

Determination on Goldfields Gas Pipeline – Annual Tariff Variation Notice

Submitted by Goldfields Gas Transmission Pty Ltd

30 December 2010

Economic Regulation Authority

 WESTERN AUSTRALIA

A full copy of this document is available from the Economic Regulation Authority website at www.erawa.com.au.

For further information, contact:

Economic Regulation Authority
Perth, Western Australia
Phone: (08) 9213 1900

© Economic Regulation Authority 2010

The copying of this document in whole or part for non-commercial purposes is permitted provided that appropriate acknowledgment is made of the Economic Regulation Authority and the State of Western Australia. Any other copying of this document is not permitted without the express written consent of the Authority.

Contents

DETERMINATION	1
REASONS	2
Code Requirements	2
Proposed Annual Tariff Variation	3
Specification of the reference tariff adjustment mechanism under the Access Arrangement	4
GGT Proposed values for the variation mechanism	6
The Authority's Assessment	7

DETERMINATION

1. On 17 November 2010, Goldfields Gas Transmission Pty Ltd (**GGT**) submitted a notice to vary reference tariffs in accordance with section 5.3(a) of the approved access arrangement for the Goldfields Gas Pipeline (**GGP**). The notice is given to the Economic Regulation Authority (**Authority**) for approval under section 8.3B(b) of the *National Third Party Access Code for Natural Gas Pipeline Systems* (**Code**) for the period 1 January 2011 to 31 March 2011.¹
2. GGT's proposed variation was submitted under the terms of the approved access arrangement that applies to the Goldfields Gas Pipeline for the second access arrangement period (2010 to 2014), which commenced on 20 August 2010.²
3. The Authority has assessed the proposed annual variations to tariff components that will take effect from 1 January 2011 to 31 March 2011 and are in lieu of the CPI adjustment specified in clause 9.8 of the General Terms and Conditions of the approved access arrangement.
4. The Authority considers that the proposed tariff variation does not comply with the provisions of Clause 5.3 and the Reference Tariff Adjustment Mechanism specified in Schedule 1 of the approved amended access arrangement.
5. In accordance with the requirements of section 8.3E of the Code, the Authority gives notice to GGT that it disallows the proposed 2011 tariff variation as it is inconsistent with the approved reference tariff variation method. The Authority has specified the tariff variation that is consistent with the approved reference tariff variation method as set out below.

Tariff	Toll \$/GJ	Capacity Reservation \$/GJ km	Throughput \$/GJ km
1 January 2011 to 31 March 2011	0.245517	0.001461	0.000402

6. The corrected tariff variations are effective from 1 January 2011 in accordance with section 8.3D of the Code. The Authority has accordingly published a notice on its website.³

¹ Goldfields Gas Transmission Pty Ltd, 17 November 2010, Goldfields Gas Pipeline – Annual Tariff Variation Notice under Code section 8.3B.

² Economic Regulation Authority, 2010, Goldfields Gas Pipeline Proposed Revisions to Access Arrangement (hereafter cited as “**amended access arrangement**”). The amended access arrangement was drafted and approved by the Authority on 5 August 2010, with a commencement date of 20 August 2010.

³ Economic Regulation Authority website: http://www.erawa.com.au/2/486/48/price_determina.pm

REASONS

Code Requirements

7. Section 8 of the Code provides for a reference tariff to vary within an access arrangement period only through implementation of the approved reference tariff variation method contained in the approved access arrangement. The service provider must provide a notice to the relevant Regulator providing information required in section 8.3C of the Code, which includes the service provider's proposed variations and the effective date for those variations and an explanation of how the variations proposed are consistent with the approved reference tariff variation method contained in the approved access arrangement.

Approval of reference tariff variations

8.3A A Reference Tariff may vary within an Access Arrangement Period only through implementation of the Approved Reference Tariff Variation Method as provided for in sections 8.3B to 8.3H.

