2013 – 2017 Gas Access Arrangement Review (GAAR)

SP AusNet's Revised Access Arrangement Proposal (RAAP)

RAAP Chapter 4:
Capital Base & Depreciation

Submitted: 9 November 2012

RAAP Chapter 4: Capital Base & Depreciation

This chapter sets out SP AusNet's response to the amendments required by the Draft Decision relating to SP AusNet's Capital Base (Chapter 5 and Attachment 2) and Regulatory Depreciation (Chapter 8 and Attachment 5).

In the event of inconsistency between information contained in this chapter and SP AusNet's Access Arrangement Information (AAI), the information contained in this chapter supersedes the AAI.

1 Introduction

In summary, SP AusNet:

- does not accept key amendments required by the Draft Decision with respect to the capital base;
- has largely implemented the required Draft Decision amendments with respect to depreciation methodologies although numbers differ due to differences in the opening capital base and forecast capex;
- has forecast that its opening capital base is expected to be $1,282.1 million on 1 January 2013 and is projected to increase to $1,711.8 ($nominal) million by the end of the forthcoming access arrangement period.

The remainder of this chapter is structured as follows:

- Section 2 explains the opening capital base;
- Section 3 presents the forecast depreciation and asset disposals;
- Section 4 explains the projected capital base.

The information set out in this chapter accords with all of the applicable requirements of the NGR.

In addition to the required information, SP AusNet has provided as RAAP Appendix 4.A the original 1998 Westar Access Arrangements and a number of models in support of its capital base calculations.

2 Capital Base

2.1 Draft Decision

The Draft Decision did not approve SP AusNet's proposed opening capital base of $1,292.6 million as at 1 January 2013 ($nominal) because it considered that some of SP AusNet's inputs into the capital base roll forward model did not comply with the NGR. The amendments made by the Draft Decision related to:

- SP AusNet's proposed escalation of the capital base which the AER considered would result in six months of unnecessary additional CPI adjustment.

- SP AusNet's treatment of the ESC's capex incentive scheme in 2012.
- SP AusNet's treatment of the movement in provision accounts which are capitalised cash flows that are set aside for paying future liabilities.
- Correcting SP AusNet's proposed capex for the 2008–11 period for small discrepancies with the regulatory accounts.
- Incorporating the forecast capex and depreciation inputs set out in the Draft Decision into the roll forward model for the projected capital base for the 2013–17 access arrangement period.

After adjusting these inputs, the Draft Decision calculated an opening capital base of $1,261.6 million ($nominal).

2.2 SP AusNet Response

SP AusNet does not accept the key parts of the Draft Decision relating to the capital base. However, SP AusNet accepts the AER's allocation of the benchmark to asset classes for the purposes of the capex efficiency scheme as it relates to 2012 capex and other minor issues. SP AusNet's detailed response is set out below.

2.2.1 CPI Escalation

The AER rejected SP AusNet's proposed inflation of the capital base, stating that SP AusNet's approach "would result in six months of unnecessary additional CPI adjustment, thereby overstating the value of the opening capital base as at 1 January 2013."[1] The AER gave as its reasons for this conclusion:[2]

- *"over the life of the assets in the capital base, the service provider will not be over or under compensated for inflation when both tariffs and the capital base are consistently escalated by the same method for determining the annual change in CPI*
- *by applying six months of additional inflation, SP AusNet's proposal creates an inconsistency between inflation applied to tariffs and inflation applied to the capital base*
- *the ESC's cash flow timing assumptions suggest the closing capital base was valued at the end of the regulatory year."*

Therefore, the Draft Decision adjusts the opening capital base for six years of inflation, rather than six and a half years of inflation.

SP AusNet submits that the AER has failed to take account of the timing of the ESC's cash flow assumptions when it rolled forward the capital base. Accordingly, SP AusNet submits that the AER's position as set out in the Draft Decision is incorrect.

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1 AER, *Access Arrangement Draft Decision SPI Networks (Gas) Pty Ltd 2013-17*, Part 2, p. 13.

