9th floor

Statement No.

MINISTER FOR THE ENVIRONMENT AND HERITAGE 000628

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

COCKBURN 2 COMBINED CYCLE POWER PLANT, KWINANA

Proposal: The construction, operation and maintenance of a nominal 240 megawatt combined cycle gas turbine power plant on a site located in Kwinana.

The proposal is documented in schedule 1 of this statement.

Proponent: Western Power Corporation

Proponent Address: GPO Box L921
PERTH WA 6001

Assessment Number: 1465

Report of the Environmental Protection Authority: Bulletin 1086

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

Procedural conditions

1 Implementation and Changes

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

1-2 Where the proponent seeks to change any aspect of the proposal as documented in schedule 1 of this statement in any way that the Minister for the Environment and Heritage determines, on advice of the Environmental Protection Authority, is substantial, the proponent shall refer the matter to the Environmental Protection Authority.

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1-3 Where the proponent seeks to change any aspect of the proposal as documented in schedule 1 of this statement in any way that the Minister for the Environment and Heritage determines, on advice of the Environmental Protection Authority, is not substantial, the proponent may implement those changes upon receipt of written advice.

2 Proponent Commitments

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

2-2 The proponent shall implement subsequent environmental management commitments which the proponent makes as part of the fulfilment of the conditions in this statement.

3 Proponent Nomination and Contact Details

3-1 The proponent for the time being nominated by the Minister for the Environment and Heritage 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 and Heritage 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 Environmental Protection 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 provide evidence to the Minister for the Environment and Heritage within five years of the date of this statement that the proposal has been substantially commenced or the approval granted in this statement shall lapse and be void.

Note: The Minister for the Environment and Heritage 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 and Heritage, prior to the expiration of the five-year period referred to in condition 4-1.

The application shall demonstrate that:

- the environmental factors of the proposal have not changed significantly;
- new, significant, environmental issues have not arisen; and
- all relevant government authorities have been consulted.

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

Environmental conditions

5 Compliance Audit and Performance Review

5-1 The proponent shall prepare an audit program in consultation with and submit compliance reports to the Department of Environmental Protection which address:

- the implementation of the proposal as defined in schedule 1 of this statement;
- evidence of compliance with the conditions and commitments; and
- 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 Environmental Protection is empowered to audit 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.

Usually, the Department of Environmental Protection prepares an audit table which can be utilised by the proponent, if required, to prepare an audit program to ensure that the proposal is implemented as required. The Chief Executive Officer is responsible for the preparation of written advice to the proponent, which is signed off by either the Minister or, under an endorsed condition clearance process, a delegate within the Environmental Protection Authority or the Department of Environmental Protection that the requirements have been met.

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

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

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

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

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

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

6 Decommissioning

6-1 Prior to construction, the proponent shall prepare, and subsequently implement, a Preliminary Decommissioning Plan, which provides the framework to ensure that the site is left in an environmentally acceptable condition to the requirements of the Minister for the Environment and Heritage on advice of the Environmental Protection Authority.

The Preliminary Decommissioning Plan shall address:

(1) rationale for the siting and design of plant and infrastructure as relevant to environmental protection, and conceptual plans for the removal or, if appropriate, retention of plant and infrastructure;

(2) a conceptual rehabilitation plan for all disturbed areas and a description of a process to agree on the end land use(s) with all stakeholders;

(3) a conceptual plan for a care and maintenance phase; and

(4) management of noxious materials to avoid the creation of contaminated areas.

6-2 At least six months prior to the anticipated date of decommissioning, or at a time agreed with the Environmental Protection Authority, the proponent shall prepare a Final Decommissioning Plan designed to ensure that the site is left in an environmentally acceptable condition to the requirements of the Minister for the Environment and Heritage on advice of the Environmental Protection Authority.