8.3B (a) If a Specified Event occurs the Service Provider must, within the time provided for in the Reference Tariff Policy, provide a notice to the Relevant Regulator containing the information set out in section 8.3C.

(b) If the Service Provider otherwise wishes to vary a Reference Tariff in accordance with the Approved Reference Tariff Variation Method, the Service Provider must provide a notice to the Relevant Regulator containing the information set out in section 8.3C.

8.3C The Service Provider's notice under section 8.3B must contain:

- (a) the Service Provider's proposed variations to the Reference Tariff and the proposed effective date for those variations; and
- (b) an explanation of how the variations proposed are consistent with the Approved Reference Tariff Variation Method contained in the Reference Tariff Policy.

Notwithstanding any other section of the Code, the Relevant Regulator must make public, and must provide the Code Registrar with a copy of, any information provided under paragraphs (a) and (b) above.

8.3D Unless the Relevant Regulator has disallowed the variation under section 8.3E, the Reference Tariff will be varied automatically on and from the later of:

- (a) the date specified in a notice from the Service Provider given in accordance with section 8.3B;
- (b) (i) if the Reference Tariff Policy specifies a minimum notice period for the variation, the expiry of that period after the date of the notice from the Service Provider given in accordance with section 8.3B; or
- (ii) if the Reference Tariff Policy does not specify a minimum notice period for the variation, 35 days after the date of the notice from the Service Provider given in accordance with section 8.3B,

but if, before the end of the relevant period in paragraph (i) or (ii) above, the Relevant Regulator notifies the Service Provider that it requires additional information from the

Service Provider, which the Relevant Regulator has reason to believe may assist the Relevant Regulator to determine whether the variations proposed are consistent with the Approved Reference Tariff Variation Method, the relevant period will be extended by the number of days commencing on the day on which the Relevant Regulator gave notice to the Service Provider and ending on the day on which the Relevant Regulator receives the additional information from the Service Provider.

8.3E The Relevant Regulator may, by notice to the Service Provider before the variation is due to come into effect under section 8.3D, disallow a variation of a Reference Tariff. The Relevant Regulator may disallow a variation only if the Relevant Regulator considers, on reasonable grounds, that the proposed variation is inconsistent with, or not permitted under, the Approved Reference Tariff Variation Method. If the Relevant Regulator disallows a variation because it considers that it is inconsistent with, or not permitted under, the Approved Reference Tariff Variation Method, the Relevant Regulator may specify a variation that is consistent with the Approved Reference Tariff Variation Method. Any such variation comes into effect on the date determined in accordance with section 8.3D.

8.3F The Relevant Regulator must publish its reasons for:

- (a) allowing a variation of a Reference Tariff (including if the variation is allowed because of the effluxion of time under section 8.3D);
- (b) disallowing a variation of a Reference Tariff; or
- (c) specifying any variation specified by the Relevant Regulator under section 8.3E,

at the time of allowing, disallowing or specifying that variation.

8.3G If a Specified Event occurs and the Service Provider does not serve a notice on the Relevant Regulator as required by section 8.3B(a), then the Relevant Regulator may itself vary the Reference Tariff concerned but only in accordance with the Approved Reference Tariff Variation Method. Any such variation comes into effect on the date specified in, or determined in accordance with, the Access Arrangement. The Relevant Regulator must publish its reasons for any variation of the Reference Tariff made under this section 8.3G at the time of making that variation.

8.3H The Relevant Regulator may:

- (a) on application by the Service Provider, grant extensions to any time period in sections 8.3B to 8.3G that applies to the Service Provider; and
- (b) extend any time period in section 8.3G that applies to the Relevant Regulator.

Proposed Annual Tariff Variation

8. Clause 5.3(a) of GGT's approved access arrangement provides that the reference tariff and other charges are not subject to variation or modification during the access arrangement period other than for CPI and other adjustments in accordance with the reference tariff adjustment mechanism as described in Schedule 1 of the approved access arrangement and clause 9.8 of the General Terms and Conditions of the approved access arrangement.
9. On 17 November 2010, GGT notified the Authority that it proposes to vary the reference tariff from 1 January 2011 in accordance with section 8.3B(b) of the Code.