2 Ibid, p. 20.

Analysis of the ESC's cash flow timing assumptions

SP AusNet observes that AER Decision RABs and cash flow analyses are always presented in end of year dollars (specifically, end of 2012 dollars for inputs into the 2013-17 GAAR PTRM). This is clearly defined in the AER's *Distribution PTRM Handbook*[3] and in the PTRM model itself.[4] In contrast, the ESC Decision capital base and cash flow analysis was delineated in 1 July 2006 dollars.[5] The AER dismisses the significance of the timing of the dollars in the ESC's modelling:[6]

> *"All data in the ESC's decision for the 2008–12 access arrangement period were expressed in real 2006 dollar terms. The AER considers that the ESC's further final decision models for the 2008–12 access arrangement period indicate that opex and capex expenditures are assumed to be incurred on average in the middle of the year. The AER considers that the '1 July 2006' label in the ESC's model refers to its assumed timing of opex and capex. However, the closing capital base for each year is valued at the end of that regulatory year."*

The conclusion reached by the AER is unsustainable on the available evidence. The gas businesses were privatised and sold with specifically defined asset bases in 1998. This documentation (provided as RAAP Appendix 4.A) shows the Westar business was privatised with a RAB value of $631.7M in 1/1/1998 dollars.[7] The Access Arrangement Models applied by the ESC (then named the Office of the Regulator General) progressively inflated the capital base as follows:

- For Access Arrangement 2, the privatisation capital base was escalated by three and a half years to 1/7/2001 dollars (using March 1997 to September 2000 CPI);[8]
- For Access Arrangement 3, the capital base was escalated by five years to 1/7/2006 dollars (using September 2000 to September 2005 CPI).[9]

Therefore, the AER's statement that the closing capital base in the ESC's models was valued at the end of year is incorrect.

Furthermore, it can be seen that the AER Draft Decision RFM escalates from 1/7/2006 dollars to 1/7/2012 dollars using six years' inflation (using September 2005 to September 2011 CPI).[10] Given that the PTRM requires inputs to be expressed in end of year dollars,

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[3] For example, Australian Energy Regulator, *Distribution PTRM Handbook*, 2008, pp. 6, 7, 8, 11 and 12.

[4] For example, PTRM 'Input' worksheet, cell E5.

[5] For example, *SP AusNet GAAR 2008 Revenue Model Further Final Decision*, 'Regulatory Asset Base' worksheet, cell A7, A11 and A20.

[6] AER, *Access Arrangement Draft Decision SPI Networks (Gas) Pty Ltd 2013-17*, Part 2, p. 20.

[7] Victorian Department of Treasury and Finance, *Victorian Third Party Access Code for Natural Gas Pipeline Systems: Access Arrangement Information for Distribution Pipeline by Westar Pty Ltd and Westar (Assets) Pty Ltd Final as at 30 November 1998*, Table 5 Asset Values Westar.

[8] SP AusNet copy of ORG model, *Final Decision Price Control Model - TXU 14 Nov.xls*, worksheet 'REGULATORY ASSET BASE' cell B6, worksheet 'ORG INPUT' cells B 65 and 69.

[9] SP AusNet copy of ESC model, *SP AusNet GAAR 2008 Revenue Model Further Final Decision 20080513.xls*, worksheet 'REGULATORY ASSET BASE' cell B7, worksheet 'DATA INPUT' cells E170.

[10] AER, *SP AusNet - resubmitted RFM - Amended - Draft decision*.xls, worksheet 'Actual Data Inputs' cells F11-L11.

the AER's failure to index capital base values for an additional six months' inflation clearly leaves the capital base under-valued for the forthcoming access arrangement period.

SP AusNet has also provided its version of the ESC's models to demonstrate this (included in support material).

The approach to indexation advocated by SP AusNet is entirely consistent with fixed principle 7.2(3)(A) as approved by the ESC. This is because the opening capital base at the start of the fourth access arrangement period (1 January 2013) has been adjusted to take account of 'changes in CPI over the access arrangement period'. Nothing in the fixed principle precludes an adjustment to the capital base in order for a different regulatory model to be applied to the subsequent access arrangement period.

The Draft Decision also provides irrelevant cash flow analyses as evidence. For example, the AER performs a detailed review of the ESC's and AER's cash flow analysis and concludes:[11]

> *"… the ESC considered the appropriate discount rate between the opening capital base and the closing capital base is exactly one full year of change in the price level, approximated by the CPI."*

The Draft Decision also states:[12]

> *"Typically, the AER presents its [PTRM] revenue modelling in nominal dollar terms, which is equivalent to real dollar terms for each year. This requires one year of CPI to be applied to the capital base values each year."*

SP AusNet is not challenging the appropriate discount rate over a regulatory year, rather it is the appropriate transition between the two regimes that is in dispute.

