

**ACCESS ARRANGEMENT  
INFORMATION  
ROMA BRISBANE PIPELINE**

**(PUBLIC VERSION)**

**6 November 2000**

## **1. INTRODUCTION**

### **1.1 Overview of the Access Arrangement Information**

This Access Arrangement Information has been prepared in accordance with the National Third Party Access Code for Natural Gas Pipelines and the Gas Pipelines Access (Queensland) Act 1998.

Terms used in this Access Arrangement Information have the meanings given to them in the Access Arrangement<sup>1</sup>.

Some confidential or commercial sensitive information has been provided to the Regulator but has been excluded from this document.

### **1.2 Derogation from Access Code**

As contemplated in the Intergovernmental Natural Gas Pipelines Access Agreement dated 7 November 1997, transitional arrangements under the Act permitted the Minister for Mines and Energy to approve a tariff arrangement for the Pipeline<sup>2</sup>. In exercise of that power under the Act, the Minister approved a Tariff Arrangement for the Pipeline.

The approved Tariff Arrangement is taken to be approved under the Gas Pipelines Access Law as the Reference Tariff and Reference Tariff Policy for the Access Arrangement for the Pipeline until the revisions commencement date to this Access Arrangement<sup>3</sup>.

The approved Tariff Arrangement provides that::

“For so long as the Service Provider’s Service Policy consists of the Reference Service described herein, and the Reference Tariff described herein continues to apply to that Reference Service, the Service Provider shall not be required to prepare an Access Arrangement Information in connection with the Access Arrangement under which the Reference Service and Reference Tariff are offered.”

Accordingly, the information required in the following categories set out in Attachment A to the Access Code is not required and only the information required under section 5 of Attachment A is provided in this Access Arrangement Information.

Category 1: Information Regarding Access and Pricing Principles

Category 2: Information Regarding Capital Costs

Category 3: Information Regarding Operations and Maintenance

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<sup>1</sup> Attachment A Schedule A3 and Attachment B

<sup>2</sup> Gas Pipelines Access (Queensland) Act 1998 section 58.

<sup>3</sup> Gas Pipelines Access Act 1998 (Qld) section 58(2)

Category 4: Information Regarding Overheads and Marketing Costs  
Category 6: Information Regarding Key Performance Indicators

### **Background to the Roma Brisbane Pipeline (RBP)**

The RBP transports gas from the gas hub at Wallumbilla, near Roma, in south central Queensland to markets along the pipeline route and markets in Brisbane in south eastern Queensland.

The RBP was constructed to meet the energy needs of south eastern Queensland, particularly the energy needs of the fertiliser industry on Gibson Island.

Construction of the RBP was completed in 1969 and gas was first delivered in March 1969, making Brisbane the first capital city to be supplied with natural gas. The RBP was Australia's first long-distance, onshore, cross-country natural gas pipeline. The RBP has undergone considerable expansion since this time.

### **IMPORTANT NOTICE**

The information contained in this document has been prepared in good faith by the Service Provider for the limited purpose of facilitating the determination of the Access Arrangement application as required under the Code. The information contained in this document should not be relied on for any other purpose. The claims contained in this document in support of the Access Arrangement application have not as yet been accepted by the Regulator.

## 2. INFORMATION REGARDING SYSTEM CAPACITY AND VOLUME ASSUMPTIONS

### General

This section provides details relating to the technical specifications of the RBP. The majority of the RBP has been in service since 17 March 1969. To increase capacity, compression was progressively brought on line between 1981 and 1986. Since 1998, the mainline has been progressively looped.

The 273.1mm (10") 400 kilometre mainline is designed for a maximum operating pressure (MAOP) of 7,136 kPa. The pipeline starts at Wallumbilla (approx 40 kms south of Roma), at Bellbird Park (a western suburb of Brisbane) the diameter of the pipeline is increased to 323.9mm mm (12") diameter and the MAOP is reduced to 4,610 kPa for the remaining 42km through the Brisbane suburbs, terminating at Gibson Island.

The mainline is looped for approximately 288 kilometres with 406.4mm mm (16") and has a design pressure of 9600 kPa.

