Infrastructure Approval – Eastern Gas Pipeline

Under the then provisions of the *Pipelines Act 1967*, Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) did not apply to the Eastern Gas Pipeline. However, those provisions were repealed in September 2006 by the *Pipelines Amendment Act 2006* which included transitional provisions for existing pipelines, under which Pipeline Licence 26 issued under the *Pipelines Act 1967* was deemed to be a planning approval granted under Part 3A of the EP&A Act.

Part 3A of the EP&A Act was also repealed in October 2011, and under the provisions of the *Environmental Planning and Assessment (Savings, Transitional and Other Provisions) Regulation 2017*, the project was transitioned to State Significant Infrastructure (SSI) in May 2019 and Pipeline Licence No. 26 comprises the Infrastructure Approval (SSI 9973) for the project.

Further modifications to the infrastructure approval under the *Environmental Planning and Assessment Act 1979* are attached as additional Schedules to the licence, as listed below.

Schedule A: Modification 1 - Port Kembla Lateral Looping Pipeline October 2020 represented in green type.

801

NEW SOUTH WALES GOVERNMENT

PIPELINES ACT 1967

LICENCE No. 26

INSTRUMENT OF GRANT OF PIPELINE LICENCE

PIPELINES ACT 1967

Licence No. 26

BHP Petroleum (Pipelines) Pty Ltd (ACN 006 919 115) and Westcoast Energy Australia (Pipelines) Pty Ltd (ACN 068 570 847), having their registered offices at 120 Collins Street, Melbourne, Victoria, have applied in accordance with the provisions of section 12 and 13 of the *Pipelines Act 1967* (hereinafter called "the Act") and the *Pipelines Regulation 1993* (hereinafter called "the Regulation") for a licence to operate a pipeline to convey natural gas between the Victoria–New South Wales border and Wilton (hereinafter called Licence No. 26), and have agreed at Annexure A to accept the Licence and the provisions and conditions attached thereto.

This application complies with the provisions of the Act and Regulation and therefore I, the Hon. Gordon Samuels AC, Governor of the State of New South Wales, acting with the advice of the Executive Council, do grant Licence No. 26 for a period of twenty one (21) years effective from my signing of the Licence.

The lands affected by the pipeline are those indicated on Deposited Plans 267407 to 267424 lodged with the Land Titles Office, Sydney and on the associated instruments.

This Licence is granted subject to the requirements of and conditions set forth in Annexure B.

Signed at Sydney, New South Wales this.....12th.....day of.November.1997.

.....

GOVERNOR
By His Excellency's Command

.....

Minister for Energy

ANNEXURE A

PIPELINES ACT 1967

Licence No. 26

BHP Petroleum (Pipelines) Pty Ltd (ACN 006 919 115) and Westcoast Energy Australia (Pipelines) Pty Ltd (ACN 068 570 847), having their registered offices at 120 Collins Street, Melbourne, Victoria, hereby agree to be bound by this Licence and confirms any warranties given therein.

The Common Seal of
BHP PETROLEUM (PIPELINES) PTY LTD
(ACN 006 919 115) was affixed in
the presence of:

BHP PETROLEUM (PIPELINES) PTY. LTD. A.C.N. 006 919 115
THE COMMON SEAL OF

.....
Director
BHP Petroleum (Pipelines) Pty Ltd and

.....
Secretary

The Common Seal of
WESTCOAST ENERGY AUSTRALIA
(PIPELINES) PTY LTD, (ACN 068 570 847),
was affixed in the presence of:

WESTCOAST ENERGY AUSTRALIA (PIPELINES) PTY LTD
Common Seal
A.C.N.
068 570 847

.....
Director
Westcoast Energy Australia (Pipelines) Pty Ltd

.....
Secretary

Registered in the Register of Permits and Licences kept in the Department of Energy of

New South Wales at Sydney this 17th..... day of November 1997.

.....
for Director-General
Department of Energy

ANNEXURE B

This and the succeeding pages are the conditions for Licence No. 26 granted on .....

1. DEFINITIONS

In this Licence, unless the contrary appears:

(a) words in the singular include the plural and vice versa;

(b) words denoting individuals include corporations and vice versa;

(c) words denoting any gender include all genders;

(d) headings are inserted for convenience of reference only and do not affect the interpretation or construction of this Licence;

(e) schedules and annexures to this Licence form part of this Licence;

(f) references to any party to this Licence or any other document or agreement include, where relevant, its successors, assigns, agents and representatives;

(g) references to any agreement, document or legislation include a reference to such agreement, document or legislation as amended, varied, noted, supplemented or replaced from time to time;

(h) if any condition of this Licence remains to be fulfilled on the expiry of this Licence, that condition shall survive the expiry;

(i) "Act" means the Pipelines Act 1967;

(j) "Application" means the application by the Licensee dated 25 February 1997.

(k) "AS 2885" refers to the following parts of the Australian Standard, Pipelines-Gas and liquid petroleum published by the Council of the Standards Association of Australia as in effect from time to time:

AS 2885.1-1997 Part 1: Design and construction

AS 2885.2-1995 Part 2: Welding

AS 2885.3-1997 Part 3: Operation and maintenance

(1) "business day" means a day on which trading banks are open for business in Sydney;

(m) "Department" means the Department of Energy;

(n) "Director-General".means the person from time to time holding office (or equivalent office) as Director-General, Department of Energy;

(o) "Licence No. 26" comprises this Licence and the Application;

(p) "Licence Area" has the meaning specified in the Act;

(q) "Licensee" refers to BHP Petroleum (Pipelines) Pty Ltd (ACN 006 919 115) and Westcoast Energy Australia (Pipelines) Pty Ltd (ACN 068 570 847), and includes where relevant, their successors, assigns, agents and representatives;

(r) "MAOP" means Maximum Allowable Operating Pressure;

(s) "Minister" means the Minister for Energy;

(t) "pipeline" includes any apparatus thereto;

(u) "Regulation" means the Pipelines Regulation 1993;

(v) "recognised" means recognised by Standards Association of Australia such as ANZS/ISO 9000 series or by the Director-General reasonably based on good pipeline practice;

(w) "public authority" has the meaning specified in the Act.

2. PIPELINE DESCRIPTION AND ENGINEERING DETAILS

The pipeline to which this Licence applies is described in Schedule 1.

The Licensee warrants that technical and other information supplied in support of its application for this licence and otherwise as required by the Licence is true and correct to the best of the knowledge of the Licensee, the Licensee having made full and diligent inquiry.

3. RESPONSIBILITY OF THE LICENSEE

Nothing in this Licence alters the Licensee's responsibility under any law for overall protection of its personnel, the public and property, and the environment from undue effects of any activities associated with construction, operation and maintenance of the pipeline.

4. COMPLIANCE WITH LAW AND STANDARDS

In carrying out its obligations under this Licence, the Licensee must comply with all requirements imposed by law and with all recognised standards and practices to operate and maintain the pipeline and must obtain all the necessary consents and approvals.

5. CONSTRUCTION, OPERATION AND MAINTENANCE

The Licensee must construct, operate and maintain the pipeline and its apparatus in such manner as is reasonably necessary to protect all persons, property and the environment from injury, loss, damage and other harm as the case may be. Except as otherwise required by this Licence, the Licensee must design, construct, operate and maintain the pipeline in accordance the requirements of the Act, the Regulation, and AS2885.

5.1 Risk Assessment

(1) The Licensee must undertake a risk assessment study in accordance with Section 2 of AS2885.1 and submit a report of the study to the Director-General before commencement of construction, or such other time as agreed in writing by the Director-General. This must include, as specified in that Section, the identification, evaluation and management of risks.

(2) The study must include a report of an independently chaired hazard and operability study for above-ground facilities.

(3) The study may include a final hazard analysis where this has been prepared as part of the design.

5.2 Construction

(1) The pipeline must be constructed in accordance with:

(a) the Environment Management Plan approved by the Director-General on 14 October 1997.

(b) the Construction Safety Plan approved by the Director-General on 14 October 1997.

(2) The Licensee must furnish details of the following to the Department of Energy before commencement of construction.

(a) a monitoring program as provided for in Section 2.6.3 of the Environment Management Plan

(b) an auditing program as provided for in Section 2.6.4 of the Environment Management Plan including the following matters:

(i) auditing program.

(ii) parameters to be audited

(iii) sites or locations at which these parameters are to be audited

(iv) agencies to receive reports on the progress of construction, and safety and environment management

(v) mechanism by which the relevant agencies can access any detailed audit reports relating to any location and any particular parameter.

5.3 Operation and Maintenance of the pipeline

The Licensee must operate and maintain the pipeline in accordance with the safety and operating plan lodged with the Director-General under condition 6 of this Licence.

5.4 Maximum Allowable Operating Pressure

Unless otherwise approved or directed in writing by the Director- General,

(a) the MAOP of the pipeline must not exceed that determined in accordance withAS2885; and

(b) control devices must comply with the requirements of AS 2885.

5.5 Repairs and Maintenance of Works

The Licensee must, when undertaking any maintenance or repairs to the pipeline, comply with all relevant safety requirements imposed by law and with recognised safety standards and practices. Such requirements must be detailed in the safety and operating plan.

