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Issues Paper

To Assist with Submissions on the Proposed Access Arrangement for the Tubridgi Pipeline System

October 1999



1. INTRODUCTION

On 21 October 1999, Boral Energy Resources Ltd (BERL), on behalf of the Tubridgi Parties, submitted a proposed Access Arrangement and Access Arrangement Information for the Tubridgi Pipeline System for approval under the *National Third Party Access Code for Natural Gas Pipeline Systems* (the Code).

The Tubridgi Parties comprise SAGASCO South East Inc. (SAGASCO), Boral Energy Petroleum Pty Ltd, Boral Energy Amadeus NL, Pan Pacific Petroleum NL and Tubridgi Petroleum Pty Ltd.

The Tubridgi Pipeline System consists of the Griffin Pipeline (WA: PL 19) and the Tubridgi Pipeline (WA: PL 16) that are parallel and juxtaposed pipelines extending from the Tubridgi Gas Plant near Onslow WA to the Dampier to Bunbury Natural Gas Pipeline, a distance of approximately 87 km.

The proposed Access Arrangement and Access Arrangement Information documents are available at no cost from the Office of Gas Access Regulation (*OffGAR*) web site (www.offgar.wa.gov.au). Printed copies of the documentation are also available for \$25.00 per set. Requests for the documents can be made to:

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A notice was issued to interested parties and advertisements were published in the *West Australian* and the *Australian* on Wednesday 10 November 1999, advising that the proposed Access Arrangement and Access Arrangement Information had been lodged by BERL.

The notice and advertisements invited public submissions to be lodged with *OffGAR* by 4pm Friday 10 December 1999.

After considering all public submissions, the Western Australian Gas Access Regulator (the Regulator) is required to issue a Draft Decision. The Code requires that if the Regulator proposes to not approve the Access Arrangement, the Draft Decision must state the amendments (or nature of the amendments) which need to be made for it to be approved.

After publication of the Draft Decision, interested parties will be given a further opportunity to make submissions. The closing date for submissions on the Draft Decision will be specified at the time the Draft Decision is released. The Regulator is required to issue a Final Decision on the proposed Access Arrangement after considering these submissions.

The purpose of this issues paper is to:

- list a number of issues that have been identified as relevant to assessing the Access Arrangement and Access Arrangement Information for the Tubridgi Pipeline System; and
- assist interested parties in making submissions on the issues raised in this paper and other relevant issues that they consider should be examined in the assessment of the proposed Access Arrangement.

2. BACKGROUND

2.1 The Pipeline System

The Tubridgi Pipeline System consists of the Griffin Pipeline (WA:PL 19) and the Tubridgi Pipeline (WA:PL 16) owned by the Tubridgi Parties and operated by SAGASCO South East Inc.

2.2 Access Arrangements in Context

The Code, given effect by the *Gas Pipelines Access (WA) Act 1998*, provides for the regulation of access to gas transmission and distribution systems in Western Australia. Service providers of gas pipelines and gas distribution systems covered by the Code are required to submit an Access Arrangement for approval by the Regulator within a specified time.

The purpose of an Access Arrangement is to provide details about the terms and conditions including price upon which an independent third party (user) can gain access to the pipelines.

The Code (sections 3.1 to 3.20) specifies the elements that are required to be included in an Access Arrangement. The central requirement is the specification of one or more reference services for access to the pipeline system. Associated with these reference services are applicable terms and conditions for provision of those services together with reference tariffs, which are in the nature of maximum charges that a pipeline service provider may apply.

A number of other principles and procedures governing access to the transmission system are also required to be included in the Access Arrangement, addressing matters such as queuing for services, capacity trading and extensions/expansions to the pipeline system.

In assessing the proposed Access Arrangement, the Regulator must take into account the matters set out in section 2.24 of the Code, that is:

- the legitimate business interests of the service provider;
- firm and binding contractual obligations of the service provider or other persons (or both) already using the covered pipeline;
- the operational and technical requirements necessary for the safe and reliable operation of the covered pipeline;
- the economically efficient operation of the covered pipeline;
- the public interest, including the public interest in having competition in markets (whether or not in Australia);
- the interests of users and prospective users; and
- any other matters that the Regulator considers are relevant.

