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Published on 21 January 2008

Statement No. 759

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

330 MW GAS-FIRED POWER STATION, NEERABUP CITY OF WANNEROO

Proposal: The proposal is to construct and operate a 330 megawatt open-

cycle gas-turbine power station within Lots 506 and 507 Pederick Road, Neerabup; a 30-kilometre long gas pipeline and compressor station to transport natural gas from the Dampier to Bunbury Natural Gas Pipeline to the power station; and a 330 kilovolt electricity transmission line, approximately two kilometres long, to connect the power station to the Western

Power Neerabup terminal substation.

The proposal is further documented in schedules 1 and 2 of this

statement.

Proponent: NewGen Neerabup Pty Ltd

Proponent Address: Level 4, St George's Square, 225 St George's Terrace,

PERTH WA 6000

Assessment Number: 1705

Report of the Environmental Protection Authority: Bulletin 1268

The proposal referred to in the above report of the Environmental Protection Authority may be implemented. The implementation of that proposal is subject to the following conditions and procedures:

1 Proposal Implementation

1-1 The proponent shall implement the proposal as documented and described in schedules 1 and 2 of this statement subject to the conditions and procedures of this statement.

2 Proponent Nomination and Contact Details

- 2-1 The proponent for the time being nominated by the Minister for the Environment under sections 38(6) or 38(7) of the *Environmental Protection Act 1986* is responsible for the implementation of the proposal.
- 2-2 The proponent shall notify the Chief Executive Officer of the Department of Environment and Conservation (CEO) of any change of the name and address of the proponent for the serving of notices or other correspondence within 30 days of such change.

3 Time Limit of Authorisation

- 3-1 The authorisation to implement the proposal provided for in this statement shall lapse and be void within five years after the date of this statement if the proposal to which this statement relates is not substantially commenced.
- 3-2 The proponent shall provide the CEO with written evidence which demonstrates that the proposal has substantially commenced on or before the expiration of five years from the date of this statement.

4 Compliance Reporting

- 4-1 The proponent shall submit to the CEO environmental compliance reports annually reporting on the previous twelve-month period, unless required by the CEO to report more frequently.
- 4-2 The environmental compliance reports shall address each element of an audit program approved by the CEO and shall be prepared and submitted in a format acceptable to the CEO.
- 4-3 The environmental compliance reports shall:
 - 1. be endorsed by signature of the proponent's chief executive officer or a person, approved in writing by the CEO, delegated to sign on behalf of the proponent's chief executive officer;
 - 2. state whether the proponent has complied with each condition and procedure contained in this statement;
 - 3. provide verifiable evidence of compliance with each condition and procedure contained in this statement;
 - 4. state whether the proponent has complied with each key action contained in any environmental management plan or program required by this statement;

- 5. provide verifiable evidence of conformance with each key action contained in any environmental management plan or program required by this statement:
- 6. identify all non-compliances and non-conformances and describe the corrective and preventative actions taken in relation to each non-compliance or non-conformance;
- 7. review the effectiveness of all corrective and preventative actions taken; and
- 8. describe the state of implementation of the proposal.
- 4-4 The proponent shall make the environmental compliance reports required by condition 4-1 publicly available in a manner approved by the CEO.

5 Performance Review

- 5-1 The proponent shall submit a Performance Review report every five years after the start of production to the Environmental Protection Authority, which addresses:
 - 1. the major environmental issues associated with implementing the project; the environmental objectives for those issues; the methodologies used to achieve these; and the key indicators of environmental performance measured against those objectives;
 - 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 objectives over the next five years, including improvements in technology and management processes.
- 5-2 The proponent shall make the Performance Review reports required by condition 5-1 publicly available in a manner approved by the CEO.

6 Vegetation Disturbance

6-1 Prior to ground-disturbing activities, the proponent shall clearly delineate on the ground the boundaries of the gas pipeline lateral and electricity transmission line easements and the area of disturbance outside the easements.

- 6-2 The proponent shall not cause disturbance of vegetation outside the delineated gas pipeline lateral and electricity transmission line easements, or the delineated area of disturbance outside the easements, as referred to in condition 6-1, unless authorised by the Minister for the Environment.
- 6-3 The proponent shall not cause or allow disturbance of vegetation outside a 20-metre wide gas pipeline lateral easement in environmentally sensitive areas, unless authorised by the Minister for the Environment.

7 Rehabilitation

7-1 Prior to ground-disturbing activities, the proponent shall prepare a Rehabilitation Management Plan in consultation with the Department of Environment and Conservation, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

This Plan shall address:

- 1. weed management protocols;
- 2. dieback management protocols;
- 3. soil management protocols;
- 4. rehabilitation completion criteria; and
- 5. the need for propagule augmentation to achieve completion criteria.
- 7-2 The proponent shall manage rehabilitation of the gas pipeline lateral and electricity transmission line easements until the rehabilitation completion criteria, referred to in condition 7-1, have been achieved.

Note: The proponent has obligations under the *Petroleum Pipelines Act 1969*, which is administered by the Department of Industry and Resources, to maintain the vehicle access track for the gas pipeline lateral. Certain completion criteria may not be achievable within the access track.