5.6 Corrosion Control

(1) The Licensee must operate and maintain cathodic protection systems on the pipeline and associated structures in accordance with recognised standards and practices including the current version of Australian Standard AS 2832.1, *Guide to the cathodic protection of metals, Part 1 -Pipes, cables and ducts,* and AS 2885 in order to minimise risk of corrosion damage to the pipeline.

(2) The Licensee must ensure that the cathodic protection system of the pipeline does not cause corrosion to other nearby structures.

(3) The safety and operating plan must state the type of testing and the planned timings at which the Licensee plans to carry out suchinspections and surveys.

5.7 Reviews

(1) The Licensee must review the operation of the pipeline in accordance with Section 4 of AS 2885.3.

(2) The safety and operating plan must provide for such reviews.

6. SAFETY AND OPERATING PLAN

6.1 Lodgement of safety and operating plan

~~(1) The Licensee must~~

~~(a) before commencement of operation <1.'the pipeline, or within such other time as may be approved in ting by the Director-General, lodge with the Director-General a safety and operating plan for the pipeline prepared in accordance with Section 3 of AS2885.3 and as required under this Licence, and~~

~~(b) implement the Plan.~~

~~(2) The object of a safety and operating plan is to ensure the safe operation of the pipeline. Accordingly, the Plan must demonstrate to the Director- General, how the License provides for safe operation of the pipeline while complying with statutory requirements and AS 2885, and must satisfy the requirements of recognised quality management and safety standards~~

~~(3) Nothing in this clause may be taken to permit the Licensee to operate the pipeline without adequate or recognised safety and operating procedures or practices before the safety and operating plan is accepted by the Director- General or subsequently.~~

The Licensee must, within six months of the date of the consent to commence operations of the pipeline:

(a) lodge with the Director-General a controlled copy of the safety and operating plan for the pipeline, and

(b) implement that plan.

6.2 Nomination of persons to audit the safety and operating plan

(1) One month prior to the commencement of an audit the Licensee must nominate a person to the Director-General as a person who is:

(a) independent of the Licensee, and

(b) competent to exercise the functions of an auditor under this Licence in respect of its safety and operating plan.

(2) If the Director-General advises a Licensee that a nomination is not accepted or is no longer acceptable:

(a) the nomination ceases to have effect for the purposes of this Licence, and

(b) the Licensee must submit another nomination in its place.

6.3 Initial audit of the safety and operating plan

~~(1) A safety and operating plan must bear a certificate from a nominated auditor certifying that:~~

~~(a) the plan complies with the requirements of this Licence, and~~

~~(b) the plan is appropriate having regard to the size and complexity of the pipeline system,~~

~~(c) all measures intended to prevent hazardous events identified in the plan from occurring, and intended to protect operating personnel, the pipeline, the community and the environment should such they occur, are in place, and,~~

~~(d) there are properly trained and equipped personnel available to implement the emergency procedures set gut in the plan.~~

~~(2) The certificate must include a summary of the procedures, standards, tests, inspections and maintenance measures contained in the plan.~~

(1) A safety and operating plan lodged in accordance with condition 6.1 must be accompanied by a certificate from the nominated auditor certifying that:

(a) the plan complies with the relevant requirements of the Pipelines Act, Pipeline Regulations, the Licence and

(b) all measures intended to prevent hazardous events identified in the plan from occurring, and intended to protect operating personnel, plant, equipment, the community and the environment should they occur, are in place, and

(c) there are properly trained and equipped personnel available to implement the plan.

(2) The Licensee is not in breech of condition 6.3 (1) if the Licensee provides a report by the auditor on any safety-related non-compliance with the safety and operating plan, the Act, the Regulation, the licence conditions and relevant standards. The report must include any corrective actions proposed by the Licensee to eliminate identified non-conformances and the proposed implementation period.

6.4 Periodical audits of the Safety and Operating Plan

~~(1) A licensee must within one month after the end of each auditing period, lodge with the Director-General in respect of its safety and operating plan:~~

(1) The Licensee must, on the anniversary each year of the consent to operate the pipeline, lodge with the Director-General in respect of the licensed pipelines safety and operating plan:

(a) a certificate from a nominated auditor certifying that:

(i) the measures ~~intended~~ implemented to prevent hazardous events identified in the plan from occurring, and intended to protect operating personnel, ~~the pipeline,~~ plant, equipment, the community and the environment should ~~such an event occur, are in place;~~ they occur, are being maintained, and

(ii) there are properly trained and equipped personnel available to ~~implement the emergency procedures set out in the plan;~~ maintain the plan, and

(b) a report by the same auditor reviewing the plan for adequacy and appropriateness having regard to any changes in the pipeline since the previous audit certificate or any non-compliance report was issued.

~~(2) The auditor's report must include:~~

~~(a) Any non-compliance with the plan, identified during the audit~~

~~(b) any modifications suggested to be made to the plan with a view to improving effectiveness of the plan~~

~~(3) In this condition, auditing period, in relation to a safety and operating plan, means period of 12 months, or such further period as may be approved by th Director-General, commencing on the date on which the previous audit certificate in respect of the plan was lodged with the Director-General.~~

(2) The Licensee is not in breech of sub condition 6.4 (1) if the Licensee provides a report by the auditor on any safety-related non-compliance with the safety and operating plan, the Act, the Regulation, licence conditions and relevant standards. The report must include any corrective actions proposed by the Licensee to eliminate identified non-conformances and the proposed implementation period

(3) Where a non-compliance report had been prepared for the previous audit, the report required under paragraph 6.4 (1)(b) or condition 6.4 (2) must also specifically address the matters covered in the non-compliance report and indicate whether the corrective actions have been implemented and were effective.

Kim Yeadon MP	**Michael McDanold**
Minister for Energy	**Managing Director Asia Pacific - DEI**
Date: 20/4/00	**Date:** 5/5/2000

6.5 Availability of safety and operating plans

The Licensee must:

(a) cause a copy of its safety and operating plan to be kept at its principal office, and

(b) cause copies of such of the provisions of the Plan as relate to safety to be made available in such a way that, as far as is practicable, the provisions are brought to the notice of the persons likely to be involved in the implementation of the plan.

6.6 Director-General may direct amendment of safety and operating plans

(1) If the Director-General is of the opinion:

(a) that a safety and operating plan will not produce a safe outcome, or

(b) that its implementation has given rise to, or will give rise to, an unsafe situation,

the Director-General may, by order in writing, direct the Licensee to amend the plan in such a manner as is specified in the order.

(2) The Licensee must comply with any direction wider this condition.

6.7 Director-General may direct compliance with safety and operating plans

(1) If the Director-General is of the opinion that the Licensee is not:

(a) complying with the requirements of its safety and operating plan or any codes, standards or specifications set out or referred in that plan, or

(b) following the procedures set out or referred in that plan,

the Director-General may, by order in writing, direct the Licensee to take such action as is specified in the order to comply with those requirements, codes, standards or specifications or follow those procedures.

(2) The Licensee must comply with any direction under this clause.

7. ADVICE TO CONTRACTORS

The Licensee must use all reasonable endeavours to ensure that contractors engaged by it comply with the relevant safety and environmental requirements imposed by law, with the requirements of the Environment Management Plan, Construction Safety Plan, safety and operating plan, and with recognised safety and environmental standards and practices, when undertaking any construction, alteration, maintenance or repairs on the pipeline.

8. ALTERATIONS TO PIPELINE

(1) Except as provided in this clause, before undertaking any works involving permanent alteration to the pipeline, the Licensee must give written notice of the works to the Director-General. In the case of an emergency, the Licensee must notify the Director- General as soon as practicable after undertaking any alterations to the pipeline.

(2) On completion of any of the works or alterations referred to in condition 8.1, the Licensee must certify to the Director-General in writing that the alteration or works were undertaken in accordance with the requirements of this licence including the safety and operating plan, any safety and environmental requirements imposed by law and recognised safety and environmental standards and practices.

9. RECORDS AND RETURNS

9.1 Pipeline Construction Records

The Licensee must maintain records of the pipeline with regard to manufacture, testing, installation and commissioning.

9.2 Pipeline Condition and Maintenance Records

The Licensee must maintain records of the pipeline, including records of internal and external corrosion, the depth of pits, the condition of pipe coating, leaks, breaks and damage and other records relating to routine or unusual inspections, maintenance and repair, necessary for the Licensee to assess and report to the Director-General on the condition of the pipeline at any time. Such records will be held by the Licensee for as long as the pipeline or any relevant section of it remains in operation. The records must be made available to the Director-General, in such form and at such times, as the Director-General may reasonably require.

9.3 Other Information Required by the Director-General

The Licensee must provide such other information in such form and at such times as the Director-General may reasonably require regarding the design, construction, operation and maintenance of the pipeline.

9.4 Review of Land Ownership

The Licensee must review ownership of the land affected by the pipeline easements annually and advise the Director-General of any changes by 28 February each year for the preceding year ending 31 December. The Licensee must establish contact with any new landowners and maintain adequate liaison with existing landowners.

