## Access Arrangement Information for the ACT, Queanbeyan and Palerang gas distribution network

1 July 2010 - 30 June 2015

Amended by order of the Australian Competition Tribunal made on 23 September 2010

**April 2010** 

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## Overview

This document should be read in conjunction with the access arrangement information for the proposal and the final decision.

## 1 Introduction

### 1.1 Purpose of this document

On 30 June 2009, ActewAGL Distribution submitted to the Australian Energy Regulator (AER) the access arrangement proposal for its Australian Capital Territory (ACT), Queanbeyan and Palerang gas distribution network for the period 1 July 2010 to 30 June 2015 (the access arrangement period) together with the required access arrangement information for the proposal.2

On 11 November 2009, following assessment of the access arrangement proposal and public submissions, the AER issued a draft decision<sup>3</sup> under Rule 59(1) of the National Gas Rules 2008 (NGR).4

On 6 January 2010 ActewAGL Distribution submitted a revised access arrangement proposal and revised access arrangement information for the revised proposal for its ACT. Queanbeyan and Palerang gas distribution network for the access arrangement period. On 26 March 2010 the AER made its final decision. This access arrangement information does not seek to replicate information included in the access arrangement information for the proposal. It reflects the revisions in the final decision. As such, it supplements the access arrangement information for the proposal and should be read in conjunction with that document.

On 18 -May 2010 ActewAGL Distribution ActewAGL sought review of the decision made by the AER in respect of the methodology and the estimation of the debt risk premium. On 23 September 2010, the Tribunal found the debt risk premium should be 3.89 per cent and the weighted average cost of capital should be 10.04 per cent. This required total revenue to be adjusted upwards to \$283.47 million (\$2009-10). Consequently tariffs have been increased to reflect the increase in the debt risk premium, the weighted average cost of capital and total revenue.

Together, these documents (this access arrangement information, the access arrangement information for the proposal and the final decision) comprise the access arrangement information that includes information that is reasonably necessary for users or prospective users to understand the background to the access arrangement, and the basis and derivation of the various elements of the access arrangement.5

ActewAGL, Access arrangement for the ACT, Queanbeyan and Palerang gas distribution network, June 2009 <sup>2</sup> ActewAGL, Access arrangement information for the ACT, Queanbeyan and Palerang gas distribution network, June 2009 (ActewAGL Distribution, *Access arrangement information for the proposal*)

<sup>3</sup> AER, Draft decision, ActewAGL Access arrangement proposal for the ACT, Queanbeyan and Palerang gas distribution

network, 1 July 2010–30 June 2015, November 2009 (AER, Draft decision)

Hereinafter, a reference to a Rule, Division or Part shall, unless otherwise specified, be understood to refer to a Rule, Division or Part as applicable of the *National Gas Rules 2008* (NGR). <sup>5</sup> Rule 42(1) of the NGR

## 1.2 Layout of the document

This document focuses on areas of revision to the access arrangement proposal and access arrangement information for the proposal. Each chapter canvasses AER amendments or revisions relevant to the subject matter of that chapter. Subsequent chapters are set out as follows:

- Chapter 2 supplements ActewAGL Distribution's network demand and utilisation forecast (chapter 5 of the access arrangement information for the proposal) and provides information about demand forecasts in chapter 11 of the final decision;
- Chapter 3 supplements ActewAGL Distribution's capital base and capital expenditure chapter (chapters 7 and 8 of the access arrangement information for the proposal) and provides information about capital expenditure in chapter 3 of the final decision;
- Chapter 4 supplements ActewAGL Distribution's rate of return and forecast inflation chapter (chapter 8 of the access arrangement information for the proposal) and provides information about depreciation in chapter 4 and rate of return in chapter 5 of the final decision:
- Chapter 5 supplements ActewAGL Distribution's operating expenditure chapter (chapter 9 of the access arrangement information for the proposal) and provides information about operating expenditure in chapter 9 of the final decision;
- Chapter 6 supplements ActewAGL Distribution's derivation of total revenue (chapter 10 of the access arrangement information for the proposal) and provides information about total revenue in chapter 10 of the final decision;
- Chapter 7 supplements ActewAGL Distribution's services, cost allocation and pricing chapter (chapter 11 of the access arrangement information for the proposal) and provides information about reference services in chapter 2 and chapter 12 of the final decision;
- Chapter 8 supplements ActewAGL Distribution's services, cost allocation and pricing chapter (chapter 11 of the access arrangement information for the proposal) and provides information about the tariff variation mechanism in chapter 13 of the final decision;
- Chapter 9 supplements ActewAGL Distribution's changes to the access arrangement (chapter 12 of the access arrangement information for the proposal) and addresses the AER's revisions to the access arrangement and provides information about non-tariff components of the access arrangement in chapter 14 of the final decision;
- Attachment A includes further supporting documents and information, and the relevant models incorporating the effects of amendments and revisions.

## 2 Network demand and utilisation

The AER approves the forecast demand and utilisation in the access arrangement information for the proposal.

Refer to chapter 11 of the draft decision and the final decision for further details.

## 3 Capital base

This chapter supplements ActewAGL Distribution's capital base and capital expenditure chapters (chapters 7 and 8 of the access arrangement information for the proposal) and provides information about capital expenditure and inflation in chapter 3 and chapter 5 of the final decision.

## 3.1 Opening capital base for the access arrangement period

The final decision approves an opening capital base in 2010/11 in the initial year of the access arrangement period, of \$278.1 million (nominal) in the revised access arrangement information for the revised proposal.

### 3.1.1 Capitalised regulatory costs

The final decision approves the capitalised regulatory costs of \$1.45 million in the revised access arrangement information for the revised proposal.

Refer to section 3.4.1.1 in chapter 3 of the final decision for further details.

#### 3.1.2 Adjustment to the capital base for inflation

Table 3.1 sets out the inflation rates to adjust the capital base approved in the final decision.

Refer to section 3.4.1.2 in chapter 3 of the final decision for details about how the inflation rates are estimated.

Table 3.1 Inflation rates for adjusting the capital base

| (%)             | 2004/05 | 2005/06 | 2006/07 | 2007/08 | 2008/09 | 2009/10 |
|-----------------|---------|---------|---------|---------|---------|---------|
| Inflation rates | 2.34    | 2.67    | 3.54    | 2.33    | 4.35    | 1.82    |

#### 3.1.3 Return on the variance from forecast 2003/04 capital expenditure

The final decision does not approve the adjustment to the opening capital base for actual capital expenditure incurred before the earlier access arrangement commences. Due to updated inflation rates, the AER approves an adjustment to the opening capital base in 2010 of \$12 276 (\$nominal).

Refer to section 3.4.1.3 of the final decision for further details.

#### 3.1.4 Opening capital base

Table 3.2 sets out the final decision on the opening capital base. Table 3.2 replaces Table 7.3 in the access arrangement information for the proposal.

Refer to section 3.4.1 in chapter 3 of the final decision for further details.

Table 3.2 Derivation of the opening capital base at 1 July 2010

| \$ million (nominal)     | 2004/05 | 2005/06 | 2006/07 | 2007/08 | 2008/09 | 2009/10 | 2010/11 |
|--------------------------|---------|---------|---------|---------|---------|---------|---------|
| Opening capital base     | 225.9   | 233.8   | 239.3   | 250.4   | 255.6   | 266.8   | 278.1   |
| Capital expenditure      | 9.8     | 7.2     | 11.1    | 7.6     | 8.6     | 15.5    |         |
| Depreciation             | 7.3     | 8.0     | 8.6     | 8.4     | 8.8     | 9.2     |         |
| Adjustment for inflation | 5.4     | 6.3     | 8.7     | 5.9     | 11.3    | 5.0     |         |
| Closing capital base     | 233.8   | 239.3   | 250.4   | 255.6   | 266.8   | 278.1ª  |         |

a: Closing capital base for 2009–10 includes an adjustment for difference between actual and forecast capital expenditure in the period before the earlier access arrangement period.

## 3.2 Forecast capital expenditure

#### 3.2.1 Security of supply

The final decision does not approve the security of supply capital expenditure for the Hoskinstown Fyshwick Loop (HFL) proposed in the access arrangement proposal, or the Dalton to Watson compressor project proposed in the revised access arrangement proposal.

Section 6.2.2.3 of the access arrangement information for the proposal no longer forms part of the access arrangement information.

Refer to section 3.6.2.1 in chapter 3 of the draft decision and section 3.4.2.1 in chapter 3 of the final decision for further details.

#### 3.2.1.1 Labour, aluminium and steel cost escalators

The final decision approves the labour, aluminium and steel cost escalators in the revised access arrangement information for the revised proposal.

Refer to section 3.4.2.1 in chapter 3 of the final decision for further details.

The updated escalators are set out in Table 3.3 below and replaces Table 6.10 in the access arrangement information for the proposal.

#### 3.2.1.2 Polyethylene cost escalator

The final decision does not approve the polyethylene cost escalator.

Refer to section 3.4.2.1 in chapter 3 of the final decision for further details.

The updated escalators are set out in Table 3.3 below and replaces Table 6.10 in the access arrangement information for the proposal.