- 7-3 In consultation with the Department of Environment and Conservation, the proponent shall review and revise, as required, the Rehabilitation Management Plan required by condition 7-1.
- 7-4 The proponent shall implement the Rehabilitation Management Plan required by condition 7-1 and subsequent revisions of the Rehabilitation Management Plan required by condition 7-3.
- 7-5 The proponent shall make the Rehabilitation Management Plan required by condition 7-1 and subsequent revisions required by condition 7-3, publicly available in a manner approved by the CEO.

8 Fauna

8-1 Trapped fauna within open trenches shall be cleared and recorded by a suitably trained fauna-clearing person no later than three hours after sunrise. The clearing and recording shall be repeated before sunset.

The open trenches shall also be cleared and recorded by a suitably trained faunaclearing person no more than one hour prior to backfilling of trenches.

Note: "fauna-clearing person" means an employee of the proponent whose responsibility it is to walk the open trench to recover and record fauna found within the trench.

- 8-2 The fauna-clearing person shall be experienced in the following, to the requirements of the Department of Environment and Conservation:
 - 1. fauna identification, capture and handling (including venomous snakes);
 - 2. identification of tracks, scats, burrows and nests of conservation-significant species;
 - 3. fauna vouchering;
 - 4. assessing injured fauna for suitability for release, rehabilitation or euthanasia;
 - 5. familiarity with the ecology of the species which may be encountered in order to be able to appropriately translocate fauna encountered; and
 - 6. performing euthanasia.
- 8-3 The proponent shall be responsible for ensuring that basic fauna-handling training is provided to the fauna-clearing person if they do not possess the skills and experience outlined in condition 8-2 prior to the fauna-clearing person commencing employment.
- 8-4 The fauna-handling training, as outlined in condition 8-3, shall be developed in consultation with the Department of Environment and Conservation.
- 8-5 Open trench lengths shall not exceed a length capable of being inspected and cleared by the fauna-clearing person within the required times as set out in condition 8-1.
- 8-6 The proponent shall monitor weather forecasts through the Bureau of Meteorology and in the event of a weather forecast indicating rainfall sufficient to cause flooding of trenches or drowning of fauna trapped in trenches, the proponent shall, in consultation with the Department of Environment and Conservation, backfill all lengths of open trench with the potential to be flooded or to cause drowning of fauna.

8-7 The proponent shall produce a report on fauna management within the gas pipeline lateral easement at the completion of gas pipeline construction.

The report shall include but not necessarily be limited to the following:

- 1. details of all fauna inspections;
- 2. the number of fauna cleared from trenches;
- 3. fauna interactions:
- 4. fauna mortalities; and
- 5. all actions taken.

The report shall be provided to the CEO no later than 14 days after the completion of gas pipeline construction, and shall be made publicly available in a manner approved by the CEO.

9 Stack Emissions

- 9-1 Prior to submitting a Works Approval application, the proponent shall provide a report to the CEO for approval which:
 - 1. confirms the engineering design details for the emission of gaseous and particulate pollutants, including stack heights, stack diameters, exit temperatures and exit velocities; and
 - 2. estimates the concentration of nitrogen oxides and other gaseous and particulate pollutants, under normal and worst-case conditions, including start-up and upset emissions.
- 9-2 At least three months prior to commencement of operations, the proponent shall prepare a Stack Emissions Management Plan to the requirements of the Minister for the Environment.

The objective of this Plan is to ensure that best available practicable and efficient technologies are used to minimise and monitor air emissions from the power station.

This Plan shall include:

- 1. proposed targets and standards;
- 2. a stack emissions monitoring programme, which includes nitrogen oxides and other gaseous and particulate pollutants; and
- 3. annual reporting.

- 9-3 The proponent shall implement the Stack Emissions Management Plan required by condition 9-2.
- 9-4 The proponent shall make the Stack Emissions Management Plan required by condition 9-2 publicly available in a manner approved by the CEO.

10 Greenhouse Gas Abatement

- 10-1 Prior to commencement of ground-disturbing activities, the proponent shall submit, for approval by the CEO, a Greenhouse Gas Abatement Programme, prepared on advice of the Environmental Protection Authority as set out in schedule 2, which sets out measures and processes 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 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 contemporary National Greenhouse Strategy as updated from time to time.
- The proponent shall implement the Greenhouse Gas Abatement Programme required by condition 10-1 unless modifications are approved by the CEO.
- 10-3 Prior to commencement of ground-disturbing activities, the proponent shall make the Greenhouse Gas Abatement Programme required by condition 10-1 publicly available in a manner approved by the CEO.

11 Decommissioning

- Prior to undertaking ground-disturbing activities, the proponent shall prepare a Preliminary Decommissioning Plan for approval by the CEO, which describes the framework and strategies to ensure that the site is suitable for future land uses, and provides:
 - 1. the rationale for the siting and design of plant and infrastructure as relevant to environmental protection;
 - 2. a conceptual description of the final landform at closure;
 - 3. a plan for a care and maintenance phase; and
 - 4. initial plans for the management of noxious materials.

11-2 At least six months prior to the anticipated date of closure, or at a time approved by the Environmental Protection Authority, the proponent shall submit a Final Decommissioning Plan designed to ensure that the site is suitable for future land uses, for approval of the CEO.

