Mid-West and South-West Gas Distribution Systems

Issues Paper on the Proposed Revisions to the Access Arrangement

26 February 2010

Economic Regulation Authority

WESTERN AUSTRALIA

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Contents

INTRODUCTION

1. The proposed revised access arrangement (**AA**) for the Mid-West and South-West Gas Distribution Systems (**GDS**) together with the access arrangement information (**AAI**) and a confidential version of its supporting information were submitted on 29 January 2010 by WA Gas Networks Pty Ltd **(WAGN)**. The Authority had previously extended the revisions submission date set out in the current access arrangement from 31 March 2009 to 31 January 2010.

2. WAGN lodged a public version of its supporting information, including a public version of its tariff model in excel format, on 11 February 2010.

3. The proposed AA, AAI and the public version of the supporting information lodged by WAGN are available from the Authority's web site at www.era.wa.gov.au.

4. 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.

5. The GDS consists of gas reticulation networks serving Geraldton, Bunbury, Busselton, Harvey, Pinjarra, Brunswick Junction, Capel and the Perth Greater Metropolitan Area including Mandurah. These combined networks constitute approximately 12,000km of gas mains and associated infrastructure and service around 600,000 household and business customers.

6. On 1 January 2010 the *National Gas Access (WA) Act 2009* (**NGA**) came into effect in Western Australia. The NGA implements a national gas access regime that replaces the previous national Gas Pipeline Access Law implemented in Western Australia by the *Gas Pipelines Access (WA) Act 1998*. The NGA also replaces the *National Third Party Access Code for Natural Gas Pipeline Systems* (**Code**).

7. The NGA amends and implements the National Gas Law (**NGL**) and the National Gas Rules (**NGR**) in Western Australia. The amended NGL, as it is implemented in Western Australia under the NGA, is termed the **NGL(WA)** for the purpose of this Issues Paper.

8. One objective of the new national gas access legislation is to implement a uniform national regime. As a guide to the access arrangement process in Western Australia, interested parties should refer to the Australian Energy Regulator's (**AER**) Access Arrangement Guideline available on its web site at www.aer.gov.au.

9. However, there are differences between the NGL as administered by the AER in other jurisdictions and the NGL(WA) that will govern the Authority in Western Australia. In order to assist interested parties, the Authority issued a Notice on 15 January 2010 describing these differences. This Notice entitled 'Gas Access Arrangement Guideline - National Gas Law', is available on the Authority's web site.

10. The NGR imposes time limits for the approval of access arrangement proposals. Under rule 62(7) the final decision on an access arrangement is required to be made within six months of the date of receipt of the access arrangement excluding clock-stopping time such as public consultation periods. There is also an absolute time limit of 13 months between the date of receipt of an access arrangement proposal and the date of the final decision (rule 13(1)).

PURPOSE

11. This Issues Paper is intended to assist interested parties in making submissions on the proposed revised access arrangement for the GDS by identifying a number of the key areas where WAGN has proposed changes which may be materially significant to shippers or other interested parties. These areas are as follows:

- Reference Tariffs
- Rate of Return
- Capital Expenditure
- Operating Expenditure
- Total Revenue
- Other Issues

12. The Issues Paper is not an exhaustive review of the content of the proposed revised access arrangement or the matters that the Authority will address in making its determination.

SUBMISSIONS

13. The Authority invited submissions from interested parties on the AA submitted by WAGN on 15 February 2010 by publishing a notice on its web site and in the *West Australian* and *The Australian* newspapers. The closing date for submissions is 12 April 2010.

14. The Authority invites interested parties to make submissions on particular matters identified in this Issues Paper or on any other matters relating to WAGN's AA.

> Submissions are invited on any of the matters identified in this Issues Paper or on any issue relating to the proposed revised access arrangement for the GDS.

15. Submissions in printed form should be sent to:

    WA Gas Networks, Gas Access
    Economic Regulation Authority
    PO Box 8469
    Perth BC WA 6849

    Electronic submissions should be sent to: publicsubmissions@era.wa.gov.au

16. In general, all submissions from interested parties will be treated as being in the public domain and placed on the Authority's web site. Where an interested party

wishes to make a submission in confidence, it should clearly indicate the parts of the submission for which confidentiality is claimed and specify in reasonable detail the basis upon which the claim is made in order that the Authority can consider whether or not disclosure of such information may be appropriate consistent with the requirements set out under sections 324 to 329 of the NGL(WA).

17. The receipt and publication of any submission on the Authority's web site shall not be taken as indicating that the Authority has knowledge, either actual or constructive, of the contents of a particular submission and, in particular, whether the submission in whole or in part contains information of a confidential nature and no duty of confidence will arise for the Authority in these circumstances.