The Final Decommissioning Plan shall address:

(1) removal or, if appropriate, retention of plant and infrastructure in consultation with relevant stakeholders;

(2) rehabilitation of all disturbed areas to a standard suitable for the agreed new land use(s); and

(3) identification of contaminated areas, including provision of evidence of notification and proposed management measures to relevant statutory authorities.

6-3 The proponent shall implement the Final Decommissioning Plan required by condition 6-2 until such time as the Minister for the Environment and Heritage determines, on advice of the Environmental Protection Authority, that the proponent's decommissioning responsibilities have been fulfilled.

6-4 The proponent shall make the Final Decommissioning Plan required by condition 6-2 publicly available, to the requirements of the Minister for the Environment and Heritage on advice of the Environmental Protection Authority.

7 Greenhouse Gas Emissions

7-1 Prior to commencement of construction of the power plant, the proponent shall prepare a Greenhouse Gas Emissions Management Plan to:

- ensure that "greenhouse gas" emissions from the project are adequately addressed and best available efficient technologies are used to minimise total net "greenhouse gas" emissions and/or "greenhouse gas" emissions per unit of product; and

- mitigate "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 and Heritage on advice of the Environmental Protection Authority.

This Plan shall include:

(1) calculation of the "greenhouse gas" emissions associated with the proposal, as indicated in *Minimising Greenhouse Gas Emissions, Guidance for the Assessment of Environmental Factors, No. 12* published by the Environmental Protection Authority;

(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;

(3) monitoring of "greenhouse gas" emissions;

(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;

(5) analysis of the extent to which the proposal meets the requirements of the National Greenhouse Strategy using a combination of:

- "no regrets" measures;
- "beyond no regrets" measures;
- land use change or forestry offsets; and
- international flexibility mechanisms.

(6) a target set by the proponent for the reduction of total net "greenhouse gas" emissions and/or "greenhouse gas" emissions per unit of product over time, and annual reporting of progress made in achieving this target.

Note: In part 5 above, the following definitions apply:

(1) "no regrets" measures are those that can be implemented by a proponent which are effectively cost-neutral and provide the proponent with returns in savings which offset the initial capital expenditure that may be incurred; and

(2) "beyond no regrets" measures are those that can be implemented by a proponent which involve some additional cost that is not expected to be recovered.

7-2 The proponent shall implement the Greenhouse Gas Emissions Management Plan required by condition 7-1 to the requirements of the Minister for the Environment and Heritage on advice of the Environmental Protection Authority.

7-3 The proponent shall make the Greenhouse Gas Emissions Management Plan required by condition 7-1 publicly available, to the requirements of the Minister for the Environment and Heritage on advice of the Environmental Protection Authority.

Procedures

1 Where a condition states "to the requirements of the Minister for the Environment and Heritage on advice of the Environmental Protection Authority", the Chief Executive Officer of the Department of Environmental Protection will obtain that advice for the preparation of written advice to the proponent.

2 The Environmental Protection Authority may seek advice from other agencies, as required, in order to provide its advice to the Chief Executive Officer of the Department of Environmental Protection.

Notes

1 The Minister for the Environment and Heritage will determine any dispute between the proponent and the Environmental Protection Authority or the Department of Environmental Protection 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*.

Dr Judy Edwards MLA
MINISTER FOR THE ENVIRONMENT AND HERITAGE

23 JUN 2003

Schedule 1

The Proposal (Assessment No. 1465)

The proposal is to construct, operate and maintain a second 240 megawatt combined cycle gas turbine unit adjacent to and to the south of Cockburn 1 which is currently under construction to form 'Cockburn Power Station'. This combined cycle gas turbine unit (Cockburn 2) will allow for the decreased usage of Kwinana Power Station Stage A; the accelerated shutdown of Stage A/B units at Muja Power Station, Collie; and the cessation of coal burning at Kwinana Power Station.

The main components of the plant are:

- one natural gas fired 160 megawatt generator unit;
- heat recovery steam generator;
- one 80 megawatt steam turbine and generator unit;
- water treatment plant to produce demineralised water;
- cooling water outfall with sub-sea diffuser; and
- administration, control room and workshop buildings.