10. RESTORATION

The Licensee must restore areas disturbed by the maintenance of, or repairs to, the

pipeline to as near as possible the condition existing prior to the commencement of such works. In carrying out such works, the Licensee must satisfy the reasonable requirements of any landowners affected by such works, having regard to any specific terms of easements created for the purposes of the pipeline.

11. EASEMENT MAINTENANCE

The Licensee must maintain vegetation in the vicinity of the pipeline that is in keeping with the vegetation native to the region or as otherwise considered appropriate by the Licensee in consultation with the landowner. Such vegetation must not interfere with the safe operation of the pipeline or the assets of relevant land owners or public authorities.

12. DAMAGE

The Licensee must make good and repair at its own expense, or where appropriate pay the costs of repair of, all loss, harm or damage caused to any person, property or the environment, being loss, harm or damage arising out of or in any way connected with the actions or inactions of the Licensee, or any of its agents, officers or employees or any contractor or subcontractor of the Licensee, concerning matters arising from the operation conducted pursuant to this Licence. Such reparation must meet the reasonable requirements of the affected party or parties. The Licensee must by 28 February each year, submit a report to the Director-General on such reparations for the preceding calendar year.

13. INSURANCE AND INDEMNITY

13.1 Insurance

The Licensee must arrange and maintain with one or more reputable insurers, adequate contract works and public liability insurance in respect of the potential for any loss, harm or damage caused to any person or property arising out of or in any way connected with the action or inaction of the Licensee or any of its agents or employees, or any contractor or subcontractor of the Licensee, pursuant to the Licence.

13.2 Advice to Director-General

The Licensee must produce to the Director General on or before each anniversary of the date on which this Licence was granted:

(a) satisfactory evidence that such insurance is in force; and

(b) a certificate signed by a senior, responsible officer of the Licensee, stating that the Licensee has taken all reasonable steps to ensure that no circumstances exist under which the insurer has or may have the right to deny indemnity under, or avoid, any such policy.

13.3 Indemnification

The Licensee must indemnify and keep indemnified the Minister, the Director-General and the Department from and against all claims, demands, rights, actions, suits, proceedings, verdicts and judgements of whatsoever kind or nature and whether at law or in equity or arising under the provisions of any statute howsoever and whether for damages, costs, expenses or otherwise and whether for a liquidated or an unliquidated sum, which may be brought against these parties, arising out of any wilful, unlawful or negligent act or omission of the Licensee, or any of its agents, officers, employees or contractors, in connection with this Licence.

14. REQUIREMENTS OF STATUTORY AUTHORITIES

Where the pipeline passes through any lands vested in or under the care and management of any public authority, the Licensee must comply with the agreements relating to the pipeline which it has with such public authorities now and hereafter, unless the public authority waives any compliance.

15. NOTICES

15.1 Addresses for notices

All notices, requests, requirements, demands, consents or other communications to be given under this Licence must be in writing and will be valid and sufficient if posted in a prepaid envelope addressed to the following:

(a) if to the, Director-General or the Minister to:

Department of Energy
29 -57 Christie Street
St. Leonards NSW 2065
(GPO Box 536)

(b) if to the Licensee to:

BHP Petroleum (Pipelines) Pty Ltd and
Westcoast Energy Australia (Pipelines) Pty Ltd
Level 10, 120 Collins St
Melbourne Vic 3000

or to such address as the relevant party may specify by notice in writing.

15.2 Service of Notices

All notices, requests, requirements, demands, consents or other communications will be deemed to have been served on the fifth business day after posting.

15.3 Authorisation of Notices

Any notice, request, requirement, demand, consent or other communication signed by an officer of a party will be deemed to be duly given and authorised by that party for the purpose of this Licence.

16. CONFLICT

16.1 Application of Act

In the event of any inconsistency between the conditions of this Licence and the Act or Regulation, the Act or Regulation will prevail to the extent of such inconsistency.

16.2 Application of conditions

In the event of any inconsistency between the conditions of this Licence and the Schedules or Annexures, the conditions of this Licence prevail to the extent of such inconsistency.

16.3 Disputes

Where, in respect of any land or part of any land comprised in the Licence Area, which now is or later becomes comprised in another Licence Area, any difference or dispute arises between the Licensees of the respective Licence Areas, the Licensees of the respective Licence Areas or any one or more of them may refer the matter for determination by the Minister. The Minister's determination will be

final.

17. GENERAL

17.1 Stamping of Licence

The Licensee is responsible and liable for the stamping of this Licence by the Office of State Revenue.

17.2 Delays and Waivers

(1) No failure or delay on the part of any party in the execution of any right, power or remedy hereunder will operate as a waiver thereof nor will any exercise of such right, power or remedy preclude any other or further exercise thereof or the exercise of any other right, power or remedy hereunder.

(2) No waiver, whether express or implied, of any breach of any condition of this Licence may be construed as a waiver of any subsequent breach of that or any other condition whether of the same or of a different nature.

17.3 Invalid conditions

If any condition, or any part thereof (in this condition called the "offending condition") in this Licence is for any reason whatsoever declared to be or becomes unenforceable, invalid or illegal, including, but without derogating from the generality of the foregoing, by a decision of any court, an Act of Parliament or any statutory by-law or regulation or any other requirement having the force of law, the remaining conditions of this Licence will remain in full force and effect as if this Licence had been granted without the offending condition appearing therein.

18. VARIATION OF CONDITIONS

The Minister may, with the agreement of the Licensee, vary, suspend or remove any of the conditions to which this Licence is subject, or may include additional conditions.

SCHEDULE 1

DESCRIPTION OF PIPELINE

1. Route

Within NSW, the pipeline will run from the Victorian border south of Bombala, along the Monaro Highway through Cooma to Michelago, then Nowra, Port Kembla, Wollongong and Wilton. It traverses the lands specified on the Licence and shown on the Deposited Plans lodged with the Lands Titles Office.

2. Pipeline system summary

2.1 Pipeline Length

The pipeline is planned to be approximately 467 kilometres in NSW (745 kilometres total).

2.2 Pipeline Diameter, Steel Pipe Specification, Wall Thickness, and Grade

Line pipe will be electric resistance welded (ERW) and in accordance with the API 5L specification. Line pipe sizes will be:

Table 0-1

Location[1]	Diameter (mm)	Grade (kpsi)	Grade (Mpa)	Wall Thickness (mm)	Design Factor (FD)
R1	457	80	551	8.6	0.72
R2, R1 crossing				10.3	0.6
Facilities, R2 crossing, T1, T1 Crossing				12.4	0.5

[1] Locations R1,R2,T1 as defined by AS 2885 clause 4.2.4.4 (no T2 locations on pipeline route)

2.3 Code for Construction, Operating

The pipeline, scraper stations, meter and pressure reduction station and compressor station main gas piping shall be designed in accordance with AS 2885.

2.4 Maximum Allowable Operating Pressure

14.89 Mpa

2.5 Design Capacity

50 petajoules per annum - initial capacity

90 petajoules per annum - ultimate capacity

2.6 Coating Specification

2.6.1 Internal Lining

Line pipe shall be coated with an epoxy paint lining. The cured film thickness is to be approximately 0.04 mm.

2.6.2 Corrosion Protection Coating

All line pipe to be installed below ground will be coated with a tri-laminate coating system comprising:

Fusion Bonded Epoxy	0.15 mm
Epoxy Adhesive	0.125 mm
Polyethylene	1.0 mm

2.6.3 Weight and Protection Coating

Corrosion protection coated line pipe shall be coated with a weight coating or a protective jacket at the following locations:

- At river crossings and wetland areas; a concrete weight coat shall be applied, unless swamp or river weights are used to give a minimum specific gravity of 1.20 for the empty pipeline
- At all bored and directionally drilled crossings
- In areas of ditch rock (see below)

Protective jacket may comprise either: specifying additional corrosion coating thickness, an epoxy concrete polymer such as *powercrete,* or Rock jacket, depending on terrain and installation detail.

In shot blast ditch rock areas and where soil contains 35% or more cobbles or stones one of the following methods shall be used:

- Rock jacket pipe approximately 25mm thick
- Sand padding and shading
- Using a backfill machine such as an *Ozzie Padder*

2.7 Valve Specification

- All in-line pipeline valves shall be API 6D Class 900 weld end ball valves.
- All branch valves (first valve off pipeline) shall be API 6D, Class 900, weld end (pipeline side) ball valves.
- DN150 and greater shall be butt welded to a high strength tee.
- DN100 and less to be socket welded onto a full circumferential saddle.

2.8 Flange and Fitting Specification

- All flanges shall meet ANSI B16.5 Pipe Flanges and Flanged Fittings
- All welded fittings shall meet - Specification for High Test Wrought Butt Welding Fittings, MSS SP-75, 1993 Edition (MSS SP-75),
- All other fittings shall meet - ANSI B16.11 Forged Fittings, Socket Welded and Threaded

2.9 Cathodic Protection Specification

An impressed current cathodic protection (ICCP) system shall be installed to protect all below ground pipework between Longford compressor station and Wilton pressure reduction and meter station.