Proposed variations and proposed effective date for variations:

10. GGT proposes that the Reference Tariff (excluding GST) is to be varied as follows:

Tariff	Toll \$/GJ	Capacity Reservation \$/GJ km	Throughput \$/GJ km
1 January 2011 to 31 March 2011	0.246100	0.001472	0.000402

11. The proposed effective date nominated by GGT for the variations is 1 January 2011.
12. GGT stated that, consistent with Schedule 1 of the approved access arrangement, the proposed variation to the Reference Tariff is conducted in lieu of the quarterly CPI adjustment which would otherwise have taken effect from 1 January 2011.

Specification of the reference tariff adjustment mechanism under the Access Arrangement

13. As discussed above, clause 5.3(a) of the approved access arrangement establishes that the reference tariff and other charges are to vary during the access arrangement period only in accordance with the reference tariff adjustment mechanism described in Schedule 1 and clause 9.8 of the General Terms and Conditions of the approved access arrangement. The operation of this mechanism within an access arrangement period is set out in Schedule 1 as follows.

Variation of Reference Tariffs

GGT has adopted a ‘tariff basket price cap’ approach as the manner in which Reference Tariff Components (as described in Clause 5.2(c)(iv)[sic]) ("**Tariff Components**") may vary within this Access Arrangement Period. For GGT, this formula applies as some tariffs are specified as a price per "TJkm". In this case the tariff components would apply for a given number of TJ capacity reservation to an outlet that is a given number of km from the Inlet Facilities.

GGT will vary Tariff Components annually in accordance with the process described below. Subject to the limit on the varied Tariff Components and the limitation on movement of the weighted average price basket described below, GGT may in its discretion vary any Tariff Component for each Variation Year.

The following adjustments relate to tariff changes effective 1 January of each year and are conducted in lieu of the CPI adjustment specified in clause 9.8 of the General Terms and Conditions:

Limit on movement of the weighted average price basket and varied Tariff Components

For each January tariff change, the limitation on movement of the January-on-January weighted average price basket is determined as follows:

$$\frac{\sum_{j=1}^m p_t^{ij} * q_{t-2}^{ij}}{\sum_{j=1}^m p_{t-1}^{ij} * q_{t-2}^{ij}}, i = 1, \dots, n \leq \frac{SepCPI_{t-1}}{SepCPI_{t-2}} * (1-x) * (1+R_t) \quad \text{[Formula 1]}$$

And, subject to the limitation on movement of the weighted average price basket, a Tariff Component variation must be in accordance with the following:

$$p_t^{ij} \leq p_{t-1}^{ij} * \frac{SepCPI_{t-1}}{SepCPI_{t-2}} * (1-x) * (1+R_t) * (1+Y) \quad [\text{Formula 2}]$$

where:

p_t^{ij} is the proposed value for Tariff Component j of Reference Tariff i in calendar Year t;

p_{t-1}^{ij} is the value for Tariff Component j of Reference Tariff i in calendar Year t-1;

q_{t-2}^{ij} is the quantity of Tariff Component j of Reference Tariff i that was sold in Year t-2;

x is $\frac{R}{100}$

R has the meaning in clause 9.8 of the General Terms and Conditions;

Y is positive 0.02;

R_t is the Regulatory Costs factor for calendar Year t and is calculated in accordance with the process described below;

$SepCPI_{t-1}$ is the September quarter CPI for Year t-1;

$SepCPI_{t-2}$ is the September quarter CPI for Year t-2; and

t is the Variation Year.