18. The AA submitted by WAGN, which is available on the Authority's web site, consists of the following documents:

    - Proposed Revised Access Arrangement for the GDS dated 29 January 2010.
    - Annexure A Calculating Haulage Tariffs – Proposed Revised Access Arrangement for the GDS.
    - Annexure B Reference Tariff Variation Mechanism – Proposed Revised Access Arrangement for the GDS.
    - Annexure C Template Haulage Contract – Proposed Revised Access Arrangement for the GDS.

19. The AAI available on the Authority's web site is titled 'Access Arrangement information for the WA Gas Networks Gas Distribution Systems 29 January 2010'. The supporting information is also available on the Authority's web site and is titled 'Submission - Public Version - Proposed Revisions to the Access Arrangement for the WA Gas Networks Gas Distribution - 29 January 2010'. A tariff model, in excel format, is also included which forms part of the supporting information.

20. The Authority's assessment process will involve consideration of WAGN's entire AA (both those areas where changes have been proposed and areas which are not proposed to change). Interested parties are invited to provide comments on issues important to them even where no changes are proposed.

LEGISLATIVE REQUIREMENTS

New Gas Law Requirements

21. The new legislative framework has as its central focus the achievement of economic efficiency, as set out in the national gas objective (section 23 of the NGL(WA)) and reinforced in the revenue and pricing principles (section 24 of the NGL(WA)).

22. Section 23 of the NGL(WA) outlines the national gas objective, as follows:

    > The objective of this Law is to promote efficient investment in, and efficient operation and use of, natural gas services for the long term interests of consumers of natural gas with respect to price, quality, safety, reliability and security of supply of natural gas.

23. Under rule l00 of the NGR, it is a requirement that all provisions of an access arrangement should be consistent with the above objective. Further, section 28(1) of the NGL(WA) provides that the Authority must, in performing or exercising an

'economic regulatory function or power', perform or exercise that function or power in a manner that will or is likely to contribute to the achievement of the national gas objective.

24. Consistent with the national gas objective the revenue and pricing principles (sections 24(2) to 24(7) of the NGL(WA)) focus on economic considerations such as achieving a return commensurate with the regulatory and commercial risks involved in providing the reference service to which that tariff relates.

25. Under section 28(2)(a) of the NGL(WA) it is provided that the Authority (in addition to considering the national gas objective under section 28(1)), must take into account the revenue and pricing principles when exercising a discretion in approving or making those parts of an access arrangement relating to a reference tariff or when making an access determination relating to a rate or charge for a pipeline service.

26. Under the rule 101 of the NGR a full access arrangement is to contain a statement of reference services, as follows:

    (1) A full access arrangement must specify all reference services.

    (2) A ***reference service*** is a pipeline service that is likely to be sought by a significant part of the market.

27. Rule 48 of the NGR sets out the requirements for a full access arrangement, as follows:

    (1) A full access arrangement must:

    (a) identify the pipeline to which the access arrangement relates and include a reference to a website at which a description of the pipeline can be inspected; and

    (b) describe the pipeline services the service provider proposes to offer to provide by means of the pipeline; and

    (c) specify the reference services; and

    (d) specify for each reference service:

    (i) the reference tariff; and

    (ii) the other terms and conditions on which the reference service will be provided

    (e) if the access arrangement is to contain queuing requirements – set out the queuing requirements; and

    (f) set out the capacity trading requirements; and

    (g) set out the extension and expansion requirements; and

    (h) state the terms and conditions for changing receipt and delivery points; and

    (i) if there is to be a review submission date – state the review submission date and the revision commencement date; and

    (j) if there is to be an expiry date – state the expiry date.

28. It should be noted that the approach to non-price terms and conditions (other than those relating to queuing, capacity trading and extensions and enhancements) is different from the Code. Under section 3.6 of the Code, non-price terms and conditions had to be 'reasonable'. However, under the new gas law the Authority

will have to consider whether the terms and conditions are consistent with the national gas objective and, if appropriate, the revenue and pricing principles.

29. The NGR, rule 59(1), provides that after taking into account all public submissions received by the due date on the proposed revisions to the access arrangement for the GDS, the Authority is required to issue a draft decision.

30. The NGR (rule 59(2)) requires that if the Authority proposes to not approve the proposed revisions to an access arrangement, the draft decision must state the nature of the amendments that are required in order to make the proposal acceptable to the Authority.

31. 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 this decision is released. The Authority is required (rule 62 of the NGR) to issue a final decision on the proposed access arrangement after considering these submissions and any other matters it considers relevant.

Service Providers

32. WAGN noted in its supporting information, that Section 132 of the NGL(WA) requires that a "covered pipeline service provider must submit ... revisions to an applicable access arrangement . . . within the time period specified by the Rules".

33. WAGN also noted in its supporting information that it owns the WAGN GDS, is the relevant party to all of the contracts under which "pipeline services" are provided to "users" and is the "covered pipeline service provider" for the WAGN GDS.

