

# CARPENTARIA GAS PIPELINE

## ACCESS PRINCIPLES

### PUBLIC VERSION

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## 1 Executive Comments

There are a few general items that should be included in an Access Principle:

- a. Mechanism to ensure that there is not over contracting of capacity
- b. Expansion should be controlled by the Regulatory not by the Service Provider
- c. All Negotiated Tariffs should be declared as Regulated Services without declaring the negotiated tariff
- d. Daily Variances should not be subject to a Charge unless excessive
- e. Bundled, delivered gas pricing should not be allowed
- f. More Reference Tariffs rather than less
- g. Earlier Revisions, Major Event Trigger

## 2 General Comments

### CSE Involvement with the Pipeline

CS Energy Limited (CSE) has been taking gas from the Carpentaria Gas Pipeline (CGP) at CSE's Mica Creek Power Station since the CGP was commissioned. CS Energy does not currently have a direct contract with the owners of the CGP;

CSE comments relate to the issues raised in the Issues paper released by the ACCC in November 2000 for the Carpentaria Gas Pipeline Joint Venture for the Ballera to Mount Isa Pipeline.

It is understood that under s.58 of the Gas Pipelines Access (Queensland) Act 1998, which came into effect on 19 May 2000, the Reference Tariffs and Reference Tariff Policy for the CGP Access Arrangement has been determined by the Queensland Minister and cannot be reviewed in the Commission's process.

If the Queensland Third Party Access Regime for Natural Gas Pipelines ("the Queensland Regime") is not certified, CS Energy would like the opportunity to submit further comments.

Many of the comments listed below discuss items that have not been declared as Reference Tariffs. Other comments relate to the Access Arrangement Information.

### Competition

CSE endorses the main reason for the National Access Code in that where competition is not feasible, robust and independent regulation becomes necessary. CS Energy looks forward to competitive pressures on the transportation of gas so that delivered energy can be used successfully in the National Electricity Market and in generating electricity.

CSE considers that it is necessary when implementing a new regulatory regime that care be taken to ensure that existing contractual arrangements are not placed at a competitive disadvantage.

While it did not negotiate its gas transportation contracts directly with the CGPJV, CS Energy is of the belief that the resultant contracts were the result of robust commercial negotiations. However it is possible that if the regulatory regime of the National Gas Code had been in place prior to those negotiations, the commercial terms agreed would have been more favourable to the Users. This particularly applies to the provision of more Reference Tariffs than are included in proposed access arrangements which might have resulted in a lower total average cost of transporting gas for most Users.

### **Pipeline Services**

CS Energy considers that all pipelines should have published services that anticipate future developments. This is especially important for the CGP as it has a long revision period (until 2023). There are many new developments that could impact on the forecast demand and capacity of the pipeline such as new gas fields, third party connecting pipeline lines and laterals, different delivery pressure requirements and hourly demands and a requirement for back haul services.

In addition, the capacity of a pipeline can change over the revision period through the actions of the pipeline owner on the timing and scope of compressor installation, expansion or extension.

### **Essential Service**

CS Energy uses gas from the CGP to generate electricity at Mica Creek Power Station (MCPS). MCPS supplies power to north-west Queensland through an electricity distribution network that is isolated from the coastal grid and as such is the only source of power to the cities of Mt Isa and Cloncurry, as well as a number of major mines.

Electricity is demand driven such that when customers turn on electricity-consuming items, (in mining, manufacturing, homes and offices), electricity is pulled from generating machines that are connected to the network. The use of electricity varies with the time of day and day of the week, ambient changes, manufacturing and mining activities, etc and therefore, it is difficult for a power station to accurately predict the amount of gas that it will use in any hour or day. Further, it is particularly difficult to predict the requirements of an isolated network for an extended period such as the 15 years required by the CGP commercial arrangements to obtain a commercial tariff.

It is much harder for an electricity generator to plan its gas consumption and transportation needs than for the traditional, past pipeline users such a manufacturers or residential customers.

A power station, when it contracts for a Firm Transportation Service, is required to estimate its daily and annual gas transportation requirements. The maximum fuel consumption on a TJ/day basis is calculated based on the maximum MW generation forecast and the gas to electricity conversion efficiency (heat rate) of its generators. But the heat rate varies at times of lower demand because electricity generators run at lower efficiencies at lower loads. This effect is compounded in a situation such is the case at MCPS, where there are a number of different types of generators, which convert gas to electricity at different heat rates. In such a case, the station's fuel use can change by 10 to 15% depending on which generation plant is running. This,

combined with normal demand fluctuations, can regularly change the daily fuel consumption rate by up to 50%.

