

Our Ref: 98/1047

Dr Ken Michael  
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Dear Ken

**OFFICE OF ENERGY ADDITIONAL SUBMISSION – PARMELIA PIPELINE**

Thank you for notifying me of the Draft Decision in respect of the Access Arrangement lodged by CMS Gas Transmission Australia (CMS) for the Parmelia Pipeline on 7 May 1999, and for allowing interested parties to respond to that Draft Decision.

As part of your Draft Decision you have not approved the Access Arrangement in its current form and have required CMS to make amendments to the proposed tariffs for gas transportation and the terms for access to the Parmelia Pipeline. The Office of Energy (the OOE) generally agrees with your Draft Decision and with the amendments required to be made by CMS to the proposed terms and conditions, including tariffs, for access to the Parmelia Pipeline.

It is clear that your decision has been made after considering the interests of all stakeholders and the commercial risks faced by CMS. This consideration had included the two submissions made by the OOE in respect of the proposed Access Arrangement and Access Arrangement Information for the Parmelia Pipeline on 14 June 1999 and 8 July 1999 respectively. It is noted that all specific comments made by the OOE in its two submissions have been either directly or indirectly addressed in making the Draft Decisions. It is also noted that the majority of the OOE arguments have been accepted in the Draft Decision and the majority of the OOE concerns have been alleviated by the amendments required to be made by CMS to the proposed Access Arrangement. Substantially, where OOE's comments did not lead to specific required amendments, the relevant arguments and supporting information in the Draft Decision addressing those comments have alleviated the concerns underlying the OOE comments.

The OOE has now considered your Draft Decision and submits the following specific comments in respect of that Draft Decision:

## 1. Rate of Return

With independent advice, you have concluded that the appropriate return on equity for the Parmelia Pipeline should be 12.3%. This together with the cost of debt results in a Weighted Average Cost of Capital (WACC) of 8.3%.

I note from your notice releasing the Draft Decision that you will assess each regulated pipeline on a case by case basis and the decisions for the Parmelia Pipeline would not necessarily apply to other regulated pipelines. Notwithstanding this, given that the Draft Decision in respect of the Access Arrangement for the Parmelia Pipeline is the first Draft Decision issued under the National Access Code in Western Australia, the above WACC may be seen by some parties to set a precedent in this State.

It is not the aim of this submission to assess the validity of the WACC calculated by the Regulator. In addition, in its first submission to the Regulator the OOE provided a specific comment on each of the WACC calculation input variables and another set of detailed comments is not considered necessary. However, the OOE considers it appropriate to comment on at least two of those relevant variables adopted in the Draft Decision, namely the Cost of Debt Margin set at 2% and the asset beta set at 0.6 by the Regulator.

In its proposed Access Arrangement CMS chose 1.20 % as the debt premium above the risk free rate. This is consistent with regulatory decisions on Access Arrangements made by the ACCC, the New South Wales IPART and the Victorian Office of the Regulator General that have accepted debt margins of 1.0 to 1.2 %. In its first submission the OOE did not specifically object to the cost of debt margin chosen by CMS but rather encouraged the Regulator to undertake a review of the debt premium being proposed.

According to the Draft Decision, financial advice obtained by the Regulator from Macquarie Bank Limited suggested that an appropriate cost of debt margin over the risk free rate for the Parmelia Pipeline could be as high as 2.0 to 2.5 %, as opposed to the 1.2 % proposed by CMS. The Regulator considered that the lower bound of the range of values for the debt margin proposed by the adviser (2.0 %) is reasonable for the Parmelia Pipeline.

The financial adviser to the Regulator considered that a higher premium over the risk free rate may be appropriate for the Parmelia Pipeline due to specific risk factors as identified by CMS in the Access Arrangement, including:

- the Dampier to Bunbury Natural Gas Pipeline (DBNGP) is a direct competitor in the gas transmission market;
- the AlintaGas distribution network is a direct competitor in the Perth area gas delivery market;
- the Parmelia Pipeline holds a small fraction of market share in both the gas transmission and gas delivery markets; the Parmelia Pipeline is incapable of competing with the DBNGP because of its relatively small capacity; and

- the currently producing gas fields in the Perth Basin which supply the Parmelia Pipeline are in decline.