34. In a notice published on its web site on 15 February 2010, the Authority noted that it had identified three entities as service providers for the GDS under the NGL(WA). These are WAGN, WA Network Holdings Pty Ltd and Westnet Energy Services Pty Ltd. The NGL(WA) only places an obligation on service providers to submit an access arrangement if they fall into the category of being a covered pipeline service provider. In the case of the GDS, the Authority considers that only WAGN is a covered pipeline service provider and therefore has an obligation to submit revisions to the GDS access arrangement.

KEY ISSUES

Tariffs

NGR Requirements

35. Rule 48 of the NGR requires that a full access arrangement must specify the reference tariff for each reference service. Rule 94 sets out the requirements for the determination of reference tariffs for distribution pipelines.

36. There are three fundamental categories of requirements under rule 94 that are new and different from the previous requirements under the Code. These are i) the need to divide customers for reference services into tariff classes, rule 94(1); ii) the requirement to recover revenue for each tariff class where the recovery is set

between an upper bound and a lower bound (rule 94(2)); and iii) the requirement when setting these upper and lower bounds to take into consideration long run marginal cost (rule 94(4)(a)).

37. It should be noted that the access arrangement proposal addressing, rule 94, must also be consistent with the national gas objective under section 23 of the NGL(WA) involving economic efficiency and with the related pricing and revenue principles under section 24 of the NGL(WA).

38. The Authority also needs to take account of the *National Gas Access (WA) (Local Provisions) Regulations 2009.* These regulations contain provisions, under Part 2, which deal with reference tariffs for supply to small use customers, as follows:

> **5. Part 2 applies only to distribution pipelines**
>
> This Part applies only in relation to a distribution pipeline.
>
> **6. Uniform tariff for small use customers**
>
> (1) The ERA must not approve or make an access arrangement for a distribution pipeline if the reference tariff for any small delivery service[1] provided for in the access arrangement varies according to the geographical location of the small delivery point to which the gas is delivered.
>
> (2) The ERA must not approve or make an access arrangement (***arrangement A***) for a distribution pipeline unless the reference tariff for any small delivery service provided for in arrangement A is the same as the reference tariff for the equivalent reference service in any neighbouring access arrangement.
>
> (3) In subregulation (2) a ***neighbouring access arrangement*** is an applicable access arrangement for a distribution pipeline —
>
> (a) that is operated by the same pipeline operator as the pipeline to which arrangement A relates; and
>
> (b) by means of which gas is or may be delivered to small delivery points anywhere in the tariff area in which gas is or may be delivered by means of a small delivery service provided for in arrangement A,
>
> other than an access arrangement that is to be revised or varied by arrangement A.
>
> (4) This regulation applies despite anything in the National Gas Law or Rules to the contrary.
>
> **7. Impact on small use customers and retailers to be taken into account**
>
> (1) When exercising a discretion in approving or making an access arrangement for a distribution pipeline the ERA must take into account the possible impact of the proposed reference tariffs, the method of determining the tariffs and the reference tariff variation mechanisms on —
>
> (a) users to whom gas is or might be delivered by means of a small delivery service provided for in the access arrangement; and
>
> (b) small use customers to whom gas is or might be delivered by those users.
>
> (2) In subregulation (1) a reference to the impact of something is not limited to the economic impact of that thing.
>
> (3) A requirement under this regulation to take a matter into account applies —
>
> (a) despite anything in the National Gas Law or Rules that would otherwise prevent the matter being taken into account; and
>
> (b) in addition to any requirement under the National Gas Law or Rules —

[1] Small delivery service is to customers using less than 1 terajoule of natural gas per annum

(i) for any other matter to be taken into account; or

(ii) as to the content of the access arrangement.

(4) For the avoidance of doubt, this regulation does not permit the ERA to approve or make an access arrangement that does not include a reference tariff variation mechanism that complies with rule 92 of the Rules.

Current Access Arrangement and Proposed Revisions

39. The Authority has compiled a table showing WAGN's current reference tariffs and its proposed reference tariffs. The proposed reference tariffs are based on information provided in WAGN's AAI (table 26). The current reference tariffs listed in the table below have applied since 1 January 2009 and will continue to apply until a new access arrangement is in place (scheduled to be 1 January 2011).