Table 3.3 Real escalation factors for capital expenditure

| (%)                 | 2009  | 2010 | 2011 | 2012 | 2013 | 2014 |
|---------------------|-------|------|------|------|------|------|
| EBA EGW labour      | 1.2   | 1.9  | 1.3  | 1.5  | 1.9  | 2.3  |
| Contract EGW labour | 0.9   | 1.2  | 1.5  | 2.7  | 3.8  | 3.7  |
| Aluminium           | -16.7 | 46.7 | 11.9 | 1.4  | 0.2  | 0.4  |
| Steel               | -28.5 | 45.6 | 17   | 1.7  | -2.4 | -1.9 |
| Polyethylene        | 0     | 0    | 0    | 0    | 0    | 0    |

#### 3.2.1.3 CPRS escalator

The final decision does not approve the CPRS cost escalator.

Refer to section 3.4.2.1 in chapter 3 of the final decision for further details.

The approved escalators are set out in Table 3.4 below and replaces Table 6.11 in the access arrangement information for the proposal.

Table 3.4 Effect of the emissions trading scheme on escalation factors

| (%)          | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|--------------|------|------|------|------|------|------|
| Aluminium    | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| Steel        | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| Polyethylene | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |

#### 3.2.2 Forecast capital expenditure

The final decision outlines the forecast capital expenditure approved for the access arrangement period.

Refer to section 3.6.2.1 in chapter 3 of the draft decision and section 3.4.2.1 in chapter 3 of the final decision for further details.

The final decision does not approve the forecast capital expenditure. The forecast capital expenditure approved in the final decision is presented in Table 3.5 and Table 3.6 below and replaces Table 6.8 and Table 6.21 in the access arrangement information for the proposal.

Table 3.5 Forecast net capital expenditure including contributions and disposals 2010-11 to 2014-15

| \$ million (2009/10)                          | 2010/11   | 2011/12 | 2012/13 | 2013/14 | 2014/15 | Total |
|---|-----------|---------|---------|---------|---------|-------|
| Distribution system capital exp               | penditure |         |         |         |         |       |
| Market expansion                              | 8.83      | 7.21    | 7.06    | 6.18    | 5.8     | 35.08 |
| Capacity development                          | 5.41      | 15.49   | 0.66    | 0.31    | 2.35    | 24.23 |
| Stay in business                              | 11.47     | 2.22    | 3.61    | 4.08    | 3.18    | 24.56 |
| Total distribution system capital expenditure | 25.72     | 24.91   | 11.33   | 10.57   | 11.33   | 83.86 |
| IT System                                     | 0.32      | 0.31    | 0.44    | 0.1     | 0       | 1.17  |
| Total non system capital expenditure          | 0.32      | 0.31    | 0.44    | 0.1     | 0       | 1.17  |
| Capital contributions                         | 0.06      | 0.06    | 0.06    | 0.06    | 0.06    | 0.29  |
| Equity raising costs                          | 0         | 0       | 0       | 0       | 0       | 0     |
| Disposals                                     | 0         | 0       | 0       | 0       | 0       | 0     |
| Total capital expenditure                     | 25.98     | 25.16   | 11.71   | 10.61   | 11.26   | 84.72 |

Table 3.6 Forecast capital expenditure 2010–11 to 2014–15 by asset type (gross)

| \$ million (2008/09)               | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 | Total |
|------------------------------------|---------|---------|---------|---------|---------|-------|
| Distribution system:               |         |         |         |         |         |       |
| TRS & DRS – Valves &<br>Regulators | 12.59   | 4.08    | 0.42    | 0.93    | 0.42    | 18.44 |
| HP Mains (inc DRS & TRS)           | 0.98    | 11.53   | -       | -       | 1.47    | 13.97 |
| MP Mains                           | 4.81    | 3.51    | 3.56    | 2.59    | 2.87    | 17.33 |
| Meters - Tariff                    | 3.75    | 2.77    | 4.33    | 4.09    | 3.77    | 18.70 |
| Meters - Contract                  | 0.63    | 0.20    | 0.22    | 0.32    | 0.22    | 1.59  |
| MP Services                        | 2.97    | 2.83    | 2.81    | 2.64    | 2.59    | 13.83 |
| HP Services                        | -       | -       | -       | -       | -       | -     |
| Non system:                        | -       | -       | -       | -       | -       | •     |
| IT System                          | 0.32    | 0.31    | 0.44    | 0.10    | -       | 1.17  |
| Total capital expenditure          | 26.04   | 25.22   | 11.78   | 10.67   | 11.33   | 85.03 |

## 3.3 Forecast capital base

The final decision approves an opening capital base of \$278.1 million (nominal) in the revised access arrangement information for the revised proposal and as outlined in section 3.1 above.

The asset lives approved in the final decision are set out in Table 3.7 and replaces Table 7.5 in the access arrangement information for the proposal.

Refer to section 4.3.1 in chapter 4 of the final decision for further details.

Table 3.7 Asset lives and remaining lives 1 July 2010

| Asset Category                | Standard life | Remaining lives |
|-------------------------------|---------------|-----------------|
| Primary (HP) Mains            | 80            | 64.9            |
| HP Services                   | 50            | 32.5            |
| MP Mains                      | 50            | 29.9            |
| MP Services                   | 50            | 39.2            |
| Regulators, Valves (TRS, SRS) | 15            | 10.9            |
| Contract meters               | 15            | 12.9            |
| Tariff meters                 | 15            | 11.4            |
| IT System                     | 5             | 3.7             |
| Regulatory Costs              | 5             | 3.9             |

The final decision does not approve the forecast depreciation. The forecast depreciation approved in the final decision is set out in Table 3.8 and replaces Table 7.6 in the access arrangement information for the proposal. The changes to forecast depreciation have been updated for changes to the forecast capital expenditure and forecast inflation approved in the final decision. Depreciation has been updated to reflect the order made by the Tribunal on 23 September 2010.

Table 3.8 Economic depreciation 2010-2011 to 2014-15

| \$ million (nominal)       | 2010/11 | 2011/12 | 2012/13 | 2013/14      | 2014/15      | Total            |
|----------------------------|---------|---------|---------|--------------|--------------|------------------|
| Straight line depreciation | 9.5     | 11.2    | 12.4    | 13. <u>3</u> | 13.8         | 60.1             |
| Inflation adjustment       | -7.0    | -7.6    | -8.2    | -8.5         | -8. <u>7</u> | -40. <u>0101</u> |
| Economic depreciation      | 2.5     | 3.6     | 4.2     | 4.8          | 5.1          | 20.1             |

The final decision does not approve the forecast capital base. The forecast capital base approved in the final decision is presented in Table 3.9 below and replaces Table 7.7 and Table 10.3 in the access arrangement information for the proposal. The projected capital base has been updated to reflect the order made by the Tribunal on 23 September 2010.

Table 3.9 Projected capital base 2010-2011 to 2014-15

| rabie 3.3 Projecteu capi          | lai nast Evi |               |               | an des ann leithe sa war | GANGER AND CARRY |              |
|-----------------------------------|--------------|---------------|---------------|--------------------------|------------------|--------------|
| \$ million (2009/10)              | 2010/11      | 2011/12       | 2012/13       | 2013/14                  | 2014/15          | Total        |
| Opening capital base              | 278.1        | 295.7         | 311. <u>1</u> | 311.7                    | 310. <u>7</u>    | na           |
| Plus forecast capital expenditure | 26.9         | 26. <u>1</u>  | 12.1          | 11.0                     | 11.7             | 87. <u>8</u> |
| Less forecast depreciation        | 9.3          | 10.7          | 11.5          | 12.0                     | 12.2             | 55.6         |
| less forecast disposals           | 0.0          | 0.0           | 0.0           | 0.0                      | 0.0              | 0.0          |
| Closing capital base              | 295.7        | 311. <u>1</u> | 311.7         | 310. <u>7</u>            | 310. <u>2</u>    | na           |

na: Not applicable.

## 3.4 Capital redundancy mechanism

The final decision does not approve the proposed capital redundancy mechanism.

Section 7.2.7 of access arrangement information for the proposal is not part of the access arrangement information.

Refer to section 3.6.4.1 in chapter 3 of the draft decision and section 3.3.4 in chapter 3 of the final decision for further details.

## 4 Rate of return and forecast inflation

This chapter supplements ActewAGL Distribution's rate of return and forecast inflation chapter (chapter 8 of the access arrangement information for the proposal) and provides information about depreciation in chapter 4 and rate of return in chapter 5 of the final decision.

<u>Table 4.1</u> sets out the rate of return and replaces Table 8.1 in the access arrangement information for the proposal.

Full details of how these parameters have been established are outlined in Chapter 5 of the final decision. These parameters have been updated to reflect the order of the Tribunal made on 23 September 2010.

Table 4.1 Summary of cost of capital parameters

| CAPM parameter                                | Value                         |  |
|---|-------------------------------|--|
| Nominal risk free rate (%)                    | 5.63                          |  |
| Equity beta                                   | 0.8                           |  |
| Market risk premium (%)                       | 6.5                           |  |
| Debt risk premium (%)                         | 3. <u>89</u>                  |  |
| Debt share of total value (gearing) (%)       | 60                            |  |
| Gamma (utilisation of imputation credits) (%) | 0.65                          |  |
| Nominal return on equity (%)                  | 10.83                         |  |
| Nominal return on debt (%)                    | 8 <del>.9</del> 8 <u>9.52</u> |  |
| Nominal vanilla WACC (%)                      | <del>9.72</del> 10.04         |  |

## 4.1 Treatment of dividend imputation credits

The final decision approves a gamma (assumed utilisation of imputation credits) value of 0.65.