Gas fired generators consume gas at a much higher rate per hour than past, industrial customers. An electricity generator estimates and then contracts for a Maximum Daily Quantity (MDQ). There are times when its hourly fuel consumption (MHQ) exceeds its average Maximum Hourly Quantity (MHQ), if so contracted. Where pipeline capacity is fully contracted, exceeding an estimated MHQ can reduce the pipeline pressure, even though the power station may not exceed its MDQ. This is because fuel consumption decreases during the off-peak hours of the day.

This demonstrates the importance of ensuring that there is a mechanism in the Access Principles for ensuring that pipeline capacity cannot be over-contracted, if reliable electricity supply is to be maintained.

It is suggested that there should be a different Reference Service – Overrun and Imbalance Policy for a designated “essential service” User.

### **Daily Variance Charges**

It is nearly impossible for a power generator to control the demand that stimulates the gas consumption profile on an hourly or daily basis. A mechanism is required to allow fluctuations in MDQ without incurring additional charges on a formula basis that may not reflect the Service Providers additional costs. Daily variances are unavoidable even by the most diligent of the Users.

Daily Variances Charges should not be allowed unless the Service Provider demonstrates that these variances cause additional costs to the Service Provider.

If the Service Provider seeks to demonstrate that there are additional costs due to excessive daily variance it should be through the use of a formal mechanism established in the Access Policy.

### **Pipeline Pressure**

MCPS is designed to receive gas at a minimum pressure of 3 000kPa, although the minimum inlet pressure of its gas turbines is in the range of 1 800 to 1 900kPa while a minimum gas pipeline pressure of 2 000kPa is theoretically acceptable. However, to maintain the reliability of operation of the power station equipment it is highly desirable for it to be not less than 2 800kPa.

If a Pressure Service were part of the Access Principles this contractual ambiguity would not occur.

When setting the Pressure Service charge, due consideration must be given to the cost related to providing this service as compared to the value to the CGPJV of the increase in pipeline capacity that is also provided by the addition of a compressor station.

Under the proposed Access Principles the Service Provider is not entitled to recover the cost of compression to provide additional capacity but could charge a User for an increase in pressure. Without sufficient documented procedures there would be an opportunity for the Service Provider to stymie the efficient operation of the Pipeline in order to obtain extra revenue.

### **Negotiated Services**

The greater the opportunity for there to be Negotiated Services that differ from the Regulated Service Tariff, the greater the likelihood that future or current Users could suffer competitive disadvantage, depending what is negotiated between the Service Provider and the individual Users. The more Regulated Services that are identified in the Access Principles the less likely that existing or future Users will face a competitive disadvantage.

It is considered that when Negotiated Services are added, they should be reviewed by an independent third party for their impact on the Service Providers forecast revenue that served as the basis of the Regulated Tariffs. They also should be reviewed to check their impact on the ability of the Service Provider to physically provide its Regulated Services.

### **Foundation Customers**

It is important when seeking to develop a new pipeline that Foundation Customers are found. However, there is a potential for the Foundation Customers to capture the bulk of the existing capacity at a more favourable price such that the remaining pipeline capacity is not available at competitive pricing thereby lowering competition in various market areas. In the case of the CGP, the reduced cost available to a Principal Foundation Customer and the other Foundation Customers (\$0.80-0.86/GJ) compared to later potential Users (\$0.96) can not be justified. Similarly the increase in cost formula for Users requiring shorter than a 15 year term disadvantages many smaller potential Users.

### **Profit Sharing Policy**

The intent of the National Gas Code is to promote, in a transparent manner, the most efficient use of a regulated pipeline. Yet, there could be opportunities for a negotiated service to remain confidential while the negotiated price leads to a windfall profit for the Service Provider. At the same time this could give this User a competitive advantage not available to existing contracted Users.

There should be a mechanism, even if the Revisions Period is in the distant future, that allows short term profits to be shared among current Users and the Service Provider.

## **3 Specific Comments**

### **Information Disclosure**

The information disclosed is inadequate to enable Users and Prospective Users to understand the derivation of the elements, because there are no details provided on how it is intended to increase pipeline capacity from either its present 98TJ/day to 175TJ/day or above 175TJ/day.

### **Services Policy**

The provision of the following additional Reference Services is considered to be normal and would assist in the better utilisation of the pipeline.

#### *Pressure Service*

The proposed Access Principles should declare how it will treat requests for pressure above its declared minimum. The Policy should discuss the impact that any pressure

requests could have on all other current and future users. The Policy should also indicate how such Pressure Services could impact on the Queuing Policy and the impact on the timing of any compressor installations or looping and the treatment of Pressure Service costs.

There should be a clearly stated mechanism that allows the provision of a Pressure Service to be priced which takes into consideration the current capacity increase obligations of the CGPJV under the proposed Access Arrangement.