ICCP system shall include:

- CP potential test points every 2km
- Transformer Rectifier Units (TRU)
- CP current test points
- TRUs located at nearest line break valve or scraper station
- External corrosion coupons located along pipeline:
- At midpoint between TRUs
- At significant change in soil/environmental conditions
- TRUs to be interfaced with SCADA

Owing to the pipeline paralleling power line easements and electrified railway lines, the CP consultant shall undertake a study to determine the mitigation required to protect pipeline against induced voltages and earth fault conditions.

2.10 Above Ground Facilities

2.10.1 Compressor Stations

There shall be one initial dual unit gas turbine powered compressor station at Longford with provision for future compressor station additions at Cann River (Victoria) and Michelago (NSW).

2.10.2 Initial Meter Stations

There shall initially be one meter station at Longford and one at Wilton.

2.10.3 Sales Taps

Within NSW, there shall be provision for fourteen sales tap connections for future gas sales deliveries.

2.10.4 Block Valves

Within NSW, there shall be sixteen line break equipped valves (LBVs) located along the pipeline.

2.10.5 Communications and Telemetry

There shall be complete communication and SCADA systems for operations of the pipeline system.

MINISTRY OF ENERGY AND UTILITIES
NEW SOUTH WALES GOVERNMENT

MINERALS AND ENERGY HOUSE
29-57 CHRISTIE STREET
ST LEONARDS NSW 2065
CORRESPONDENCE: PO BOX 536
ST LEONARDS NSW 1590
DX 3324 ST LEONARDS
TELEPHONE: (02) 9901 8888
FACSIMILE: (02) 9901 8777
INTERNET SITE: http:///www.doe.nsw.gov.au

Mr Mark Landseidal
Duke Energy International
55 Hunter Street
Sydney NSW 2000

File: 11803#7

Dear Mr Landseidal

Eastern Gas Pipeline Project
Instrument of Grant of Variation to Pipeline Licence No. 26

I am pleased to confirm that the Governor of New South Wales granted the variation to Pipeline Licence No. 26 to extend the pipeline from Wilton to Horsley Park on the 21st April 1999. Attached is an original signed "Instrument of grant of Variation to Pipeline Licence Pipelines Act 1967 Licence No. 26" and a copy of "Annexure A Conditions".

In finalising the Environmental Management Plan as required under Annexure A, the following amendments must be addressed or included:

- Results of an eight-part test related to the Western Sydney Shale/Sandstone Transition Forest–Woodland as well as specific consideration of the Transition Forest–Woodland in the Plan, for example, inclusion in Table 3 – *Specific Vegetation Species Management*;
- A commitment (in response to a requirement from the Ministry of Energy and Utilities) that there be no overall adverse effect of the construction or operation of the pipeline on threatened or endangered species or ecological communities;
- Matters raised by Sydney Water (eg, SW letter of 16/3/1999 enclosed);
- A commitment (in response to a requirement from the Ministry of Energy and Utilities) that there be no adverse effect of the construction or operation of the pipeline on Sydney Water's water quality.

You are reminded that construction of the pipeline extension cannot commence until the amended Environmental Management Plan is approved in writing by the Director of the Ministry for Energy and Utilities.

If you have any queries in relation to this matter, you should contact Mr R C Coughlin the Manager, Fuel Supply Branch, Ministry of Energy and Utilities, telephone (02) 9901 8850 or facsimile to (02) 9901 8620.

Yours sincerely,

3 May 1999

for R S W Neil
Acting Director

Encl.

INSTRUMENT OF GRANT OF VARIATION TO PIPELINE LICENCE

PIPELINES ACT 1967

LICENCE No. 26

Duke Eastern Gas Pipeline Pty Ltd (ACN 006 919 115) and DEI Eastern Gas Pipeline Pty Ltd (ACN 068 570 847), having their registered office at 120 Collins Street Melbourne, have applied in accordance with the provisions of section 18 of the *Pipelines Act 1967* (hereinafter called "the Act") and the *Pipeline Regulation 1993* (hereinafter called "the Regulation") for a variation to Licence 26 to extend the pipeline from Wilton to Horsley Park.

This application complies with the provisions of the Act and Regulation and therefore I, the Hon. Gordon Samuels AC, Governor of the State of New South Wales, acting with the advice of the Executive Council, do grant the variation to Licence No. 26.

The lands effected by the variation to the pipeline licence area are indicated on the instrument associated with Deposited Plans 269183 to 269186, lodged at the Land Titles Office, Sydney.

This Variation is granted subject to the requirements of and conditions set forth in Annexure A.

Signed at Sydney, New South Wales this.....21.....day of.....April.....1999.

GOVERNOR
By His Excellency's Command

Minister for Energy

ANNEXURE A

Conditions

The grant of the application for the variation (Variation 1) to Licence No. 26 is subject to the requirements of and conditions set forth in Licence 26 Annexure B dated 12 November 1997, subject to the following amendment:

Delete paragraph (a) of Condition 5.2(1) and replace with the following paragraph:

(a) the Environment Management Plan, incorporating amendments required to take account of the variation to the Licence granted on 21 April 1999 , must be approved in writing by the Director of the Ministry of Energy and Utilities before construction commences.

RECEIVED
05 MAY 2000

New South Wales

MINISTER FOR INFORMATION TECHNOLOGY,
MINISTER FOR ENERGY, MINISTER FOR FORESTRY, AND
MINISTER FOR WESTERN SYDNEY

DITM Ref: D06340
MEU Ref: 00/00294

Mr Michael McDanold
Managing Director Asia Pacific
Duke Energy International
PO Box 7863
BRISBANE QLD 4001

2 MAY 2000

Dear Mr McDanold

Amendment of Pipeline Licence 26 Conditions

I refer to your letter dated 26 January 2000 requesting amendment of Pipeline Licence No. 26 to allow the auditing process to be completed within the first six months of the commencement of operation.

I am pleased to amend the Licence to allow for this. Two copies of the relevant amended pages of the Licence are attached. You are requested to sign and date both copies of the amended pages, and return one copy to the Ministry as a confirmation of your acceptance.

The six month period will commence on the date I grant consent to operate the Eastern Gas Pipeline under section 25 of the *Pipelines Act 1967*. An application for this consent should be made so consent can be granted prior to your commissioning of the pipeline. My administration will continue to liaise with Duke Energy personnel to assist with the successful completion of this phase of the project.

I look forward to the completion of construction of the Eastern Gas Pipeline and the commencement of natural gas supplies from Bass Strait to Sydney.

Yours sincerely

Kim Yeadon MP
Minister for Energy

Level 34 Governor Macquarie Tower
1 Farrer Place, Sydney NSW 2000
Phone (02) 9228 3688 Fax (02) 9228 3801
Email: kim.yeadon@www.nsw.gov.au

(1) The Licensee must review the operation of the pipeline in accordance with Section 4 of AS 2885.3.

(2) The safety and operating plan must provide for such reviews.

6. SAFETY AND OPERATING PLAN

6.1 Lodgement of safety and operating plan

The Licensee must, within six months of the date of the consent to commence operations of the pipeline:

(a) lodge with the Director-General a controlled copy of the safety and operating plan for the pipeline, and

(b) implement that plan.

6.2 Nomination of persons to audit the safety and operating plan

(1) One month prior to the commencement of an audit the Licensee must nominate a person to the Director-General as a person who is:

(a) independent of the Licensee, and

(b) competent to exercise the functions of an auditor under this Licence in respect of its safety and operating plan.

(2) If the Director-General advises a Licensee that a nomination is not accepted or is no longer acceptable:

(a) the nomination ceases to have effect for the purposes of this Licence, and

(b) the Licensee must submit another nomination in its place.

6.3 Initial audit of the safety and operating plan

(1) A safety and operating plan lodged in accordance with condition 6.1 must be accompanied by a certificate from the nominated auditor certifying that:

(a) the plan complies with the relevant requirements of the Pipelines Act, Pipeline Regulations, the Licence and

(b) all measures intended to prevent hazardous events identified in the plan from occurring, and intended to protect operating personnel, plant, equipment, the community and the environment should they occur, are in place, and

(c) there are properly trained and equipped personnel available to implement the plan.

(2) The Licensee is not in breech of condition 6.3 (1) if the Licensee provides a report by the auditor on any safety-related non-compliance with the safety and operating plan, the Act, the Regulation, the licence conditions and relevant standards. The report must include any corrective actions proposed by the Licensee to eliminate identified non-conformances and the proposed implementation period.

Kim Yeadon MP
Minister for Energy
Date: 28/4/00

Michael McDanold
Managing Director Asia Pacific - DEI
Date: 5/5/2000

6.4 Periodical audits of the Safety and Operating Plan

(1) The Licensee must, on the anniversary each year of the consent to operate the pipeline, lodge with the Director-General in respect of the licensed pipelines safety and operating plan:

(a) a certificate from a nominated auditor certifying that:

(i) the measures implemented to prevent hazardous events identified in the plan from occurring, and intended to protect operating personnel, plant, equipment, the community and the environment should they occur, are being maintained, and

(ii) there are properly trained and equipped personnel available to maintain the plan, and

(b) a report by the same auditor reviewing the plan for adequacy and appropriateness having regard to any changes in the pipeline since the previous audit certificate or any non-compliance report was issued.