Consistency with ACT Decisions

The issue of indexing capital base values was recently ventilated before the Australian Competition Tribunal. In that case, Jemena Electricity Networks (Vic) Ltd (JEN) successfully demonstrated that the AER's decision was erroneous and unreasonable in all the circumstances when the AER treated the RAB values, expressed in clause S6.2.1(c)(1) of the National Electricity Rules as being in 1 July 2004 dollars, as values expressed in dollars at some other point in time. The Tribunal noted:[13]

> *"In our view, it is not open to the AER to treat the statement made in respect of each DNSP's RAB value to the effect that the value was $x "as at 1 January 2006 in July 2004 dollars …" as meaning anything other than what it says. In particular, it is not open to the AER to treat the statement that the figures in the table were expressed in July 2004 dollars as an error and to approach the question of RAB indexation on the basis that the figures in the table were actually expressed in September 2003 dollars. The AER was required to use the RAB values in the table in accordance with the remarks made about them in the table."*

[11] AER, *Access Arrangement Draft Decision SPI Networks (Gas) Pty Ltd 2013-17*, Part 2, p. 22.

[12] Ibid, p. 20.

[13] *Application by United Energy Distribution Pty Limited* [2012] ACompT1 at [376].

SP AusNet contends that by ignoring the cashflow timing adopted by the ESC, the AER has similarly erred in the Draft Decision.

The Tribunal also noted the need to ensure adjustments to the RAB for inflation are contiguous. In discussing the end point for escalation, the Tribunal said:[14]

> *"The DNSPs will not suffer provided that the adjustments for inflation to be made in the next regulatory control period commence at the end point to which the values have been escalated in the previous period."*

SP AusNet submits that by indexing the capital base for only 6 years' inflation, the AER is creating a gap between the end point of the previous escalation and the commencement of the forthcoming regulatory control period.

The exact mechanism applied by the AER to correct its decision in response to the Tribunal's finding in this case has not been made public. Therefore, SP AusNet maintains the calculation of the adjustment of its capital asset base it proposed in its original access arrangement proposal. However, SP AusNet understands the adjustment used in response to the Tribunal's decision does allow the AER to continue indexing the RAB using exactly the same lagged September-September CPI as the tariff adjustment mechanism. SP AusNet would be happy to discuss the application of the methodology applied to JEN to ensure the continued consistency between the GAAR capital base roll-forward and CPI-X tariff variation mechanism.

Consistency with the annual tariff variation mechanism

The Draft Decision describes the use of the lagged September-September CPI by the ESC and the AER for the purposes of tariff variation within the regulatory control period and for the roll forward model. In particular, it observes:[15]

> *"The AER's capital base roll forward employs cash flow timing assumptions that are broadly the same as the ESC's approach. These are:*
>
> - *the opening capital base is at the start of the regulatory year*
> - *the closing capital base is at end of the regulatory year*
> - *capex is incurred on average in the middle of the regulatory year."*

The Draft Decision concludes:[16]

> *"Accordingly, the AER and the ESC approaches result in consistent treatment of CPI between asset values and the CPI–X tariff variation mechanism. The AER considers that by applying six months of additional inflation, SP AusNet's proposal creates an inconsistency between inflation as applied to the tariffs and inflation as applied to the capital base."*

SP AusNet does not consider that the AER's conclusion is correct.

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[14] *Application by United Energy Distribution Pty Limited* [2012] ACompT1 at [383].

[15] AER, *Access Arrangement Draft Decision SPI Networks (Gas) Pty Ltd 2013-17*, Part 2, p. 21.

[16] Ibid, p. 21.

SP AusNet agrees that the AER's and ESC's approaches, in isolation, result in CPI being treated consistently between asset values and the CPI-X tariff variation mechanism. However, the AER's approach does not correctly transition the capital base values from the ESC's methodology to the PTRM.

The opening and closing capital bases in the ESC methodology are expressed in 1 July dollars[17] while the opening and closing capital bases are expressed in end of year dollars in the AER PTRM methodology.[18] Therefore, to preserve the value of SP AusNet's capital base, it is necessary to convert the capital base values expressed in 1 July dollars to values expressed in end of year dollars before those values are inserted into the AER's PTRM. The AER has failed to undertake this important step.