Reference tariffs (proposed tariffs are in December 2009 dollars)

		Current	proposed	proposed	proposed	proposed
Reference tariffs applicable from		**1 Jan 2009**	**1 Jan 2011**	**1 July 2011**	**1 Jul 2012**	**1 Jul 2013**
Tariffs Excluding GST						
	Charging parameter					
A1	(100 Customers using >35 TJ per annum)					
	Fixed [$/year]	44,286.96	46,476.23	48,800.04	51,240.04	53,802.04
	Usage 1 (<=10km) [$/GJ*km]	0.0446	0.0446	0.0468	0.0492	0.0516
	Usage 2 (>10km) [$/GJ*km]	0.0223	0.0223	0.0234	0.0246	0.0258
	Demand 1 (<=10km) [$/GJ*km*year],	182.86	182.86	192.00	201.60	211.68
	Demand 2 (>10km) [$/GJ*km*year],	91.43	91.43	96.00	100.80	105.84
A2	(100 customers using between 10 and 35 TJ per year)					
	Fixed [$/year]	556.13	34,115.00	35,820.75	37,611.79	39,492.38
	Usage 1 (Q<=5TJ/year) [$/GJ],	4.89	2.20	2.31	2.43	2.55
	Usage 2 (5<Q<=10TJ/year) [$/GJ],	4.60	2.20	2.31	2.43	2.55
	Usage 3 (Q>10TJ/year) [$/GJ],	1.21	2.20	2.31	2.43	2.55
B1	(1200 customers using less than 10 TJ year)					
	Fixed [$/year]	556.13	1,165.50	1,223.78	1,284.97	1,349.22
	Usage 1 (Q<=5TJ/year) [$/GJ],	4.89	5.34	5.61	5.89	6.18
	Usage 2 (5<Q<=10TJ/year) [$/GJ],	4.60	5.34	5.61	5.89	6.18
B2	(7600 large housold or small business customers with a 12m3/hr meter)					
	Fixed [$/year]	223.02	270.00	283.50	297.68	312.56
	Usage 1 (Q<=100GJ/year) [$/GJ],	5.66	7.00	7.35	7.72	8.11
	Usage 2 (Q>100GJ/year) [$/GJ],	4.84	7.00	7.35	7.72	8.11
B3	(600,000 houshold and small business customers)					
	Fixed [$/year]	28.59	70.00	72.80	77.90	83.35
	Usage 1 (Q<=15GJ/year) [$/GJ],	9.500	9.500	9.880	10.570	11.310
	Usage 2 (15<Q<=45GJ/year) [$/GJ],	5.690	9.500	9.880	10.570	11.310
	Usage 3 (Q>45GJ/year) [$/GJ],	3.860	9.500	9.880	10.570	11.310

40. As shown in the table above, significant changes are proposed by WAGN in the relative tariff components, with an increase across all five tariff classes of the standing charges particularly for reference tariffs A2 and B3, as follows:

- The A2 tariff is applied to customers consuming 10 to 35 terajoules of gas per annum. The standing charge component is proposed to increase from the current $556.13 per year to $34,115.00 per year. The variable component changes to a flat rate of $2.20 per gigajoule rather than the current declining block tariff structure of $4.89 per gigajoule for the first 5 terajoules, $4.60 per gigajoule for the next 5 terajoules and $1.21 per gigajoule thereafter, up to 35 terajoules.

- The B3 tariff is applied to households and small businesses. The standing charge component is proposed to increase from the current $28.59 per year to $70.00 per year. The proposed consumption charge is a flat rate of $9.50 per gigajoule rather than the current declining block tariff structure of $9.50 for the first 15 gigajoules, $5.69 for the next 30 gigajoules and $3.86 thereafter.

41. Annexure B of the proposed access arrangement contains WAGN's proposed reference tariff variation mechanism. WAGN's proposed reference tariff variation mechanism addresses three main issues. Firstly, to adjust the reference tariffs for the effects of inflation, WAGN proposes to use the Consumer Price Index, All Groups, Perth. Secondly, WAGN proposes to adjust standing charges toward the corresponding long run marginal costs. Thirdly, WAGN proposes to recover unanticipated increases in capital or operating costs both relating to regulatory costs and to other areas.

42. WAGN's proposal is different from the current access arrangement which allows for adjustment to a pre-determined price path combined with an adjustment to reflect inflation using the Weighted Average of Eight Capital Cities All Groups, CPI plus an adjustment for the actual costs of regulation. The current access arrangement also does not include unanticipated operating and capital costs in the tariff variation adjustment mechanism except for regulatory costs. In addition, the current access arrangement also applies a limited tariff basket price-cap approach to the variation of the reference tariffs where, under the price-cap, the annual increase in any tariff component is limited to 2 per cent.

Submissions are invited on the proposed revised access arrangement for the GDS in relation to :

- The proposed increase in the portion of revenue to be recovered from the standing charge for each tariff class.
- The proposal to not have a declining block tariff for most tariff classes.
- The proposed application of the Western Australian regulations in relation to the proposed reference tariffs.
- The proposed reference tariff variation mechanism.
- Any other matters relating to the proposed tariff arrangements.