(2) The Licensee is not in breech of sub condition 6.4 (1) if the Licensee provides a report by the auditor on any safety-related non-compliance with the safety and operating plan, the Act, the Regulation, licence conditions and relevant standards. The report must include any corrective actions proposed by the Licensee to eliminate identified non-conformances and the proposed implementation period

(3) Where a non-compliance report had been prepared for the previous audit, the report required under paragraph 6.4 (1)(b) or condition 6.4 (2) must also specifically address the matters covered in the non-compliance report and indicate whether the corrective actions have been implemented and were effective.

6.5 Availability of safety and operating plans

The Licensee must:

(a) cause a copy of its safety and operating plan to be kept at its principal office, and

(b) cause copies of such of the provisions of the Plan as relate to safety to be made available in such a way that, as far as is practicable, the provisions are brought to the notice of the persons likely to be involved in the implementation of the plan.

6.6 Director-General may direct amendment of safety and operating plans

(1) If the Director-General is of the opinion:

(a) that a safety and operating plan will not produce a safe outcome, or

(b) that its implementation has given rise to, or will give rise to, an unsafe situation,

the Director-General may, by order in writing, direct the Licensee to amend the plan in such a manner as is specified in the order.

(2) The Licensee must comply with any direction under this condition.

Kim Yeadon MP
Minister for Energy
Date: 28/4/00

Michael McDanold
Managing Director Asia Pacific - DEI
Date: 7/7/2000

New South Wales

MINISTER FOR INFORMATION TECHNOLOGY,
MINISTER FOR ENERGY, MINISTER FOR FORESTRY, AND
MINISTER FOR WESTERN SYDNEY

DITM Ref: D12287

Ms Julie Dill
Managing Director, Asia Pacific
Duke Energy International
PO Box 7863
BRISBANE QLD 4001

12 OCT 2001

Dear Ms Dill

PIPELINE LICENCE NO 26 – AMENDMENT OF LICENCE

I am advised that Duke Energy International have not received my letter dated 8 May 2001 approving the changes to Pipeline Licence No 26 for the Eastern Gas Pipeline as requested in its application dated 16 February 2001.

Please find attached a copy of my original letter and two new copies of the revised Schedule 1 – Description of Pipeline. Please sign and date both copies of the revised schedule before returning one copy to Adrian Amey of the Ministry of Energy and Utilities at PO Box 536, St Leonards, NSW 1590. The other copy is for Duke's records.

As stated in my original letter there is no need to amend the address for notices in the licence document as the licence allows for this to be changed by notice in writing. Duke's original application served as notice of the change of address.

I look forward to the continued development of natural gas services to south eastern New South Wales as a result of the Eastern Gas Pipeline.

Yours sincerely

Kim Yeadon MP
Minister for Energy

Level 36 Governor Macquarie Tower
1 Farrer Place, Sydney NSW 2000
Phone (02) 9228 3688 Fax (02) 9228 3801
Email: kim.yeadon@it.nsw.gov.au

SCHEDULE 1
DESCRIPTION OF PIPELINE

1. Route

Within NSW, the pipeline will run from the Victorian border south of Bombala, along the Monaro Highway through Cooma to Michelago, then Nowra, Port Kembla, Wollongong, Wilton to terminate adjacent to the existing city gate station at Horsley Park. It traverses the lands specified on the Licence and shown on the Deposited Plans lodged with the Lands Titles Office.

Two lateral pipelines will be installed, one between the Kembla Grange MLV and Port Kembla, and one between the Horsley Park meter station and Sithe Energy at Smithfield.

2. Pipeline system summary

2.1 Pipeline Length

The Pipeline is approximately 516 kilometres in NSW (796.6 kilometres total).

2.2 Pipeline Diameter, Steel Pipe Specification, Wall Thickness, and Grade

Line pipe is electric resistance welded (ERW) and in accordance with the API 5L specification. Line pipe sizes are:

Location[1]	Diameter	Grade		**Wall Thickness**	**Design Factor**
	(mm OD)	API 5L	MPa	(mm)	(F_d)
R1	457	X70	14.895	9.8	0.72
Increased penetration resistance, Load bearing capacity, fracture control[2], R2	457	X70	14.895	11.8	0.72
Increased penetration resistance, load bearing capacity, fracture control[2], T1	457	X70	14.895	14.1	0.72
Port Kembla and Smithfield Lateral	219	X65	14.895	9.1	0.72

Note 1: Locations R1, R2, T1 as defined by AS 2885
Note 2: Refer to Fracture Control Plan

2.3 Code for Construction, Operating

The pipeline, scraper stations, meter and pressure reduction station and compressor station main gas piping shall be designed in accordance with requirements of AS 2885.

2.4 Maximum Allowable Operating Pressure (MAOP)

14.895 MPa

Note: The pipeline and all pressure containing components up to and including the first offtake valve are to be hydrostatically tested to a minimum pressure of 100% of SMYS. Should the design code in the future permit operation at a design factor of 0.80, a test to this level is expected to be a minimum requirement to permit the pipeline uprating to a MAOP of 16.55 MPa.

2.5 Design Capacity

55 PetaJoules per annum – initial capacity

110 PetaJoules per annum – ultimate capacity

2.6 Coating Specification

All line pipe to be installed below ground will be coated with a fusion bonded epoxy (FBE) coating system comprising 400 micron of FBE applied to prepared steel

The pipeline is not internally lined.

2.6.1 Weight and Protection Coating

Corrosion protection coated line pipe shall be coated with a weight coating or an abrasion-resistant coating at the following locations:

- At river crossings and wetland areas; a concrete weight coat shall be applied, unless swamp or river weights are used to give a minimum specific gravity of 1.20 for the empty pipeline
- At all bored and directionally drilled crossings
- In areas of ditch rock (see below)

Protective jacket may comprise either: specifying additional abrasion resistant polymer coating, or Rock jacket, depending on terrain and installation detail.

2.7 Valve Specification

- All in-line pipeline valves shall be API 6D Class 900 weld end ball valves tested for operation at 16.55 MPa.
- All branch valves (first valve off pipeline) shall be API 6D, Class 900, weld end (pipeline side) ball valves tested for operation at 16.55 MPa or ANSI Class 1500 valves.

2.8 Flange and Fitting Specification

- All flanges shall meet ANSI B16.5 Pipe Flanges and Flanged Fittings or MSS-SP44
- All welded fittings shall meet – Specification for High Test Wrought Butt Welding Fittings, MSS SP-75
- All other fittings shall meet – ANSI B16.11 Forged Fittings, Socket Welded and Threaded

2.9 Cathodic Protection Specification

An impressed current cathodic protection (ICCP) system shall be installed to protect all below ground pipework.

The ICCP shall be designed, constructed, tested and commissioned in accordance with AS 2885, AS 2832. Interference testing shall be completed in accordance with the requirements of the NSW Electrolysis Committee after the system is commissioned.

2.10 Above Ground Facilities

2.10.1 Site List

Significant sites along the pipeline are summarised in the following table:

Site	Pipeline KP	Interval (Km)
Longford Scraper Launcher / Compressor Station	0	0
Bairnsdale MLV	62.3	62.3
Orbost MLV	146.3	84.0
Cann River MLV	226	79.7
Victorian Border	276	
Mila Scraper Station / Future Comp Station	289.7	63.7
Bombala Sales Taps	309.0	
Cooma MLV	393.4	103.7
Michelago MLV/Future Comp Station	458.8	65.4
Molonglo MLV	497.5	38.7
Canberra Offtake	504.1	6.6
Oallen MLV / Scraper Station	562.0	57.9
Nowra MLV	640.2	78.2
Bomaderry MLV	650.7	10.5
Albion Park MLV	691.2	40.5
Kembla Grange MLV / Lateral Offtake	710.6	19.4
O'Briens Gap MLV	716.2	5.6
Appin MLV	750.1	33.9
Menangle MLV	762.6	12.5
Raby Rd MLV	774.3	11.7
Austral MLV	786.0	11.7
Horsley Park Scraper Station / Meter Station	796.6	10.6

2.10.2 Compressor Stations

There shall be one initial gas turbine powered compressor station at Longford with provision for future compressor station additions at Orbost (Victoria) and Mila and Michelago (NSW).

2.10.3 Initial Meter Stations

Metering stations shall be installed at:

- Longford
- Port Kembla
- Horsley Park
- Smithfield

2.10.4 Sales Taps

Within NSW, each MLV and scraper station shall be provided with facilities for connection of a future sales tap. In addition provision will be made as required for identified potential offtakes at Bombala and Yallah.

2.10.4 Block Valves

In rural (R1) locations, the number and location of mainline block valves shall be determined by a study of the isolation requirements of the pipeline for maintenance and operation. Elsewhere the spacing will generally not exceed the maximum nominated by AS ~~2558~~ 2885 for the location class.

Each scraper station will be equipped with an actuated isolation valve.

Each isolation valve will be capable of remote actuation via the project's SCADA system.

2.10.5 Communications and Telemetry

The pipeline shall be equipped with a communication and control system capable of allowing the pipeline to be safely operated from a remote pipeline control centre.