Refer to chapter 6 of the final decision for further details.

## 4.2 Sample period

The final decision does not approve the proposed averaging period. The final decision approves the averaging period of 20 business days between 15 February 2010 and 12 March 2010.

Refer to chapter 5 of the final decision for further details.

#### 4.3 Nominal risk free rate

The final decision does not approve the proposed nominal risk free rate. The final decision approves a nominal risk free rate of 5.63 per cent.

Refer to section 5.4 of chapter 5 of the final decision for further details.

#### 4.4 Market Risk Premium

The final decision does not approve the proposed market risk premium. The final decision approves a market risk premium of 6.5 per cent.

Refer to section 5.6 of chapter 5 of the final decision for further details.

## 4.5 Equity beta

The final decision does not approve the proposed equity beta. The final decision approves an equity beta of 0.8.

Refer to section 5.7 of chapter 5 of the final decision for further details.

## 4.6 Debt risk margin and credit rating

The final decision does not approve the proposed debt risk premium. The final decision approves a BBB+ credit rating and a debt risk premium of 3.35 per cent.

Refer to section 5.5 of chapter 5 of the final decision for further details.

This parameter was varied by order of the Tribunal made 23 September 2010. The Tribunal determined that the debt risk premium should be set using the average of the Bloomberg BBB fair value curve and the CBASpectrum BBB+ fair value curve. This results in a debt risk premium of 3.89 per cent.

#### 4.7 Forecast inflation

The final decision does not approve the proposed forecast inflation rate. The final decision approves a forecast inflation rate of 2.52 per cent per annum.

<sup>7</sup> The debt risk premium is calculated over a 20 business day averaging period from 15 February 2010 to 12 March 2010, consistent with the risk free rate.

<sup>&</sup>lt;sup>6</sup> The Tribunal directed that the Bloomberg BBB fair value curve should be extended to 10 years using the difference between the Bloomberg AAA fair value curve at 7 years and at 10 years. The CBASpectrum BBB+ fair value curve includes a value at 10 years so does not require extrapolation.

Table 4.2 Inflation forecast (%)

| June               |      |      |     | 2014 | 2015 | 2016 | 2017 | 2018 |     |     | Geometric<br>Average |
|--------------------|------|------|-----|------|------|------|------|------|-----|-----|----------------------|
| Forecast inflation | 2.50 | 2.75 | 2.5 | 2.5  | 2.5  | 2.5  | 2.5  | 2.5  | 2.5 | 2.5 | 2.52                 |

Refer to section 5.8 of chapter 5 of the final decision for further details.

## 5 Operating expenditure

This chapter supplements ActewAGL Distribution's operating expenditure chapter (chapter 9 of the access arrangement information for the proposal) and provides information about operating expenditure in chapter 9 of the final decision.

## 5.1 Selection of base year

The final decision approves 2009-10 as the base year for forecast operating expenditure.

Refer to section 9.5.3.1 of chapter 9 of the draft decision for further details.

## 5.2 Step changes

#### 5.2.1.1 Technical regulation

The final decision approves the step change for technical regulation in the revised access arrangement information for the revised proposal. The step changes relate to increases in costs associated with complying with the requirements of Australian Standards AS2885 and AS4645, including the conducting of safety management studies, integrity reviews and formal safety assessments.<sup>8</sup>

Refer to section 9.3.1.2 in chapter 9 of the final decision for further details.

#### 5.2.1.2 Project specific costs

The final decision approves the step change for project specific costs in relation to specific high pressure system projects, the Canberra primary main integrity project, and the Hoskinstown-Fyshwick trunk main integrity project. The AER approves the step changes for all the project specific costs subject to two adjustments in respect of the Queanbeyan TRS and the Phillip PRS.

Refer to section 9.5.3.2 in chapter 9 of the draft decision for further details.

#### 5.2.1.3 AEMO fees

The final decision does not approve the AEMO step change but instead includes it as a cost pass through event.

Refer to section 9.5.3.2 in chapter 9 of the draft decision for further details.

#### 5.2.1.4 Gas market development

The final decision does not approve the gas market development step changes.

Refer to section 9.5.3.2 in chapter 9 of the draft decision for further details.

<sup>&</sup>lt;sup>8</sup> ActewAGL Distribution, Access arrangement information for the proposal, p. 166

#### 5.2.1.5 Information Technology application costs

The final decision approves the information technology application costs in the revised access arrangement information for the revised proposal.

Refer to section 9.3.1.3 of chapter 9 of the final decision for further details.

#### 5.2.1.6 APA Security of Supply

The final decision does not approve the compressor project operating expenditure.

Section 6.2.2.3 of the access arrangement information for the proposal is not part of the access arrangement information.

Refer to section 9.3.1.1 of chapter 9 of the final decision for further details.

#### 5.3 Cost escalators

#### 5.3.1.1 Labour escalators

The final decision approves the labour cost escalators in the revised access arrangement information for the revised proposal.

The labour cost escalators approved in the final decision are summarised in Table 5.1 and replace Table 9.8 in the access arrangement information for the proposal.

Table 5.1 Escalators (excluding CPI) used for operating expenditure (excluding corporate overheads)

| Category           | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 |
|--------------------|---------|---------|---------|---------|---------|
| EBA labour (%)     | 0       | 1.4     | 1.6     | 2.2     | 2.2     |
| Non EBA labour (%) | 1.2     | 1.9     | 3.4     | 4       | 3.3     |
| Other (%)          | 0       | 0       | 0       | 0       | 0       |

Refer to section 9.3.1.4 of chapter 9 of the final decision for further details.

#### 5.3.1.2 Corporate overhead and ACT escalators

The final decision approves the corporate overhead and ACT cost escalators in the revised access arrangement information for the revised proposal.

The labour cost escalators approved in the final decision are summarised in Table 5.2 below and replaces Tables 9.9 and 9.10 in the access arrangement information for the proposal.

Table 5.2 ACT labour, IT application and other escalators 2010/11 to 2014/15 (real)

|                    | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 |
|--------------------|---------|---------|---------|---------|---------|
| General labour (%) | 2.1     | 1.5     | 1.4     | 1.6     | 2.1     |
| EGW (%)            | 2.1     | 1.5     | 1.4     | 1.6     | 2.1     |
| IT application (%) | 2.7     | 2.4     | 2.4     | 2.4     | 2.4     |
| Other (%)          | 0       | 0       | 0       | 0       | 0       |

Refer to section 9.3.1.4 of chapter 9 of the final decision for further details.

## 5.4 Forecast controllable operating expenditure

Controllable operating expenditure includes: operating and maintenance costs, corporate overheads, non-system asset usage charge as well as marketing and other controllable direct costs.

The final decision does not approve the proposed controllable operating expenditure. The controllable operating expenditure approved in the final decision is set out in Table 5.3, which replaces the controllable operating expenditure in Table 9.11 and Table 9.25 in the access arrangement information for the proposal.

Table 5.3 Forecast controllable operating expenditure 2010-15

| \$ million (2009/10)      | 2010/11 | 2011/12 | 2012/13 | 2013/14                                    | 2014/15 | Total |
|---------------------------|---------|---------|---------|--|---------|-------|
| Controllable costs        |         |         |         | · V · ii u · u · u · u · u · u · u · u · u |         |       |
| Operating and maintenance | 9.5     | 11.3    | 11.6    | 10.4                                       | 10.7    | 53.4  |
| APA Security of supply    | 0       | 0       | 0       | 0  | 0       | 0     |
| Corporate overheads       | 3.2     | 3.3     | 3.4     | 3.5  | 3.5     | 17.0  |
| Non-system asset charge   | 0.5     | 0.5     | 0.5     | 0.5  | 0.5     | 2.6   |
| Marketing                 | 1.3     | 1.3     | 1.4     | 1.4  | 1.4     | 6.8   |
| Other controllable costs  | 0.2     | 0.2     | 0.2     | 1.0  | 0.8     | 2.5   |
| Total controllable costs  | 14.8    | 16.7    | 17.1    | 16.8                                       | 17.0    | 82.3  |

Refer to section 9.5 of chapter 9 of the final decision for further details.

## 5.5 Forecast other allowable operating expenditure

Forecast other allowable operating expenditure includes government charges, UNFT, the Contestability charge, unaccounted for gas and other costs.

#### 5.5.1.1 Government charges and UNFT

The final decision approves government charges and UNFT in the revised access arrangement information for the revised proposal as set out in Table 5.4 below.

This replaces the government charges and UNFT amounts set out in the access arrangement information for the proposal in Tables 9.11, 9.16 and 9.25.

Refer to section 9.5.5.1 in chapter 9 of the draft decision for further details.

#### 5.5.1.2 Contestability charges

The final decision approves the contestability charges in the revised access arrangement information for the revised proposal as set out in Table 5.4 below and replaces the contestability charges in the access arrangement information for the proposal set out in Tables 9.11 and 9.17 and 9.25.

Refer to section 9.5.5.2 of chapter 9 of the draft decision for further details.