The OOE considers that the first three arguments may be immaterial in determining the risk exposure of CMS in respect of the Parmelia Pipeline, given that:

- recent evidence shows that the Perth basin producers and CMS continue to successfully compete for incremental transmission loads in the Perth market against the North West Shelf producers and the services of the DBNGP. A major competitive advantage experienced by the Perth basin producers is their lower transport costs because of the proximity of the Perth basin fields to the Perth market;
- unlike the DBNGP, on which available capacity is utilised and which would need a substantial additional capital investment to provide for spare capacity, the Parmelia Pipeline has spare capacity available;
- the Parmelia Pipeline has access to locations in the Perth metropolitan area not serviced by the DBNGP. This was also argued by the Regulator in its Draft Decision;
- CMS continues to successfully capture new distribution loads and compete for existing AlintaGas distribution loads in the Perth market. This also applies to non-contestable loads due to CMS not being covered by the restrictions that apply to third parties accessing AlintaGas' distribution system for as long as CMS distributes gas produced in the Perth basin;
- it is expected that the Parmelia Pipeline will soon be operationally interconnected with the AlintaGas distribution system and thus the market for gas transported through the Parmelia Pipeline will increase without the need for additional capital investment; and
- CMS expects full utilisation of the pipeline over the access period.

Both CMS and the Regulator's financial adviser have claimed particular uncertainty over the life of gas resources in the Perth Basin. Similarly to the Regulator, the OOE cannot assess the validity of this argument given the lack of ability to accurately assess the gas reserves of the Perth Basin. However, the OOE considers that although this may be a business risk factor specific to the Parmelia Pipeline, there are other factors that would act to mitigate commercial risk for the Parmelia Pipeline from the possible depletion of the current fields operating in the Perth basin, as follows:

- The Perth basin area remains highly prospective both in terms of the current Perth basin producers and potential new market entrants such as Empire Oil and Gas NL. In the case of Empire Oil and Gas NL, for example, further development of extraction technologies appears likely to reduce unit production costs and make the price of gas produced from fields such as Gingin competitive in the Perth market.
- The Regulator has considered it reasonable for the asset life of the Parmelia Pipeline to be its technical life. The Regulator had considered this on the basis that there is a reasonable prospect for continued use of the Parmelia Pipeline even if the Perth

Basin gas reserves are depleted. This use may arise from transport of gas from the Carnarvon Basin via the DBNGP to the locations currently serviced by the Parmelia Pipeline. It should be noted that Carnarvon basin gas is already transported through the Parmelia Pipeline from the DBNGP.

- The proposed storage facility at Mondarra will provide services unique to the Perth market.
- CMS and the Gorgon gas project partner Texaco Australia are investigating the commercial viability of a second pipeline from the Carnarvon basin to Geraldton. The pipeline could duplicate 1,000km of the existing DBNGP and join the Parmelia Pipeline.

It should be noted that the debt margin chosen by the Regulator is inconsistent with the margins used for other Access Arrangements that determined debt premiums of 1.0 to 1.2 % (see comparative table below) and with current determinations for electricity transmission/distribution in Western Australia.

<b>WACC Calculation Input Variable</b>	<b>CMS</b>	<b>OffGAR Draft Decision</b>	<b>ORG/ACCC<sup>i</sup></b>	<b>ACCC<sup>ii</sup></b>	<b>IPART<sup>iii</sup></b>	<b>ELECTR<sup>iv</sup></b>
Real risk free rate (%)	3.9	3.7	3.4	3.44	3.49	*
Nominal risk free rate (%) <sup>1</sup>	6.5	6.3	6.0	5.83	6.35	*
Inflation forecast (%) <sup>2</sup>	2.5	2.5	2.5	2.31	2.76	*
Cost of debt margin over the nominal risk free rate (%)	1.2	2.0	1.2	1.0	0.9-1.1	*
Gearing (debt to equity and debt ratio) (%)	50	60	60	60	60	*
Corporate tax rate (%)	36	36	36	36	36	*
Dividend imputation factor (gamma)	0	50	50	50	30-50	*
Asset beta	1.2	0.6	0.55	0.6	0.4-0.5	*
Equity beta	1.58	1.0	1.2	1.48	0.9-1.1	*
Market risk premium (%)	6.5	6.0	6.0	5.5	5.0-6.0	*
<b>WACC</b>	<b>16.0</b>	<b>8.3</b>	<b>7.75</b>	<b>7.5</b>	<b>7.75</b>	<b>6.87</b>

(i) Victorian final decisions – October 1998

(ii) Draft decision Central West Pipeline – August 1999

(iii) Draft decision AGL – October 1999

(iv) 1999/2000 Price Re-determination for WPC's transmission & distribution – August 1999

\* Information not publicly available

<sup>1</sup> Nominal risk free rate is based on ten year Commonwealth bond rates which vary over time.