The adjustment mechanism proposed by SP AusNet was to index the capital base values for 6.5 years of inflation. In principle, once the adjustment is made, this does not prevent the AER continuing to index the capital base using exactly the same lagged September-September CPI. SP AusNet would be happy to discuss with the AER alternative adjustments to ensure the continued consistency between the capital base roll-forward and CPI-X tariff variation mechanism.

Conclusion

For the reasons set out above and in SP AusNet's original Access Arrangement Information, in order to index the capital base for the period from 1 July 2012 to 1 January 2013 for the opening capital base, SP AusNet applied the following formula:

(Proposed inflation rate of (2.50%+1)^0.5)-1)

This adjustment is required to ensure the capital base is in dollars consistent with the requirements of the PTRM framework as set out in the AER's *Distribution Handbook* (2008) and is consistent with fixed principle 7.2(3)(A) and Rule 73. It is also consistent with the Revenue and Pricing Principles of the National Gas Law, particularly section 24 (4) which requires that regard should be had to the capital base with respect to a pipeline adopted in any previous full access arrangement decision.

2.2.2 Treatment of the capex incentive scheme

SP AusNet accepts the amendments required by the Draft Decision concerning the treatment of SP AusNet's capex incentive scheme and has amended its 2012 capex to be consistent with the ESC's capex incentive scheme. The capex incentive scheme has been updated to reflect more recent 2012 estimates of kilometers replaced for low pressure mains replacement program and the number of new connections for domestic and non-domestic customers.

[17] For example, SP AusNet copy of ESC model, *SP AusNet GAAR 2008 Revenue Model Further Final Decision 20080513.xls*, worksheet 'REGULATORY ASSET BASE' cell A11.

[18] For example, instructions in *SP AusNet - PTRM - Amended - Draft decision.xls,* worksheet 'Intro' cell C44 and worksheet 'Inputs' cell E39 and see general construction of the 'Assets' and 'Analysis' worksheet.

2.2.3 Treatment of provisions

SP AusNet accepts the amendments required by the Draft Decision concerning the treatment of provisions in capex and has amended its capex to be consistent with this treatment.

2.2.4 Regulatory accounting inconsistencies

SP AusNet accepts the amendments required by the Draft Decision concerning the consistency of conforming net capex amounts with the audited historical regulatory accounts and has corrected its Roll Forward Model to address the inconsistencies identified by the AER.

2.2.5 Opening capital base 1 January 2013

In accordance with the calculations described above, the written-down value of the rolled forward capital base as at 1 January 2013 is $1,282.06 million as shown in Table 4-1 below.

Table 4-1: Opening capital base as at 1 January 2013

(1/07/2012 $M)	2008	2009	2010	2011	2012
Opening capital base	1,153.71	1,177.14	1,198.15	1,217.14	1,245.22
Gross Capex	75.34	75.97	76.77	85.76	80.30
Customer Contributions	4.08	3.36	3.62	3.62	4.01
Disposals	0.44	0.24	0.13	-	-
Depreciation	47.39	51.35	54.03	54.06	55.18
Closing capital base	1,177.14	1,198.15	1,217.14	1,245.22	1,266.33
Six months CPI adjustment					15.73
Capital Base as at 1 Jan 2013					**1,282.06**

Source: SP AusNet, the RFM rolls forward in July 2012 dollars and at the end makes the six month adjustment.

The information presented in this table, together with the preceding information, explains how the opening capital base is arrived at and provides a demonstration of how the capital base increased or diminished over the previous access arrangement period, in accordance with rule 72(1)(b) of the NGR.

2.2.6 Roll forward of capital base over 2013 to 2017

SP AusNet does not accept the amendments required to its capex or depreciation in Revisions 3.2 and 5.1 of the Draft Decision. Therefore, the roll forward of the capital base reflects SP AusNet's revised attachments in these areas.

3 Depreciation

3.1 Draft Decision

The AER did not approve SP AusNet's proposed regulatory depreciation allowance of $147.8 million ($nominal) for the 2013–17 access arrangement period. The Draft Decision required the following amendments:[19]

- Correct modelling errors of unrecovered depreciation from previous regulatory control periods and lengthen the period across which the unrecovered depreciation is to be recovered.
- Divide the 'Land & buildings' asset class into separate 'Land' and 'Buildings' asset classes from 1 January 2013 to reflect different depreciation treatment.
- Correct a number of errors in the way SP AusNet calculates depreciation for existing assets. These included changing the period over which unrecovered depreciation is recovered, consistency issues in individual numbers between the RFM and the PTRM, not deducting disposals for the depreciation calculations, and not allowing for the potential for negative net capex.
- Calculate depreciation using the standard PTRM approach for depreciating existing assets in the opening capital base rather than the method proposed by SP AusNet.