The Regulatory Costs factor R_t is calculated as follows:

(a) for Variation Year 2011:

$$R_t = \frac{1 + \frac{Drc_{t-1} * (1 + WACC)}{Rrev_t}}{1} - 1$$

(b) for each Variation Year other than 2011:

$$R_t = \frac{1 + \frac{Drc_{t-1} * (1 + WACC)}{Rrev_t}}{1 + \frac{Drc_{t-2} * (1 + WACC)}{Rrev_{t-1}}} - 1$$

where:

Drc_{t-1} is the actual Regulatory Costs minus the forecast Regulatory Costs for Year t-1, and is calculated as follows:

$$Drc_{t-1} = (Arc_{t-1} - Frc_{t-1})$$

where:

Arc_{t-1} is the actual Regulatory Costs for Year t-1;

Frc_{t-1} is the forecast Regulatory Costs for Year t-1; and

Drc_{t-2} is the actual Regulatory Costs minus the forecast Regulatory Costs for Year t-2 and is calculated as follows:

$$Drc_{t-2} = (Arc_{t-2} - Frc_{t-2})$$

where:

Arc_{t-2} is the actual Regulatory Costs for Year t-2;

Frc_{t-2} is the forecast Regulatory Costs for Year t-2;

$WACC$	is the nominal pre-tax Weighted Average Cost of Capital used in the determination of the Total Revenue;
$Rrev_t$	is the Total Revenue applicable to the Covered Pipeline for Year t ;
$Rrev_{t-1}$	is the Total Revenue applicable to the Covered Pipeline for Year $t-1$;
$Rrev_{t-2}$	is the Total Revenue applicable to the Covered Pipeline for Year $t-2$; and
Drc_{t-1}, Drc_{t-2}	are each subject to a “deadband” materiality threshold of plus or minus 0.5% of Total Revenue for the Covered Pipeline for the relevant year.

GGT’s Regulatory Costs are defined as:

For the purpose of this Tariff Adjustment Mechanism, **Regulatory Costs** means a cost connected to or associated with:

- (a) GGT’s compliance with new or revised requirements or procedures under the *Petroleum Pipelines Act 1969*, Pipeline Licence 24, the *Energy Coordination Act 1994 (WA)*, the *Gas Standards Act 1972 (WA)*, the *Energy Operators (Powers) Act 1979*, *Environmental Protection Act 1986 (WA)* and all other applicable laws which affect the operation of the Covered Pipeline or the provision of Services;
- (b) GGT’s participation in regulatory policy or regulatory reform consultation processes;
- (c) the pro rata portion of the Emissions Costs;
- (d) changes to the GGP Act, GGP Agreement, *Gas Pipelines Access (Western Australia) Act 1998 (WA)*, the Code or the *Economic Regulation Authority Act 2003 (WA)*;
- (e) the introduction of new or revised requirements under the Code which are more complex or extensive than those applying at 31 December 2008 including the introduction of the *National Gas Access (Western Australia) Act 2008*; and
- (f) participating in legal proceedings before a Court, tribunal, arbitrator or other body of competent jurisdiction relating to this Access Arrangement or revisions (or proposed revisions) thereto.

GGT Proposed values for the variation mechanism

14. GGT has set out its application of Schedule 1 of the approved access arrangement which is replicated in Attachment 1.
15. In its notice GGT has claimed that its proposed variations are consistent with the approved reference tariff variation mechanism. GGT provided a spreadsheet it claimed demonstrated the proposed reference tariff is within the limitation on movement of the January-on-January weighted average price basket. It considered the proposed tariff component variation was within the permitted range; and each variable used in calculating the varied reference tariff has been established in accordance with the relevant formulae and definitions in Schedule 1 of the access arrangement.
16. GGT provided a separate confidential document with supporting information regarding the 1 January 2011 variation to the reference tariff. The supporting information included the schedule of variables used in calculating the varied reference tariff, the amount of forecast regulatory costs for 2010 (Frc_{t-1}), details of amounts falling under paragraph (b) of the definition of “Regulatory Costs” and details of amounts falling under paragraph (f) of the definition of “Regulatory Costs. The schedule of variables is shown in Attachment 1.
17. GGT has calculated the actual total regulatory costs for 2010 (Arc_{t-1}) (as defined in Schedule 1 of the approved access arrangement) to be \$1,155,781, comprising of

costs connected to or associated with categories (b) and (f) of defined regulatory costs in Schedule 1, being:

- (b) *GGT's participation in regulatory policy or regulatory reform consultation processes; and*
- (f) *participating in legal proceedings before a Court, tribunal, arbitrator or other body of competent jurisdiction relating to this Access Arrangement or revisions (or proposed revisions) thereto.*

18. Category (b) costs are claimed to total \$156,762 and category (f) costs are claimed to total \$999,020.⁴

The Authority's Assessment

19. On 25 November 2010 the Authority requested further supporting information from GGT to assist it in determining whether and to what extent the costs claimed met the definition of each of the above cost categories, i.e. (b) and (f) of Schedule 1.
20. GGT responded to the Authority's request for further supporting information on 3 December 2010 by providing detailed information regarding the calculation of the claimed regulatory costs for each category.
21. GGT has stated that the approved access arrangement does not include any amount in relation to "Regulatory Costs" as defined in Schedule 1 of the access arrangement and has accordingly claimed the value for the variable Frc_{t-1} to be nil.
22. However, the Authority is cognisant that it approved forecast regulatory costs as part of its assessment of proposed revisions to the GGP access arrangement for the period 2010 to 2014. These values included regulatory costs totalling \$853,000 for 2010.
23. GGT has claimed such costs are business as usual regulatory activities in relation to the operation and scheduled revisions to the 2010 to 2014 access arrangement which it states includes:⁵
 - finalisation of the process for approval by the Authority of a revised Access Arrangement for 2010-2014;
 - internal and external costs of the preparation and establishment of revisions to the Access Arrangement, including participating in the approval process through the approval by the Authority of a revised access arrangement for 2014-2019; and
 - compliance with obligations under the National Gas Access Act (WA) 2009 as in force at 1 January 2010 (e.g. preparation of regulatory accounts, routine regulatory reporting obligations).
24. GGT claims that despite the use of the term "regulatory costs" the above mentioned activities are not covered by the definition of "Regulatory Costs" in Schedule 1 of

⁴ GGT has advised that the total of these two costs varies due rounding.

⁵ GGT Letter 17 November 2010, Confidential Supporting Information, section 2, p. 4.

- the approved access arrangement. GGT states the amount calculated as the Actual Regulatory Costs (Arc_{t-1}) does not include the costs of any of these activities.
25. The Authority has assessed the information provided by GGT, including the additional supporting information.
 26. The Authority has identified a number of concerns with the application of the reference tariff variation mechanism. These are discussed below.
 27. The existence of two cost categories with the same name is problematic and has caused the Authority to examine whether the formulae of Schedule 1 remain valid.
 28. GGT in stating that Frc_{t-1} should be nil renders this variable in the set of Schedule 1 equations for the regulatory cost factor R_t irrelevant, as Drc_{t-1} will always be equal to Arc_{t-1} in the equation $Drc_{t-1} = (Arc_{t-1} - Frc_{t-1})$, which is used to determine the regulatory cost factor.
 29. This of itself is not problematic for the tariff variation mechanism but it does contribute to the Authority's concern about the interpretation of regulatory costs that should be included for purpose of Schedule 1 reference tariff variations.
 30. In excluding "business as usual" regulatory costs from the reference tariff variation calculation, GGT has sought to distinguish some costs it has incurred during the Authority's assessment of the proposed revisions to the GGP access arrangement for the period 2010 to 2014.
 31. Following an examination of the nature of the costs GGT has sought to differentiate for the purpose of calculating the actual regulatory costs for 2010, i.e. for the variable, Arc_{t-1} , the Authority considers some of the costs that have been included in this variable should be considered "... *external costs of the preparation and establishment of revisions to the Access Arrangement*" and therefore should be excluded when determining the variable, Arc_{t-1} . The Authority is of this view despite GGT's argument that a significant proportion of these regulatory costs are costs "*connected to or associated with*" "*(f) participating in legal proceedings before a Court, tribunal, arbitrator or other body of competent jurisdiction relating to this Access Arrangement or revisions (or proposed revisions) thereto (Legal Proceedings)*".⁶
 32. The Authority considers that all costs incurred prior to the lodgement by GGT of its final submission during the Authority's assessment of the proposed revisions for the access arrangement period 2010 to 2014 are "*costs of the preparation and establishment of revisions to the Access Arrangement*", despite such costs arguably being able to be considered as being connected to or associated with Legal Proceedings. Accordingly, these costs are business as usual regulatory costs and are not solely costs connected to or associated with Legal Proceedings.
 33. An access arrangement is comprised of a series of interrelated elements and any element is capable of being appealed. Distinguishing regulatory costs incurred during the process of assessing proposed revisions on the basis that they are related to matters likely to be appealed is, in the Authority's view, speculative as all