#### 5.5.1.3 Unaccounted for gas

The final decision approves the unaccounted for gas costs in the revised access arrangement information for the revised proposal as set out in Table 5.4 below and replaces unaccounted for gas costs in Tables 9.11, 9.18 and 9.25 in the access arrangement information for the proposal.

Refer to section 9.3.1.5 of chapter 9 of the final decision for further details.

#### 5.5.1.4 Ancillary Services

The final decision approves the costs for ancillary services costs in the revised access arrangement information for the revised proposal as set out in Table 5.4 below.

Refer to section 9.3.1.6 of chapter 9 of the final decision for further details.

#### 5.5.1.5 Other costs

The final decision approves the other costs in the revised access arrangement information for the revised proposal as set out in Table 5.4 below and replaces the other costs in the access arrangement information for the proposal set out in Tables 9.11, 9.21 and 9.25.

Refer to section 9.5.5.4 in chapter 9 of the draft decision for further details.

### 5.5.1.6 Summary of forecast other allowable operating expenditure

Table 5.4 contains the approved forecast operating expenditure for other allowable operating expenditure for the access arrangement period, which replaces other allowable operating expenditure in Table 9.11 and Table 9.25 from the access arrangement information for the proposal.

Table 5.4 Forecast other allowable operating expenditure for the access arrangement period

| arrangement period          |         |         |         |         | CONTROL CONTROL | Martin Committee of the |
|-----------------------------|---------|---------|---------|---------|-----------------|--|
| \$ million (2009/10)        | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15         | Total  |
| Other allowable costs       |         |         |         |         |                 |  |
| Government levies           | 0.7     | 0.7     | 0.7     | 0.7     | 0.7             | 3.2  |
| UNFT                        | 3.4     | 3.4     | 3.5     | 3.5     | 3.6             | 17.4   |
| Contestability costs        | 0.6     | 0.6     | 0.6     | 0.6     | 0.6             | 2.9  |
| Unaccounted for gas         | 0.7     | 0.7     | 0.7     | 0.7     | 0.7             | 3.6  |
| Ancillary services          | 0.2     | 0.2     | 0.2     | 0.2     | 0.2             | 8.0  |
| Other costs                 | 0.3     | 0.3     | 0.3     | 0.3     | 0.3             | 1.3  |
| Total other allowable costs | 5.7     | 5.8     | 5.8     | 5.9     | 6.0             | 29.2   |

Refer to section 9.5 of chapter 9 of the final decision for further details.

### 5.6 Debt raising costs

The final decision approves the debt raising costs in the revised access arrangement information for the revised proposal as set out in Table 5.5. This replaces the debt raising costs in Table 9.24 and Table 9.25 in the access arrangement information for the proposal.

Table 5.5 Debt raising costs

| \$ million (2009/10) | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 | Total |
|----------------------|---------|---------|---------|---------|---------|-------|
| Debt raising costs   | 0.2     | 0.2     | 0,2     | 0.2     | 0.2     | 0.9   |

#### 5.7 Self insurance costs

The final decision does not approve most of the self insurance costs proposed by ActewAGL Distribution. Table 5.6 sets out the self insurance costs approved in the final decision and replaces the self insurance costs in Table 9.22 of the access arrangement information for the proposal. Section 9.2.3.5 of the access arrangement information for the proposal refers to the annual self insurance costs and the total self insurance costs over the access arrangement period and needs to reflect the costs approved in the final decision as set out in Table 5.6.

Refer to section 9.3.1.7 of chapter 9 of the final decision for further details.

#### 5.8 Statement of costs

The final decision outlines that it may seek the additional cost information that ActewAGL Distribution is required to maintain in clause 4.19 of the access arrangement using its information gathering powers.

Refer to section 9.3.1.8 of chapter 9 of the final decision for further details.

## 5.9 Summary of operating expenditure

The final decision does not approve the proposed operating expenditure. Table 5.6 below replaces Table 9.25 in the access arrangement information for the proposal.

Table 5.6 Forecast total operating expenditure for the access arrangement period

| Table 5.0 Forecast total o    | peraung e | Apenana | ire for the | access a | mangemen | n period |
|-------------------------------|-----------|---------|-------------|----------|----------|----------|
| \$ million (2009/10)          | 2010/11   | 2011/12 | 2012/13     | 2013/14  | 2014/15  | Total    |
| Controllable costs            |           |         |             |          |          |          |
| Operating and maintenance     | 9.5       | 11.3    | 11.6        | 10.4     | 10.7     | 53.4     |
| APA Security of supply        | 0         | 0       | 0           | 0        | 0        | 0        |
| Corporate overheads           | 3.2       | 3.3     | 3.4         | 3.5      | 3.5      | 17.0     |
| Non-system asset charge       | 0.5       | 0.5     | 0.5         | 0.5      | 0.5      | 2.6      |
| Marketing                     | 1.3       | 1.3     | 1.4         | 1.4      | 1.4      | 6.8      |
| Other controllable costs      | 0.2       | 0.2     | 0.2         | 1.0      | 8.0      | 2.5      |
| Total controllable costs      | 14.8      | 16.7    | 17.1        | 16.8     | 17.0     | 82.3     |
| Other allowable costs         |           |         |             |          |          |          |
| Government levies             | 0.7       | 0.7     | 0.7         | 0.7      | 0.7      | 3.2      |
| UNFT                          | 3.4       | 3.4     | 3.5         | 3.5      | 3.6      | 17.4     |
| Contestability costs          | 0.6       | 0.6     | 0.6         | 0.6      | 0.6      | 2.9      |
| Unaccounted for gas           | 0.7       | 0.7     | 0.7         | 0.7      | 0.7      | 3.6      |
| Ancillary services            | 0.2       | 0.2     | 0.2         | 0.2      | 0.2      | 8.0      |
| Other costs                   | 0.3       | 0.3     | 0.3         | 0.3      | 0.3      | 1.3      |
| Total other non-capital costs | 5.7       | 5.8     | 5.8         | 5.9      | 6.0      | 29.2     |
| Self insurance costs          | 0.0       | 0.0     | 0.0         | 0.0      | 0.0      | 0.0      |
| Debt raising costs            | 0.2       | 0.2     | 0.2         | 0.2      | 0.2      | 0.9      |
| Total operating expenditure   | 20.7      | 22.6    | 23.1        | 22.9     | 23.2     | 112.4    |

## 6 Derivation of total revenue

This chapter supplements ActewAGL Distribution's Derivation of total revenue chapter (chapter 10 of the access arrangement information for the proposal) and reflects the final decision on taxation, the incentive mechanism and total revenue set out in chapters 6, 7 and 10 of the final decision.

## 6.1 Summary of required amendments

The final decision does not approve the proposed total revenue figure of \$329.8 million (\$2009–10) in the revised access arrangement information for the revised proposal. Instead, the final decision approves a total revenue of \$278.7283.47 million (\$2009–10).

Refer to chapter 10 of the final decision for further details.

## 6.2 Depreciation

The final decision does not approve the forecast depreciation.

The forecast depreciation approved in the final decision is set out in Table 6.1. This replaces Table 10.2 of the access arrangement information for the proposal. <u>Depreciation has been updated to reflect the order made by the Tribunal on 23 September 2010.</u>

Table 6.1 Economic depreciation 2010-11 to 2014-15

| \$000 nominal              | 2010/11 | 2011/12 | 2012/13 | 2013/14      | 2014/15        |
|----------------------------|---------|---------|---------|--------------|----------------|
| Straight line depreciation | 9.5     | 11.2    | 12.4    | 13. <u>3</u> | 13.8           |
| Inflation adjustment       | -7.0    | -7.6    | -8.2    | -8.5         | -8. <u>7</u> 6 |
| Economic depreciation      | 2.5     | 3.6     | 4.2     | 4.8          | 5.1            |

Refer to section 3.4.4 in chapter 3 of the final decision for further details.

## 6.3 Corporate income tax

#### 6.3.1 Transition to post-taxation framework

As ActewAGL Distribution previously used a pre-taxation framework, the proposed post-taxation framework required the establishment of a taxation asset base at the start of the access arrangement period. ActewAGL Distribution established a tax asset base at the date on which it first came under the national taxation equivalent regime on 1 July 2001. The tax asset base was then rolled forward to 30 June 2010, using actual and forecast capital expenditure, capital contributions, disposals and taxation depreciation, applying a straight line depreciation method.

#### 6.3.2 Tax asset lives

The tax asset lives in the revised access arrangement information for the revised proposal approved in the final decision are set out in <u>Table 6.2</u> below. This replaces Table 10.6 of the access arrangement information for the proposal.