It is important to note that the services (and terms and conditions including price) that are described in an Access Arrangement do not necessarily preclude a Service Provider and User from agreeing to the provision of a different service at a different price. In addition, the dispute resolution provisions of section 6 of the Code are available should there be a dispute as to the terms of supply of such other services.

The Regulator may approve an Access Arrangement only if satisfied that the Access Arrangement contains the elements and satisfies the principles set out in sections 3.1 to 3.20 of the Code. An Access Arrangement cannot be rejected on the basis that it does not address a matter that section 3 of the Code does not require it to address. Notwithstanding this, the Regulator has a broad discretion in accepting or rejecting an Access Arrangement.

3 ISSUES FOR CONSIDERATION

As indicated in section 2 of this Issues Paper, the required contents of an Access Arrangement include the following elements:

- a **services policy**, which must include a description of one or more services that the Service Provider will offer to users and prospective users;
- **reference tariffs** and a **reference tariff policy**, including one or more tariffs determined according to the reference tariff principles in section 8 of the Code;
- the **terms and conditions** on which the Service Provider will supply each reference service;
- a **capacity management policy**, incorporating a statement that the covered pipeline is either a contract carriage or market carriage pipeline;
- a **trading policy**, addressing the transfer between persons of rights to obtain a service (on a contract carriage pipeline);
- a **queuing policy**, defining the priority that prospective users have to negotiate for specific capacity;
- an **extensions/expansions policy**, setting out a method for determining whether an extension or expansion to the Covered Pipeline is or is not to be treated as part of the Covered Pipeline for the purposes of the Code; and
- a **review date**, by which revisions to the Access Arrangement must be submitted, and a date by which the revisions are intended to commence.

3.1 Services Policy

Sections 3.1 and 3.2 of the Code require an Access Arrangement to include a services policy which must include a description of one or more services that the service provider will make available to users and prospective users. The policy must contain one or more reference services which are likely to be sought by a significant part of the market, and any service or services that in the Regulator's opinion should be included in the services policy.

To the extent practicable and reasonable, a service provider should make available elements of a service if requested by users and prospective users and apply a separate tariff for each element of such a service.

The Access Arrangement for the Tubridgi Pipeline System makes provision for the following classes of service.

(a) Reference Services

The proposed reference service for the Tubridgi Pipeline System is called the Haulage Reference Service.

Issues for Consideration - Reference Services

- Will the Haulage Reference Service be sought by a significant part of the market?
- Is the proposed Haulage Reference Service likely to be easily understood by users and prospective users?
- Does the proposed Haulage Reference Service impose any unreasonable or unnecessary constraints on users?

(b) Non-Reference Services

In addition to the Haulage Reference Service, the Access Arrangement makes provision for other services (non-reference services) to be offered to users as a Negotiated Service.

Issues for Consideration - Non-Reference Services

- Are non-reference services adequately provided for by the Access Arrangement?

3.2 Trading Policy

Sections 3.9 to 3.11 of the Code set out the requirements of a trading policy. If a pipeline is a contract carriage pipeline (as is proposed for the Tubridgi Pipeline System), the Access Arrangement must include a trading policy, which explains how users may trade their rights to a service with other persons.

The Access Arrangement requires that, in the case of a bare transfer¹, the transferee must notify the service provider, before the transfer takes place, that the transferee wishes to utilise the portion of the contracted quantity and the nature of the contracted quantity subject to the bare transfer.

¹ A bare transfer occurs where a user transfers or assigns all or part of its contracted capacity and the terms of the contract with the Service Provider are not altered as a result of the transfer or assignment.

For other transfers, the Access Arrangement provides for a User to transfer or assign all or part of its contracted capacity with the prior written consent of the service provider. The Access Arrangement provides for the service provider to only withhold consent on reasonable commercial or technical grounds.

Issues for Consideration - Trading Policy

- Does the proposed trading policy adequately provide for Users to trade their rights to obtain services with other persons?
- Are matters of commercial information handled appropriately?
- Are the obligations placed on the parties wishing to trade in rights to a service appropriate and reasonable?
- Is the proposed trading policy likely to facilitate competition?
- Does the policy reasonably balance the interests of the service provider and other parties?