⁶ Approved revisions to the GGP access arrangement: Schedule 1, definition of regulatory costs, p.20.

matters are considered by the regulator during its assessment of whether a service provider's proposed revisions to an access arrangement comply with the Code.

34. The Authority considers that differentiating regulatory costs on the basis that they relate to specific grounds of appeal at the conclusion of a regulator's assessment is not consistent with the holistic nature of the considerations of a regulator in weighing all relevant matters when approving an access arrangement. To do so would be inconsistent with the established application of the Code. The Authority considers that the efficient cost of obtaining legal advice during an assessment process would reasonably be forecast with other business as usual regulatory costs and the reference tariff variation mechanism regulatory costs would be limited to those incurred after any final submission to the regulator prior to the publication of its further final decision. Costs incurred prior to any final submission by GGT to the regulator's assessment are considered by the Authority to be different in nature to the regulatory costs contemplated in the reference tariff variation mechanism.
35. The Authority is also concerned that interpreting "regulatory costs" connected to or associated with Legal Proceedings in the reference tariff variation mechanism as GGT has proposed could create inappropriate incentives for service providers in their approach to participating in the regulatory assessment process at the expense of users who would pay through higher tariffs.
36. Another consideration of the Authority is that the regulatory regime under the Code is an incentive based regulatory regime whereby the service provider forecasts its cost of service and demand. As such, if the service provider is able to reduce its costs through efficient operations or generate increased income for services then the service provider retains any efficiencies and income in excess of the approved forecasts.
37. The Authority has also noted the general principles set out in section 8.1 and 8.2 of the Code.
38. The Authority considers the definition of Regulatory Costs in Schedule 1 does not allow the differentiation of regulatory costs for the purpose of paragraph (f) of Schedule 1 as proposed by GGT in its notice and, therefore, the Authority considers that the proposed variation is inconsistent with the Approved Reference Tariff Variation Method.
39. The Authority considers that the interpretation of regulatory costs it has used in applying the reference tariff variation mechanism of Schedule 1 is consistent with the Approved Reference Tariff Variation Method and also best achieves the Code objectives for the Reference Tariff and Reference Tariff Policy set out in the approved access arrangement for the GGP.
40. Accordingly, the Authority has determined the corrections required to give effect to the notice and has corrected the value of the variable Arc_{t-1} as set out below.
41. The Authority agrees that the costs GGT has proposed as costs connected with or associated with GGT's participation in regulatory reform consultation processes are included in the actual regulatory costs for 2010. Accordingly, the amount proposed by GGT that is associated with these costs in its notice of 17 November 2010 is included in calculating the reference tariff variation that will apply from 1 January 2011.

