GOVERNMENT OF WESTERN AUSTRALIA

Statement No.

MINISTER FOR THE ENVIRONMENT; SCIENCE

000693

STATEMENT THAT A PROPOSAL MAY BE IMPLEMENTED (PURSUANT TO THE PROVISIONS OF THE ENVIRONMENTAL PROTECTION ACT 1986)

KWINANA GAS-FIRED POWER STATION
LEATH & BARTER ROADS, KWINANA

Proposal: The construction, operation and maintenance of a nominal 320 megawatt combined-cycle base-load power plant at Kwinana, as documented in schedule 1 of this statement.

Proponent: Wambo Power Ventures Pty Ltd

Proponent Address: PO Box 98
KENMORE QLD 4069

Assessment Number: 1569

Report of the Environmental Protection Authority: Bulletin 1174

The proposal referred to above may be implemented by the proponent subject to the following conditions and procedures:

1 Implementation

1-1 The proponent shall implement the proposal as documented in schedule 1 of this statement subject to the conditions and procedures of this statement.

2 Proponent Commitments

2-1 The proponent shall implement the environmental management commitments documented in schedule 2 of this statement.

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3 Proponent Nomination and Contact Details

3-1 The proponent for the time being nominated by the Minister for the Environment under section 38(6) or (7) of the *Environmental Protection Act 1986* is responsible for the implementation of the proposal until such time as the Minister for the Environment has exercised the Minister's power under section 38(7) of the Act to revoke the nomination of that proponent and nominate another person as the proponent for the proposal.

3-2 If the proponent wishes to relinquish the nomination, the proponent shall apply for the transfer of proponent and provide a letter with a copy of this statement endorsed by the proposed replacement proponent that the proposal will be carried out in accordance with this statement. Contact details and appropriate documentation on the capability of the proposed replacement proponent to carry out the proposal shall also be provided.

3-3 The nominated proponent shall notify the Department of Environment of any change of contact name and address within 60 days of such change.

4 Commencement and Time Limit of Approval

4-1 The proponent shall substantially commence the proposal within five years of the date of this statement or the approval granted in this statement shall lapse and be void.

Note: The Minister for the Environment will determine any dispute as to whether the proposal has been substantially commenced.

4-2 The proponent shall make application for any extension of approval for the substantial commencement of the proposal beyond five years from the date of this statement to the Minister for the Environment, prior to the expiration of the five-year period referred to in condition 4-1.

The application shall demonstrate that:

1. the environmental factors of the proposal have not changed significantly;

2. new, significant, environmental issues have not arisen; and

3. all relevant government authorities have been consulted.

Note: The Minister for the Environment may consider the grant of an extension of the time limit of approval not exceeding five years for the substantial commencement of the proposal.

5 Compliance Audit and Performance Review

5-1 The proponent shall prepare an audit program and submit compliance reports to the Department of Environment which address:

1. the status of implementation of the proposal as defined in schedule 1 of this statement;

2. evidence of compliance with the conditions and commitments; and

3. the performance of the environmental management plans and programs.

Note: Under sections 48(1) and 47(2) of the *Environmental Protection Act 1986*, the Chief Executive Officer of the Department of Environment is empowered to monitor the compliance of the proponent with the statement and should directly receive the compliance documentation, including environmental management plans, related to the conditions, procedures and commitments contained in this statement.

5-2 The proponent shall submit a performance review report every five years after the start of operations, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority, which addresses:

1. the major environmental issues associated with implementing the project; the targets for those issues; the methodologies used to achieve these; and the key indicators of environmental performance measured against those targets;

2. the level of progress in the achievement of sound environmental performance, including industry benchmarking, and the use of best available technology where practicable;

3. significant improvements gained in environmental management, including the use of external peer reviews;

4. stakeholder and community consultation about environmental performance and the outcomes of that consultation, including a report of any on-going concerns being expressed; and

5. the proposed environmental targets over the next five years, including improvements in technology and management processes.