The main characteristics of the proposal are summarised in the Table 1 below.

Table 1 - Key Proposal Characteristics

Element	Description
Project purpose	To construct, operate and maintain a natural gas fired combined cycle gas turbine plant of nominal 240 Megawatt capacity to supply electricity to customers on the South West Interconnected System grid.
Life of the Project	25 years
Power Generating Capacity	240 megawatt (nominal)
Facility "footprint" Site area	2 hectares 9.4 hectares
Fuel	Natural gas
Natural gas supply: Source	Dampier to Bunbury Natural Gas Pipeline, via the Epic Energy gate station at the corner of Leath and Barter Roads, Naval Base. Cockburn 2 will utilise gas supply facilities constructed as part of the Cockburn 1 development.
Plant facilities: No. and size of gas turbines	 1 x Alstrom GT13E2 gas turbine unit of 160MW nominal generating capacity fitted with dry low NO_x burners. A gas bypass system and bypass stack may be fitted.
No. and size of steam turbines	1 x Alstom single shaft, axial exhaust steam turbine of 80 MW nominal generating capacity.
Heat Recovery Steam Generator (HRSG)	Alstom dual pressure HRSG with horizontal gas path.
No. of stacks	One heat recovery steam generator stack and one bypass stack (optional).
Height of HRSG stack Height of bypass stack (optional) No. of cooling towers No. of liquid fuel tanks	60m 45m nil nil
Sub-sea diffuser and associated pipeline	1 of 180m length

Element	Description
Plant operation	Baseload/Mid Merit
Evaporation ponds	Excess wastewater which is not suitable for recycling will be discharged to the evaporation pond constructed as part of the Cockburn 1 development.
Construction period	27 months
Operating Hours	24 hours a day, 365 days a year.
INPUTS	
Natural gas	39 Terajoules per day
Cooling water	Seawater (5 m^3/s)
Process water	Groundwater from the Perron Quarry Ash Disposal Facility
OUTPUTS	
Wastewater	Cooling water – 5 m^3/s Process waters – minimal to evaporation pond
Air emissions: Oxides of nitrogen (NO_X) Sulphur dioxide (SO_2) Carbon dioxide (CO_2)(equiv) Carbon monoxide (CO) Non-methane volatile organic compounds (NMVOCs)	 830 tpa, (26.5 g/s) (less than 34 ppmv, dry, 15% O_2) 2.1 tpa, (0.07 g/s) 838 000 tpa (maximum at 100% load) 629 000 tpa (based on projected usage, at 75% load) 154.5 tpa 51 tpa

Abbreviations for Table 1:

DBNGP	Dampier to Bunbury Natural Gas Pipeline
g/s	grams per second
L	litres
m	metres
m^3/yr	cubic metres per year
mm	millimetres
MW	megawatts
ppmv	parts per million by volume
SWIS	South West Interconnected System
tpa	tonnes per annum

Figures (attached)

Figure 1 - Regional location;
Figure 2 - Location Plan; and
Figure 3 - Power plant layout.