<sup>2</sup> Inflation rates are based on forecasts which vary over time.

A second adviser to the Regulator – the Allen Consulting Group, has used CMS' typical value for the debt margin of 1.2%. The OOE notes the advice of the Allen Consulting Group that under the approach to 're-levering' proxy asset betas described in the Draft Decision, changes in the assumed debt margin have a minimal impact on the estimated WACC for a given proxy asset beta. However, it is also noted that the Regulator has chosen the upper limit of the range of asset betas determined by regulators across Australia and a lower asset beta may be appropriate in relation to the Parmelia Pipeline.

As evident from the above table, the ORG/ACCC decision in 1998 used 0.55, and the more recent IPART draft decision for the AGL gas network in NSW uses asset beta in the range of 0.4 to 0.5. Examples additional to the ones shown in the above table of asset betas for comparable listed companies and regulated infrastructure were indicated by the Regulator in his Draft Decision to be in the range of 0.4 to 0.5. As indicated in the Draft Decision the average asset beta for the Australian companies listed in the Draft Decision is about 0.5 and an asset beta of 0.6 would be at the upper end of the range of asset betas that have been adopted by regulators in Australia to date. In addition, generally worldwide asset beta values for gas transmission pipelines are in the range of 0.45 to 0.6. Given the arguments in relation to the Parmelia Pipeline risk levels outlined above lowering the asset beta from 0.6 to 0.55 would appear consistent in the case of this pipeline.

## **2. Review Date**

### *Trigger Mechanism*

Under section 3.17 of the Code in approving a Revisions Submissions Date and Revisions Commencement Date, the Regulator may in making its decision on an Access Arrangement, if it considers it necessary having had regard to the objectives in section 8.1 of the Code, require that specific major events be defined that trigger an obligation on the Service Provider to submit revisions prior to the Revisions Submission Date.

Section 2.28 of the Code allows a Service Provider to propose revisions to an Access Arrangement at any time with no restrictions placed on the Service Provider as to the reasons for proposing revisions. Thus CMS could propose revisions to the Access Arrangement in response to any event CMS, including for example lower sales of Services than forecast. However, notwithstanding the ability of CMS to propose revisions to the Access Arrangement, any proposed revisions are subject to assessment and approval by the Regulator in accordance with provisions of Part 2 of the Code. The Regulator does not have a corresponding power, to seek revisions to an Access Arrangement at any time, but may nominate trigger mechanisms within the Access Arrangement, which can be used to start a review.

In making its Draft Decision, the Regulator gave consideration to whether it was necessary for the Access Arrangement to define specific major events that trigger an obligation on the Service Provider to submit revisions prior to the Revisions Submission Date, in accordance with section 3.17 of the Code. In this regard, the Regulator considered only one specific major event, namely the Federal Government's proposed changes to company taxation, to be relevant.

In its proposed Access Arrangement CMS has projected increases in pipeline throughput to 86 TJ/d for the entire period of the access arrangement, an increase of approximately 187% over current throughput. The Regulator considered this projected throughput to be unsubstantiated and requested amendments to the assumptions of pipeline throughput to provide for a maximum throughput of 60 TJ/d by the end of the Access Arrangement Period. This is despite projected annual throughputs for existing contracts being around 30 TJ/d.

In making its Draft Decision the Regulator accepted a value of the Initial Capital Base of \$62.5 million subject to CMS making a corresponding assumption of growth in throughput to 60 TJ/d in the calculation of Reference Tariffs, and CMS amending the Access Arrangement to include a Redundant Capital Policy that states principles for reduction of the Capital Base at the end of the Access Arrangement Period if the assumed market growth does not materialise.

The Regulator considers that CMS should be provided with the opportunity to expand the market for services on the Parmelia Pipeline and have this reflected in the Capital Base. On the basis of the Initial Capital Base of \$62.5 million and the increase in throughput to 60 TJ/d, the Regulator calculated a Reference Tariff of \$0.55/GJ over the Access Arrangement Period. According to the Draft Decision, information provided by CMS to the Regulator indicates \$0.55/GJ to be the current average tariff for the Parmelia Pipeline.