3.3 Queuing Policy

Sections 3.12 to 3.15 of the Code set out the requirements for a queuing policy. An Access Arrangement must include a queuing policy that determines the priority given to users and prospective users for obtaining access to a covered pipeline and for seeking dispute resolution under section 6 of the Code.

The policy must provide sufficient detail to enable users and prospective users to understand in advance how priority will be assigned and, to the extent reasonably possible, accommodate the legitimate business interests of the service provider, users and prospective users, and generate economically efficient outcomes.

The Access Arrangement makes provision for a queue to be established for all applications for services by prospective users. When spare capacity becomes available, that capacity will be progressively offered to each prospective user according to their position in the queue. The position will be determined by the date and time at which each request is received. The exception to this rule is that queued applications for the reference service have priority over access requests for non-reference services.

Issues for Consideration - Queuing Policy

- Does the proposed queuing policy provide sufficient detail for users and prospective users to understand how the queuing policy will operate?
- Does the proposed queuing policy accommodate the legitimate business interests of the service provider, users and prospective users?
- Is the proposed policy consistent with a reasonable balance of interests between the service provider and users?

3.4 Extensions/Expansions Policy

Section 3.16 of the Code requires an Access Arrangement to include an extensions/expansions policy that sets out the method to determine whether any extensions or expansions of the pipeline will be treated as part of the covered pipeline and, if covered, how they will affect reference tariffs.

The Access Arrangement provides for all expansions of capacity and extensions to the Tubridgi Pipeline System to a value of less than \$75,000 to be automatically included as part of the Tubridgi Pipeline System from the time the expansion or extension comes into service. For extensions to the pipeline of value greater than \$75,000, the Access Arrangement provides for the service provider to exercise discretion as to whether the extension comprises a stand-alone pipeline or part of the covered Tubridgi Pipeline System.

Issues for Consideration - Extensions/Expansions Policy

- Does the proposed Access Arrangement adequately specify how extensions and expansions will affect reference tariffs?
- To what extent, if any, would tariffs associated with roll-in likely result in incumbent users subsidising new customers?
- Is the proposed extensions/expansions policy consistent with the minimum requirements of the Code?
- Is the proposed extensions/expansions policy consistent with a reasonable balance of interests between the service provider and users?

3.5 Terms and Conditions Other Than Price

An Access Arrangement must contain the Terms and Conditions applicable to Reference Services (section 3.6 of the Code). The terms and conditions form the

basis of a contract between a user and the service provider for provision of a reference service. The terms and conditions must, in the Regulator's opinion, be reasonable.

The proposed terms and conditions for both reference and non-reference services on the Tubridgi Pipeline System are provided as Annexure B of the Access Arrangement.

Issues for Consideration - Terms and Conditions Other Than Price

- Are the proposed terms and conditions reasonable in the context of the Tubridgi Pipeline System?
- Is the allocation of risk between the service provider and users implied by the terms and conditions consistent with economic efficiency?
- Is the allocation of risk implied by the terms and conditions consistent with proposed charges, including reference tariffs?
- Does the Access Arrangement clearly identify the relevant terms and conditions, and thereby enable a prospective user to be sufficiently well informed before making a specific access request?

3.6 Commencement and Review of an Access Arrangement

(a) Commencement of the Access Arrangement

The Tubridgi Joint Venture Parties have proposed that the commencement date of this Access Arrangement be the date on which the Access Arrangement is approved by the Regulator.

(b) Review of the Access Arrangement

The Code requires an Access Arrangement to include a date by which the Service Provider must submit revisions to the Access Arrangement (the revisions submission date), and the commencement date for those revisions (the revisions commencement date). The Access Arrangement specified a revisions submissions date of 1 January 2004 and a revisions commencement date of 1 July 2004. This implies that the proposed Access Arrangement (and reference tariffs) would remain in place for about 4 ½ years).

The Access Arrangement also makes provision for revisions to the Access Arrangement to be triggered by a demand forecast report to be completed by 31 March 2002.

The choice of the period between tariff reviews involves a trade-off between different efficiency objectives (as outlined in section 3.8(e) of the Code). In addition, the choice of this period has implications for the extent of uncertainty that is faced by market participants.