The Final Decommissioning Plan shall set out procedures and measures for:

- 1. removal or, if appropriate, retention of plant and infrastructure agreed 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.
- 11-3 The proponent shall implement the Final Decommissioning Plan required by condition 11-2 until such time as the Minister for the Environment determines, on advice of the CEO, that the proponent's decommissioning responsibilities have been fulfilled.
- 11-4 The proponent shall make the Final Decommissioning Plan required by condition 11-2 publicly available in a manner approved by the CEO.

Notes

- 1. Where a condition states "on advice of the Environmental Protection Authority", the Environmental Protection Authority will provide that advice to the Department of Environment and Conservation 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 and Conservation.
- 3. The Minister for the Environment will determine any dispute between the proponent and the Environmental Protection Authority or the Department of Environment and Conservation over the fulfilment of the requirements of the conditions.
- 4. 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*.
- 5. The proponent should note that the proposed pipeline route traverses the Gnangara Underground Water Pollution Control Area (UWPCA) and the route cuts across Reserve 45511 both of which are managed by the Department of Water for water quality protection.

- 6. The proponent should note that the project area is within the Gnangara UWPCA which is covered by the Department of Water policies and the State Planning Policy for public drinking water resources. These policies require that the construction and testing of the gas pipeline should include management measures that are consistent with the principle of risk avoidance to the quality of the groundwater resource and any project construction or maintenance depots should not be placed within P1 areas.
- 7. The proponent should note that any requirement for groundwater abstraction would be subject to water licensing as the proposed power station is located within the Wanneroo Groundwater Area, which is subject to water licensing under the Rights in Water and Irrigation Act 1914.

David Templeman MLA MINISTER FOR THE ENVIRONMENT; CLIMATE CHANGE; PEEL

The Proposal (Assessment No. 1705)

The proposal is to construct and operate:

- a 330 megawatt open-cycle gas-turbine power station within Lots 506 and 507 Pederick Road, Neerabup, City of Wanneroo;
- a 30-kilometre long gas pipeline and compressor station to transport natural gas from the Dampier to Bunbury Natural Gas Pipeline to the power station; and
- a 330-kilovolt electricity transmission line, approximately two kilometres long, to connect the power station to the Western Power Neerabup terminal substation.

The location of the various project components is shown in Figures 1 and 2. Figure 3 depicts the power station plant layout, and Figure 4 the compressor station plant layout.

The main characteristics of the proposal are summarised in Table 1 below. A detailed description of the proposal is provided in sections 3.1 to 3.2.6 of the project referral document, 330MW Gas-Fired Power Station Neerabup Project Referral, prepared by ERM Power & Griffiths Environmental, Perth, Western Australia (October 2007).

Table 1: Summary of key proposal characteristics

Element	Description	
Project purpose:	To construct, operate and maintain a 330MW power station and	
	associated infrastructure.	
Project life:	30 years.	
Power output:	330MW (nominal).	
Sent out electricity:	Approximately 867GWh/yr.	
Thermal efficiency:	33.3% HHV at 25°C and 60% relative humidity.	
Plant operation:	Intermittent operation to suit demand - peak and shoulder periods.	
Operating hours:	Approximately 2628 hours per year.	
Capacity factor:	Approximately 30%.	
Power station footprint:	Site is 10ha of cleared farming land of which approximately 4ha is used for infrastructure.	
Pipeline footprint:	Construction corridor 30m wide over 30km length. Approximately 30ha of native vegetation to be cleared and rehabilitated after construction.	
Transmission line footprint:	Approximately 400m ² of native vegetation for construction of each of seven single column power pole bases.	
Fuel:		
Type:	Natural gas.	
Source:	North-west Shelf.	
Method of transport:	Dampier to Bunbury Natural Gas Pipeline and an approximately 30km long gas pipeline lateral to the power station site.	