Table 6.2 Adopted standard tax lives of assets

| Asset class                     | Standard life (years) |
|---------------------------------|-----------------------|
| TRS & DRS - Valves & Regulators | 40                    |
| HP Mains                        | 50                    |
| MP Mains                        | 50                    |
| Meters - Tariff                 | 15                    |
| Meters - Contract               | 15                    |
| MP Services                     | 30                    |
| HP Services                     | 50                    |
| IT Systems                      | 5                     |
| Regulatory Costs                | 5                     |

The final decision approves an opening tax asset base at 1 July 2010 to \$196.9 million in the revised access arrangement information for the revised proposal. The approved roll forward of the Tax Asset Base (TAB) is set out in <u>Table 6.3</u> below. This replaces Table 10.8 in the access arrangement information for the proposal. <u>Table 6.4 has been updated to reflect the order made by the Tribunal on 23 September 2010.</u>

Table 6.3 Roll forward of the TAB from 2001-02 to 2009-10

| 7 U.O.O.                         | 1011 101 11 | ara or an | INDIIO  | 111 LUU 1-C | 72 to 200 | J-10    |         |         |          |
|----------------------------------|-------------|-----------|---------|-------------|-----------|---------|---------|---------|----------|
| \$ million<br>(nominal)          | 2001/02     | 2002/03   | 2003/04 | 2004/05     | 2005/06   | 2006/07 | 2007/08 | 2008/09 | F2009/10 |
| Opening<br>TAB                   | 168.58      | 174.09    | 177.74  | 179.41      | 182.85    | 183.26  | 187.31  | 188.56  | 189.44   |
| Capital expenditure              | 10.91       | 9.33      | 7.59    | 9.84        | 7.28      | 11.23   | 8.75    | 8.75    | 15.53    |
| Straight-line depreciation       | -5.40       | -5.67     | -5.93   | -6.40       | -6.87     | -7.18   | -7.50   | -7.87   | -8.10    |
| Closing<br>TAB                   | 174.09      | 177.74    | 179.41  | 182.85      | 183.26    | 187.31  | 188.56  | 189.44  | 196.88   |
| Opening<br>TAB at 1<br>July 2010 |             |           |         |             |           |         |         |         | 196.88   |

The final decision does not approve the opening taxation asset base. The approved opening taxation asset base as at 1 July 2010 and the roll forward of the capital base for taxation is set out in <u>Table 6.4</u> below. This replaces Table 10.9 of the access arrangement information for the proposal.

Table 6.4 Roll forward of the TAB from 2010/11 to 2014/15

| \$ million (nominal)         | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 |
|------------------------------|---------|---------|---------|---------|---------|
| Opening TAB                  | 196.9   | 216.1   | 234.2   | 237.7   | 240.0   |
| Forecast capital expenditure | 26.7    | 26.5    | 12.7    | 11.8    | 12.8    |
| Straight-line depreciation   | -7.5    | -8.4    | -9.2    | -9.4    | -9.9    |
| Closing TAB                  | 216.1   | 234.2   | 237.7   | 240.0   | 242.9   |

The final decision does not approve the taxation asset base. Based on the tax asset base in <u>Table 6.4</u>, the final decision approves the tax depreciation in <u>Table 6.5</u> below. This replaces Table 10.10 of the access arrangement information for the proposal.

Table 6.5 Tax depreciation 2010/11 to 2014/15

| Tax depreciation concessions | 7.5     | 0.4     |         | 0.4     |         |
|------------------------------|---------|---------|---------|---------|---------|
|                              | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 |

The final decision does not approve the income taxation building block. The final decision approves the income tax building block as set out in <u>Table 6.6</u> below. This replaces Table 10.11 of the access arrangement information for the proposal.

Table 6.6 Corporate income tax building block 2010/11 to 2014/15

|                             | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 |
|-----------------------------|---------|---------|---------|---------|---------|
| Tax payable                 | 2.4     | 2.8     | 3.1     | 3.3     | 3.4     |
| Value of imputation credits | -1.5    | -1.8    | -2.0    | -2.2    | -2.2    |
| Tax allowance               | 8.0     | 1.0     | 1.1     | 1.2     | 1.2     |

Refer to chapter 6 of the draft decision and final decision for further details.

### 6.4 Revenue requirement

The final decision does not approve the total revenue requirement. The final decision approves the total revenue requirement over the access arrangement period of \$278.7283.47 million (\$2009–10).

The building block components of total revenue approved in the final decision are shown in Table 6.7 below. This replaces Table 10.1 and Table 10.12 of the access arrangement information for the proposal. <u>Total Revenue has been updated to reflect the order made by the Tribunal on 23 September 2010. These changes are reflected in Table 6.7.</u>

Table 6.7 Estimation of total revenue (\$m, nominal, unless otherwise stated)

|  |             |                               |                      |                      | o ca co a y        |
|--|-------------|-------------------------------|----------------------|----------------------|--------------------|
|  | 2010/11     | 2011/12                       | 2012/13              | 2013/14              | 2014/15            |
| Regulatory depreciation                      | 2.5         | 3.6                           | 4.2                  | 4.8                  | 5.1                |
| Return on capital                            | <u>27.9</u> | <u>30.4</u>                   | <u>32.8</u>          | <u>33.7</u>          | <u>34.5</u>        |
| Tax allowance                                | 0.8         | 1.0                           | 1.1                  | 1.2                  | 1.2                |
| Operating expenditure                        | 21.2        | 23.8                          | 24.9                 | 25.3                 | 26.2               |
| Incentive mechanism<br>payments (decrements) | 0.0         | 0.0                           | 0.0                  | 0.0                  | 0.0                |
| Unsmoothed revenue requirement               | <u>52.4</u> | <u>58.8</u>                   | <u>63.0</u>          | <u>65.0</u>          | <u>67.0</u>        |
| Energy forecasts (TJ)                        | 6545.0      | 6525.2                        | 6565.5               | 6641.6               | 6736.0             |
| Revenue yield (tariff/TJ)                    | 7547.4      | 81 <del>21.7<u>93.3</u></del> | 8739.8 <u>8894.4</u> | 9404.8 <u>9655.5</u> | 10481.81012<br>0.4 |
| Smoothed revenue requirement                 | 51.4        | <u>55.7</u>                   | <u>60.8</u>          | <u>66.7</u>          | <u>73.2</u>        |
| of which tariff revenue                      | 49.4        | <u>53.5</u>                   | <u>58.4</u>          | <u>64.1</u>          | <u>70.6</u>        |
| of which contract revenue                    | 2.0         | 2.3                           | <u>2.4</u>           | <u>2.5</u>           | <u>2.6</u>         |
| X factor tariff revenue (%)                  | na          | na                            | na                   | na                   | na                 |

na - not applicable

Refer to chapter 10 of the final decision for further details.

Further details about the allocation of revenues to tariff and contract services is provided in section 7.3 of the revised access arrangement information for the revised proposal.

### 6.5 Incentive mechanism

The final decision does not approve the rolling carryover mechanism for capital expenditure found in the revised access arrangement proposal.

The final decision requires that clause 4.12 of the revised access arrangement proposal is amended to state that the efficiency gain in year 1 of the access arrangement period (ie 2010/11) will be calculated as the forecast in year 1 less the actual in year 1. This can be expressed as:

$$E_1 = (F_1 - A_1)$$

### 6.5.1.1 Treatment of year 5 expenditure

The final decision requires that an adjustment be made to the calculation of the carryover amount in year 6 (and the first year of subsequent access arrangement periods), to ensure there is no double counting. That is, the implicit carryover reward, in the form of higher than otherwise forecast operating expenditure, must be removed from the calculation of the year 6 efficiency gain in clause 4.12 of the revised access arrangement proposal.

## 6.5.2 Adjustments

The final decision approves the adjustments for the incentive mechanism in the revised access arrangement information for the revised proposal.<sup>9</sup>

Refer to chapter 7 of the draft decision and chapter 7 of the final decision for further details.

<sup>&</sup>lt;sup>9</sup> AER, *Draft decision*, p. 81

## 7 Services, cost allocation and pricing

This chapter supplements ActewAGL Distribution's services, cost allocation and pricing chapter (chapter 11 of the access arrangement information for the proposal) and addresses the final decision for pipeline and reference services and reference tariffs set out in chapters 2, 10, 12, 13 and 14 of the final decision.

## 7.1 Treatment of ancillary services

The final decision approves ancillary service as a pipeline service and as a reference service.

Refer to Box A.2 in Attachment A which provides new information on ancillary services to replace the information in the access arrangement information for the proposal as well as chapter 2 of the draft decision and chapter 2 of the final decision for further information.

Refer to Box A.1 in Attachment A for the replacement text for section 11.1 of the access arrangement information for the proposal.

#### 7.2 Reference tariffs

The final decision approves the methodology for setting the network tariffs.

Refer to chapter 12 of the draft decision and chapter 12 of the final decision for further information.

#### 7.2.1 Specification and presentation issues

The final decision does not approve certain aspects of the specification of the tariffs.

Refer to chapter 13 of the draft decision and chapter 13 of the final decision for further details.

## 7.3 Allocation of adjusted revenue to tariffs

The final decision does not approve the total revenue.

Refer to chapter 10 of the final decision for further information.

As a consequence the reference tariffs are adjusted to reflect the reduction in total revenue.

Refer to Box A.3 in Attachment A which provides the replacement text for section 11.2 of the access arrangement information for the proposal.

Refer to chapter 13 of the final decision for further details.

## 8 Reference tariff variation mechanism

This chapter supplements ActewAGL Distribution's services, cost allocation and pricing chapter (chapter 11 of the access arrangement information for the proposal) and reflects the final decision set out in chapter 13 of the final decision.

## 8.1 Annual reference tariff adjustment formula mechanism

#### 8.1.1 Adjustment factor

The final decision does not approve the proposed adjustment factor in the annual reference tariff adjustment formula mechanism to adjust for actual costs in relation to the Utilities (Network Facilities) Tax (UNFT), AEMO fees, the Energy Industry Levy, and the difference between the forecast cost of UAG and the efficient tendered market price of UAG as a percentage of actual gas receipts.<sup>10</sup>

Box A.4 in Attachment A replaces section 11.3.1 of the access arrangement information for the proposal.