Issues for Consideration - Commencement & Review of the Access Arrangement

- Does the length of the access arrangement period appropriately balance the need to recognise the rapidly changing nature of the natural gas industry and the uncertainty which arises in such an environment (which favours a short access arrangement period) against the desire to reduce uncertainty created by the regulatory process (which favours a longer access arrangement period)?
- Is the proposed trigger event for a review of the Access Arrangement appropriate?
- Should new or increased taxes, including the goods and services tax, and any costs of regulatory changes be automatically passed on to users or should such events be treated as major events triggering a review of the Access Arrangement?
- Should any other trigger events be included in the Access Arrangement?
- Should any principles upon which an Access Arrangement is based be established as “fixed principles” which extend beyond the revisions date of the Access Arrangement?

3.7 Reference Tariffs

In the setting of reference tariffs, there is a need to strike a balance between the interests of the service provider, users and the broader community.

If an Access Arrangement proposes a reference tariff that is higher than appropriate it:

- may unreasonably discourage downstream uses or consumers of gas; and
- may lead to lower employment and growth opportunities for the State.

If an Access Arrangement proposes a reference tariff that is too low it:

- may risk the long run sustainability of the pipeline service, with revenue cash flows being insufficient to finance needed capital expenditure and maintenance;
- could deter future investment in the gas pipeline industry;
- could deter future investment in both upstream and downstream industries to the extent that both customers and producers are exposed to inadequate service reliability and capacity; and
- could result in lower employment and development opportunities for the downstream industry.

A key objective in setting the reference tariff is to provide the service provider with a stream of revenue sufficient to cover the efficient cost of providing gas transportation services, including a reasonable return on capital investment. A second objective is to encourage efficiency in the provision of pipeline services. Estimating a revenue level and developing a tariff methodology that meets these objectives is central to striking an appropriate balance between the interests of the service provider and users and in promoting competition and efficiency in upstream and downstream markets.

The parameters to the determination of total revenue are:

- the initial capital base and the regulatory rate of return which together provide for an appropriate return on assets;
- expenditure on new capital;
- expenditure on operation and maintenance activities; and
- economic depreciation of assets (return of capital).

(a) Initial Capital Base

The initial capital base for the pipeline will be a major determinant of the revenue to the service provider and tariffs paid by users for both the current and future access arrangement periods.

The Code requires the value assigned to existing assets (the initial Capital Base) to be normally within the range of the Depreciated Actual Cost (DAC) and the Depreciated Optimised Replacement Cost (DORC) (section 8.10 - 8.11 of the Code). In determining a value within the range, consideration should be given to the factors outlined in section 8.10 of the Code including:

- economic efficiency;
- other well recognised methodologies for asset valuation, and the advantages and disadvantages of different methodologies;
- international best practice in comparable situations and the impact on the international competitiveness of energy consuming industries;
- the basis on which tariffs have been set in the past and the historical returns to the asset; and
- the reasonable expectations of persons under the regulatory regime that applied to the pipeline prior to the commencement of the Code;
- the impact on the economically efficient use of gas resources;
- the comparability with the cost structure of new pipelines that may compete with the pipeline in question; and

- the price paid in a recent sale of the asset (and the circumstances of that sale).

Issues for Consideration - Initial Capital Base

- Does the proposed value of the Initial Capital Base meet the requirements of the Code?
- Have the factors in section 8.10 of the Code been adequately considered?
- Have any specific asset valuation methodologies been applied correctly and in accordance with prevailing industry practice?

(b) Regulatory Rate of Return

The regulatory rate of return is the return to be provided on the capital base for the purposes of determining the required revenue.

The Code requires the rate of return to reflect an estimate of the cost of capital (commensurate with prevailing conditions in the market for funds) that is associated with the provision of the regulated services. The Code makes reference to recognised models from finance theory for estimating costs of capital, such as the capital asset pricing model. The Tubridgi Parties have proposed a rate of return set equal to the weighted average cost of capital estimated using the capital asset pricing model.