Major plant components Power station gas turbines: Two 165MW open-cycle gas turbines fitted with low NOx burners. Number of stacks: 2 Height of stacks: 35m Stack diameter: 6m Gas pipeline: A dedicated lateral from the Dampier to Bunbury Natural Gas Pipeline of approximately 30km length. Compressor station: Located on gas pipeline lateral and consists of two compressor units with only one unit in operation at any time. Electricity transmission line: 330kV line to Western Power Neerabup terminal substation - approximately 2km long. Inputs Approximately 11.2PJ per year. Process water: Approximately 15ML per year from on-site bore. Outputs Wastewater: No discharge of wastewater. Oxides of nitrogen (NO _X): Oxides of nitrogen (NO _X): 380,000kg/yr, (< 25ppmv @ 15% O ₂). Particulates (PM ₁₀): 74,000kg/yr. Carbon monoxide (CO): 93,000kg/yr (< 10ppmv @ 15% O ₂). Sulphur dioxide (SO ₂): 5,100kg/yr. Direct greenhouse gas emissions: Approximately 590,000 tonnes of CO ₂ -e per year. Full fuel cycle greenhouse gas emissions: Approximately 673,000 tonnes of CO ₂ -e per ger.	Element	Description
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Sulphur dioxide (SO ₂): 5,100kg/yr. Approximately 590,000 tonnes of CO ₂ -e per year. Full fuel cycle greenhouse gas emissions: Approximately 673,000 tonnes of CO ₂ -e per year. Approximately 673,000 tonnes of CO ₂ -e per year. Approximately 554kg of CO ₂ -e per MWh. Noise: Will comply with the Environmental Protection (Noise) Regulations 1997: < 30dB(A) at nearest residential property; and	Particulates (PM ₁₀):	74,000kg/yr.
Sulphur dioxide (SO ₂): 5,100kg/yr. Approximately 590,000 tonnes of CO ₂ -e per year. Full fuel cycle greenhouse gas emissions: Approximately 673,000 tonnes of CO ₂ -e per year. Approximately 673,000 tonnes of CO ₂ -e per year. Approximately 554kg of CO ₂ -e per MWh. Noise: Will comply with the Environmental Protection (Noise) Regulations 1997: < 30dB(A) at nearest residential property; and		
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emissions: Full fuel cycle greenhouse gas emissions: Approximately 673,000 tonnes of CO ₂ -e per year. Greenhouse intensity: Approximately 554kg of CO ₂ -e per MWh. Will comply with the <i>Environmental Protection (Noise)</i> Regulations 1997: < 30dB(A) at nearest residential property; and	Sulphur dioxide (SO_2):	5,100kg/yr.
emissions: Full fuel cycle greenhouse gas emissions: Approximately 673,000 tonnes of CO ₂ -e per year. Approximately 554kg of CO ₂ -e per MWh. Noise: Will comply with the Environmental Protection (Noise) Regulations 1997: < 30dB(A) at nearest residential property; and	Diameter and the same	A
Full fuel cycle greenhouse gas emissions: Approximately 673,000 tonnes of CO ₂ -e per year. Approximately 554kg of CO ₂ -e per MWh. Noise: Will comply with the Environmental Protection (Noise) Regulations 1997: < 30dB(A) at nearest residential property; and		Approximately 590,000 tonnes of CO_2 -e per year.
gas emissions: Greenhouse intensity: Approximately 554kg of CO ₂ -e per MWh. Will comply with the Environmental Protection (Noise) Regulations 1997: < 30dB(A) at nearest residential property; and	emissions:	
gas emissions: Greenhouse intensity: Approximately 554kg of CO ₂ -e per MWh. Will comply with the Environmental Protection (Noise) Regulations 1997: < 30dB(A) at nearest residential property; and	Full fuel evels arreacheuse	Approximately 672 000 tennes of CO a person
Greenhouse intensity: Approximately 554kg of CO ₂ -e per MWh. Will comply with the <i>Environmental Protection (Noise)</i> Regulations 1997: < 30dB(A) at nearest residential property; and		Approximately 675,000 tollies of CO ₂ -e per year.
Noise: Will comply with the <i>Environmental Protection (Noise)</i> **Regulations 1997: < 30dB(A) at nearest residential property; and	gas emissions.	
Noise: Will comply with the <i>Environmental Protection (Noise)</i> **Regulations 1997: < 30dB(A) at nearest residential property; and	Greenhouse intensity:	Approximately 55/kg of CO., e per MWh
Regulations 1997: < 30dB(A) at nearest residential property; and	Greeniouse intensity.	Approximately 33-rag of CO2-c pet ivi vi ii.
Regulations 1997: < 30dB(A) at nearest residential property; and	Noise:	Will comply with the Environmental Protection (Noise)
< 30dB(A) at nearest residential property; and	1 10100.	
1 < 65dB(A) at nearest industrial property		< 65dB(A) at nearest industrial property.
(00 00 (17) at notice intensitial property.		1 constant property.

Abbreviations

CO ₂ -e	carbon dioxide equivalent	m	metres
dB(A)	decibels (A-weighted)	m^2	square metres
GWh/yr	gigawatt hours per year	ML	megalitres (10 ⁶ litres)
kg	Kilograms	m/s	metres per second
kg/yr	kilograms per year	MW	megawatts (10 ⁶ watts)
ha	Hectares	MWh	megawatt hours
HHV	higher heating value	O_2	oxygen
km	Kilometres	PJ	petajoules (10 ¹⁵ joules)
kV	kilovolts (10 ³ volts)	PM_{10}	particulate matter with an aerodynamic diameter of
			less than 10 micrometres
		ppmv	parts per million by volume

Source: Modified version of Table 3.1 from ERM Power & Griffiths Environmental, 2007

330 MW Gas-Fired Power Station, Neerabup, City Of Wanneroo (Assessment No. 1705)

Figures (attached)

- Figure 1 Location of all project components.
- Figure 2 Location of power station and electricity transmission line.
- Figure 3 Power station plant layout.
- Figure 4 Compressor station plant layout.