Refer to section 13.4.1.2 in chapter 13 of the draft decision for further details.

#### 8.1.2 Adjustment for time value of money

The final decision does not approve the proposed adjustment factor in the annual reference tariff adjustment formula mechanism to take account of the time value of money.

Box A.4 in Attachment A replaces section 11.3.1 of the access arrangement information for the proposal.

Refer to section 13.4.1.2 in chapter 13 of the draft decision for further details.

#### 8.1.3 CPI formula

The final decision approves the revised CPI formula in the revised access arrangement information for the revised proposal.

Box A.4 in Attachment A replaces section 11.3.1 of the access arrangement information for the proposal.

Refer to chapter 13 of the final decision for further details.

#### 8.1.4 Inclusion of a rounding convention in the access arrangement

The final decision approves a rounding convention for the tariff variation mechanism in the revised access arrangement information for the revised proposal.

Refer to chapter 13 of the draft decision for further details.

<sup>10</sup> AER, Draft decision, p. 157

8.1.5 Amendments to the access arrangement information for the proposal Section 11.3.1 of the access arrangement information for the proposal is replaced with the text in Box A.4 in Attachment A.

## 8.2 Cost pass through tariff variation mechanism

#### 8.2.1 Definition of pass through events

The final decision does not approve the definition of the STTM event. Table 8.1 includes the definition of the STTM event approved in the final decision and replaces the sections 'Defining the proposed pass through events' and 'Justification for and nature of proposed cost pass through events' in section 11.3.2 in the access arrangement information for the proposal.

Refer to section 13.4.2.1 in chapter 13 of the draft decision for further details.

#### 8.2.2 Low Administrative Cost Event

The final decision approves the renaming of the low administrative cost event as a new Specified Uncontrollable Cost event in the revised access arrangement information for the revised proposal. Table 8.1 includes the definition of the new Specified Uncontrollable Cost event approved in the final decision and replaces Table 11.13 in the access arrangement information for the proposal.

Refer to section 13.3.10.1 in chapter 13 of the final decision for further details.

#### 8.2.3 Supply Curtailment Event

The final decision does not approve that the supply curtailment event can adjust tariffs for foregone revenue. Table 8.1 below includes the definition of the supply curtailment event approved in the final decision and replaces Table 11.13 in the access arrangement information for the proposal.

Refer to section 13.3.7 in chapter 13 of the final decision for further details.

Table 8.1 Definitions of cost pass through events

| Event name             | Definition  |
|------------------------|---|
| Change in tax<br>event | Change in Tax Event means:  (a) a change in the amount of a Relevant Tax, or the way or rate at which a Relevant Tax is calculated (including a change in the application or official interpretation of a Relevant Tax); or  (b) the removal of a Relevant Tax or imposition of a new Relevant Tax. |

#### Service standard event

Service Standard Event means any decision made by the Relevant Regulator or any other Authority, or any introduction of or amendment to applicable law or Gas Law, which: (a) has the effect of:

- (i) imposing or varying standards (including Network Design and operational standards) on ActewAGL relevant to any one or more of the Services, that are more onerous than the standards imposed at the Commencement Date; or
- (ii) altering the nature or scope of services that comprise any one or more of the Services; or
- (iii) substantially altering the manner in which ActewAGL is required to undertake any activity forming part of, or ancillary to, any one or more of the Services (including through rules for the operation of competitive gas markets); and
- (b) results in ActewAGL incurring or being likely to incur higher or lower costs in providing any one or more of the Services than it would have incurred but for that event.

## Regulatory change event

Regulatory Change Event means a change in a regulatory obligation or requirement that: (a) substantially affects the manner in which ActewAGL provides the Services (or any one of them) or otherwise operates its gas business (or any part of it);

(b) increases or decreases the costs of providing those Services or operating its business; and

(c) does not fall within any other category of Cost Pass Through Event under this clause.

#### **CPRS** event

Carbon Pollution Reduction Scheme Event means an event which results in the imposition of legal obligations on ActewAGL or a third party arising from the introduction or operation of a carbon emissions trading scheme imposed by the Commonwealth, a State or Territory or an Authority and results in ActewAGL incurring costs directly or indirectly (including under statute or contract) and includes:

(a) the cost of acquiring emissions allowances, permits or units (howsoever called);(b) costs incurred in order to reduce liability for carbon emissions associated with the production, transport or supply of gas, or otherwise in connection with ActewAGL's gas

distribution business or the Services; and (c) administrative and compliance costs associated with the introduction or operation of such a scheme, including reporting costs.

## An NECF or NGCF event

National Energy Customer Framework/ National Energy Connections Framework Event means the introduction of new laws (including through proposed National Energy Retail Law and Rules, or by additions or changes to the National Gas Law or Rules) or additions or changes to the existing Gas Law, to implement either or both of the proposed National Energy Customer Framework or National Energy Connections Framework, which results in the imposition of legal obligations on ActewAGL or a third party and results in ActewAGL incurring costs directly or indirectly (including under statute or contract) from the operation of those frameworks.

## An STTM event

Short Term Trading Market Event occurs if ActewAGL participates in the Short Term Trading Market, resulting in:

(a) changes in costs that ActewAGL incurs directly or indirectly (including under statute or contract); or

(b) the need to change services provided to accommodate the market, leading to additional costs.

## General pass through event

General Pass-Through Event occurs in the following circumstances:

- (a) an uncontrollable and unforeseeable event that falls outside of the normal operations of a business such that prudent operational risk management could not have prevented or mitigated the effect of the event;
- (b) which results in a change in the cost of providing the Services (or any of them) or the operation of its gas business (or any part of it); and
- (c) does not fall within any other category of Cost Pass Through Event under this clause. For the purposes of this definition, an event will be considered unforeseeable if:

  (a) it is an act of terrorism, natural disaster (including fire, flood and earthquake) or
- (a) it is an act of terrorism, natural disaster (including fire, flood and earthquake) or change in law; or
- (b) at the time the AER approves this Access Arrangement, despite the occurrence of the event being a possibility, there was no compelling reason to consider that the event was more likely to occur than not to occur during the access arrangement period.

# Specified uncontrollable cost event

Specified Uncontrollable Cost Event means:

- (a) the difference between actual and forecast costs in the relevant year for the following costs:
- (i) the AEMO Fee;
- (ii) the Utilities (Network Facilities) Tax; and
- (iii) the Energy Industry Levy;

where the forecast costs for each of the charges are those included in the revenue allowance for the relevant year as per the table below, and actual costs are those costs incurred in the relevant year for each of the charges; and

(b) the difference between UAG forecast as 1.7 per cent of actual gas network receipts at the relevant forecast cost per GJ in \$2009/10 as follows:

(i) in FY11: \$5.31 (ii) in FY12: \$5.23 (iii) in FY13: \$5.25 (iv) in FY14: \$5.27 (v) in FY15: \$5.29,

and 1.7 per cent of actual network gas receipts at the efficient tendered market price per GJ for the relevant year.

# Supply curtailment event

Supply Curtailment Event means a period when insufficient gas is delivered to ActewAGL's gas network due to reasons beyond ActewAGL's control, and cannot be supplied to meet demand requirements as represented by ActewAGL's forecasts used to derive the Reference Tariffs in this Access Arrangement, resulting in:

(a) supply restrictions directed under the Utilities (Gas Restrictions) Regulation 2005

(ACT); and/or

(b) widespread domestic load shedding, gas rationing or curtailment within ActewAGL's Network.

For the avoidance of doubt, the cost of preparing for, arranging and managing domestic load shedding, gas rationing or curtailment are part of the expenditure incurred by ActewAGL when determining the relevant Change in Cost of a Supply Curtailment Event.

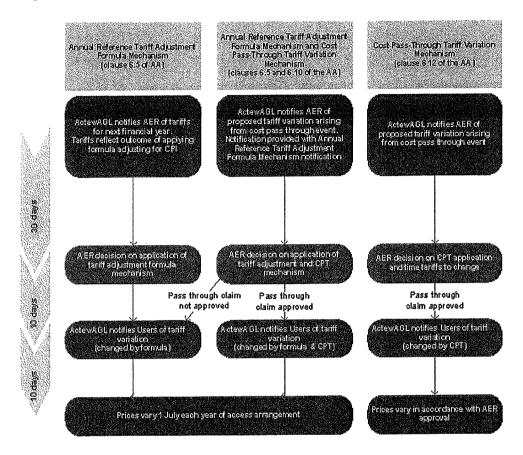
## 8.3 Oversight of reference tariff variation mechanism

#### 8.3.1 AER consideration of tariff variation notifications

The final decision does not approve certain aspects of the tariff variation notification process.

The figure below replaces section 11.3.3 of the access arrangement information for the proposal.

Figure 11.1



Refer to section 13.3.1 in chapter 13 in the final decision for further details.

#### 8.3.2 Notification of pass through events

The final decision does not approve the notification period for cost pass through events in the revised access arrangement information for the revised proposal. The final decision approves the notification period of 90 business days after a cost pass through event occurs.

Refer to section 13.3.10 in chapter 13 in the final decision for further details.