Rate of Return

NGR Requirements

43. Rule 87(1) of the NGR states that the rate of return is to be commensurate with prevailing conditions in the market for funds and the risks involved in providing reference services. Rule 87(2) sets out the methodology for determining a rate of return on capital, as follows:

    (2) In determining a rate of return on capital:

    (a) it will be assumed that the service provider:

    (i) meets benchmark levels of efficiency; and

    (ii) uses a financing structure that meets benchmark standards as to gearing and other financial parameters for a going concern and reflects in other respects best practice; and

    (b) a well accepted approach that incorporates the costs of equity and debt, such as the Weighted Average Cost of Capital, is to be used; and a well accepted financial model, such as the Capital Asset Pricing Model, is to be used.

44. Under rule 40(3) of the NGR, the Authority has full discretion so that if the Authority considers there to be a preferable alternative to the proposed rate of return consistent with the requirements of rule 40(3)(a) and (b), the Authority can decline approval of this element.

45. In terms of comparison with the Code, there is an equivalent provision in the Code (section 8.30). However under the Code, as interpreted by the Australian Competition Tribunal (**ACT**), there was a range of possible compliant outcomes for the rate of return on capital. Under the ACT's interpretation, the Authority was required to accept the proposed rate of return if it fell within the range considered by the Authority to be appropriate. In contrast, under rule 40 of the NGR, the Authority has full discretion and, subject to the provisions of rule 40, can substitute its own preferred rate of return in appropriate circumstances.

Current Access Arrangement

46. Under the current access arrangement, the real pre-tax rate of return is 6.78 per cent. This was based on the calculation of a Weighted Average Cost of Capital (**WACC**) using the Capital Asset Pricing Model (**CAPM**) to determine the return on equity. This rate of return was used to determine the reference tariffs for the current access arrangement.

Proposed Revisions

47. WAGN has proposed a real pre-tax rate of return of 11.1 per cent. (pages 30 to 34 of its AAI).

48. In relation to the cost of debt WAGN has proposed that the return on debt consists of the sum of three components: the risk free rate of return (nominal 5.59 per cent); plus a debt risk premium (4.50 per cent) plus an allowance for debt raising costs (0.288 per cent). This gives a nominal cost of debt of 10.38 per cent.[2]

[2] Note page 32 of WAGN's AAI applies a nominal risk free rate of 5.71% and therefore estimates the nominal pre tax cost of debt as 10.50%. The actual WACC calculations use the risk free rate of 5.59%, as set out on page 29 of the AAI, the corresponding estimate of the nominal pre tax cost of debt is 10.38% which is used in the WACC calculations.

49. The above calculation includes, under the allowance for debt raising costs, two components. The first is an allowance for debt facility establishment costs of 0.125 per cent and the second, an allowance for recovery of refinancing costs of 0.163 per cent.

50. The method of calculation is different from the current access arrangement in that WAGN has made four calculations for WACC, each based on different methods of calculating the expected post-tax nominal return on equity. The four methods used for calculating the proposed return on equity are the Sharpe-Lintner CAPM, Black (zero beta) CAPM, Fama-French three factor model and Fama-French (zero beta) three factor model.

51. WAGN used the above methods to arrive at four different post-tax nominal return on equity results then used these results to derive four different nominal and real pre-tax WACC numbers. The table below, which shows these values has been compiled from WAGN's AAI (pages 31 to 33).

WAGN's Proposed WACC Outcomes

Return on equity method	Nominal post-tax return on equity	Nominal pre-tax WACC (using nominal pre-tax return on debt of 10.38%)	Real pre-tax WACC
Sharpe-Lintner CAPM	11.99%	11.36%	8.67%
Black (zero beta) CAPM	13.59%	13.38%	10.64%
Fama-French three factor model	13.30%	13.23%	10.49%
Fama-French (zero-beta) three factor model	16.10%	14.70%	11.93%

52. WAGN has proposed a single pre-tax WACC of 11.1 per cent which is the lower limit of the upper quartile of the values it derived, as shown in the table above, for the pre-tax real WACC (AAI, page 34).

Submissions are invited on the proposed revised access arrangement for the GDS in relation to :

- The proposed rate of return (WACC).
- The proposed cost of debt.
- The four methods used to calculate the proposed return on equity.
- Any other matters relating to the proposed rate of return including the associated methodology.

Capital Expenditure

NGR Requirements

53. Capital expenditure must be 'conforming capital expenditure' in order to be rolled into a pipeline's capital base. Under rule 79 of the NGR:

> Conforming capital expenditure is capital expenditure that conforms with the following criteria:
>
> a) The capital expenditure must be such as would be incurred by a prudent service provider acting efficiently, in accordance with accepted good industry practice, to achieve the lowest sustainable cost of providing services;
>
> b) The capital expenditure must be justifiable on a ground stated in subrule (2).