Issues for Consideration - Regulatory Rate of Return

- Does the proposed rate of return that has been used to derive Reference Tariffs reflect a reasonable estimate of the market-determined cost of capital for the relevant assets?
- Has the capital asset pricing model been applied in an appropriate and consistent manner?
- Have reasonable values been assigned to input variables of the capital asset pricing model (such as estimates of the risk free rate; asset or equity betas; market risk premium; treatment of taxation and dividend imputation etc.)?

(c) New Capital Expenditure

The Code (sections 8.15 to 8.19) permits new capital expenditure to be included in the Capital Base provided that:

- the expenditure represents prudent and efficient investment; and
- the benefits of the investment exceed the costs.

In addition, where reference tariffs are based on a forecast of future capital expenditure there needs to be a reasonable basis for such a forecast.

The Access Arrangement Information for the Tubridgi Pipeline System does not indicate any capital expenditure during the term of the Access arrangement.

Issues for Consideration - New Capital Expenditure

- Is it reasonable for there to be no capital expenditure for the 4½ year term of the access arrangement period?

(d) Operations and Maintenance Expenditure

The Code permits the recovery of forecast operations and maintenance costs, provided that these costs reflect prevailing industry best practice and that there is a reasonable basis for the forecasts.

Issues for Consideration - Operations and Maintenance Expenditure

- Is there a reasonable basis for the forecasts of operating and maintenance costs?
- Do the forecast operations and maintenance costs reflect prevailing industry best practise in the operation of pipelines?

(e) Economic Depreciation of Assets (Return of Capital)

The Tubridgi Joint Venture Parties have proposed accelerated depreciation schedules for groups of assets that form the Tubridgi Pipeline System. The accelerated depreciation is argued to reflect the risk associated with the assets being made redundant when existing gas fields are depleted.

Issues for Consideration - Economic Depreciation of Assets (Return of Capital)

- Is the use of accelerated depreciation appropriate in the context of the Tubridgi Pipeline System and are the proposed depreciation schedules appropriate?
- Are the assumed economic lives of the various assets appropriate?

(f) Incentive Mechanisms

The Code encourages the inclusion in Access Arrangements of mechanisms for providing the service provider with incentives to improve the efficiency of pipeline operation. Incentive mechanisms typically provide for a sharing of the benefits of efficiency gains between the service provider and users both within an access arrangement period (such as through a CPI-X incentive mechanism) and across access arrangement periods.

The Tubridgi Joint Venture Parties have proposed two incentive mechanisms in the Access Arrangement:

- the absence of adjustments to total revenue or tariffs over the access arrangement period, thus allowing the Tubridgi Parties to capture benefits of efficiency gains within the period; and
- a ‘glide path’ approach to the setting of tariffs such that reductions in non-capital costs achieved in one access arrangement period are shared with users over the subsequent access arrangement period.

Issues for Consideration - Regulatory Efficiency Incentives

- Do the proposed incentive mechanisms provide an adequate incentive for the service provider to seek efficiency gains in operation of the pipeline?
- Do the proposed incentive mechanisms provide for a reasonable sharing of the benefits from efficiency gains between the service provider and users?

(g) Methodology for Determining Total Revenue

The Code (section 8.4) requires that the total revenue from operation of the pipeline be calculated by one of three methodologies:

- a cost-of-service methodology;
- a Net Present Value (NPV) methodology; or
- an Internal Rate of Return (IRR) methodology.

Each of these methodologies should deliver the same value of total revenue over the life of the pipeline system if applied correctly.

The Tubridgi Parties utilised the cost-of-service methodology, whereby the total revenue is calculated as equal to the cost of providing all services, with this cost calculated as the sum of a return on the capital base, depreciation of the capital base, and non-capital costs.

Issues for Consideration - Methodology for Determining Total Revenue

- Has the methodology for calculating total revenue been applied correctly?

4 ACCESS ARRANGEMENT INFORMATION

The purpose of the Access Arrangement Information is to permit interested parties to understand the derivation of the “elements” in the proposed Access Arrangement and to form an opinion as to the compliance of the Access Arrangement with provisions of the Code. The term “elements” refers to Reference Tariffs, Reference Services and other minimum requirements as discussed above.