Kim Yeadon MP
Minister for Energy
Date: 11 / 10 / 01

Julie Dill
Managing Director Asia Pacific – DEI
Date: 18 / 10 / 01

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENT

Pipelines Act 1967

VARIATION OF LICENCE TO OPERATE PIPELINE 232

I, the Minister for Energy and Resources for the State of Victoria, hereby give notice in accordance with the provisions of Section 28A(1) of the *Pipelines Act* 1967, that the Licence to Operate a Pipeline 232, owned by **Duke Eastern Gas Pipeline Pty Ltd and DEI Eastern Gas Pipeline Pty Ltd** of **Lot 37, West Dapto Road, Kembla Grange, New South Wales 2526** is varied by:-

DELETION of the expression –

"51X-P1-001 to 51X-P1-002 Revision B."

SUBSTITUTING in lieu the expression –

"51X-P1-001 to 51X-P1-002 Revision B, BPSP-1-M2-303 and 32036-15-005."

Candy Broad
Minister for Energy and Resources

27 / 6 /2001

PIPELINES ACT 1967

INSTRUMENT OF GRANT OF VARIATION TO LICENCE

EASTERN GAS PIPELINE
LICENCE No 26, VARIATION No 7

Jemena Eastern Gas Pipeline (1) Pty Ltd (ABN 15 068 570 847) and Jemena Eastern Gas Pipeline (2) Pty Ltd (ABN 77 006 919 115) having their registered office at 321 Ferntree Gully Road, Mount Waverley Victoria 3149, having been granted a licence under section 14 of the Pipelines Act 1967 (the Act) on 12 November 1997, have applied in accordance with the provisions of section 18 of the Act for a variation to the Licence Area of the pipeline in order to interconnect the Eastern Gas Pipeline to the Wilton Custody Transfer Station on Ashford Road, Wilton.

This application complies with the provisions of the Act and the Pipelines Regulation 2013 and therefore I, Anthony Roberts, Minister for Industry, Resources and Energy do grant Variation No 7 to Pipeline Licence No 26 effective from my signing of this Instrument.

The additional Licence Area of the Pipeline means the lands indicated on Memorandum No AJ274090 lodged and registered with Sydney Office of NSW Land & Property Information.

Signed at Sydney, New South Wales this .....25th..... day of ...MAY.... 2015.

Anthony Roberts MP
Minister for Industry, Resources and Energy

PIPELINES ACT 1967

INSTRUMENT OF GRANT OF VARIATION TO LICENCE

EASTERN GAS PIPELINE
LICENCE No 26, VARIATION No 8

Jemena Eastern Gas Pipeline (1) Pty Ltd (ABN 15 068 570 847) and Jemena Eastern Gas Pipeline (2) Pty Ltd (ABN 77 006 919 115) having their registered office at 321 Ferntree Gully Road, Mount Waverley Victoria 3149, having been granted a licence under section 14 of the Pipelines Act 1967 (the Act) on 12 November 1997, have applied in accordance with the provisions of section 18 of the Act for a variation to the Licence Area of the pipeline in order to provide a second interconnection to the Tallawarra gas pipeline at Yallah.

This application complies with the provisions of the Act and the Pipelines Regulation 2013 and therefore I, Anthony Roberts, Minister for Resources and Energy do grant Variation No 8 to Pipeline Licence No 26 effective from my signing of this Instrument.

The additional Licence Area of the Pipeline means the lands indicated on Registered Survey Plan DP 1139184 lodged and registered with NSW Land & Property Information.

Signed at Sydney, New South Wales this .....25th..... day of ...February... 2015.

Anthony Roberts MP
Minister for Resources and Energy
Special Minister of State

PIPELINES ACT 1967

NOTIFICATION OF VESTING OF LANDS

EASTERN GAS PIPELINE
LICENCE No 26, VARIATION No 8

I, Anthony Roberts, the Minister for Resources and Energy, pursuant to the provisions of section 21 of the Pipelines Act 1967, hereby declare that the lands included in the Licence Area consequent to the grant of Variation No 8 to Pipeline Licence No 26, as described in Schedule 1 hereto, are vested in Jemena Eastern Gas Pipeline (1) Pty Ltd (ABN 15 068 570 847) and Jemena Eastern Gas Pipeline (2) Pty Ltd (ABN 77 006 919 115)for the purposes of and incidental to the operation of the pipeline.

Dated this .....25th..... day of ....February..... 2015.

Anthony Roberts MP
Minister for Resources and Energy
Special Minister of State

SCHEDULE 1

Lands affected by proposed easement for Pipeline

All those lands described in Deposited Plan No DP 1139184 lodged and registered with Land & Property Information.

SCHEDULE A

MODIFICATION 1 – PORT KEMBLA LATERAL LOOPING PIPELINE

TABLE OF CONTENTS

DEFINITIONS **2**

PART A ADMINISTRATIVE CONDITIONS **3**

Obligation to Minimise Harm to the Environment 3
Terms of Consent 3
Limits of Operations 3
Rehabilitation 3
Protection of Public Infrastructure 3
Notification of construction and comissioning 3

PART B ENVIRONMENTAL CONDITIONS **4**

Hazards and Risks 4
Traffic 4
Amenity 4
Soil and Water 5
Contamination 5
Waste 5
Heritage 6
Biodiversity 6
Biodiversity Offsets 6

PART C ENVIRONMENTAL MANAGEMENT AND REPORTING **7**

Construction Environmental Management Plan 7
Notification and Reporting 8

APPENDIX 1: SCHEDULE OF LAND **9**

APPENDIX 2: GENERAL LAYOUT OFTHE PORT KEMBLA LATERAL LOOPING PIPELINE **10**

DEFINITIONS

BDAR	Port Kembla Lateral Looping Project Biodiversity Development Assessment Report (Biosis, 23 September 2020)
CEMP	Construction Environmental Management Plan
Construction	All physical works associated with the Port Kembla Looping Pipeline, including but not limited to demolition and removal of buildings or works, erection or installation of buildings and infrastructure, road upgrades, and the carrying out of works permitted by this consent
Council	Wollongong City Council
Decommissioning	The demolition and/or removal of buildings, infrastructure and works installed for the construction of the Port Kembla Lateral Looping Pipeline and/or rehabilitation of the site corridor
Department	Department of Planning, Industry and Environment
EP&A Act	*Environmental Planning and Assessment Act 1979*
Feasible	Means what is possible and practical in the circumstances
Heritage item	An item as defined under the *Heritage Act 1977* and/or an Aboriginal Object or Aboriginal Place as defined under the *National Parks and Wildlife Act 1974*
Incident	An occurrence or set of circumstances that causes or threatens to cause material harm and which may or may not be or cause a non-compliance
Land	Has the same meaning as the definition of the term in section 1.4 of the EP&A Act
Material harm	Is harm that: • involves actual or potential harm to the health or safety of human beings or to the environment that is not trivial, or • results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding $10,000, (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment)
Minimise	Implement all reasonable and feasible measures to reduce the impacts of the Port Kembla Lateral Looping Pipeline
Minister	Minister for Planning and Public Spaces, or delegate
Mitigation	Activities associated with reducing the impacts of the Port Kembla Lateral Looping Pipeline prior to or during those impacts occurring
Modification Report	The modification report titled *Eastern Gas Pipeline – Port Kembla Lateral Looping Modification Report* dated May 2020, the response to submissions report titled *Port Kembla Looping Lateral Modification Report, Response to Submissions* dated August 2020, and additional information provided in Appendix
Operation	The operation of the Port Kembla Lateral Looping Pipeline, but does not include commissioning, trials of equipment or the use of temporary facilities
POEO Act	*Protection of the Environment Operations Act 1997*
Proponent	Jemena Eastern Gas Pipeline (1) Pty Ltd and Jemena Eastern Gas Pipeline (2) Pty Ltd or any person who seeks to construct and operate the Port Kembla Lateral Looping Pipeline
Port Kembla Lateral Looping Pipeline	The pipeline described in the Modification Report and shown in Appendix 2
Public infrastructure	Linear and related infrastructure that provides services to the general public, such as roads, railways, water supply, drainage, sewerage, gas supply, electricity, telephone, telecommunications, irrigation channels, drainage channels
Reasonable	Means applying judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements
Rehabilitation	The restoration of land disturbed by the Port Kembla Lateral Loop to a satisfactory condition, to ensure it is safe, stable and non-polluting
Secretary	Planning Secretary under the EP&A Act, or nominee
Secretary – Authorising	Secretary with responsibility under the *Pipelines Act 1967*
Site corridor	The area of disturbance for construction activities as identified in the Modification Report
TfNSW	Transport for NSW

PART A ADMINISTRATIVE CONDITIONS

OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT

A1. The Proponent must implement all reasonable and feasible measures to prevent, and if prevention is not reasonable or feasible, minimise any material harm to the environment that may result from the construction, operation, rehabilitation or decommissioning of the Port Kembla Lateral Looping Pipeline,

TERMS OF CONSENT

A2. The Proponent must construct and operate the Port Kembla Lateral Looping Pipeline:
- (a) in accordance with the conditions contained in this Schedule;
- (b) in accordance with all written directions of the Secretary; and
- (c) generally in accordance with the Modification Report.