42. The Authority notes that it received a final submission from GGT in response to its Final Decision on 8 June 2010. Accordingly, it has only included costs incurred after this date for the purpose of the reference tariff variation mechanism. On the basis of information provided to the Authority by GGT on 3 December 2010 the Authority has calculated regulatory costs connected to or associated with legal proceedings to be \$443,295 less than proposed in the notice of 17 November 2010.
43. The Authority also noted a number of minor arithmetical corrections were required when applying the tariff variation mechanism. These corrections were associated with issues of precision arising from tariffs determined in the Authority's tariff and revenue model for the approved access arrangement. These include rounding of numbers by GGT for the weighted average cost of capital, the total revenue values for 2010 and 2011 and differences in the assumed quarterly tariffs for the purpose of calculating 2011 total revenue. These minor corrections to the GGT calculation and the revised reference tariff variation parameters used to calculate the reference tariff are reflected in the revised Schedule 1 spreadsheet below.

Goldfields Gas Pipeline - Access Arrangement 2010-14 Further Final Decision by ERA					
Tariff Calculation: Schedule 1 "Reference Tariff Adjustment Mechanism"					
year		2009	2010	2011	
Toll Tariff \$/GJ as applied in 1st quarter of year			0.243262	0.245517	
Reservation Tariff \$/GJ.km as applied in 1st quarter of year			0.001439	0.001461	
Throughput Tariff \$/GJ.km as applied in 1st quarter of year			0.000401	0.000402	
Price Basket Limit check: RHS minus LHS				1.80175E-06	tariff variation OK
Tariff Component Variation check					
September CPI		168.6	173.3		
assumed future annual rate of CPI increase	2.50%				
Arc actual Regulatory Costs \$m			0.712486	0	
Frc forecast Regulatory Costs \$m			0	0	
WACC (from FFD) %			10.47748%	10.47748%	
Rev Total Revenue (AAI Table 1) \$m			86.670874	83.793841	
R	2.5				
Y	0.02				
Drc deadband	0.5%				
rounding (number of decimal places) for tariff components	6				
x	0.025				
Drc as calculated \$m			0.712486	0	
Drc as used after applying deadband \$m			0.712486	0	
Rt				0.009393729	
PRICE BASKET LIMIT CALCULATION					
RHS of price basket limit i.e. (SepCPIt-1/SepCPIt-2) ^(1-x) (1+Rt)				1.01159392	
transport revenue for numerator of LHS of price basket limit \$m				83.55	
transport revenue for denominator of LHS of price basket limit \$m				82.59	
LHS of price basket limit i.e. (sum:Pt*Qt-2)/(sum:Pt-1*Qt-2)				1.011592118	
RHS of Price Basket Limit minus LHS of Price Basket Limit				1.80175E-06	tariff variation OK
TARIFF COMPONENT VARIATION CALCULATION					
Tariff Component Variation multiplier (RHS of formula) i.e. (SepCPIt-1/SepCPIt-2) ^(1-x) (1+Rt) ^(1+Y)				1.031825798	
toll tariff using Tariff Component Variation \$/GJ			0.243262	0.251004	tariff component variation OK
reservation tariff using Tariff Component Variation \$/GJ.km			0.001439	0.001485	tariff component variation OK
throughput tariff using Tariff Component Variation \$/GJ.km			0.000401	0.000414	tariff component variation OK
PRICE BASKET CALCULATION:					
TOLL REVENUE: \$000's			Year t-1	Year t	
RESERVATION REVENUE: \$000's			9,450	9,531	
THROUGHPUT REVENUE: \$000's			59,769	60,629	
TOTAL REVENUE: \$000's			13,369	13,385	
			82,588	83,546	
	31-Mar-2009	30-Jun-2009	30-Sep-2009	31-Dec-2009	
LOAD: MDQ FOR YEAR t-2	105.93	106.49	106.87	106.13	
LOAD: THROUGHPUT: FOR YEAR t-2	85.87	83.79	87.05	85.13	
flow weighted average distance (MDQ) km	1070.9	1069.0	1067.9	1068.3	
flow weighted average distance (Throughput) km	1063.6	1070.6	1067.3	1068.3	