54. Under subrule (2), capital expenditure is justifiable if:

> (a) the overall economic value of the expenditure is positive; or
>
> (b) the present value of the expected incremental revenue to be generated as a result of the expenditure exceeds the present value of the capital expenditure; or
>
> (c) the capital expenditure is necessary:
>
> (i) to maintain and improve the safety of services; or
>
> (ii) to maintain integrity of services; or
>
> (iii) to comply with a regulatory obligation or requirement; or
>
> (iv) to maintain the service provider's capacity to meet levels of demand for services existing at the time the capital expenditure is incurred (as distinct from projected demand that is dependent on an expansion of pipeline capacity); or
>
> (d) The capital expenditure is an aggregate amount divisible into 2 parts, one referable to incremental services and the other referable to a purpose referred to in paragraph (c), and the former is justifiable under paragraph (b) and the latter under paragraph (c).

55. A significant difference between rule 79 of the NGR and the equivalent section of the Code (section 8.16(a)) is that the Code required that forecast capital expenditure only be 'reasonably expected' to pass the requirements of section 8.16(a) in order to be rolled into the projected capital base whereas under the NGR the forecast capital expenditure is required to meet the requirements of rule 79 to be rolled into the projected capital base.

Current Access Arrangement

56. The AAI sets out, under Table 3, the capital expenditure incurred by WAGN over the current access arrangement period (2005 to 2009). This table is shown below.

Table 3
Capital expenditure by asset class 2005-2009
($ million, December 2009)

	2005	2006	2007	2008	2009[1]
High pressure mains	0.535	1.626	1.506	3.301	9.505
Medium pressure mains	0.000	0.000	0.000	0.000	0.000
Medium/low pressure mains	8.149	9.020	13.455	11.932	9.491
Low pressure mains	0.000	0.000	0.000	0.000	0.000
Regulators	0.115	0.809	0.662	0.186	0.910
Secondary gate stations	0.000	0.000	0.000	0.013	1.601
Buildings	0.000	0.000	0.042	0.117	0.126
Meters and service pipes	19.093	22.189	19.637	17.518	18.905
Equipment and vehicles	0.000	0.000	0.000	0.000	0.000
Information technology	0.429	0.001	0.000	2.615	3.638
Full retail contestability	0.000	0.000	0.000	0.000	0.000
Land	0.000	0.000	0.000	0.000	0.000
Total	**28.320**	**33.645**	**35.303**	**35.683**	**44.176**

1. Estimate

57. In its current access arrangement WAGN forecast expenditure, over the 2005 to 2009 period, of $145.72m (in December 2004 dollars) [equivalent to $164m in December 2009 dollars]. Based on the above table the incurred expenditure is 8% higher than forecast.

Proposed Revisions

58. The AAI sets out, under Table 12, the forecast capital expenditure over the period 2010 to 2013/14. This table is shown below.

Table 12
Forecast Conforming Capital Expenditure
($ million, December 2009)

	2010[1]	2010/11	2011/12	2012/13	2013/14
High pressure mains	9.577	4.168	7.008	10.663	10.289
Medium pressure mains	0.000	0.000	0.000	0.000	0.000
Medium/low pressure mains	6.505	12.534	13.232	13.675	16.094
Low pressure mains	0.000	0.000	0.000	0.000	0.000
Regulators	0.668	0.261	0.229	0.267	0.203
Secondary gate stations	2.006	0.424	0.000	0.000	0.000
Buildings	0.454	2.305	6.691	0.000	0.000
Meters and service pipes	7.377	16.311	18.947	20.422	22.579
Equipment and vehicles	0.000	4.472	0.000	0.000	0.637
Information technology	1.483	4.641	3.474	5.021	1.635
Full retail contestability	0.000	0.000	0.000	0.000	0.000
Land	0.000	0.000	0.000	0.000	0.000
Total	**28.070**	**45.115**	**49.582**	**50.048**	**51.437**

1. 1 January 2010 to 30 June 2010 only

59. The above table shows that the largest single capital expenditure item over the forthcoming access arrangement period is meters and service pipes. Further detail and justification in relation to WAGN's forecast expenditure is provided in its supporting information.

60. The above table also shows that WAGN has forecast total capital expenditure over the forthcoming access arrangement period, 1 January 2010 to 30 June 2014, of $224.25m. This amounts to an increase of 37% above the expenditure during the current access arrangement period ($164m as noted above). It should be noted that the current access arrangement period is five years whereas the proposed access arrangement is 4.5 years.

Submissions are invited on the proposed revised access arrangement for the GDS in relation to :

- The incurred capital expenditure under the current access arrangement being 8 per cent higher than forecast.
- The forecast capital expenditure over the forthcoming access arrangement period being 37 per cent higher than the incurred expenditure under the current access arrangement.
- Any other matters relating to the incurred or forecast capital expenditure under the proposal.