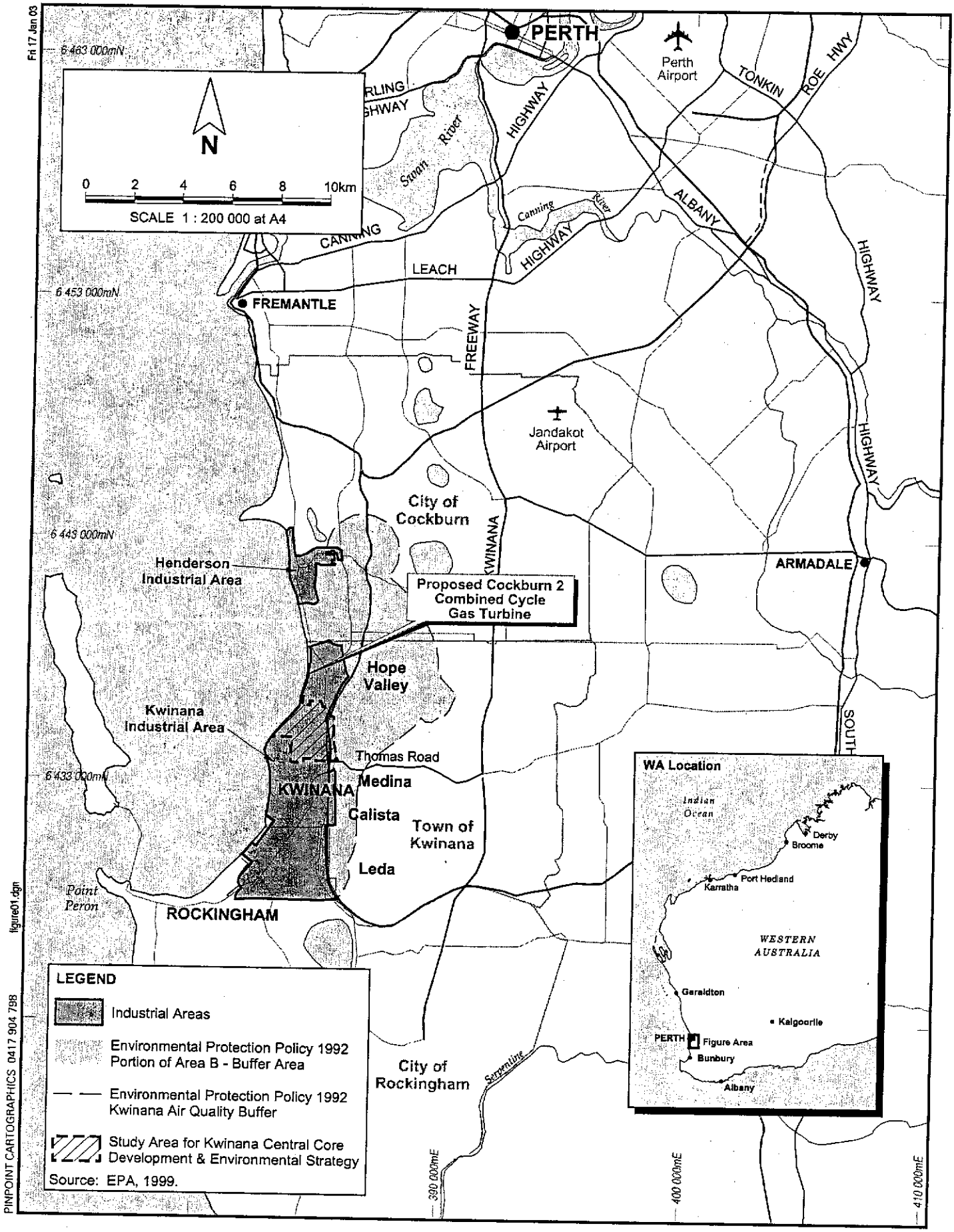

Figure 1: Regional location

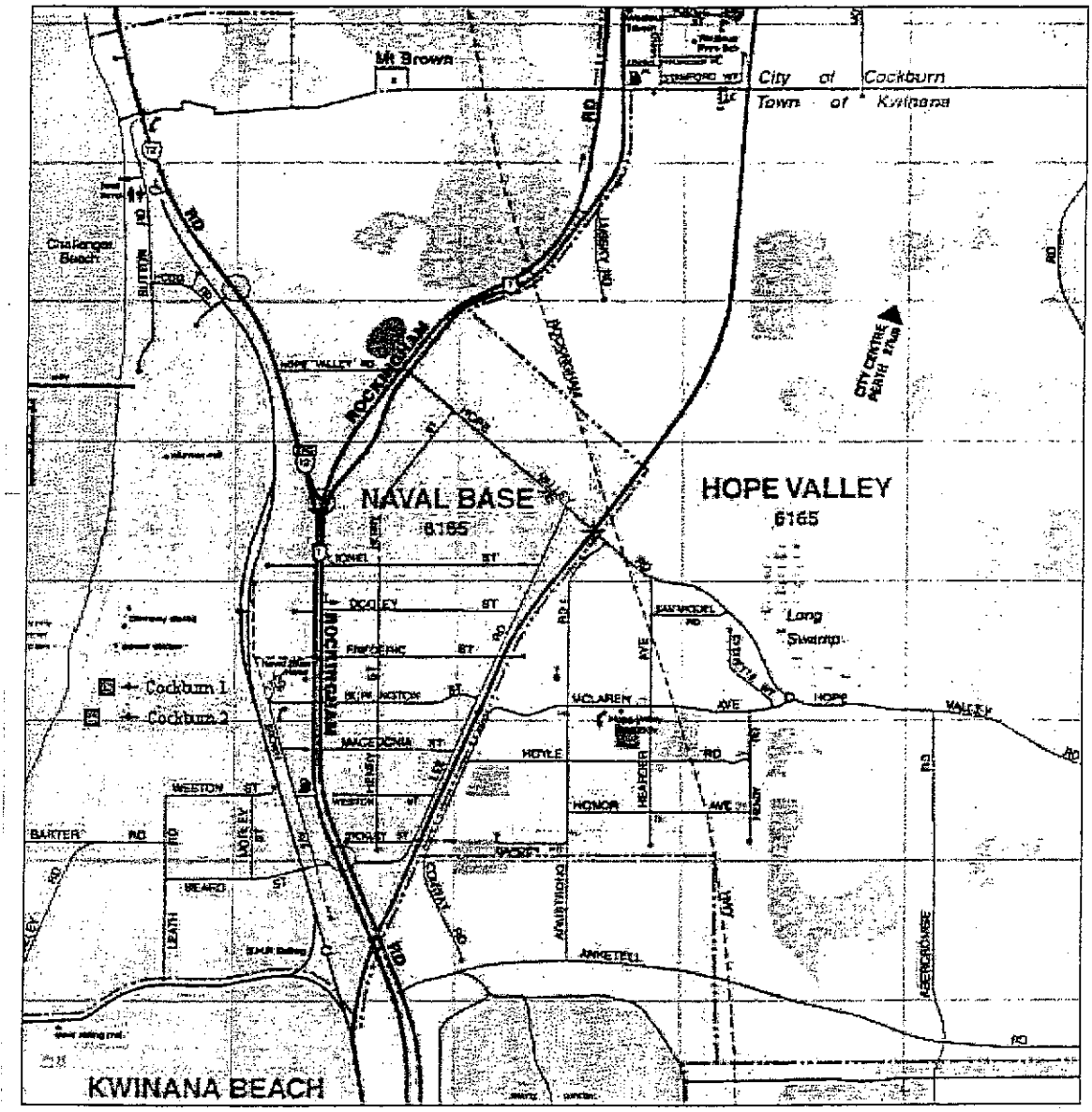

Figure 2: Location plan

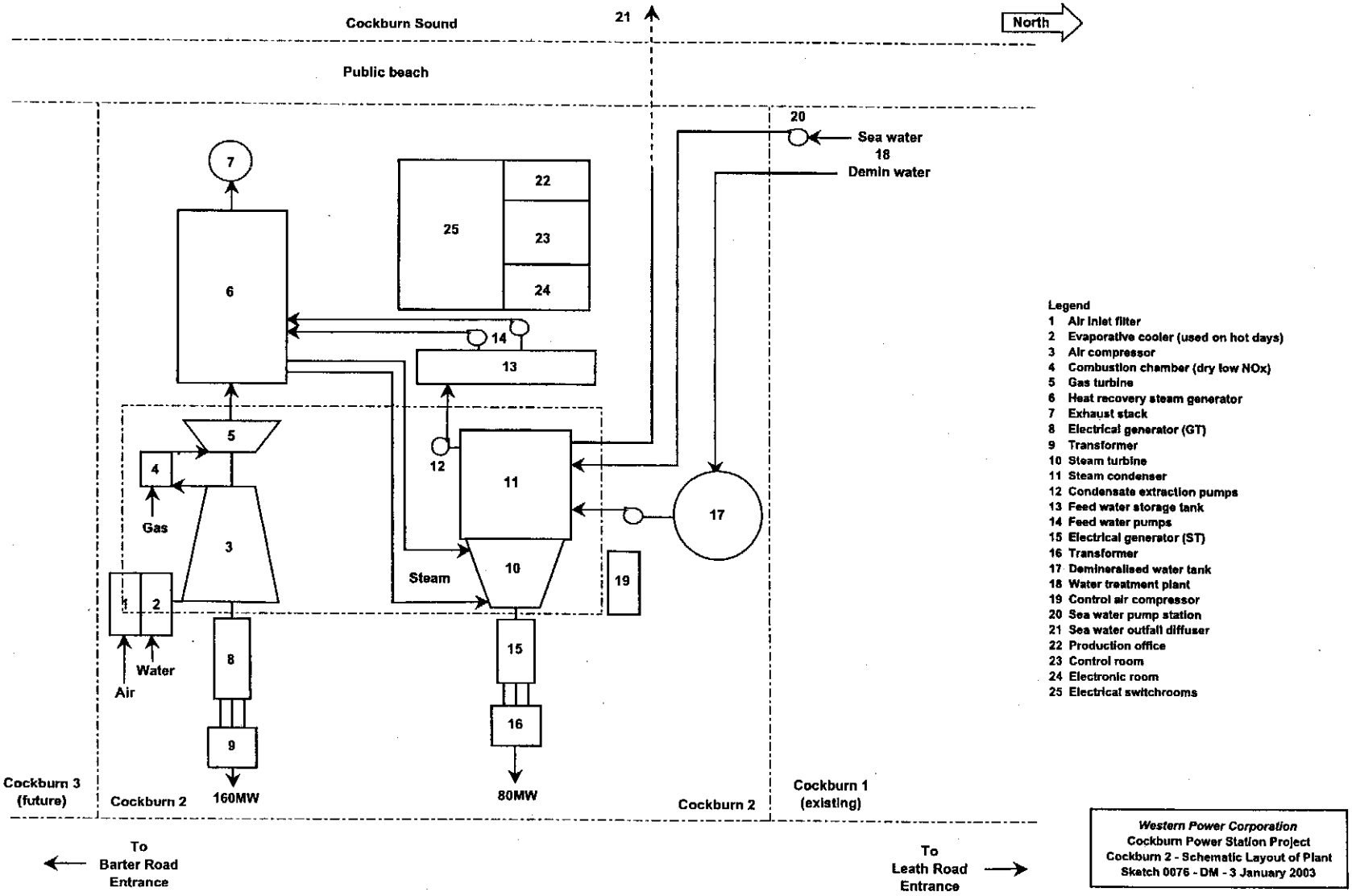

Figure 3: Proposed power plant layout

Schedule 2

Proponent's Environmental Management Commitments

January 2003

COCKBURN 2 COMBINED CYCLE POWER PLANT, KWINANA

(Assessment No. 1465)

Western Power Corporation

Schedule 2

Proponent's Consolidated Environmental Management Commitments

Cockburn 2 Combined Cycle Power Plant (Assessment No. 1465)