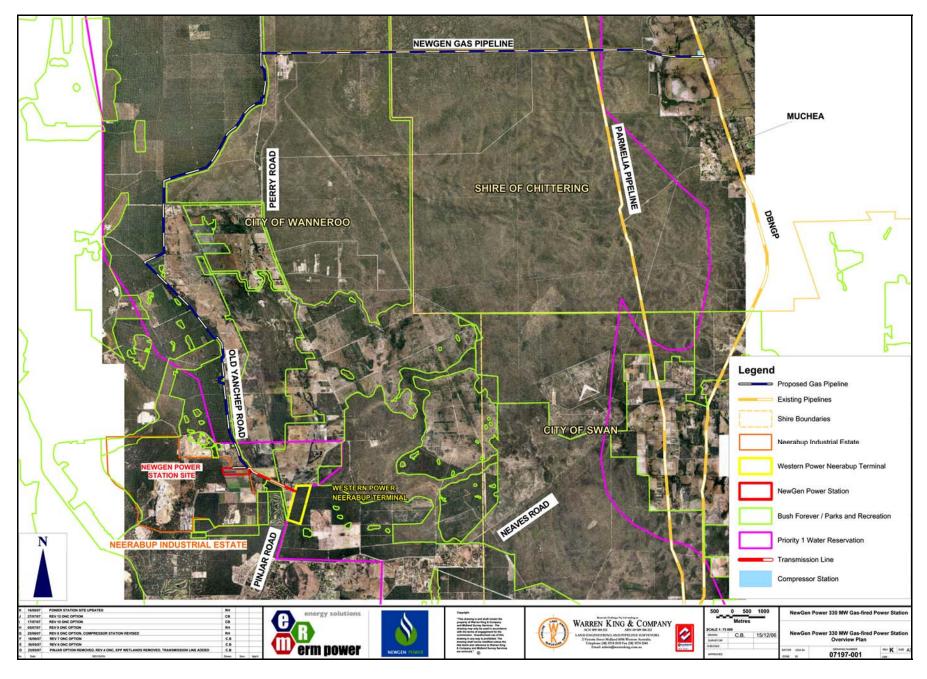


Figure 1 Location of all project components.

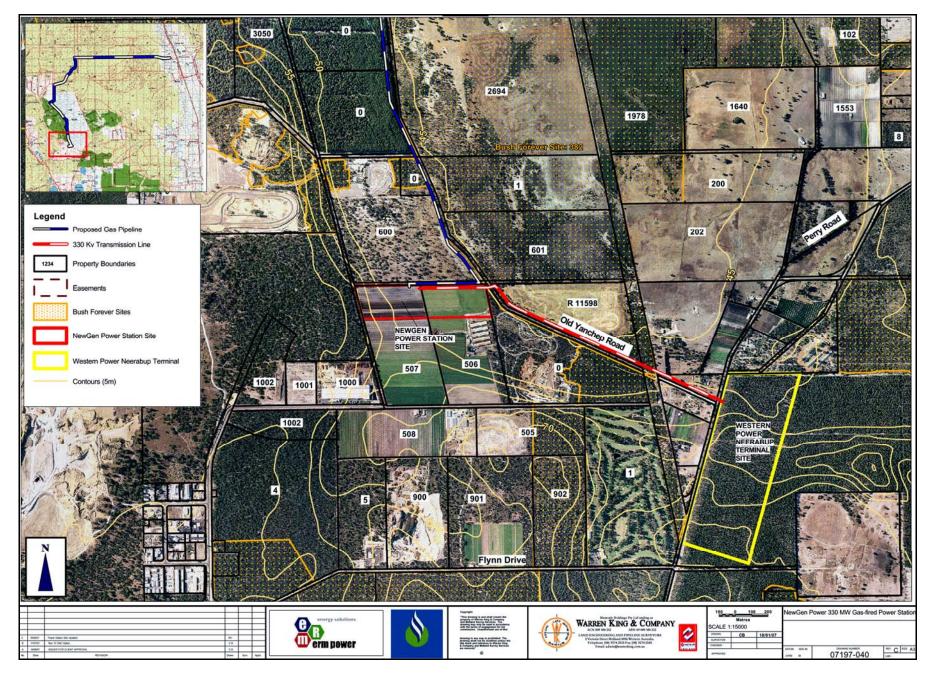


Figure 2 Location of power station and electricity transmission line.

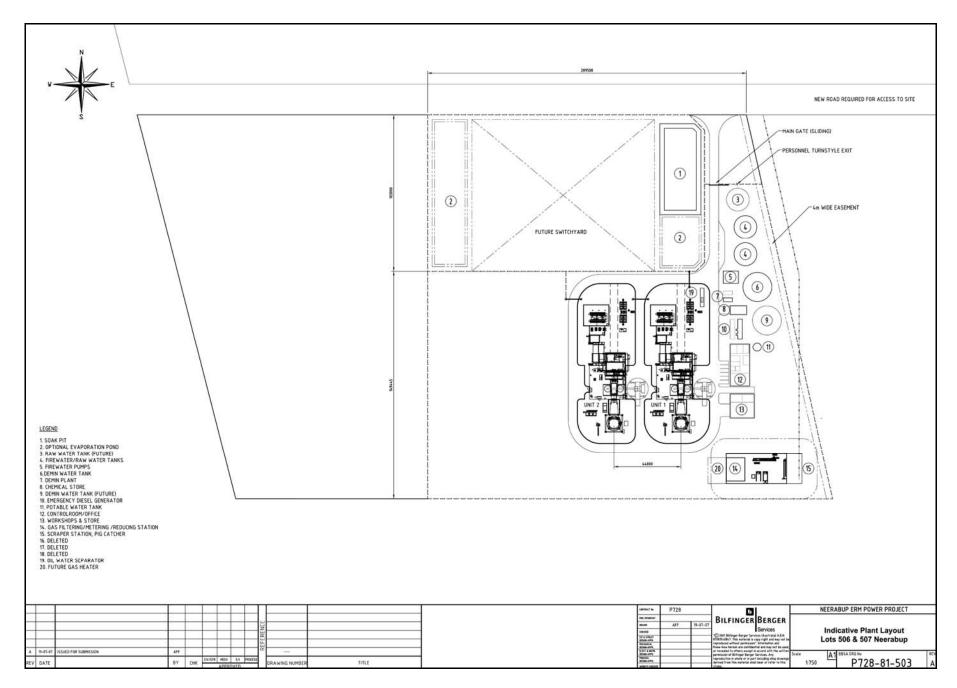


Figure 3 Power station plant layout.