#### 8.3.3 Information provided to the AER in tariff variation notifications

The final decision does not approve certain aspects of the information provided to the AER in the tariff variation notifications.

Refer to sections 13.3.2, 13.3.5 and 13.3.10 in chapter 13 of the final decision for further details.

#### 8.3.4 Considerations in approving a tariff variation notification

The final decision does not approve certain aspects of the additional factors for consideration when approving the tariff variation notification.

Refer to section 13.3.6 in chapter 13 of the final decision for further details.

#### 8.3.5 Timing of operation of reference tariff variation mechanism

The final decision does not approve certain aspects of the timing of operation of the reference tariff variation mechanism.

Figure 11.1 replaces section 11.3.3 of the access arrangement information for the proposal.

Refer to section 13.3.1 in chapter 13 of the final decision for further details.

#### 8.3.6 Pass though claims in the final year of the access arrangement

The final decision does not approve pass through claims in the final year of the access arrangement period in the revised access arrangement information for the revised proposal.

Refer to section 13.3.9 in chapter 13 of the final decision for further details.

#### 8.3.7 Other matters

The final decision does not approve certain aspects of the definition of a Change in Cost.

Refer to section 13.3.8 in chapter 13 of the final decision for further information.

#### 8.4 Materiality threshold

#### 8.4.1.1 Low administrative cost impact threshold

The final decision accepts ActewAGL's low administrative cost impact threshold in the revised access arrangement information for the revised proposal.

Refer to section 13.3.10 in chapter 13 of the final decision for further details.

# 8.4.1.2 Administrative Cost Impact threshold applying to other cost pass through events

The final decision does not approve the administrative cost impact threshold applying to other cost pass through events in the revised access arrangement information for the revised proposal.

Refer to section 13.3.3 in chapter 13 of the final decision for further details.

#### 8.4.1.3 Definition of Change in Cost

Discussed in section 8.3.7 above.

# 8.4.1.4 Treatment of cost pass through claims under separate events but linked to a single happening

The final decision does not approve the treatment of cost pass through claims under separate events but linked to a single happening in the revised access arrangement information for the revised proposal.

Refer to section 13.3.4 in chapter 13 of the final decision for further details.

#### 8.5 Other amendments to the reference tariff variation mechanism

The final decision approves other amendments to the reference tariff variation mechanism to reflect the draft decision and final decision, or to correct reference, definitional or other issues identified since submission of the access arrangement proposal.

These changes include:

- A definition of a Cost Pass Through Amount and Cost Pass-Through Event in the access arrangement;
- More accurately refer to Reference Tariffs set out in attachment 3 of the access arrangement; and
- Change the reference from the service provider to ActewAGL Distribution.

Refer to section 13.3.10 in chapter 13 of the final decision for further details.

# 9 Changes to the access arrangement

This chapter supplements ActewAGL Distribution's changes to the access arrangement chapter (chapter 12 of the access arrangement information for the proposal) and addresses the final decision for non-tariff components of the access arrangement in chapters 2, 3, 5, 8, 10, 12 and 14 of the final decision.

### 9.1 Reference tariff policy

The final decision does not approve certain aspects of the reference tariff policy.

Parts of section 12.4 of the access arrangement proposal about reference tariff policy no longer forms part of the access arrangement information.

Refer to section 12.3 of chapter 12 of the final decision for further details.

### 9.2 New capital expenditure

The final decision does not approve the inclusion of the new capital expenditure in the reference tariff policy.

Parts of section 12.4 of the access arrangement information for the proposal about new capital expenditure is not part of the access arrangement information.

Refer to section 3.4.6 of chapter 3 of the final decision for further details.

### 9.3 Provision of meter data services

The final decision approves the amendments set out in section 2.4 of the draft decision as accepted by ActewAGL Distribution.

Refer to section 2.4 of the draft decision and chapter 2 of the final decision for further details.

### 9.4 Fixed Principles

The final decision does not approve certain aspects of the fixed principles.

Refer to chapter 8 of the draft decision and chapter 8 of the final decision for further details.

### 9.5 Extensions and expansions policy

The final decision does not approve extensions and expansions policy.

Refer to section 14.3 of chapter 14 of the final decision for further details.

### 9.6 Trading policy

The final decision does not approve the trading policy.

Refer to section 14.2 of chapter 14 of the final decision for further details.

## 9.7 Trigger event

The final decision requires the inclusion of a trigger event.

Refer to section 14.4 in chapter 14 of the final decision for further details.

# Glossary

| Term  | Meaning  |
|---|--|
| AAG   | Access Arrangement Guideline   |
| AASB  | Australian Accounting Standards Board  |
| ABS   | Australian Bureau of Statistics  |
| ACCC  | Australian Competition and Consumer Commission   |
| access arrangement                              | the access arrangement for the ACT, Queanbeyan and Palerang gas distribution network for 1 July 2010–30 June 2015 approved by the AER in April 2010  |
| access arrangement information                  | the access arrangement information for the access arrangement for the ACT, Queanbeyan and Palerang gas distribution network for 1 July 2010–30 June 2015 approved by the AER in April 2010 |
| access arrangement proposal                     | ActewAGL, Access arrangement for the ACT, Queanbeyan and Palerang gas distribution network, June 2009  |
| access arrangement information for the proposal | ActewAGL, Access arrangement information for the ACT, Queanbeyan and Palerang gas distribution network, June 2009  |
| access arrangement period                       | 1 July 2010 to 30 June 2015  |
| Access Economics                                | Access Economics Pty Ltd   |
| ACIL  | ACIL Tasman Pty Ltd  |
| ACQ   | annual contract quantity   |
| ACG   | The Allen Consulting Group Pty Ltd   |
| ACT   | Australian Capital Territory   |
| AEMC  | Australian Energy Market Commission  |
| AEMO  | Australian Energy Market Operator  |
| AER   | Australian Energy Regulator  |
| AFMA  | Australian Financial Markets Association   |
| ANSIO   | Australian national state and industry outlook   |
| APA Group                                       | APA Group is comprised of the Australian Pipeline Trust and APT Investment Trust   |
| ASX   | Australian Stock Exchange  |
| BB  | National Gas Services bulletin board   |
| CAPM  | Capital Asset Pricing Model  |
| CCGT  | combined cycle gas turbine   |
| CEG   | Competition Economists Group   |
| CGS   | Commonwealth government securities   |
| CO2   | carbon dioxide   |
| CPI   | consumer price index   |
| CPRS  | Carbon Pollution Reduction Scheme  |
| DAMS  | Distribution Asset Management Services   |
| DGM   | dividend growth model  |
| draft decision                                  | AER, Draft decision, ActewAGL Access arrangement proposal for the ACT, Queanbeyan and Palerang gas distribution network, 1 July 2010–30 June 2015, November 2009                           |

| Term                              | Meaning  |
|-----------------------------------|--|
| DRP                               | debt risk premium  |
| DRS                               | district regulator set   |
| earlier access arrangement        | the access arrangement for the ACT, Queanbeyan and Palerang gas distribution network for 1 January 2005–30 June 2010 approved by the ICRC  |
| earlier access arrangement period | 1 January 2005–30 June 2010  |
| Eastern Gas Pipeline              | this is owned by Jemena Ltd and transports gas from the Gippsland Basin in Victoria to markets in Sydney and regional centres  |
| EBA                               | enterprise bargaining agreement  |
| EBT                               | earnings before taxation   |
| Econtech                          | KPMG Econtech Pty Ltd  |
| EGP                               | Eastern gas pipeline   |
| EGW                               | electricity, gas and water   |
| EIL                               | energy industry levy   |
| ERP                               | equity risk premium  |
| ESCV                              | Essential Services Commission of Victoria  |
| final decision                    | AER, Final decision, Access arrangement proposal, ACT, Queanbeyan and Palerang gas distribution network for 1 July 2010–30 June 2015, March 2010   |
| GFC                               | Global Financial Crisis  |
| GIS                               | Geographic Information System  |
| GJ                                | gigajoule (1 000 000 000 joules)   |
| GMC                               | Gas Market Company   |
| GST                               | goods and services tax   |
| HFL                               | Hoskinstown to Fyshwick loop   |
| ICRC                              | Independent Competition and Regulatory Commission (ACT)  |
| IPART                             | Independent Pricing and Regulatory Tribunal (NSW)  |
| ISR                               | Industrial special risk  |
| IT                                | Information technology   |
| Jemena                            | Jemena Gas Networks (NSW) Ltd.   |
| JV                                | joint venture  |
| KPI                               | key performance indicator  |
| LME                               | London Metal Exchange  |
| MAOP                              | maximum allowable operating pressure   |
| MCE                               | Ministerial Council on Energy  |
| MDQ                               | maximum daily quantity   |
| Moomba to Sydney pipeline         | this is owned by the APA Group and links the Cooper Basin gas fields at Moomba with distribution networks in Sydney and regional New South Wales. The pipeline includes laterals to Canberra and regional centres including Lithgow and Griffith |
| MRP                               | market risk premium  |
| MSP                               | Moomba to Sydney pipeline  |

