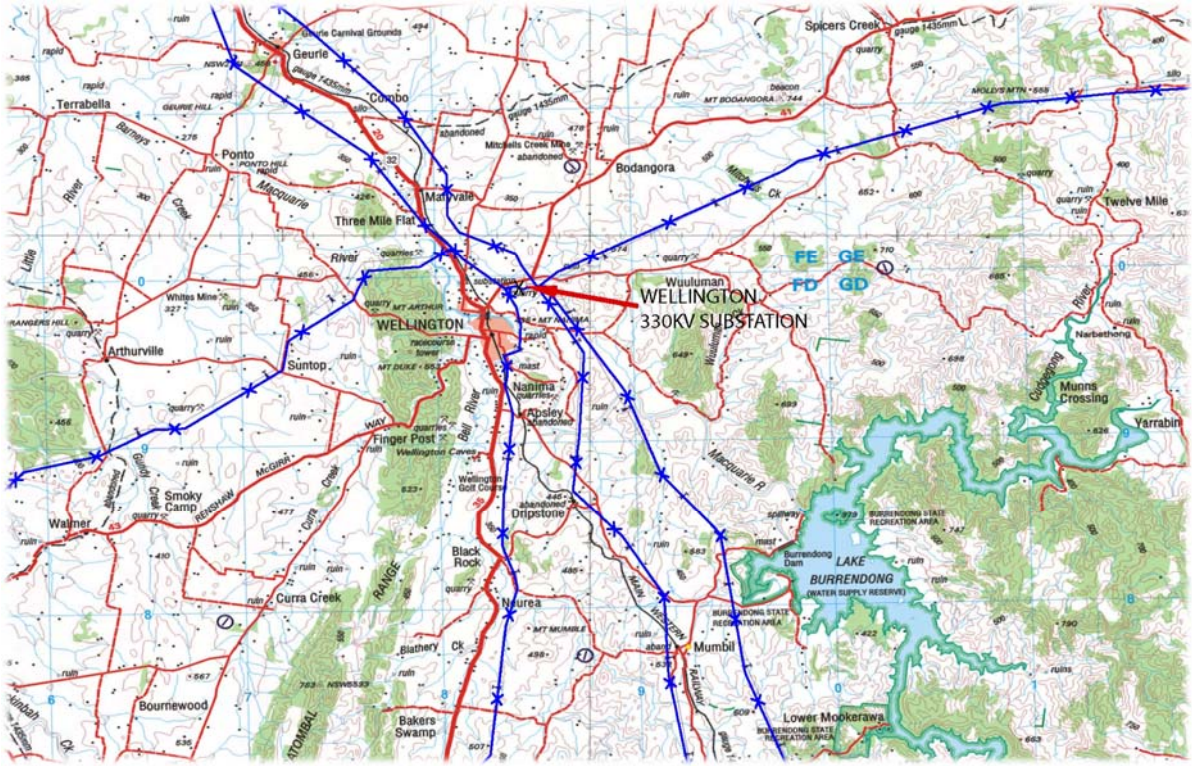
A construction period of approximately 20 months is envisaged.

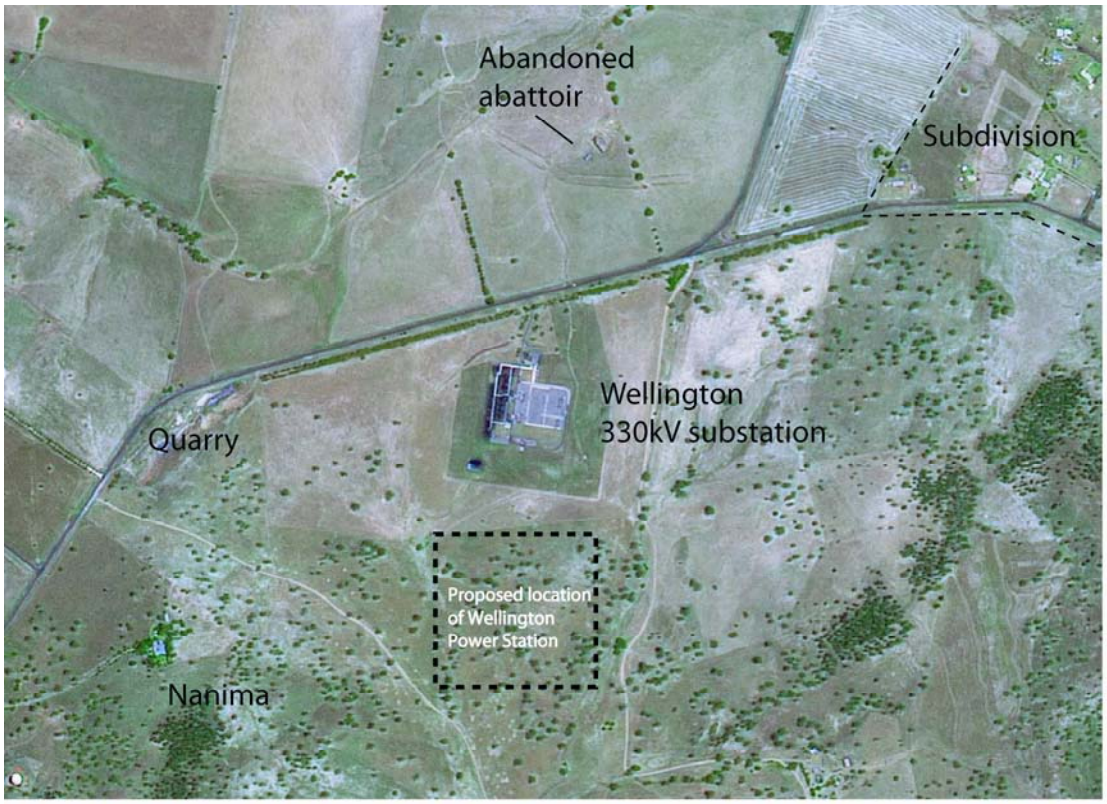
Indicative project timing is as follows:

- Land acquisition — October 2006
- Development approval — November 2006 – June 2007
- Financial close — August 2007
- Construction — September 2007 – March 2009
- Commercial Operation Date Units 1-4 — December 2008 – March 2009

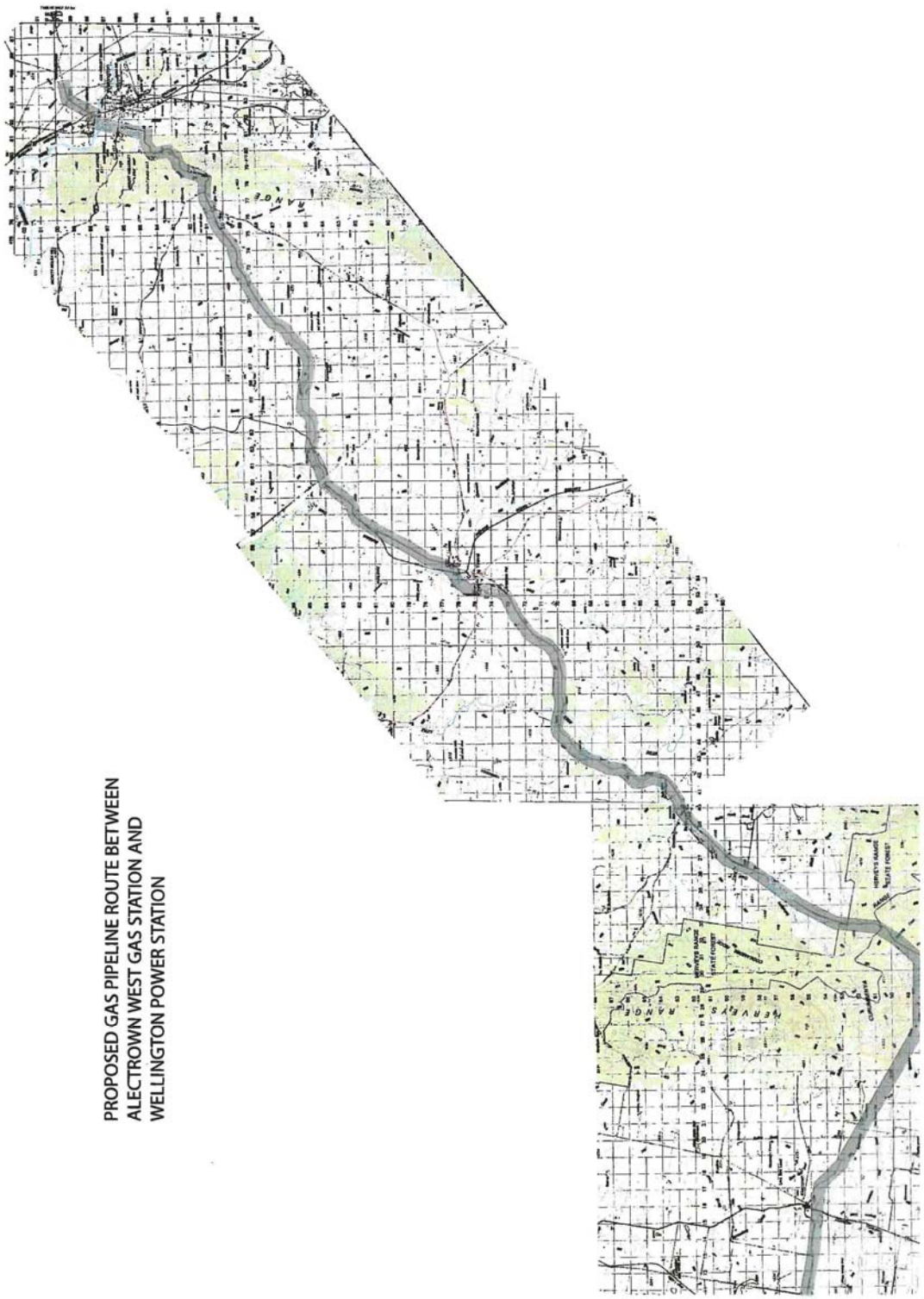
Attachment A

Proposed Location and Site Map (with existing transmission lines)





Attachment B



PROPOSED GAS PIPELINE ROUTE BETWEEN
ALECTROWN WEST GAS STATION AND
WELLINGTON POWER STATION