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

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

Topic	Action	Objective	Timing	Advice
Environmental management approach	1 Operate plant under existing Western Power Environmental Management System which meets the requirements of AS/NZS ISO 14001:1996.	To ensure construction, operation and decommissioning phases of the Project are managed to minimise environmental impacts.	1 Design, operation and closure.	
Community consultation	2 Continue with the Consultation Program.	Keep the local community and other interested stakeholders well informed of the development and operation of the Project.	2 Throughout the life of the Project.	Relevant local authorities & community groups.
Decommissioning of existing Plant	3 Cease using coal at Kwinana Power Station 4 Decommission Muja Power Station Stage A/B.	To reduce emissions to the environment from old inefficient plant	3 30 June 2004 4 30 June 2006	
Air emissions	5 Incorporate dry low NO_X burners into the plant design which are capable of consistently achieving NO_X emission concentrations of 34 ppmv or below. 6 Sample, analyse and report on relevant stack emissions (including NO_X) on a six-monthly basis until performance is established and thereafter annually.	Ensure that air emissions (including NO_x) meet statutory requirements, and meet acceptable standards.	5 Design. 6 During operations, 6 monthly and then annually thereafter.	

Topic	Action	Objective	Timing	Advice
Water quality	7 Prepare Water Management Plan to address: • stormwater management; • contaminated runoff from site; • groundwater monitoring program; and • emergency response for spillages. 8 Implement the Water Management Plan	To maintain the quality of surface and groundwater and the waters of Cockburn Sound so that existing and potential environmental values, including ecosystem maintenance, are protected.	7 Design 8 Operation	WRC WRC
	9 Prepare a Marine Protection Management Plan to address: • a program to monitor available chlorine levels • a program to monitor thermal discharge from the diffuser and the temperature elevation field in Cockburn Sound; and • contingency plans to address exceedences in Environmental Quality Objectives. 10 Implement the Marine Protection Management Plan.	To maintain the quality of the Cockburn Sound so that environmental values are protected. To ensure that the Environmental Quality Objectives of the Cockburn Sound Environmental Protection Policy are met.	9 Prior to operation 10 Operation	
Noise	11 Prepare a Construction Noise Management Plan to address the requirements of the *Environmental (Noise) Regulations 1997* (Regulation 13). 12 Implement Construction Noise Management Plan. 13 Prepare an Operational Noise Management Plan to address: • noise attenuation packages incorporated into the plant to ensure compliance with the SVT Engineering Consultants Environmental Noise Review (2002) and the Alstom Overall Noise Protection Concept (2002); • a noise monitoring program to verify compliance with noise control requirements for the plant equipment and buildings and to verify predictive modelling; • provision of noise modelling information to Kwinana Industries Council to update their cumulative noise model. 14 Implement the Operational Noise Management Plan.	To protect the amenity of nearby residents from noise impacts resulting from activities associated with the proposal by ensuring the noise levels meet the statutory requirements and acceptable standards.	11 Design. 12 Construction. 13 Design. 14 Operation	

Topic	Action	Objective	Timing	Advice
Construction of the Cooling Water Discharge Pipeline	15 Prepare a Pre-construction Management Plan to address: • sediment sampling to include testing for organochlorine, pesticides and nutrient release potential; and • geotechnical characterisation to determine the need for specialised dredging/blasting. 16 Implement the Pre-construction Management Plan 17 Prepare a Construction Management Plan to address: • dredging plume monitoring; • dredging plume reporting; and • contingency plans for plume management and for specialised dredging or blasting if required. 18 Implement the Construction Management Plan.	To determine the quality of material to be excavated and to characterise the proposed pipeline route. To ensure that site construction activities are undertaken in a manner that minimises or removes any environmental impact.	15 Design 16 Design 17 Design 18 Construction	
Risk and hazards	19 Prepare a Site Safety Management Plan to address: • emergency response procedures as part of the overall Emergency Response Plan. 20 Implement the Site Safety Management Plan	To ensure that at all stages of the plant's life it is managed and operated to minimise risk.	19 Design 20 Operation.	Fire and Emergency Services Authority and the Kwinana Industries Mutual Aid Group.

Abbreviations

AS/NZS = Australian Standard/New Zealand Standard
WRC = Water and Rivers Commission