A summary of technical details associated with the RBP is follows:

### MAINLINE (Wallumbilla to Bellbird Park)

<b>Applicable Code</b>	ASSI B31.8:1967
<b>Maximum allowable operating pressure (MAOP)</b>	7,136 kPa
<b>Steel grades</b>	API 5L X46
<b>Diameter and Wall thickness</b>	273.1mm 4.78mm 273.1mm 5.16mm 273.1mm 6.35mm
<b>Length</b>	400 km
<b>External coating</b>	Over the ditch single tape wrap
<b>Internal coating</b>	Nil
<b>Depth of cover</b>	750mm in private property 1200mm in roads, road reserve and under rail
<b>Concrete slabs</b>	in higher risk areas, introduced post initial construction
<b>Valve coating</b>	Ultra High Build epoxy

## **METRO (Bellbird Park to Gibson island)**

<b>Applicable Code</b>	ASSI B31.8:1967
<b>Maximum allowable operating pressure (MAOP)</b>	4,610 kPa
<b>Steel grades</b>	API 5L X42 and X46
<b>Diameter and Wall thickness</b>	323.9mm    5.16mm 219.1mm    4.78mm
<b>Length</b>	40 km (323.9mm) and 2 km (219.1mm)
<b>External coating</b>	Over the ditch double wrap tape
<b>Internal coating</b>	Nil
<b>Depth of cover</b>	1200mm
<b>Concrete Coating</b>	Oxley Creek, Bulimba Creek introduced post initial construction
<b>Concrete slabs</b>	Various areas, introduced post initial construction
<b>Valve coating</b>	Ultra High Build epoxy

## **LOOPING**

<b>Applicable Code</b>	AS2885.1 – 1987 Stage 1,2 & 3 AS2885.1 – 1997 Stage 4
<b>Design Pressure</b>	9600 kPa
<b>Steel grades</b>	API 5L X60 and X80
<b>Diameter and Wall thickness</b>	406.4mm    6.4mm 406.4mm    6.6mm 406.4mm    7.7mm 406.4mm    7.9mm 406.4mm    9.5mm
<b>Length</b>	288 km
<b>External coating</b>	Extruded high density polyethylene 1.2mm thickness

<b>Internal coating</b>	Nil
<b>Depth of cover</b>	750mm in private property 1200mm in roads, road reserve and under rail
<b>Joint coating</b>	Polyken 943-30 (inner) and 955-20 (outer) tape
<b>Valve coating</b>	Ultra High Build epoxy

- 16 Off-take points on the RBP supply gas to utility distribution systems and major industrial and power generation facilities in south eastern Queensland and the Brisbane metropolitan area.
- There are 4 receipt points into the pipeline, all of which are located at the Wallumbilla hub.
- Customers odorise the gas as required.
- Pipeline markers and cathodic protection test points are at regular intervals along the system.
- 6 compressors are located along the pipeline at Yuleba, Condamine, Kogan, Dalby, Oakey and Gatton.

## 2.2 Map of RBP and Pipe Specification

A map of the RBP Route is attached as Attachment 1.

Pipe sizes, lengths and delivery capability are set out in the tables below:

<b>Pipeline Section</b>	<b>Diameter (mm outside)</b>	<b>Length (km)</b>
• Wallumbilla to Bellbird Park	273.1mm	400
• Bellbird Park to Murarrie	323.9mm	40
• Murarrie to Gibson Island	219.1mm	2
• Between Wallumbilla and Bellbird Park at Various Locations	406.4mm	288

<b>Maximum Delivery Capability</b> (Wallumbilla inlet pressure = 7,100 kPa)	108 TJ/day
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## 2.3 Average Daily and Peak Demands

Estimates for average daily and peak demands for individual delivery points for the calendar year 2000 are shown below<sup>4</sup>.

### IMPORTANT NOTICE

The delivery points in the table below are all single customer delivery points, and consequently the information contained in this table is confidential and commercially sensitive for these customers.

The information in this table has been deleted for the purpose of this document but has been provided to the Regulator.

<b>Pipeline Delivery Point</b>	<b>Annual Volume, Average Daily Flow Rate, Peak Day Flow Rate, Minimum Pressure forecasts for calendar year 2000</b>
<b>Oakey</b> Total Annual Volume (TJ) Average Daily Flow Rate (GJ) Peak Day Flow Rate (GJ) Minimum Delivery Pressure (kPa)	1,500
<b>Toowoomba</b> Total Annual Volume (TJ) Average Daily Flow Rate (GJ) Peak Day Flow Rate (GJ) Minimum Delivery Pressure (kPa)	1,000
<b>Riverview</b> Total Annual Volume (TJ) Average Daily Flow Rate (GJ) Peak Day Flow Rate (GJ) Minimum Delivery Pressure (kPa)	1,500
<b>Ellengrove</b> Total Annual Volume (TJ) Average Daily Flow Rate (GJ) Peak Day Flow Rate (GJ) Minimum Delivery Pressure (kPa)	1,500