Operating Expenditure

NGR Requirements

61. Rule 76(e) requires that forecast operating expenditure be included as a building block in the calculation of total revenue for each year of the access arrangement period. The forecast operating expenditure for the year must conform to the criteria in rule 91(1) which is that forecast operating expenditure must be such as would be incurred by a prudent service provider acting efficiently, in accordance with accepted good industry practice, to achieve the lowest sustainable cost of delivering pipeline services. The Authority has limited discretion under rule 91.

62. In terms of comparison with the Code, there are equivalent provisions in the Code under the cost of service (**COS**) methodology. Non-capital costs are included in the COS methodology for calculating Total Revenue. The Code referred to 'non-capital costs' whereas the NGR uses the term 'operating expenditure' to refer to the same category of costs in the total revenue calculation.

Current Access Arrangement

63. WAGN has provided, as shown in table 4 on page 5 of the AAI, information on its incurred operating expenditure for the current access arrangement period. This table is shown below.

Table 4
Operating expenditure by category 2005-2009'($ million, December 2009)

	2005	2006	2007	2008	2009[1]
Network	25.575	26.554	24.353	23.473	23.884
Marketing	0.332	0.367	0.351	0.239	0.211
Corporate	5.941	5.904	6.764	4.552	5.797
Information technology	5.029	4.970	5.335	3.109	4.458
Full retail contestability	1.275	1.266	1.308	1.330	1.372
Regulatory cost	1.111	1.196	1.341	3.102	4.557
Unaccounted for gas	3.626	3.659	4.496	6.482	7.694
Total	**42.889**	**43.914**	**43.949**	**42.286**	**47.972**

1. Estimate

64. In its current access arrangement WAGN forecast operating expenditure, over the 2005 to 2009 period, of $194.28m (in December 2004 dollars) [equivalent to $218.66 in December 2009 dollars]. Based on the above table the incurred expenditure ($221m) is 1% higher than forecast.

65. It should be noted from the above table that UAFG (unaccounted for gas) has significantly increased in both 2008 and 2009. The percentage increase above forecast in UAFG was 83 percent in 2008 and 115 percent in 2009. Therefore, had this significant increase in UAFG not occurred in 2008 and 2009, WAGN's total incurred operating expenditure over the 2005 to 2009 access arrangement period would have been less than forecast.

Proposed Revisions

66. WAGN has provided, as shown in table 19 on page 20 of its AAI, the forecast operating expenditure for the forthcoming access arrangement period. This table is shown below.

Table 19
Forecast Operating Expenditure
($ million, December 2009)

	2010[1]	**2010/11**	**2011/12**	**2012/13**	**2013/14**
Network	20.679	27.431	28.200	28.372	27.834
Marketing	0.177	2.598	1.086	1.091	1.097
Corporate	3.983	7.966	7.966	7.966	7.966
Information Technology	2.791	5.956	6.167	5.839	6.210
Regulatory Cost	3.914	5.411	5.403	6.172	6.617
Unaccounted for Gas	4.874	10.259	10.379	10.741	11.003
Total	**36.418**	**59.621**	**59.200**	**60.182**	**60.727**

1. 1 January 2010 to 30 June 2010 only

67. The above table shows that WAGN has forecast total operating expenditure over the forthcoming access arrangement period, 1 January 2010 to 30 June 2014, of $276.15m. This amounts to an increase of 25% above the expenditure during the current access arrangement period ($221m as noted above). It should be noted the current access arrangement period is five years whereas the proposed access arrangement is 4.5 years.

68. The operating expenditure on UAFG amounts to a total of $47.26m over the forthcoming access arrangement period. This is 17 per cent of the total forecast operating expenditure. In the current access arrangement UAFG accounted for 11.7 per cent of the total incurred operating expenditure. In relation to this increase, it should be noted that there has been a significant increase in the cost of gas in Western Australia since 2005 and WAGN has stated in its AAI (page 20) that the forecast cost of UAFG is based on gas prices received as a result of a tender process.

Submissions are invited on the proposed revised access arrangement for the GDS in relation to :

- The forecast operating expenditure over the forthcoming access arrangement period being 25 per cent higher than the incurred expenditure under the current access arrangement.
- Any other matters relating to the incurred or forecast operating expenditure under the proposal.

Total Revenue

NGR Requirements

69. The NGR (rule 76) states that the building block approach is to be used for calculating Total Revenue, which is to be determined for each regulatory year of the access arrangement period as the return on the projected capital base for each year plus depreciation plus cost of corporate income tax if applicable plus incentive mechanism carry over plus forecast operating expenditure.

70. The Authority does not have separate discretion over the determination of total revenue taken as a whole under the NGR since the total revenue is the sum of the building blocks. However, the Authority does have defined discretions over each of the individual building blocks.