44. Accordingly, the Authority has determined that the Reference Tariff (excluding GST) is to be varied as follows:

Tariff	Toll \$/GJ	Capacity Reservation \$/GJ km	Throughput \$/GJ km
1 January 2011 to 31 March 2011	0.245517	0.001461	0.000402

45. Taking these matters into account, the Authority considers that the changes it has made to the notice to vary reference tariff from 1 January 2011 complies with the reference tariff variation method established under the amended access arrangement.

Attachment 1 – Schedule 1

Goldfields Gas Pipeline - Access Arrangement 2010-14 Further Final Decision by ERA				
Tariff Calculation: Schedule 1 "Reference Tariff Adjustment Mechanism"				
year		2009	2010	2011
Toll Tariff \$/GJ as applied in 1st quarter of year			0.243262	0.246100
Reservation Tariff \$/GJ.km as applied in 1st quarter of year			0.001439	0.001472
Throughput Tariff \$/GJ.km as applied in 1st quarter of year			0.000401	0.000402
Price Basket Limit check: RHS minus LHS				0.005858363
Tariff Component Variation check				tariff variation OK
September CPI		168.6	173.3	
assumed future annual rate of CPI increase	2.50%			
Arc actual Regulatory Costs \$m			1.155781	0
Frc forecast Regulatory Costs \$m			0	0
WACC (from FFD) %			10.48%	10.48%
Rrev Total Revenue (AAI Table 1) \$m			86.7	83.8
R	2.5			
Y	0.02			
Drc deadband	0.5%			
rounding (number of decimal places) for tariff components	6			
x	0.025			
Drc as calculated \$m			1.155781	0
Drc as used after applying deadband \$m			1.155781	0
Rt				0.015237552
PRICE BASKET LIMIT CALCULATION				
RHS of price basket limit i.e. $(\text{SepCPI}t-1/\text{SepCPI}t-2)^{(1-x)}(1+Rt)$				1.017450481
transport revenue for numerator of LHS of price basket limit \$m				83.55
transport revenue for denominator of LHS of price basket limit \$m				82.59
LHS of price basket limit i.e. $(\text{sum:Pt}^*Qt-2)/(\text{sum:Pt}-1^*Qt-2)$				1.011592118
RHS of Price Basket Limit minus LHS of Price Basket Limit				0.005858363
				tariff variation OK
TARIFF COMPONENT VARIATION CALCULATION				
Tariff Component Variation multiplier (RHS of formula) i.e. $(\text{SepCPI}t-1/\text{SepCPI}t-2)^{(1-x)}(1+Rt)^{(1+Y)}$				1.03779949
toll tariff using Tariff Component Variation \$/GJ			0.243262	0.252457
reservation tariff using Tariff Component Variation \$/GJ.km			0.001439	0.001493
throughput tariff using Tariff Component Variation \$/GJ.km			0.000401	0.000416
				tariff component variation OK
				tariff component variation OK
				tariff component variation OK
PRICE BASKET CALCULATION:				
			Year t-1	Year t
TOLL REVENUE: \$000's			9,450	9,531
RESERVATION REVENUE: \$000's			59,769	60,629
THROUGHPUT REVENUE: \$000's			13,369	13,385
TOTAL REVENUE: \$000's			82,588	83,546
	31-Mar-2009	30-Jun-2009	30-Sep-2009	31-Dec-2009
LOAD: MDQ FOR YEAR t-2	105.93	106.49	106.87	106.13
LOAD: THROUGHPUT: FOR YEAR t-2	85.87	83.79	87.05	85.13
flow weighted average distance (MDQ) km	1070.9	1069.0	1067.9	1068.3
flow weighted average distance (Throughput) km	1063.6	1070.6	1067.3	1068.3