It is noted that in accordance with the principles established by the Code, CMS used a price path methodology for the determination of Reference Tariffs. Under section 8.3 of the Code Reference Tariffs may be determined by a price path approach, whereby a series of Reference Tariffs are determined in advance for the Access Arrangement Period to follow a path that is forecast to deliver a revenue stream calculated consistently with the principles in section 8 of the Code, but is not adjusted to account for subsequent events until the commencement of the next Access Arrangement Period.

Given the implied uncertainties associated with the throughput forecasts for the Parmelia Pipelines, evidenced by the differences in the Regulator's and CMS' opinion in respect of those forecasts, a trigger mechanism may be warranted based on actual throughput. (For example, the difference in the throughput estimated by the Regulator and CMS for the year 2000 is 46 TJ/d or 115%.) The mechanism would be aimed at preventing windfall gains for CMS in the case of significantly higher throughputs earlier than projected by the Regulator in making his Draft Decision.

The Regulator could consider including a trigger mechanism, which would require the Access Arrangement to be reviewed, if in any one year the throughput of the Parmelia Pipeline was significantly higher than the estimated by the Regulator in making his Draft Determination. The OOE notes, however, that the trigger mechanism should be designed to avoid having adverse effects on CMS' incentives to grow the throughput of the pipeline for the long-term benefits of its customers.

The OOE notes that both the ACCC (in its recent Draft Decision on the Central West Pipeline (NSW)) and IPART (in its recent Draft Decision on the AGL's gas network (NSW)) have required trigger mechanisms based on throughput volumes. Both regulators have required the respective Access Arrangements to be reviewed, if, in any one year, contract market volume forecasts on which reference tariffs are based proved to

be more than 25% inaccurate. The IPART considers that this mechanism leaves sufficient incentive for AGL to grow the NWS gas market in the Access Arrangement period.

The OOE requests that the Regulator consider including a trigger mechanism, which would require the CMS Access Arrangement to be reviewed, if in any one year the throughput of the Parmelia Pipeline was 25% higher than the estimated by the Regulator in making his Draft Determination.

### *Goods and Services Tax*

Section 21.6 of the General Terms and Conditions proposed by CMS as part of its Parmelia Pipeline Access Arrangement provides that if a GST is imposed or measured during the term of a Service Agreement the following applies (amongst other things):

- “notwithstanding any other term or condition set out (in the General Terms and Conditions), CMS is entitled to pass on as part of the Transportation Charges, Quantity Variation Charges, System Use Gas Charges for the Services and any other charges, and recover from the User the amount of any GST levied upon CMS or payable by CMS in respect of the Services supplied under a Service Agreement”; and
- “upon the introduction of a GST, or subsequent GST Rate change, the User and Supplier shall, as soon as possible thereafter endeavour to agree an adjustment to the Transportation Charges, Quantity Variation Charges, System Use Gas Charges, and any other charges to reflect the impact on the net economic benefit derived by CMS from the provision of the Services under a Service Agreement of any contemporaneous or related change in the imposition of any other taxes, imposts or duties levied under legislation of the Commonwealth of Australia or the State of Western Australia which are intended to compensate in whole or in part for the imposition of the GST or GST Rate Change. If CMS and the User are unable to agree an appropriate adjustment within 90 days, either CMS or the User may refer the matter for resolution under part 25”.

In its first submission to the Regulator the OOE commented that given the significance and complexities of the GST, it may be more appropriate for a review and adjustment of charges to be undertaken only with the prior agreement of the Regulator and that the GST should serve as an Access Arrangement review trigger event as provided for under the Code.

In response to this comment the Regulator stated the following in its Draft Decision:

- Section 2.28 of the Code provides for the Service Provider to, at any time, submit to the Regulator proposed revisions to the Access Arrangement. Revisions only come into effect after approval by the Regulator. Consequently the requirements of the Code satisfy concerns raised in the submission in respect of a requirement for prior agreement of the Regulator with revisions of the Access Arrangement; and
- Section 3.17 of the Code provides for the Regulator to require that specific major events be defined that trigger an obligation on the Service Provider to submit

revisions to the Access Arrangement prior to the Revisions Submission Date. This is not considered necessary in respect of the goods and services tax given the relatively short duration of the Access Arrangement and a low likelihood that any matters would arise in association with the goods and services tax that would require revision of the Access Arrangement in the interests of Users. A specified trigger event is not necessary for CMS to propose revisions to the Access Arrangement in order to raise Reference Tariffs to accommodate a goods and services tax.