6 Greenhouse Gas Abatement

6-1 Prior to commencement of construction, the proponent shall develop a Greenhouse Gas Abatement Programme to:

- ensure that the plant is designed and operated in a manner which achieves reductions in "greenhouse gas" emissions as far as practicable;

- provide for ongoing "greenhouse gas" emissions reductions over time;

- ensure that through the use of best practice, the total net "greenhouse gas" emissions and/or "greenhouse gas" emissions per unit of product from the project are minimised; and

- manage "greenhouse gas" emissions in accordance with the *Framework Convention on Climate Change 1992*, and consistent with the National Greenhouse Strategy;

to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

This Programme shall include:

1 calculation of the "greenhouse gas" emissions associated with the proposal, as advised by the Environmental Protection Authority;

Note: The current requirements of the Environmental Protection Authority are set out in: *Minimising Greenhouse Gas Emissions, Guidance for the Assessment of Environmental Factors, No. 12* published by the Environmental Protection Authority (October 2002). This document may be updated or replaced from time to time.

2 specific measures to minimise the total net "greenhouse gas" emissions and/or the "greenhouse gas" emissions per unit of product associated with the proposal using a combination of "no regrets" and "beyond no regrets" measures;

Note: The following definitions apply:

1. "no regrets" measures are those which can be implemented by a proponent and which are effectively cost-neutral.
2. "beyond no regrets" measures are those which can be implemented by a proponent and which involve additional costs that are not expected to be recovered.

3 consideration of the implementation of "greenhouse gas" offset strategies;

4 estimation of the "greenhouse gas" efficiency of the project (per unit of product and/or other agreed performance indicators) and comparison with the efficiencies of other comparable projects producing a similar product, both within Australia and overseas;

5 implementation of thermal efficiency design and operating goals consistent with the Australian Greenhouse Office Technical Efficiency guidelines in design and operational management;

6 actions for the monitoring, regular auditing and annual reporting of "greenhouse gas" emissions and emission reduction strategies;

7 a target set by the proponent for the progressive reduction of total net "greenhouse gas" emissions and/or "greenhouse gas" emissions per unit of product and as a percentage of total emissions over time, and annual reporting of progress made in achieving this target. Consideration should be given to the use of renewable energy sources such as solar, wind or hydro power;

8 a program to achieve reduction in "greenhouse gas" emissions, consistent with the target referred to in (7) above;

9 entry, whether on a project-specific basis, company-wide arrangement or within an industrial grouping, as appropriate, into the Commonwealth Government's "Greenhouse Challenge" voluntary cooperative agreement program.

Components of the agreement program include:

1. an inventory of emissions;
2. opportunities for abating "greenhouse gas" emissions in the organisation;
3. a "greenhouse gas" mitigation action plan;
4. regular monitoring and reporting of performance; and
5. independent performance verification.

10 Review of practices and available technology; and

11 "Continuous improvement approach" so that advances in technology and potential operational improvements of plant performance are adopted.

6-2 The proponent shall implement the Greenhouse Gas Abatement Programme required by condition 6-1.

6-3 Prior to the commencement of construction, the proponent shall make the Greenhouse Gas Abatement Programme required by condition 6-1 publicly available.

7 Stack Emissions

7-1 Prior to commencement of construction, the proponent shall prepare a Stack Emissions Management Plan, to ensure that best available practicable and efficient technologies are used to minimise total air emissions from the power station, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

This Plan shall address:

1. specific measures to minimise total air emissions from the power station to meet emission limits consistent with best practicable technology and current industry standards;

2. monitoring of air emissions, including nitrogen oxides (NO_X) and volatile organic compounds (VOCs); and

3. public reporting of air emissions and any complaints about air emissions.

7-2 The proponent shall implement the Stack Emissions Management Plan required by condition 7-1.

7-3 The proponent shall make the Stack Emissions Management Plan required by condition 7-1 publicly available.

Procedures

1. Where a condition states "to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority", the Environmental Protection Authority will provide that advice to the Department of Environment for the preparation of written notice to the proponent.

2. The Environmental Protection Authority may seek advice from other agencies or organisations, as required, in order to provide its advice to the Department of Environment.

3. Where a condition lists advisory bodies, it is expected that the proponent will obtain the advice of those listed as part of its compliance reporting to the Department of Environment.