A3. If there is any inconsistency between the above documents, the most recent document must prevail to the extent of the inconsistency. However, the conditions of this Schedule prevail to the extent of any inconsistency.

A4. The Proponent must comply with any requirement/s of the Secretary arising from the Department's assessment of:
- (a) any strategies, plans or correspondence that are submitted in accordance with this consent;
- (b) any reports, reviews or audits commissioned by the Department regarding compliance with this consent; and
- (c) the implementation of any actions or measures contained in these documents.

LIMITS OF OPERATIONS

A5. The Port Kembla Lateral Looping Pipeline must either be separated with adequate distance to prevent propagation risk with nearby pipelines or other measures must be implemented to prevent the propagation risk.

REHABILITATION

A6. The Proponent must:
- (a) rehabilitate the site corridor progressively, as soon as reasonably practicable following disturbance;
- (b) minimise the disturbance area at any time; and
- (c) employ interim rehabilitation strategies to minimise dust generation, soil erosion and weed incursion on parts of the site corridor that cannot yet be permanently rehabilitated.

PROTECTION OF PUBLIC INFRASTRUCTURE

A7. Unless the Proponent and the applicable authority agree otherwise, the Proponent must:
- (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the construction or operation of the Port Kembla Lateral Looping Pipeline; and
- (b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the construction of the Port Kembla Lateral Looping Pipeline.

NOTIFICATION OF CONSTRUCTION AND COMISSIONING

A8. At least two weeks prior to the commencement of the construction and commissioning of the Port Kembla Lateral Looping Pipeline, the Proponent must notify the Department of the relevant date via the Major Projects Portal.

PART B ENVIRONMENTAL CONDITIONS

HAZARDS AND RISKS

Pre-construction

B1. Prior to the commencement of construction of the Port Kembla Lateral Looping Pipeline, unless otherwise agreed by the Secretary, the Proponent must prepare and submit to the satisfaction of the Secretary a:

(a) Construction safety study that must be consistent with *Australian Standard AS 2885.1, Pipelines – Gas and liquid petroleum* (Part 1: Design and construction), and that specifically addresses all safety measures related to construction, testing and commissioning;

(b) Hazard and operability study for the Port Kembla Lateral Looping Pipeline, that must be consistent with the Department's *Hazardous Industry Planning Advisory Paper No. 8*, 'HAZOP Guidelines' and *Australian Standard AS 2885, Pipelines – Gas and liquid petroleum*, and must be prepared by a suitably qualified, experienced and independent expert; and

(c) Final Hazard Analysis that must be consistent with the Department's Hazardous Industry Planning Advisory Paper No. 6, *'Guidelines for Hazard Analysis'*, and must report on separation distances between the Port Kembla Lateral and the Port Kembla Lateral Looping Pipeline.

B2. The Proponent must operate the Port Kembla Lateral Looping Pipeline in accordance with the approved Construction safety study, Hazard and operability study and Final Hazard Analysis.

Pre-commissioning

B3. Prior to the commencement of commissioning of the Port Kembla Lateral Looping Pipeline, unless otherwise agreed by the Secretary – Authorising, the Proponent must prepare and submit to the satisfaction of the Secretary – Authorising:

(d) an Emergency Plan prepared in accordance with Section 4 of AS 2885.3; and

(e) a Pipeline Management Plan prepared in accordance with AS 2885.3, which must clearly specify all safety related procedures, responsibilities and policies, along with detail of measures to ensure adherence to the procedures.

B4. The Proponent must implement the approved Emergency Plan and Pipeline Management Plan.

Notes:

- *The update of a relevant existing document may satisfy the condition where all the relevant requirements are addressed in the updated document.*

TRAFFIC

Construction Traffic Management Requirements

B5. The Proponent must:

(f) minimise traffic and pedestrian safety issues and disruption to local users of the transport route/s during construction;

(g) maintain all footpaths, roads and utility-related infrastructure in a safe and serviceable condition; and

(h) minimise the traffic noise impacts from the construction of the Port Kembla Looping Pipeline.

AMENITY

Construction hours

B6. Unless otherwise agreed by the Secretary, the Proponent may only undertake construction activities between:

(a) 7 am to 6 pm Monday to Friday;

(b) 8 am to 1 pm Saturdays; and

(c) at no time on Sundays and NSW public holidays

The following activities may be undertaken outside these hours without the approval of the Secretary:

(a) the delivery of materials as requested by the NSW Police Force or other authorities for safety reasons;

(b) emergency work to avoid the loss of life, property and/or material harm to the environment;

(c) where a negotiated agreement has been reached with affected receivers; or

(d) works as approved through the out-of-hours work protocol outlined in the CEMP required by condition C1.

Noise

B7. The Proponent must minimise the noise generated by any construction, upgrading or decommissioning activities in accordance with the best practice requirements outlined in the *Interim Construction Noise Guideline* (DECC, 2009), or its latest version.

Dust

B8. The Proponent must minimise the dust generated during construction of the Port Kembla Lateral Looping Pipeline, including wind-blown and traffic generated dust.

SOIL AND WATER

B9. The Proponent must:

(a) ensure that construction, commissioning and operation of the Port Kembla Lateral Looping Pipeline does not cause any water pollution, as defined under Section 120 of the POEO Act, including the management of surface water runoff, groundwater inflow into construction areas, and use of water for testing and commissioning of the pipeline;

(b) minimise any soil erosion associated with the construction of the Port Kembla Lateral Looping Pipeline in accordance with the relevant requirements in the *Managing Urban Stormwater: Soils and Construction* (Landcom, 2004) manual, or its latest version;

(c) ensure that pipeline construction and installation is undertaken to minimise impacts on watercourses by applying management measures generally in accordance with the guidance series for *Controlled Activities on Waterfront Land* (DPIE Water 2012 or latest versions)

(d) ensure that any construction activities in identified areas of acid sulfate soil risk are carried out in accordance with *Acid Sulfate Soil Manual* (Acid Sulfate Soil Management Advisory Committee, 1998) or its latest version.

Note: Under the *Water Management Act 2000*, the Applicant is required to obtain all necessary water licences if required for the Port Kembla Lateral Looping Pipeline.

CONTAMINATION

B10. The Proponent must ensure the Port Kembla Lateral Looping Pipeline is constructed to minimise the potential for contaminant mobilisation.

B11. An Unexpected Contaminated Land Finds Procedure must be prepared before the commencement of construction and must be followed should unexpected contaminated land (or suspected contaminated land) be excavated or otherwise discovered during construction. This Procedure must be included in the CEMP required by Condition C1.

WASTE

B12. The Proponent must:

(a) minimise the waste generated by the construction of the Port Kembla Lateral Looping Pipeline;

(b) classify all waste generated in accordance with the EPA's *Waste Classification Guidelines 2014* (or its latest version);

(c) store and handle all waste in accordance with its classification;

(d) not receive or dispose of any waste within the site corridor; and

(e) remove all waste from the site corridor as soon as practicable, and ensure it is sent to an appropriately licensed waste facility for disposal.

HERITAGE

Protection of Heritage Items

B13. The Proponent must ensure the construction of the Port Kembla Lateral Looping Pipeline does not cause any direct or indirect impacts on heritage items located outside the approved Port Kembla Lateral Looping Pipeline footprint.

B14. An Unexpected Heritage Finds and Human Remains Procedure must be prepared to manage unexpected heritage finds and human remains in accordance with guidelines and standards published by the Heritage Council of NSW or DPIE EES Group. This Procedure must be included in the CEMP required by Condition C1.

BIODIVERSITY

B15. Construction impacts must be restricted to areas for which biodiversity impacts were assessed in the biodiversity development assessment report (BDAR) and must not encroach into other areas of retained native vegetation and habitat.

Biodiversity Offsets

B16. Prior to the commencement of works for the Port Kembla Lateral Looping Pipeline that would impact on biodiversity values, unless otherwise agreed by the Secretary, the number and classes of ecosystem credits in Table 1 must be retired to offset the residual biodiversity impacts.