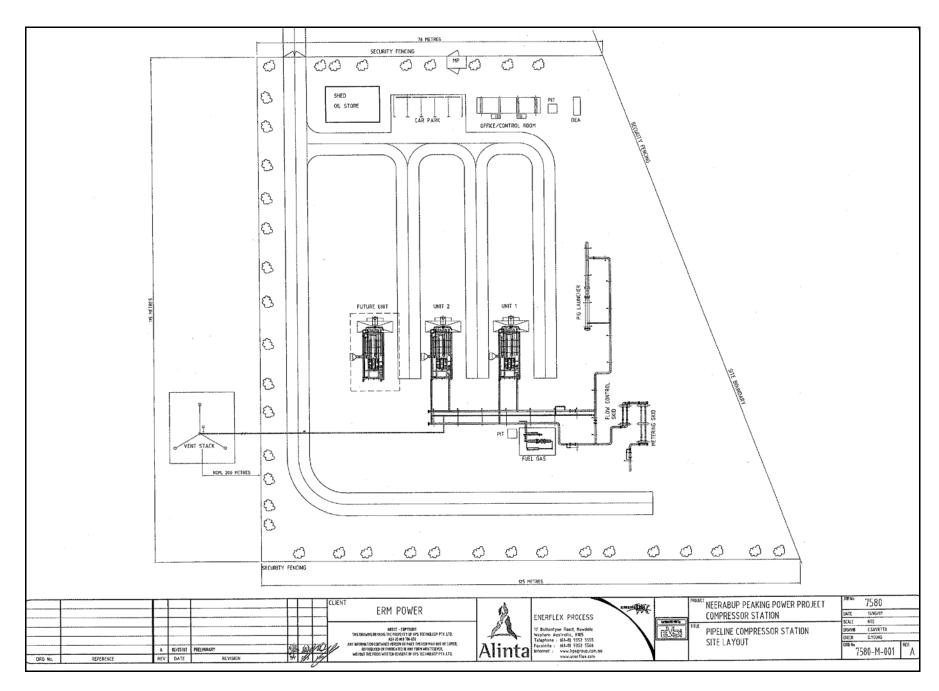


Figure 4 Compressor station plant layout.

Specifications for the content of the Greenhouse Gas Abatement Programme

The Programme should be based upon the principles in the Environmental Protection Authority Guidance Statement – *Minimising Greenhouse Gas Emissions, Guidance for the Assessment of Environmental Factors*, No. 12, October 2002.

Items which a Programme should include in most cases:

- calculation of the "greenhouse gas" emissions associated with the proposal;
- 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;
- 3 consideration of the implementation of "greenhouse gas" offset strategies;
- estimation of the "greenhouse gas" efficiency of the project (per unit of product 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;
- actions for the monitoring, regular auditing and annual reporting of "greenhouse gas" emissions and emission reduction strategies;
- 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, which includes:
 - 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;
- review of practices and available technology; and
- "continuous improvement approach" so that advances in technology and potential operational improvements of plant performance are adopted.

Note: In item (2) above, the following definitions apply:

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

Attachment 1 to Statement 759

Change to Proposal

Proposal:

330 MW Gas-Fired Power Station, Neerabup

Proponent:

NewGen Neerabup Pty Ltd

Change:

The original gas pipeline route that was assessed by the EPA ran around the boundary of Bush Forever Site No. 451. The new gas pipeline route will run through the eastern edge of Bush Forever Site No. 451, immediately adjacent to Old Yanchep Road.

Components of original Proposal as implemented:

The original route of the gas pipeline around the boundary of Bush Forever Site No. 451 is depicted by the dark red dashed line in Figure 1.1 (attached).

Components of changed Proposal:

The new gas pipeline route through the eastern edge of Bush Forever Site No. 451 is depicted by the blue and white dashed line in Figure 1.1 (attached).