Notes

1. The Minister for the Environment will determine any dispute between the proponent and the Environmental Protection Authority or the Department of Environment over the fulfilment of the requirements of the conditions.

2. The proponent is required to apply for a Works Approval and Licence for this project under the provisions of Part V of the *Environmental Protection Act 1986*.

3. Within this statement, to "have in place" means to "prepare, document, implement and maintain for the duration of the proposal".

Dr Judy Edwards MLA
MINISTER FOR THE ENVIRONMENT; SCIENCE

12 OCT 2005

Schedule 1

The Proposal (Assessment No. 1569)

The proposal is to construct and operate a natural gas-fired combined-cycle gas turbine power plant with a nominal generation capacity of 320 megawatts on a site located off Leath and Barter Roads on the western edge of the Kwinana Industrial Area, being portion of Crown Reserve No. 30611 and part of Kwinana Lots 161, 218 and 1772 (vesting order number 90 for *Use and Requirements of State Energy Commission*) and part of Lot 22. (The location is shown in Figures 1 and 2 attached).

Table 1 – Key Proposal Characteristics

Element	Description
Life of the Project	30 years
Power Generating Capacity	320 MW (nominal)
Facility footprint	Approximately 4 ha
Fuel Type Gas Transportation	 Natural Gas Dampier to Bunbury Natural Gas Pipeline
Plant Facilities Gas turbine specifications Steam turbine specifications Heat recovery steam generator (HRSG) Number of stacks Height of stack Cooling system Liquid fuel storage on site	 1 × gas turbine of 160 MW nominal generating capacity fitted with dry low NO_x burners. 1 × single shaft, axial exhaust steam turbine of 160 MW nominal steam generating capacity. 100% steam turbine bypass. 1 × dual pressure HRSG with horizontal gas path and supplementary firing. One 60 metres Air cooled, 20 cells Approximately 200 litres of diesel for emergency shut-down generator.
Thermal Efficiency Percentage Thermal Efficiency based on nett higher heating value	Approximately 47.3%
Plant operation	Base load (65-85% of operation time) plus peaking (10-15% of operation time)
Operation Hours Percentage operation without duct firing Percentage operation with duct firing	Available 24 hours, 365 days per year Approximately 5600-7500 hours per year (65-85% ACF) Approximately 1000-1300 hours per year (10-15% ACF)
Chemical Storage	All chemical/storage areas will be bunded and all chemical use areas will be paved
Inputs Natural Gas Process water	 55 TJ per day 137 ML per year, supplied by Water Corporation
Outputs Waste Water	 Approximately 5.5 ML per year Contained in Evaporation Pond or removed from site
Air Emissions Oxides of Nitrogen (NO_x) Carbon Dioxide	 Approximately 25- >31ppmv Approximately 845 000 tonnes per year

Abbreviations in Table 1

ACF	annual capacity factor
ha	hectares
HRSG	heat recovery steam generator
ML	megalitres
MW	megawatts
MWh	megawatt hours
NO_x	oxides of nitrogen
ppmv	parts per million by volume
TJ	Terajoule (10^{12} Joules)

Figures (attached)

Figure 1 – Regional location
Figure 2 – Location in Kwinana Industrial Area
Figure 3 – Kwinana Gas-Fired Power Station site layout
Figure 4 – Kwinana Gas-Fired Power Station plant elevations