### Back Haul Service

The increased possibility of an alternative supply of gas from Timor Sea being available at the Mt Isa end of the CGP or other gas fields along the CGP makes the requirement for a back haul service likely. Even the possibility of a PNG Townsville to Mt Isa Pipeline could occur before the Revisions Date.

A tariff for Back Haul Services should be provided.

### Interruptible Service

The provision of an interruptible service is considered to be one that would be commonly available on any pipeline, including the CGP. As such there should be a stated Interruptible Tariff.

### Spot Tariff

It should be expected that there could be more gas producers and more gas pipeline users in the next five years than in the past. The more flexible the tariffs the less costly it should be for the end customer. Spot Tariffs should be allowed for as a Regulated Tariff.

### **Terms and Conditions**

The lack of information makes it unclear what detailed terms and conditions will apply to the day-to-day administration issues of the pipeline.

For example, the method to be used by the CGPJV for determining the amount of line pack to be provided is not stated or how the day-to-day administration of line pack is to be effected. This lack of detail creates uncertainty and potential conflict between Users and the CGPJV.

### **Reference Tariffs / Reference Tariff Policy**

Although the Reference Tariff was established under the Approved Tariff Arrangement and is not subject to comment, CS Energy is concerned at the lack of transparency of the arrangements. Without adequate information it creates difficulties for existing and for prospective Users in negotiating with the CGPJV for capacity and other services.

Also of concern is that the Reference Tariff will not be subject to review for another 22 years.

### **Trading Policy**

In order for a User to be able to effectively trade part of its Reserved Capacity, its delivery point or receipt point, its line pack or any other Service, there needs to be a clear mechanism for pricing the trade.

The provision of zonal pricing would assist each User to calculate its cost and benefit for trading a contracted Service to another User. For example, if a firm transportation price was provided for the total pipeline with separate tariffs adjustments for the Cannington and Western Mining delivery points, this would assist in a proper allocation of costs for trading between these delivery points.

As an alternative to zonal pricing, the tariff could be structured to give a Capacity Reservation Charge for a Firm Forward Haul relative to the distance from receipt and delivery points with a separate Throughput Charge based on distance transported.

The less opportunity the Service Provider has to be involved in the decisions by Users to trade between them, the lower the likelihood of conflict arising between the Service Provider and Users. Also trading between Users should not result in the Service Provider receiving additional revenue for no additional costs.

The Service Provider should only be allowed to withhold consent to a trade between Users on reasonable technical grounds and not on commercial grounds.

The trading of a delivery or a receipt point must be subject to a specific test or require a published mechanism as it can have serious effects on other users and the ability of the service provider to meet its physical transportation obligations.

### **Lateral Pricing Policy**

As with the APT owned East Australia Pipeline Limited (EAPL), if a firm transportation price was offered for the main pipeline with a separate tariff for the laterals, it would assist in a proper allocation of costs to the appropriate user or end customer.

Under the proposed access principles the Cannington Lateral is considered part of the CGP. The cost of using this lateral will not be known. Therefore, a third party may not be able to effectively cost the use of this lateral.

### **Prospective Users Queuing Policy**

CS Energy considers that the provisions in the proposed Access Arrangement for queuing to contract services on the CGP needs to be more fully considered.



The proposed Access Arrangements suggest that Firm Transportation Prospective Users will have priority over Negotiated Services Prospective Users. The justification for this proposed policy has not been provided.

CS Energy believes this policy could be detrimental to the efficient operation of the CGP. For example, it is possible that short term interruptible gas contracts over the revisions period could significantly increase the return on equity (ROE) or return of funds employed (ROFE). However, if there were a profit sharing Policy there might be a potential benefit to all Users at the end of the revision period.

A prospective User who is prepared to pay for increased line pressure (and thereby provide earlier increased line capacity), should be able to maintain its position in the queue. As long as the same opportunities for Negotiated Services are available to all potential users, there is no need for the proposed restriction and its removal potentially will lead to a more efficient, effective pipeline.

### **Negotiated Services**

There is a potential that the more opportunity there is for negotiated services that differ from the Regulated Service Tariff the more competitive disadvantage current users may face as the new regulatory regime is implemented, especially if there are few regulated services. A negotiated service might be agreed such that the load factor impact is different to the Regulated Tariff.

Existing users are less likely to face a competitive disadvantage if all Services being provided to date (whether regulated or negotiated) are identified as Services being provided.

All negotiated services should be reviewed by an independent third party for its impact on the forecasted revenue that served as the basis of the Regulated Tariffs and its impact on the ability of the Service Provider to physically provide its Regulated Services.

It is recognised that it is important when seeking to develop, expand or extend a gas pipeline that foundation customers are found. This policy has been identified in the access principles.