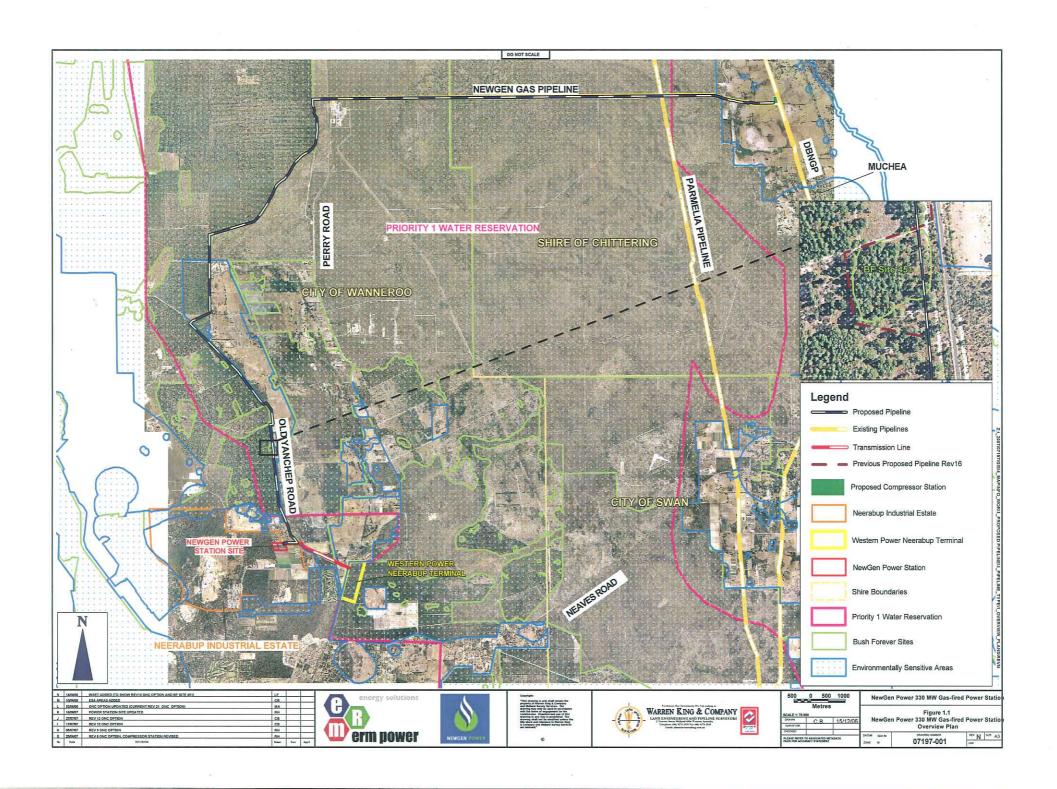
Approved under delegation from Minister for the Environment: Delegation under section 18 of

the Environmental Protection Act Dated 24 November 2004

S45C Approval Date:____

Published on

10 OCT 2008



Attachment 2 to Ministerial Statement 759

Change to proposal approved under section 45C of the Environmental Protection Act 1986

This Attachment replaces Schedule 1, Attachment 1 and Figures 1 and 2 of Ministerial Statement 759

Proposal: 330 MW Gas-Fired Power Station, Neerabup

Proponent: NewGen Neerabup Pty Ltd

Change:

- To remove the 330-kilovolt electricity transmission line component from the proposal.
- Update current address of proposal.

Table 1: Summary of the Proposal

Proposal Title	330MW Gas-Fired Power Station, Neerabup
Short Description	The proposal is to construct and operate a 330-megawatt
	open cycle gas-turbine power station within Lot 100 Trandos
	Road, Neerabup; and a 30 kilometer long gas pipeline and
	compressor station to transport natural gas from the Dampier
	to Bunbury Natural Gas Pipeline to the power station.

Table 2: Location and authorised extent of physical and operational elements

		·
Element	Previously Authorised Extent	Authorised Extent
Project purpose	To construct, operate and maintain a 330MW power station and associated infrastructure.	To construct, operate and maintain a 330MW power station and associated infrastructure.
Project life	30 years.	30 years.
Power output	330MW (nominal).	330MW (nominal).
Sent out electricity	Approximately 867GWh/yr.	Approximately 867GWh/yr.
Thermal efficiency	33.3% HHV at 25°C and 60% relative humidity.	33.3% HHV at 25°C and 60% relative humidity.
Plant operation	Intermittent operation to suit demand - peak and shoulder periods	Intermittent operation to suit demand - peak and shoulder periods
Operating hours	Approximately 2628 hours per year.	Approximately 2628 hours per year.
Capacity factor	Approximately 30%.	Approximately 30%.

Element	Previously Authorised Extent	Authorised Extent
Power station footprint	Site is 10ha of cleared farming land of which approximately 4ha is used for infrastructure.	Site is 10ha of cleared farming land of which approximately 4ha is used for infrastructure.
Pipeline footprint	Construction corridor 30m wide over 30km length. Approximately 30ha of native vegetation to be cleared and rehabilitated after construction.	Construction corridor 30m wide over 30km length. Approximately 30ha of native vegetation to be cleared and rehabilitated after construction.
Transmission line footprint	Approximately 400m ² of native vegetation for construction of each of seven single column power pole bases.	Removed
Fuel type	Natural gas.	Natural gas.
Fuel source	North-west Shelf.	North-west Shelf.
Fuel method of transport	Dampier to Bunbury Natural Gas Pipeline and an approximately 30km long gas pipeline lateral to the power station site.	Dampier to Bunbury Natural Gas Pipeline and an approximately 30km long gas pipeline lateral to the power station site.
Major plant components		
Power station gas turbines	Two 165MW open-cycle gas turbines fitted with low NOx burners.	Two 165MW open-cycle gas turbines fitted with low NO _X burners.
Number of stacks	2	2
Height of stacks	35m	35m
Stack diameter	6m	6m
Gas pipeline	A dedicated lateral from the Dampier to Bunbury Natural Gas Pipeline of approximately 30km length.	A dedicated lateral from the Dampier to Bunbury Natural Gas Pipeline of approximately 30km length.
Compressor station	Located on gas pipeline lateral and consists of two compressor units with only one unit in operation at any time.	Located on gas pipeline lateral and consists of two compressor units with only one unit in operation at any time.
Electricity transmission line	330kV line to Western Power Neerabup terminal substation - approximately 2km long.	Removed