While the OOE agrees with the first statement, it notes that section 21.6 of the General Terms and Conditions proposed by CMS as part of its Parmelia Pipeline Access Arrangement does not reflect the requirement for prior agreement of the Regulator with revisions of the Access Arrangement. The OOE considers that it is in the interest of the users that section 21.6 is amended to reflect that revisions to any of the charges only come into effect after approval by the Regulator.

### **3. Terms and Conditions**

#### *Measurement*

As part of his Draft Decision the Regulator has required that section 16.3 of the General Terms and Conditions be altered to provide for accuracy ranges of metering equipment to be specified for different flow rates, to state whether specifications of accuracy are based on units of energy or volume, and to provide for statements of accuracy in the same units as are used for billing.

It appears that the above amendment was required on the basis of a technical advice to the Regulator on this issue that most pipeline operators in Australia define ranges of accuracy for different flow rates and specify if the stated accuracy is based on units of energy or volume.

It may be relevant to note that in Western Australia for customers supplied directly from transmission pipelines (i.e. pipelines subject to a Petroleum Pipeline Licence) the margin of metering error is generally negotiated between the customer and the pipeline operator. However, in the case of the DBNGP the requirements prescribing metering accuracy and formerly located in the Gas Transmission Regulations were, after the sale of the pipeline, transferred to the DBNGP Access Manual.

According to the DBNGP Access Manual primary metering equipment must achieve measurement within a maximum uncertainty of +/-1% of actual mass flow rate at a minimum of the 95% confidence level for metering equipment with a design maximum flow rate of 5 TJ/d or greater; and +/-2% of actual mass flow rate at a minimum of the 95% confidence level for metering equipment with a design maximum flow rate of less than 5 TJ/d. In addition, primary metering equipment must achieve measurement within a maximum uncertainty of +/-0.25% of higher heating value at a minimum of the 95% confidence level.



#### 4. Statutory Charges

##### *Quantity Variation Charges*

The OOE notes and supports the Regulator's determination that the Quantity Variation Charges proposed by CMS are unreasonable. The OOE agrees that review and consideration of common practices in the gas transportation industry in respect of such charges assists in assessing their reasonableness. However, an analysis of the costs (opportunity or actual) and benefits addressed by such penalties in light of the capacity and operation specific to this pipeline, together with potential customer usage, would establish a more rational and potentially more reasonable basis for the charges. Such analysis would also help in identifying other related cost-reflective services that the pipeline could offer in light of its particular circumstances.

For instance, such analysis may be able to determine whether, in light of the under-utilised capacity of the pipeline and the desire for inlet and outlet flexibility, penalties for hourly and maximum flow rate overrun are more suitable than penalties for a daily overrun. It may also be able to determine whether a parking service is feasible and is a service sought by a significant part of the market.

Related to the above issues, though it is recognised that an access arrangement for the DBNGP is yet to be submitted to the Regulator, the Regulator may wish to also consider the DBNGP's current arrangements as outlined in its access manual, in particular Sub-chapter 3.5 – Overrun capacity and Sub-chapter 7.4 – Balancing and peaking.

The OOE also requests that the Regulator re-consider the issue raised by AlintaGas, in its submission to the Regulator, related to nominations being the basis for the overrun penalties. In respect of the daily, hourly and maximum flow rates overruns, it would appear that the MDQ or the nomination, whichever is the larger quantity, would be a more reasonable basis for the overrun penalties. It is also noted that the MDQ is the basis for the overrun penalties in the case of other pipelines cited by the Regulator (as presented in the quantity variation charges table on page 141, Part B of the Draft Decision).

I understand that the Office of Gas Access Regulation proposes to hold a seminar on the issues raised in the Regulator's Draft Decision. I expect that relevant officers within the Office of Energy would be amongst the invitees for that seminar, where they will be able to discuss these issues further.

Yours sincerely

LES FARRANT  
**COORDINATOR OF ENERGY**

18 November 1999

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