<sup>4</sup> Although the Service Provider regards these estimates as appropriate at the present time, the Service Provider cannot and does not make any representation or warranty as to the accuracy of these estimates

<b>Runcorn</b>	
Total Annual Volume (TJ)	
Average Daily Flow Rate (GJ)	
Peak Day Flow Rate (GJ)	
Minimum Delivery Pressure (kPa)	1,500
<b>Mt Gravatt</b>	
Total Annual Volume (TJ)	
Average Daily Flow Rate (GJ)	
Peak Day Flow Rate (GJ)	
Minimum Delivery Pressure (kPa)	1,500
<b>Tingalpa</b>	
Total Annual Volume (TJ)	
Average Daily Flow Rate (GJ)	
Peak Day Flow Rate (GJ)	
Minimum Delivery Pressure (kPa)	1,500
<b>Doboy</b>	
Total Annual Volume (TJ)	
Average Daily Flow Rate (GJ)	
Peak Day Flow Rate (GJ)	
Minimum Delivery Pressure (kPa)	1,500
<b>Redbank</b>	
Total Annual Volume (TJ)	
Average Daily Flow Rate (GJ)	
Peak Day Flow Rate (GJ)	
Minimum Delivery Pressure (kPa)	1,500
<b>Riverview</b>	
Total Annual Volume (TJ)	
Average Daily Flow Rate (GJ)	
Peak Day Flow Rate (GJ)	
Minimum Delivery Pressure (kPa)	1,500
<b>Sandy Creek</b>	
Total Annual Volume (TJ)	
Average Daily Flow Rate (GJ)	
Peak Day Flow Rate (GJ)	
Minimum Delivery Pressure (kPa)	1,500
<b>Brightview</b>	
Total Annual Volume (TJ)	
Average Daily Flow Rate (GJ)	
Peak Day Flow Rate (GJ)	
Minimum Delivery Pressure (kPa)	1,500



<b>Murrarie</b>	
Total Annual Volume (TJ)	
Average Daily Flow Rate (GJ)	
Peak Day Flow Rate (GJ)	1,500
Minimum Delivery Pressure (kPa)	
<b>Gibson Island</b>	
Total Annual Volume (TJ)	
Average Daily Flow Rate (GJ)	
Peak Day Flow Rate (GJ)	1,500
Minimum Delivery Pressure (kPa)	
<b>Oakey Power Station</b>	
Total Annual Volume (TJ)	
Average Daily Flow Rate (GJ)	
Peak Day Flow Rate (GJ)	3,000
Minimum Delivery Pressure (kPa)	

## 2.4 Estimated Load Across Each Pricing Zone

The RBP has over 30 years of operating history, however, recent load growth has been influenced by the demand for gas fired power generation. Consequently the load forecasts are significantly effected by the demands of this relatively new market for gas in south eastern Queensland. The forecasts below are based on the best information available at this time regarding the impact of these loads.

Estimated average daily, peak and total pipeline load for calendar years 1999 – 2004 are set out below<sup>5</sup> (1999 figures are actuals). There is only one pricing zone for the CBP.

Load and Volume <sup>6</sup>	1999 (actual)	2000	2001	2002	2003	2004	2005	2006
Average Daily Load (GJ/D)	75,060	89,400	95,900	103,808	112,739	119,041	120,602	121,795
Peak Load (GJ/D)	95,272	101,900	107,700	147,000	148,500	150,300	151,950	153,350
Annual Volume (TJ)	27,397	32,630	35,020	37,890	41,150	43,450	44,020	44,455

<sup>5</sup> Although the Service Provider regards these estimates as appropriate at the present time, the Service Provider cannot and does not make any representation or warranty as to the accuracy of these estimates.

<sup>6</sup> The RBP currently has a licence allowing up to 118.5 TJ per day. Volumes assumed above this level are conditional on appropriate licences and approvals being obtained.

## 2.5 System Load Profile by Month

The monthly load profile is based on estimated loads for the existing utility market (this market shows a slight seasonal profile) combined with the addition of new power generation loads. As the load on the RBP is expected to have a number of step increases in future years, the load profile is presented in terms of percentages.

<b>Month</b>	<b>% of total Annual Load</b>
January	7.3
February	7.3
March	8.0
April	8.0
May	8.5
June	8.6
July	9.5
August	9.8
September	8.5
October	8.5
November	8.3
December	7.7
<b>Total</b>	<b>100</b>

## 2.6 Numbers of Users on the RBP as at September 2000

Number of Users	6
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# ATTACHMENT 1

## MAP OF RBP PIPELINE ROUTE