B17. Evidence of the retirement of credits in satisfaction of B16 must be provided to the Secretary for approval prior to commencement of works for the Port Kembla Lateral Looping Pipeline that will impact on biodiversity values

Table 1 Ecosystem credits required to be retired – like-for-like

Impacted plan community type	Number of ecosystem credits	IBRA sub-region	Plant community type(s) that can be used to offset the impacts from the development	Requirement for hollow bearing trees
PCT 781 – Freshwater Coastal Wetlands	1	Illawarra	Any Plant Community Type with the below Threatened Ecological Community: • *Coastal Freshwater wetland*	Credit is not required to represent hollow bearing trees
PCT 838 – Illawarra Lowlands Grassy Woodland	20	Illawarra	Any Plant Community Type with the below Threatened Ecological Community: • *Illawarra Lowlands Grassy Woodland*	Credit is not required to represent hollow bearing trees
PCT 1232 – Swamp Oak Floodplain Forest	2	Illawarra	Any Plant Community Type with the below Threatened Ecological Community: • *Swamp Oak Floodplain Forest*	Credit is not required to represent hollow bearing trees

Note: Credits can also be sourced from sub-regions within 100 kilometres of the Port Kembla Lateral Looping Pipeline

PART C ENVIRONMENTAL MANAGEMENT AND REPORTING

CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

C1. Prior to commencing construction, the Applicant must prepare a Construction Environmental Management Plan (CEMP) for the Port Kembla Lateral Looping Pipeline to the satisfaction of the Secretary. This plan must:

(a) be prepared in consultation with Council, Sydney Trains and TfNSW;

(b) identify the statutory approvals that apply to the construction and commissioning of the Port Kembla Lateral Looping Pipeline;

(c) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the Port Kembla Lateral Looping Pipeline;

(d) describe the procedures that would be implemented to:
- keep the local community and relevant agencies informed about the construction and commissioning of the Port Kembla Lateral Looping Pipeline;
- receive, handle, respond to, and record complaints;
- resolve any disputes that may arise;
- respond to any non-compliance; and
- respond to emergencies; and

(e) include:
- the following sub-plans:
  - noise, including an out-of-hours work protocol;
  - air quality;
  - biodiversity;
  - soil and water management;
  - traffic management; and
  - waste.
- a clear plan depicting monitoring to be carried out in relation to the Port Kembla Lateral Looping Pipeline.

C2. The CEMP sub-plans must state how:

(a) the mitigation measures identified in the Modification Report will be implemented; and

(b) the relevant terms of this Schedule will be complied with.

C3. The Biodiversity CEMP sub-plan must:

(a) identify areas of land that are to be retained as outlined in the BDAR; and

(b) identify all measures in the BDAR to mitigate and manage impacts on biodiversity, including performance measures for each measure.

C4. The Traffic Management CEMP sub-plan must:

(a) describe the measures that would be implemented to comply with the transport management requirements in condition B5;

(b) include details of the transport route to be used for all construction and operational traffic;

(c) include details of the likely peak hour vehicle movements including detail of vehicle types and the distribution of the movements on the road network;

(d) include a swept path analysis of entry and exit at all construction access points;

(e) include sight distance plans for all construction access points;

(f) include details of any oversize and over-mass vehicles anticipated for the construction, operation and decommissioning of the Port Kembla Lateral Looping Pipeline; and

(g) include a Driver Code of Conduct

C5. The Proponent must implement the approved CEMP.

NOTIFICATION AND REPORTING

Incident Notification

C6. The Proponent must immediately notify the Department and any other relevant agencies immediately after it becomes aware of an incident. The notification must identify the development (including the development application number and name) and set out the location and nature of the incident.

Non-Compliance Notification

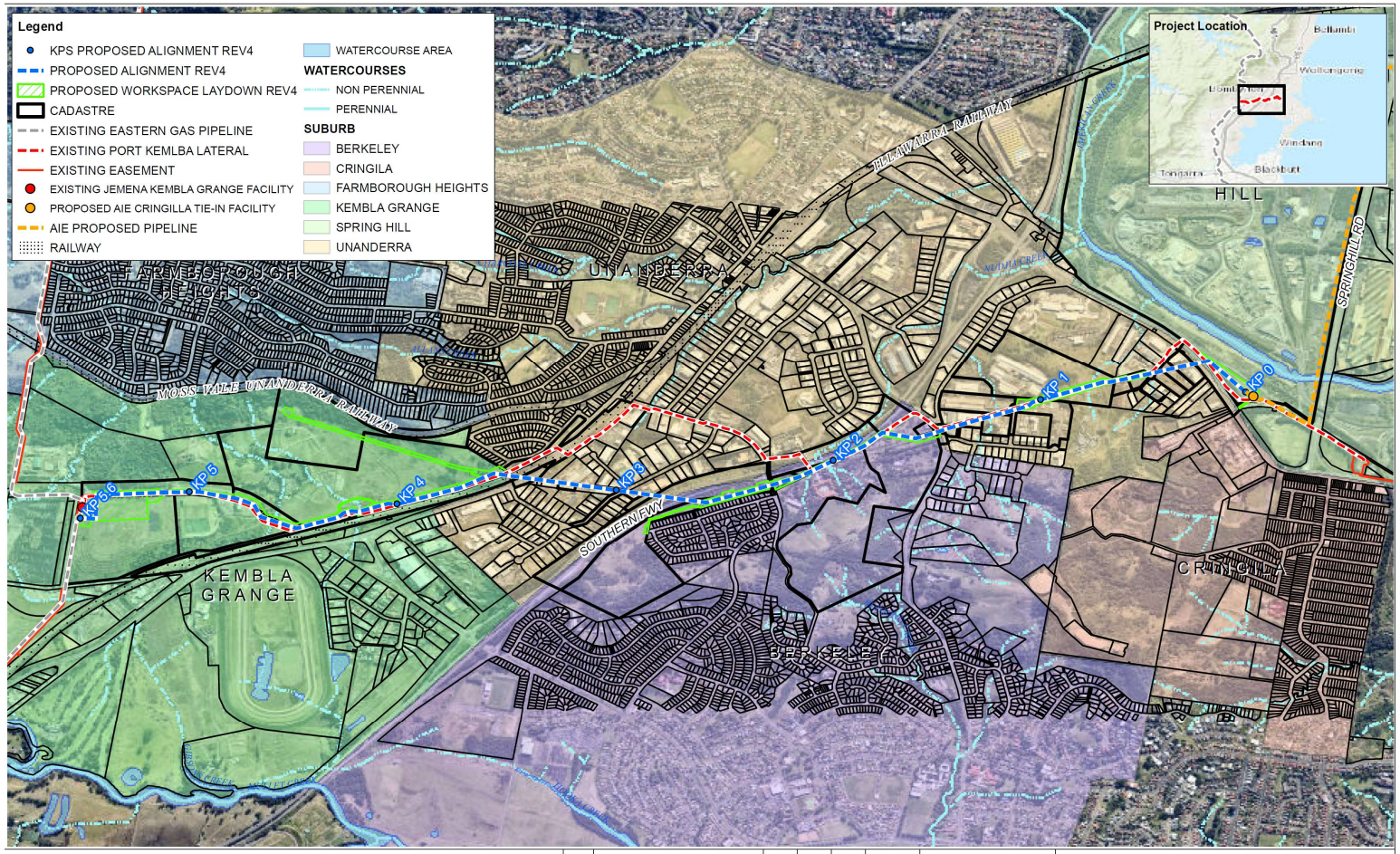
C7. Within seven days of becoming aware of a non-compliance, the Proponent must notify the Department of the non-compliance. The notification must set out the condition of this consent that the development is non-compliant with, why it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.

***Note**: A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.*

APPENDIX 1: SCHEDULE OF LAND

Port Kembla Lateral Looping Pipeline Site Corridor		
Lot	**Plan**	**Parcel type**
2	DP792692	Lot parcel
104	DP617569	Lot parcel
	160058702	Road-road
	107980136	Road-road
	120158009	Rail
44	DP1189256	Lot parcel
2	DP609232	Lot parcel
	107979537	Road-road
114	DP28203	Lot parcel
100	DP713634	Lot parcel
	106735051	Road-road
34	DP217106	Lot parcel
9	DP258635	Lot parcel
	106757181	Road-road
48	DP261816	Lot parcel
	105313605	Road-road
	107201052	Road-road
	154370167	Road-road
	154370169	Road-road
127	DP817646	Lot parcel
	107201051	Road-road
	107999271	Road-road
	106710708	Road-intersection
22	DP1047513	Lot parcel
21	DP1047513	Lot parcel
1	DP1237278	Lot parcel
13	DP813368	Lot parcel
	170908958	Road-road
2	DP1237278	Lot parcel
210	DP811435	Lot parcel
13	DP1126042	Lot parcel
14	DP1126042	Lot parcel
	105653947	Road-road
123	DP837651	Lot parcel
122	DP837651	Lot parcel
	SP76828	Lot parcel
	107201267	Road-road
1	DP606430	Lot parcel
2	DP569201	Lot parcel
4	DP258635	Lot parcel

APPENDIX 2: GENERAL LAYOUT OFTHE PORT KEMBLA LATERAL LOOPING PIPELINE



0 500 1,000 1,500
Metres

Scale: 1:18,000 (at A3)

Coordinate System: GCS GDA 1994
Datum: GDA 1994

N

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, MFTI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community
Native Title Data sourced from National Native Title Tribunal
Department of Aboriginal & Torres Strait Islander

Rev	Description	DRN	CHK	APP	Date
0	Issued for Information Only	RW	ND	JW	12/08/2020

Jemena

Produced by GIS Gas Transmission
Jemena
567 Collins Street
Melbourne VIC 3000

Port Kembla Looping Lateral Project
Overview Map

Map	Doc No	Revision
1 of 1	-	0
Date: 12/08/2020	Map ID: GAS-MAR-MA-PL-008	

\\wprfil122\GIS\Projects\Active Projects\2019_ProjectMarlin\04.Projects\GAS-MAR-MA-PL-008_Marlin_Mod_Response\GAS-MAR-MA-PL-008_Overview_Marlin_Mod.mxd

While every effort was made to ensure the accuracy and currency of the information shown on this map, Jemena does not accept any responsibility for errors or omissions that may have occurred.