Element	Previously Authorised Extent	Authorised Extent
Inputs		
Natural gas	Approximately 11.2PJ per year.	Approximately 11.2PJ per year.
Process water	Approximately 15ML per year from on-site bore	Approximately 15ML per year from on-site bore
Outputs		
Wastewater	No discharge of wastewater.	No discharge of wastewater.
Oxides of nitrogen (NOx)	380,000kg/yr, (< 25ppmv @ 15% O ₂).	380,000kg/yr, (< 25ppmv @ 15% O ₂).
Particulates (PM ₁₀)	74,000kg/yr.	74,000kg/yr.
Carbon monoxide (CO)	93,000kg/yr (< 10ppmv @ 15% O ₂).	93,000kg/yr (< 10ppmv @ 15% O ₂).
Sulphur dioxide (SO ₂)	5,100kg/yr.	5,100kg/yr.
Direct greenhouse gas emissions	Approximately 590,000 tonnes of CO ₂ -e per year.	Approximately 590,000 tonnes of CO ₂ -e per year.
Full fuel cycle greenhouse gas emissions	Approximately 673,000 tonnes of CO ₂ -e per year.	Approximately 673,000 tonnes of CO ₂ -e per year.
Greenhouse intensity	Approximately 554kg of CO ₂ -e per MWh.	Approximately 554kg of CO ₂ -e per MWh.
Noise	Will comply with the Environmental Protection (Noise) Regulations 1997: < 30dB(A) at nearest residential property; and < 65dB(A) at nearest industrial property.	Will comply with the Environmental Protection (Noise) Regulations 1997: < 30dB(A) at nearest residential property; and < 65dB(A) at nearest industrial property.

Note: Text in **bold** in Tables 1 and 2 indicates a change to the proposal.

Table 3: Abbreviations

Abbreviation	Term
CEO	Chief Executive Officer
CO ₂ -e	carbon dioxide equivalent
dB(A)	decibels (A-weighted)
GWh/yr	gigawatt hours per year
ha	hectare
HHV	higher heating value
kg	kilograms
kg/yr	kilograms per year
km	kilometre
kV	kilovolt (10 ³ volts)
m	metres
m ²	square metres

Abbreviation	Term
ML	megalitres (10 ⁶ litres)
m/s	metres per second
MW	megawatts (10 ⁶ watts)
MWh	megawatt hours
O ₂	oxygen
PJ	petajoules (10 ¹⁵ joules)
PM ₁₀	particulate matter with an aerodynamic diameter of less than
	10 micrometres
ppmv	parts per million by volume

Figures (attached)

Figure 1 Regional Location

Figure 2 Location of NewGen Neerabup power station

Figure 3 Power station plant layout

Figure 4 Compressor station plant layout

Table 4: Development Envelope Coordinates

Coordinates defining the 330 MW Gas-Fired Power Station, Neerabup development envelope are held by the Department of Water and Environmental Regulation, document reference number DWERDT347274.

[Signed 2 June 2021]

Professor Matthew Tonts

CHAIR

Environmental Protection

Authority

under delegated authority

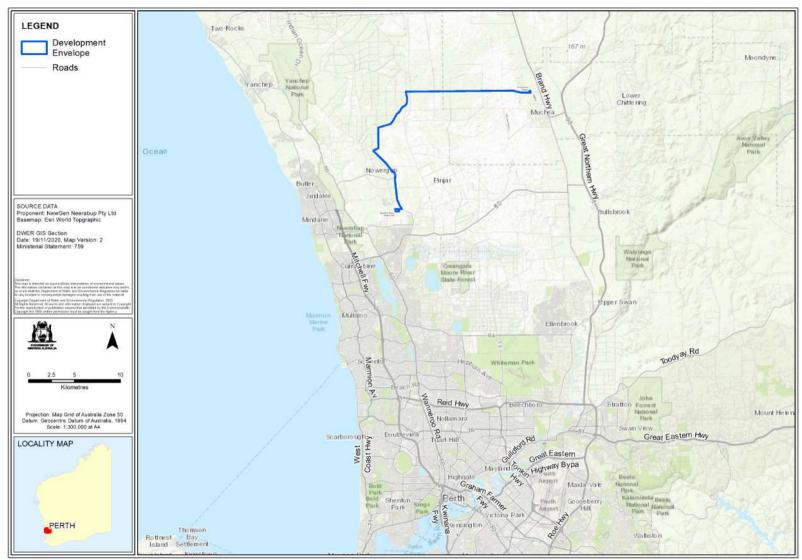


Figure 1: Regional Location



Figure 2: Location of the NewGen Neerabup power station and development envelope