However, there is a potential for the foundation customers to capture all existing capacity at a favourable price such that the pipeline is not competitively available for a long period in the future lowering competition in various market areas. This may occur through looping, compression (expansion) and extension.

### **Bundled Prices**

CS Energy considers that when a gas supplier is able to offer a delivered price, inclusive of non-disclosed pipeline transportation cost, it lowers market information

and could lessen market competition. Therefore, offering delivered gas prices inclusive of non-disclosed pipeline transportation costs should be avoided.

Bundled pricing creates a lack of information and economic incentives to improve efficiency. For example, a User may require additional compression with an expectation that it should be supplied in the near term. However, because of some undisclosed gas transportation arrangements, its gas supplier may have a reason not to desire an increase in gas transportation capacity at that time and will therefore not negotiate effectively with the Service Provider.

### **Extension/Expansion Policy**

#### Extension

The term “geographic expansion to the Pipeline” is not defined and therefore it is unclear as to what changes would be required in order for the Service Provider to be compelled to refer the issue to the Regulator.

The Service Provider should not be allowed to choose to extend the Pipeline beyond its present configuration including looping without the Regulator’s approval.

#### Expansion

It is not recommended that the Service Provider be able to determine when it will expand the Pipeline without Regulatory Review. The Service Provider may be able to extract monopoly rents, disrupt the smooth functioning of the Pipeline and cause the ultimate customer financial and/or operational difficulties if it is allowed to be the sole decider of when or how to expand the capacity of the Pipeline.

The proposed arrangements for triggering an expansion in capacity up to 175TJ per day should be stated explicitly to avoid the current situation where MCPS is being required to use distillate to reduce demand on the gas pipeline at times of peak-load and there is no fixed obligation or process for the CGPJV to rectify the situation.

It is understood that CGPJV intends to increase the GCP capacity in stages from its initial 98TJ/day to 175TJ/day by adding compressors progressively at the 5 scraper stations already installed along the pipeline. Each stage will presumably add about 10 to 15TJ/day.

However the proposed Access Principles do not indicate the 5 thresholds levels of contracted MDQ that will trigger the installation of each stage of compression.

The Service Provider should declare the impact of one compressor on the capacity of the Pipeline or the increase in capacity for each of the declared compressors that would be contemplated in setting the overall Revenue targets for the Pipeline. It is desirable that this be incorporated into the Access Principles to stop the possibility of over-contracting of pipeline capacity by the CGPJV based on optimum usage or diversification of maximum loads rather than peak demands.

When setting these threshold quantities, consideration must be given to providing flexibility for the variations in load that can occur at MCPS from the time the threshold is reached until the installation of a compressor station is completed.

Also allowance should be made when setting these threshold levels for worst conditions ie the pipeline capacity with the lowest allowed specific energy fuel, worst pipeline cleanliness factor and highest expected ambient and gas temperatures etc.

It is suggested that if the Queuing Policy has potential customers above the capacity that could be met with the installation of one new compressor then the Service Provider must install new compressors or face a penalty. The Service Provider could appeal to the Regulator to seek a delay.

### **Profit Sharing Policy**

The intent of the National Gas Code is to promote, in a transparent manner, the most efficient regulated pipeline. Yet, there could be opportunities for a negotiated service to remain confidential but the negotiated price leads to a windfall profit for the service provider. At the same time this could give this user a competitive advantage not available to existing contracted users.

There should be a mechanism that allows short-term profits to be shared among current users and the service provider. This may be less of a problem if the RBP and the WBP have separate licences and separate access principles.

### **Length of Contract**

The length of contract should not have an impact on the Regulated Tariff. In many access principles for existing pipelines the minimum term is one year. The shorter the minimum term the more flexible and competitive will be the use of the pipeline.

### **Term and Review**

The term of 22 years is considered to be unrealistically long. Without adequate information having been provided in determining the Regulated Tariffs and Return it is difficult to determine whether there has been a faster increase in contracted capacity than anticipated. However it is suggested that a more equitable situation would be to have a either five year review term or major event trigger for the review. A major event trigger could be a faster take-up of contracted capacity than used to determine the initial Regulated Tariffs. Another major event could be the construction of a lateral to Mt Isa from the proposed Darwin to Moomba Gas Pipeline or the PNG Townsville to Mt Isa Pipeline.

### **MDQ Adjustment for Gross Heating Value**

It is thought that there should not be a need for an adjustment of MDQ by the Service Provider based on a reduction of gross heating value. The inclusion of a Gas Specification and the overriding General Condition requiring gas entering the pipeline to conform to it, unless agreed otherwise by the Service Provider, should be more

than adequate to control both pipeline gas quality and throughput capacity. Across the board reductions in MDQ for all firm capacity Service Users must not be subject to the Service Providers discretionary acceptance of off-specification gas by a single Service User, be it a firm or interruptible Service User.