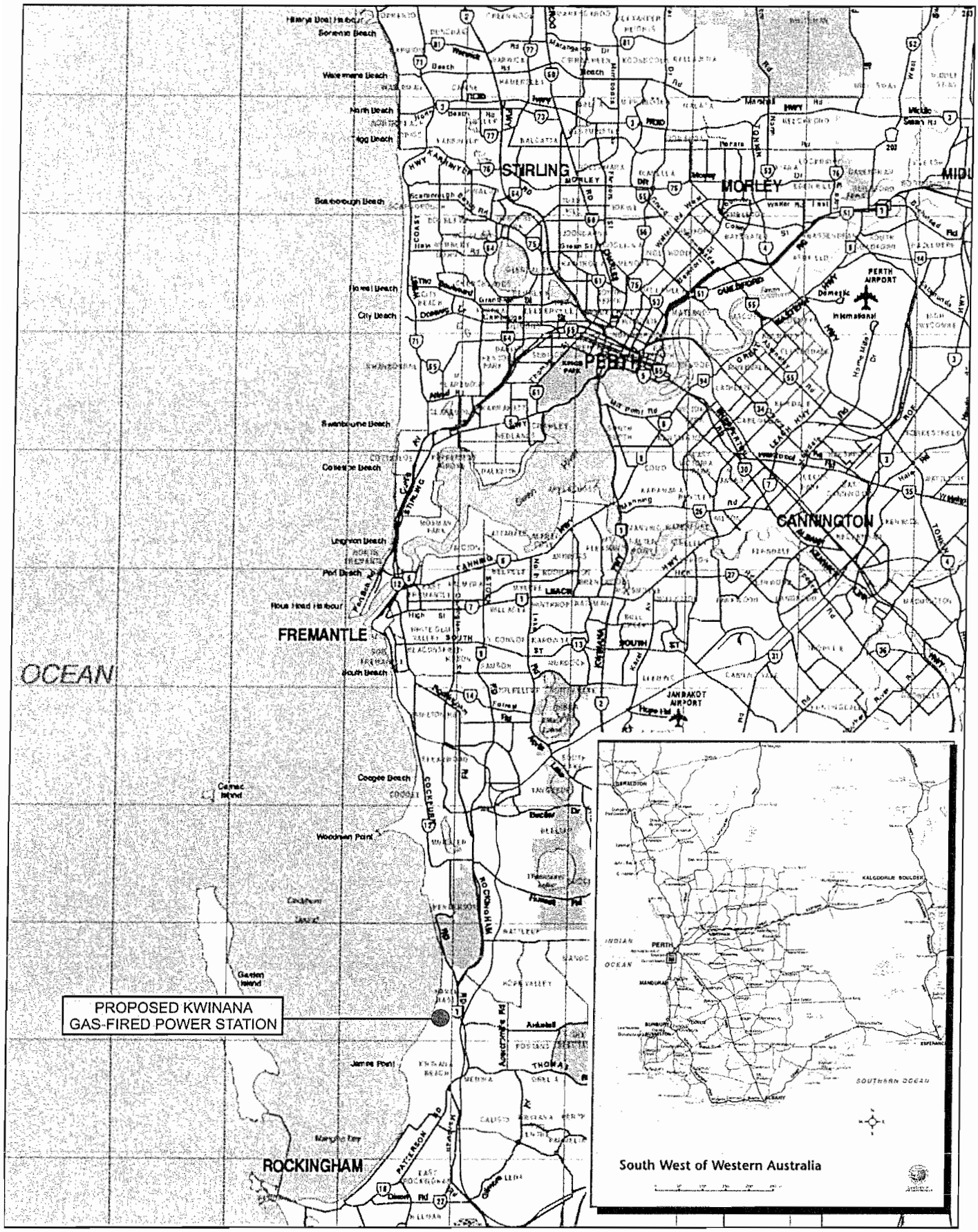

Figure 1: Regional location

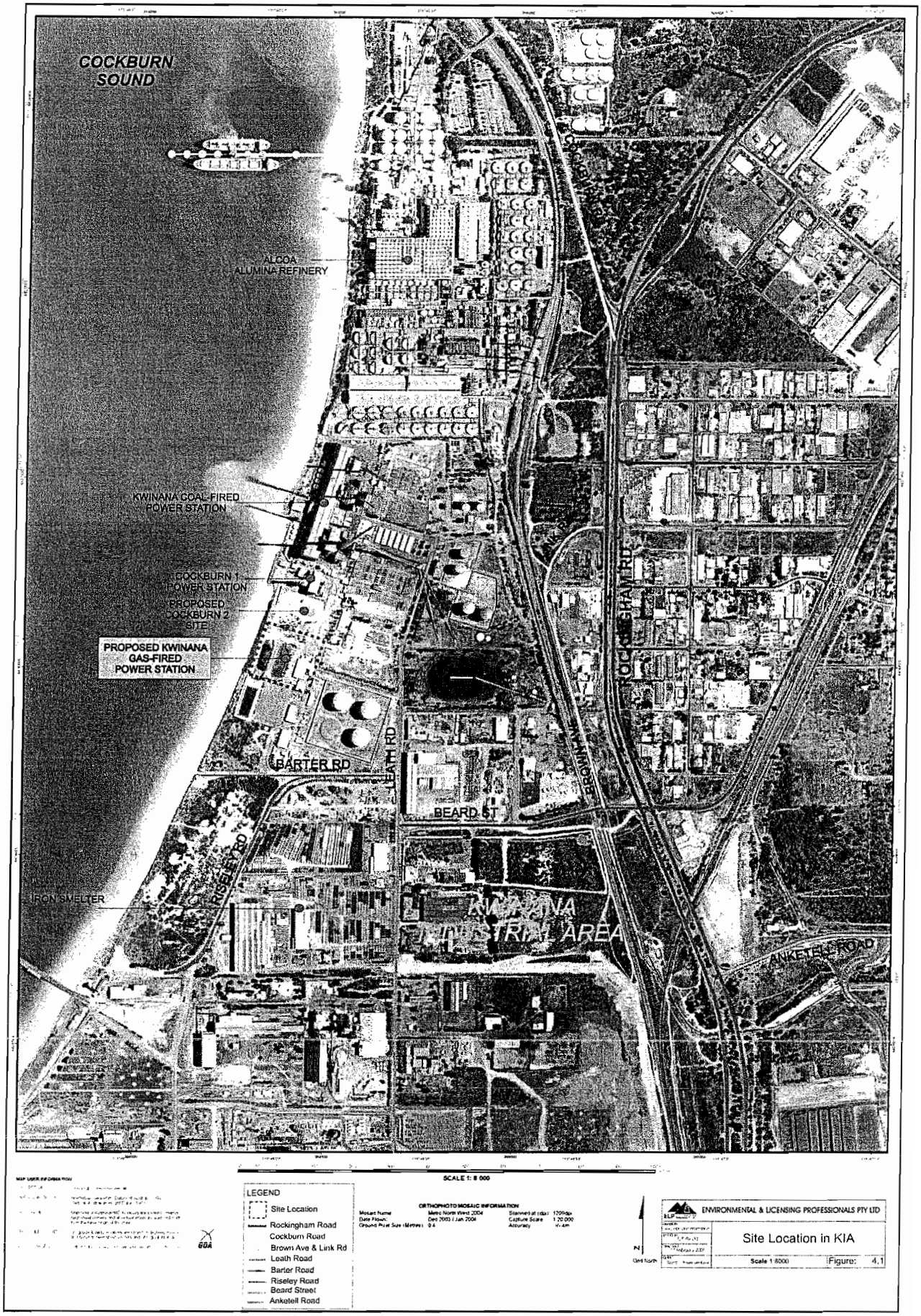

Figure 2: Location in Kwinana Industrial Area

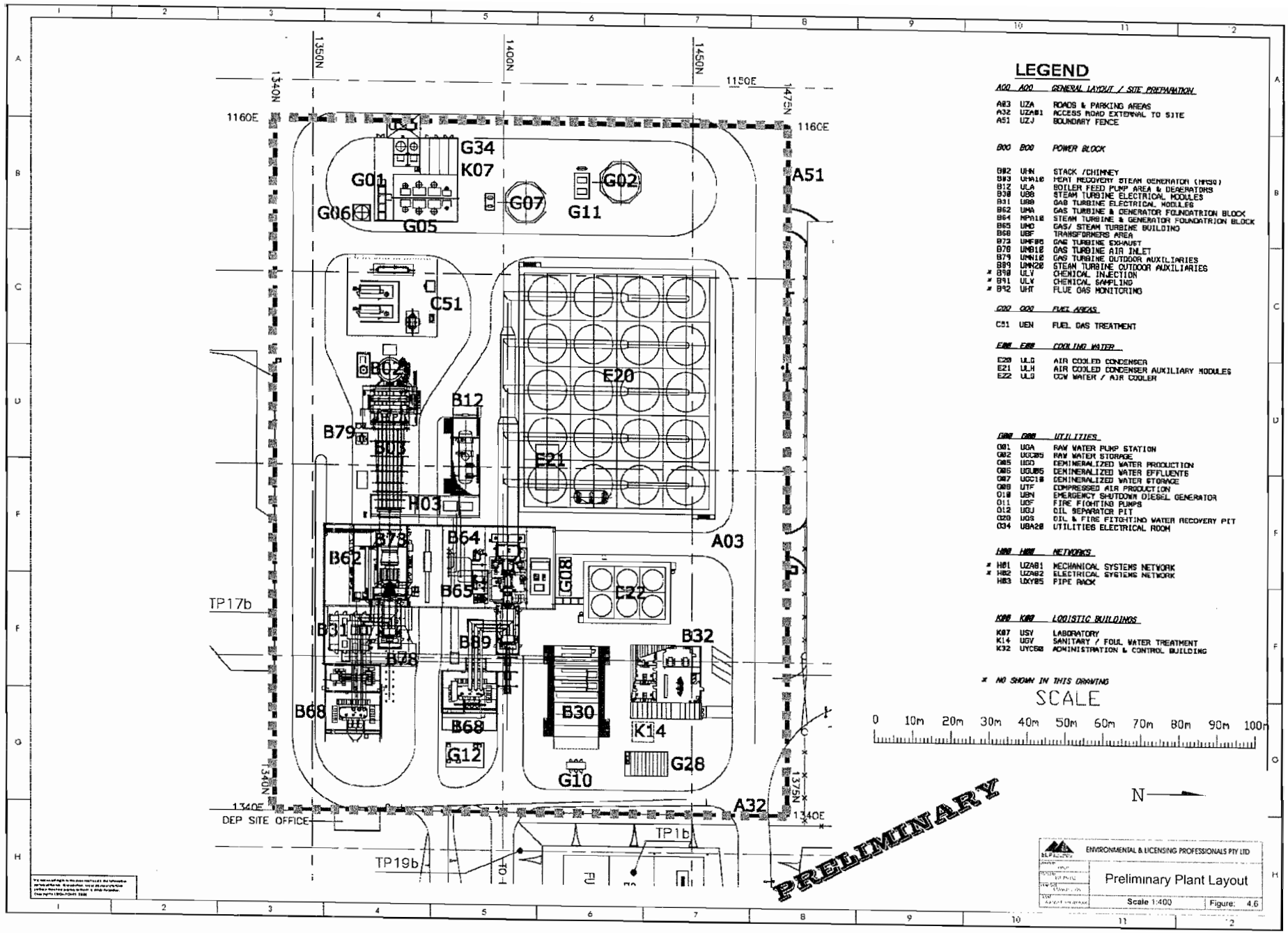

Figure 3: Kwinana Gas-Fired Power Station Site Layout

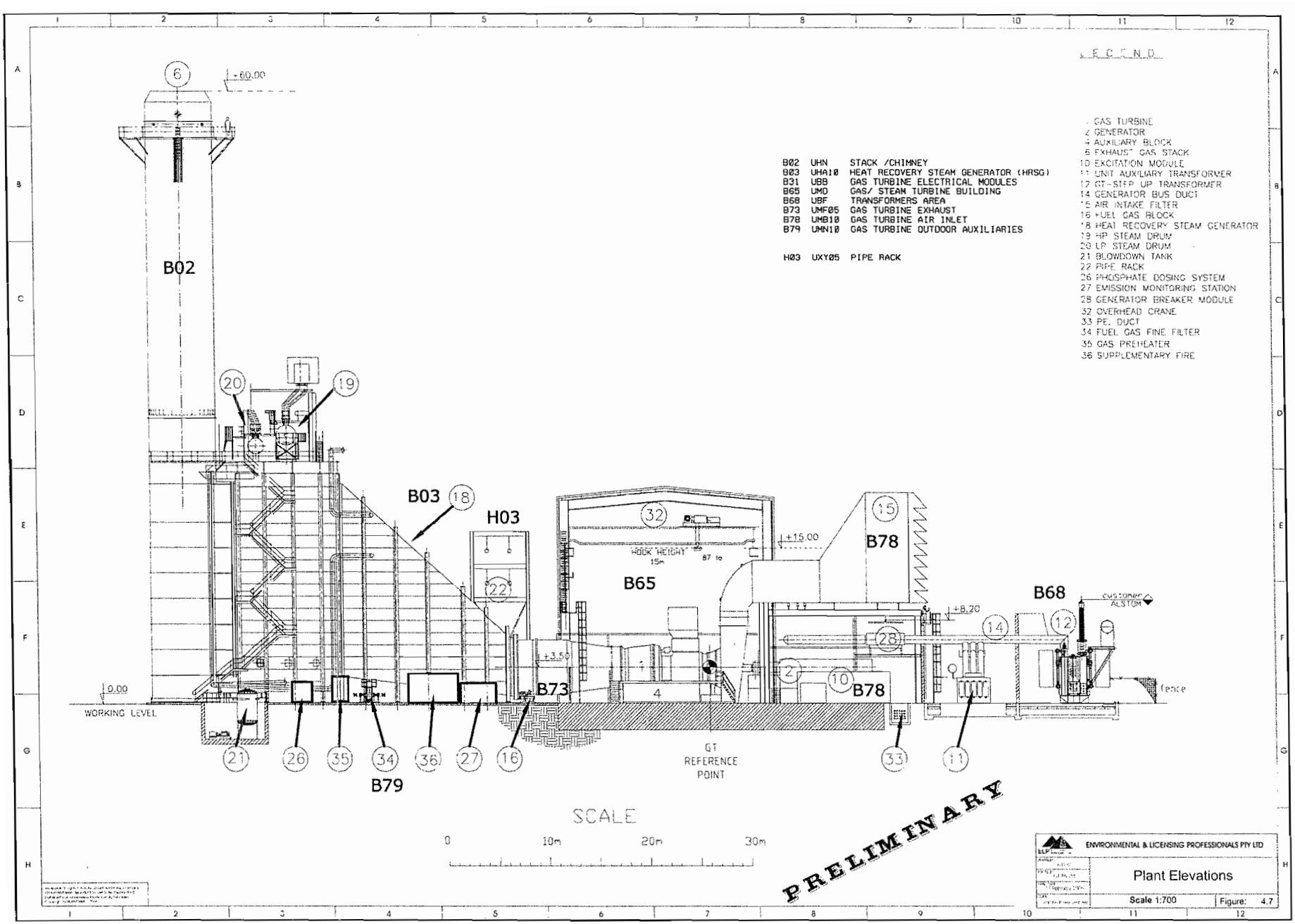

Figure 4: Kwinana Gas-Fired Power Station plant elevations

Schedule 2

PROPONENT'S ENVIRONMENTAL MANAGEMENT COMMITMENTS

May 2005

KWINANA GAS-FIRED POWER STATION LEATH & BARTER ROADS, KWINANA

Assessment No. 1569

Wambo Power Ventures Pty Ltd

Schedule 2

PROPONENT'S CONSOLIDATED ENVIRONMENTAL MANAGEMENT COMMITMENTS
KWINANA GAS-FIRED POWER STATION (Assessment No. 1569)

Note: The term "commitment" as used in this schedule includes the entire row of the table and its six separate parts as follows:

- a commitment number;
- a commitment topic;
- the objective of the commitment;
- the 'action' to be undertaken by the proponent;
- the timing requirements of the commitment; and
- the body/agency to provide technical advice to the Department of Environment.

No.	Topic	Objective	Action	Timing	Advice
1	Flora and Fauna	To ensure no disturbance of dune/native vegetation along the western boundary of the site.	The remnant vegetation within one metre of the western boundary of the site will not be disturbed by construction activities.	Construction	
2	Greenhouse Gases	To ensure that emissions are within the greenhouse gas guidelines.	Become a signatory to the Greenhouse Challenge programme.	Project Design	Australian Greenhouse Office