3.2 SP AusNet Response

With some modifications, SP AusNet has implemented the majority of the required amendments although the amended numbers differ to those set out in the Draft Decision due to differences in the opening capital base and forecast capex. SP AusNet's detailed response is set out below.

3.2.1 Recovery of unrecovered depreciation

SP AusNet proposed to recover the difference between forecast and actual depreciation from 1998 to 2012 (unrecovered depreciation) over the 2013–17 access arrangement period.

The Draft Decision states that SP AusNet's proposed recovery does not meet the requirements of the NGR. Rather, to satisfy the NGR, the Draft Decision required SP

[19] AER, *Access Arrangement Draft Decision SPI Networks (Gas) Pty Ltd 2013-17*, Part 1, p. 27.

AusNet to recover its unrecovered depreciation over the remaining economic life of the asset class to which the unrecovered depreciation relates.[20]

SP AusNet accepts this amendment. However, SP AusNet's original access arrangement PTRM did not attempt to assign the under-recovery across asset classes. In response to the Draft Decision, the under-recovery has now been allocated to asset classes and depreciation modelled accordingly. This results in higher depreciation than calculated by the AER although the methodology is consistent with the AER approach.

3.2.2 Land and buildings asset class split

SP AusNet accepts the amendments required by the Draft Decision concerning the creation of separate "Land" and "Buildings" asset classes and has applied separate asset classes from 2013 onwards.

3.2.3 Correction of errors

SP AusNet accepts the amendments required by the Draft Decision to correct errors in its RFM and PTRM and has amended its models accordingly (including the 2012 capex update for the incentive scheme adjustment).

3.2.4 Use of the standard PTRM depreciation approach

SP AusNet accepts the use of the standard PTRM depreciation methodology and has applied it, subject to the amendments accepted above.

3.2.5 Capex over 2013 to 2017

SP AusNet does not accept the amendments to its capex required by the Draft Decision. Therefore, the depreciation of the capital base reflects SP AusNet's forecast capex as set out in its revised access arrangement (see RAAP Chapter 2).

3.2.6 Proposed Forecast Regulatory Depreciation

The table below sets out SP AusNet's forecast depreciation for the forthcoming access arrangement period, in response to the Draft Decision.

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[20] AER, *Access Arrangement Draft Decision SPI Networks (Gas) Pty Ltd 2013-17*, Part 2, p. 133.

Table 4-2: Forecast depreciation

(Nominal $M)	2013	2014	2015	2016	2017
Nominal Straight-line Depreciation	48.7	55.3	62.2	67.8	73.3
Inflation on Opening RAB	32.1	34.3	36.6	38.8	40.8
Nominal Regulatory Depreciation	16.6	21.0	25.6	29.1	32.5

Source: SP AusNet

For the reasons set out in its AAI and as demonstrated above, SP AusNet's forecast depreciation complies with the requirements of rules 88 and 89.

4 Projected Capital Base

The projected capital base for the forthcoming access arrangement period is set out in the table below. The table reflects the calculation of the opening capital asset base and forecast depreciation as described in this chapter. In addition, it also includes forecast capital expenditure and customer contributions over the forthcoming access arrangement period as described in Chapter 5 of the AAI as modified by RAAP Chapter 2.

Table 4-3: Projected capital base

(Nominal $M)	2013	2014	2015	2016	2017
Opening capital base	1,282.1	1,372.4	1,464.2	1,551.4	1,630.9
Net capex	107.0	112.8	112.8	108.6	113.4
Economic Depreciation	16.6	21.0	25.6	29.1	32.5
Closing capital base	1,372.4	1,464.2	1,551.4	1,630.9	1,711.8

Source: SP AusNet

The information presented in the above table and the explanations provided in sections 2 and 3 above satisfy the requirements of rule 72(1)(c), which requires SP AusNet to present the projected capital base over the access arrangement period, including:

- a forecast of conforming capital expenditure for the period and the basis for the forecast; and
- a forecast of depreciation for the period including a demonstration of how the forecast is derived on the basis of the proposed depreciation method.