71. In terms of comparison with the Code, there is an equivalent provision in section 8.4 of the Code. However the difference is that the NGR sets out the building block approach as the method to calculate total revenue whereas the Code allowed for a choice of three methods to calculate total revenue. These methods were: Cost of Service (COS), Internal Rate of Return (IRR) or Net Present Value (NPV). The COS method is similar to the building block approach in the NGR.

Current Access Arrangement

72. The access arrangement for the current access arrangement sets out, under Table 4.20, the total revenue forecast over the current access arrangement period (2005 to 2009) This table is shown below.

TABLE 4.20 - COMPOSITION OF TOTAL REVENUE FOR THE SECOND ACCESS ARRANGEMENT PERIOD

(REAL $ MILLION AT DECEMBER 2004)

	YEAR ENDING 31 DECEMBER				
	2005	2006	2007	2008	2009
Non-Capital Costs	40.13	39.42	38.65	38.13	37.95
Return on Capital	44.65	45.11	45.38	45.17	45.18
Depreciation	24.77	26.35	27.81	28.99	30.50
Efficiency carry-over	0.00	0.00	0.00	0.00	0.00
Return on Working Capital	0.43	0.44	0.44	0.44	0.45
Total Revenue	**109.99**	**111.32**	**112.27**	**112.73**	**114.08**

Proposed Revisions

73. WAGN's AAI sets out, under Table 28, the total revenue forecast over the period 1 January 2010 to 30 June 2014. This table is shown below.

Table 28
Total revenue
($ million, December 2009)

	2010[1]	2010/11	2011/12	2012/13	2013/14
Return on Capital Base	44.035	91.949	94.165	96.670	99.065
Return on Working Capital	0.427	1.605	1.988	2.223	2.462
Depreciation	0.328	24.349	26.229	28.203	30.123
Efficiency gains	2.179	2.248	0.969	2.211	1.311
Forecast Operating Expenditure[1]	36.418	59.621	59.200	60.182	60.727
Total	**83.387**	**179.772**	**182.621**	**189.489**	**193.689**

1. January 2010 to 30 June 2010 only.

74. The proposed total revenue for 2010-11 (the first full year) is $179.77m (December 2009 dollars) compared to the current approved total revenue for calendar year 2009 of $132.0m (December 2009 dollars) [which is equivalent to $114.08m in December 2004 dollars]. This amounts to an increase of 36 per cent above the 2009 figure. It should be noted that WAGN has moved from calendar years to financial years in its proposed revised AA.

75. The most significant differences in the forecast total revenue for 2005 – 2009 under the current access arrangement and that forecast for 2010-2013/14 are the return on the capital base and the forecast operating expenditure as shown in the tables above. Other components of total revenue are discussed below.

76. In relation to the return on working capital, working capital refers to a stock of funds that must be maintained by a service provider to pay costs as they fall due. As shown in the tables above, the current access arrangement allows approximately $0.45m per annum in working capital whereas the proposed access arrangement provides for an average of $1.93m per annum which is approximately 1 per cent of total revenue. WAGN explains its working capital proposal on pages 119 to 122 of its supporting information.

77. With regard to depreciation, as shown in the tables above under WAGN's proposal, depreciation is forecast to decrease significantly over the 6 month period 1 January 2010 to 30 June 2010 (from a level of around $25-30m per annum to $0.33m over this six month period). There are two main reasons for this. Firstly meters and service pipes have now been fully depreciated. The depreciation charge for these items under the current access arrangement was around $8.4m per annum. Secondly WAGN has proposed negative values for the depreciation of equipment, vehicles and information technology as a result of over-depreciating these items under the current access arrangement. WAGN's tariff model, included as part of its supporting information, contains detailed calculations on these matters.

78. In relation to efficiency gains, the current access arrangement enabled efficiency gains to be carried forward to the forthcoming access arrangement. WAGN has not proposed an incentive mechanism for the forthcoming access arrangement period.

Submissions are invited on the proposed revised access arrangement for the GDS in relation to :

- The proposed increase in the total revenue of 36 per cent for 2010-11 compared to the total revenue figure for 2009 under the current access arrangement.
- The proposed increase in the allowance for working capital.
- The proposed depreciation methodology to account for past ‘over depreciation’.
- Any other matters relating to the proposed total revenue.

Other Issues

Consumer Price Index (CPI)

79. Under the current access arrangement the Authority approved the calculation of reference tariffs based on the use of the Australian Bureau of Statistics Weighted Average of Eight Capital Cities All Groups, CPI. This index was also used for all inflation related calculations including WACC and incurred expenditure rolled into the capital base.

80. In its proposal (page 3 of the AAI) WAGN has used the Australian Bureau of Statistics Perth All Groups, CPI rather than the above index.

Submissions are invited on the proposed revised access arrangement for the GDS in relation to :

- Whether the basis proposed for the provision of financial information, through use of the Perth CPI, is appropriate.