Attachment A to the Code specifies the information that must be included in the Access Arrangement Information. While there is no requirement for the Access Arrangement Information to be approved, the service provider can be asked to provide more information to the public if the Access Arrangement Information does not meet the purposes or minimum requirements set out in the Code. Any person may request the Regulator to consider whether the Access Arrangement Information is sufficient in relation to any particular matter.

While ensuring that sufficient information is available to users and prospective users, the Regulator must not seek information to be disclosed that is unduly harmful to the legitimate business interests of the service provider, users or prospective users.

Issues for Consideration - Information Disclosure

- Is the information disclosed in the Access Arrangement and the Access Arrangement Information sufficient to enable users and prospective users to understand the derivation of the elements in the proposed Access Arrangement?
- Is the information sufficient to allow users and prospective users to form an opinion as to the compliance of the Access Arrangement with the provisions of the Code?
- Are the information requirements listed in Attachment A to the Code adequately addressed? If not, what additional information should be provided, and in what form?

5 MAKING A SUBMISSION

Submissions are invited from all interested parties on the proposed Access Arrangement which must be received by 4pm Friday 10 December 1999, Western Standard Time. *OffGAR* would also appreciate comments on whether the Access Arrangement Information is sufficient for its purpose as described above.

5.1 Confidentiality

In general, all submissions from interested parties will be treated as in the public domain and placed on the *OffGAR* web site. Where an interested party wishes to keep part or all of the contents of a submission confidential, it should indicate these parts clearly. However, where the Regulator considers that the release of this information would not be 'unduly harmful' to the legitimate business interests of any party, the Regulator will return the submission to the party making the submission and provide that party with the option of revising or withdrawing its submission.

5.2 Format for Submissions

Submissions with comments on the proposed Access Arrangement should be in both written and electronic form, preferably in Microsoft Word 6.0 or 97 and addressed to:

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197 St Georges Terrace
PERTH WA 6000
Email: mike_jansen@offgar.wa.gov.au

⇒ Attachment

APPENDIX

Attachment A to the Code

Information Disclosure by a Service Provider to Interested Parties

Pursuant to Section 2.7 the following categories of information must be included in the Access Arrangement Information.

The specific items of information listed under each category are examples of the minimum disclosure requirements applicable to that category but, pursuant to Sections 2.8 and 2.9, the Relevant Regulator may:

- allow some of the information disclosed to be categorised or aggregated; and
- not require some of the specific items of information to be disclosed,

if in the Relevant Regulator's opinion it is necessary in order to ensure the disclosure of the information is not unduly harmful to the legitimate business interests of the Service Provider or a or Prospective User.

Category 1: Information Regarding Access & Pricing Principles

Tariff determination methodology

Cost allocation approach

Incentive structures

Category 2: Information Regarding Capital Costs

Asset values for each pricing zone, service or category of asset

Information as to asset valuation methodologies - historical cost or asset valuation

Assumptions on economic life of asset for depreciation

Depreciation

Accumulated depreciation

Committed capital works and capital investment

Description of nature and justification for planned capital investment

Rates of return - on equity and on debt

Capital structure - debt/equity split assumed

Equity returns assumed - variables used in derivation

Debt costs assumed - variables used in derivation

Category 3: Information Regarding Operations & Maintenance

Fixed versus variable costs

Cost allocation between zones, services or categories of asset & between regulated/unregulated

Wages & Salaries - by pricing zone, service or category of asset

Cost of services by others including rental equipment

Gas used in operations - unaccounted for gas to be separated from compressor fuel

Materials & supply

Property taxes

Category 4: Information Regarding Overheads & Marketing Costs

Total service provider costs at corporate level

Allocation of costs between regulated/unregulated segments

Allocation of costs between particular zones, services or categories of asset

Category 5: Information Regarding System Capacity & Volume Assumptions

Description of system capabilities

Map of piping system - pipe sizes, distances and maximum delivery capability

Average daily and peak demand at "city gates" defined by volume and pressure

Total annual volume delivered - existing term and expected future volumes

Annual volume across each pricing zone, service or category of asset

System load profile by month in each pricing zone, service or category of asset

Total number of customers in each pricing zone, service or category of asset

Category 6: Information Regarding Key Performance Indicators

Industry KPIs used by the Service Provider to justify "reasonably incurred" costs

Service provider's KPIs for each pricing zone, service or category of asset