| NECF National Energy Customer Framework NEMMCO National Electricity Market Management Company NERA NERA Economic Consulting NIEIR National Institute of Economic and Industry Research NPV net present value NSP network service provider NSW New South Wales NTER National tax equivalent regime NYMEX New York Mercantile Exchange OECD Organisation for Economic Co-operation and Development ORG Victorian Office of Regulator General  PB Parsons Brinckerhoff PJ petajoule (equal to 1000 terajoules) POTS Packaged off take station PRS primary regulating station PTRM post-taxation revenue model  QSN Link The link between Epic Energy's South West Queensland Pipeline and the Moomba to Adelaide Pipeline System and the MSP—the Queensland South Australia and NSW Link RBA Reserve Bank of Australia  ActewAGL, Addendum to access arrangement Information for the ACT, Queanbeyan and Palerang gas distribution network, January 2010  SCP SoftLaw Community Projects  |
|--|
| NEMMCO         National Electricity Market Management Company           NERA         NERA Economic Consulting           NIEIR         National Institute of Economic and Industry Research           NPV         net present value           NSP         network service provider           NSW         New South Wales           NTER         National tax equivalent regime           NYMEX         New York Mercantile Exchange           OECD         Organisation for Economic Co-operation and Development           ORG         Victorian Office of Regulator General           PB         Parsons Brinckerhoff           PJ         petajoule (equal to 1000 terajoules)           POTS         Packaged off take station           PRS         primary regulating station           PTRM         post-taxation revenue model           QSN Link         The link between Epic Energy's South West Queensland Pipeline and the Moomba to Adelaide Pipeline System and the MSP—the Queensland South Australia and NSW Link           RBA         Reserve Bank of Australia           revised access arrangement information for the revised proposal         ActewAGL, Addendum to access arrangement information for the ACT, Queanbeyan and Palerang gas distribution network, January 2010 |
| NERA         NERA Economic Consulting           NIEIR         National Institute of Economic and Industry Research           NPV         net present value           NSP         network service provider           NSW         New South Wales           NTER         National tax equivalent regime           NYMEX         New York Mercantile Exchange           OECD         Organisation for Economic Co-operation and Development           ORG         Victorian Office of Regulator General           PB         Parsons Brinckerhoff           PJ         petajoule (equal to 1000 terajoules)           POTS         Packaged off take station           PRS         primary regulating station           PTRM         post-taxation revenue model           QSN Link         The link between Epic Energy's South West Queensland Pipeline and the Moomba to Adelaide Pipeline System and the MSP—the Queensland South Australia and NSW Link           RBA         Reserve Bank of Australia           revised access arrangement information for the revised proposal         ActewAGL, Addendum to access arrangement information for the ACT, Queanbeyan and Palerang gas distribution network, January 2010   |
| NIEIR National Institute of Economic and Industry Research  NPV net present value  NSP network service provider  NSW New South Wales  NTER National tax equivalent regime  NYMEX New York Mercantile Exchange  OECD Organisation for Economic Co-operation and Development  ORG Victorian Office of Regulator General  PB Parsons Brinckerhoff  PJ petajoule (equal to 1000 terajoules)  POTS Packaged off take station  PRS primary regulating station  PTRM post-taxation revenue model  QSN Link The link between Epic Energy's South West Queensland Pipeline and the Moomba to Adelaide Pipeline System and the MSP—the Queensland South Australia and NSW Link  RBA Reserve Bank of Australia  revised access arrangement information for the revised proposal  revised access arrangement alerang gas distribution network, January 2010  |
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| NSPnetwork service providerNSWNew South WalesNTERNational tax equivalent regimeNYMEXNew York Mercantile ExchangeOECDOrganisation for Economic Co-operation and DevelopmentORGVictorian Office of Regulator GeneralPBParsons BrinckerhoffPJpetajoule (equal to 1000 terajoules)POTSPackaged off take stationPRSprimary regulating stationPTRMpost-taxation revenue modelQSN LinkThe link between Epic Energy's South West Queensland Pipeline and the Moomba to Adelaide Pipeline System and the MSP—the Queensland South Australia and NSW LinkRBAReserve Bank of Australiarevised access arrangement Information for the revised proposalActewAGL, Addendum to access arrangement information for the ACT, Queanbeyan and Palerang gas distribution network, January 2010revised access arrangement proposalActewAGL, Access arrangement for the ACT, Queanbeyan and Palerang gas distribution network, January 2010  |
| NSW New South Wales NTER National tax equivalent regime NYMEX New York Mercantile Exchange OECD Organisation for Economic Co-operation and Development ORG Victorian Office of Regulator General  PB Parsons Brinckerhoff PJ petajoule (equal to 1000 terajoules)  POTS Packaged off take station PRS primary regulating station  PTRM post-taxation revenue model  QSN Link The link between Epic Energy's South West Queensland Pipeline and the Moomba to Adelaide Pipeline System and the MSP—the Queensland South Australia and NSW Link  RBA Reserve Bank of Australia  revised access arrangement Information for the revised proposal  revised access arrangement Palerang gas distribution network, January 2010  |
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| NYMEX  New York Mercantile Exchange  OECD  Organisation for Economic Co-operation and Development  ORG  Victorian Office of Regulator General  PB  Parsons Brinckerhoff  PJ  petajoule (equal to 1000 terajoules)  POTS  Packaged off take station  PRS  primary regulating station  PTRM  OSN Link  The link between Epic Energy's South West Queensland Pipeline and the Moomba to Adelaide Pipeline System and the MSP—the Queensland South Australia and NSW Link  RBA  Reserve Bank of Australia  revised access arrangement information for the revised proposal  revised access arrangement proposal  ActewAGL, Access arrangement for the ACT, Queanbeyan and Palerang gas distribution network, January 2010  |
| OECD Organisation for Economic Co-operation and Development ORG Victorian Office of Regulator General  PB Parsons Brinckerhoff PJ petajoule (equal to 1000 terajoules)  POTS Packaged off take station  PRS primary regulating station  PTRM post-taxation revenue model  QSN Link The link between Epic Energy's South West Queensland Pipeline and the Moomba to Adelaide Pipeline System and the MSP—the Queensland South Australia and NSW Link  RBA Reserve Bank of Australia  revised access arrangement information for the revised proposal  revised access arrangement proposal  ActewAGL, Access arrangement for the ACT, Queanbeyan and Palerang gas distribution network, January 2010   |
| ORG Victorian Office of Regulator General  PB Parsons Brinckerhoff PJ petajoule (equal to 1000 terajoules)  POTS Packaged off take station  PRS primary regulating station  PTRM post-taxation revenue model  QSN Link The link between Epic Energy's South West Queensland Pipeline and the Moomba to Adelaide Pipeline System and the MSP—the Queensland South Australia and NSW Link  RBA Reserve Bank of Australia  revised access arrangement information for the revised proposal  revised access arrangement proposal  ActewAGL, Addendum to access arrangement information for the ACT, Queanbeyan and Palerang gas distribution network, January 2010  ActewAGL, Access arrangement for the ACT, Queanbeyan and Palerang gas distribution network, January 2010   |
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| POTS Packaged off take station PRS primary regulating station PTRM post-taxation revenue model QSN Link The link between Epic Energy's South West Queensland Pipeline and the Moomba to Adelaide Pipeline System and the MSP—the Queensland South Australia and NSW Link RBA Reserve Bank of Australia revised access arrangement information for the revised proposal revised access arrangement proposal  ActewAGL, Access arrangement for the ACT, Queanbeyan and Palerang gas distribution network, January 2010  ActewAGL, Access arrangement for the ACT, Queanbeyan and Palerang gas distribution network, January 2010   |
| POTS Packaged off take station  PRS primary regulating station  PTRM post-taxation revenue model  QSN Link The link between Epic Energy's South West Queensland Pipeline and the Moomba to Adelaide Pipeline System and the MSP—the Queensland South Australia and NSW Link  RBA Reserve Bank of Australia  revised access arrangement information for the revised proposal  revised access arrangement ActewAGL, Access arrangement for the ACT, Queanbeyan and Palerang gas distribution network, January 2010  ActewAGL, Access arrangement for the ACT, Queanbeyan and Palerang gas distribution network, January 2010   |
| PTRM post-taxation revenue model  QSN Link The link between Epic Energy's South West Queensland Pipeline and the Moomba to Adelaide Pipeline System and the MSP—the Queensland South Australia and NSW Link  RBA Reserve Bank of Australia  revised access arrangement information for the revised proposal  revised access arrangement proposal  ActewAGL, Access arrangement for the ACT, Queanbeyan and Palerang gas distribution network, January 2010  ActewAGL, Access arrangement for the ACT, Queanbeyan and Palerang gas distribution network, January 2010   |
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| information for the revised proposal  Palerang gas distribution network, January 2010  revised access arrangement proposal  ActewAGL, Access arrangement for the ACT, Queanbeyan and Palerang gas distribution network, January 2010   |
| proposal network, January 2010   |
| SCP Softl aw Community Projects  |
| COI COILLAW COMMUNICY I TOJECTO  |
| SRS secondary regulator set  |
| STTM short-term trading market   |
| TJ terajoules (equal to 1000 gigajoules)   |
| Tribunal Australian Competition Tribunal   |
| TRS trunk receiving stations   |
| UAG unaccounted for gas  |
| UNFT utilities network facilities tax  |
| WACC weighted average cost of capital  |
| WBH water bath heater  |
| Wilson Cook Wilson Cook & Co Limited   |

# Attachment A: Replacement text for the access arrangement information for the proposal

Box A.1 Replacement text for section 11.3.1 of the access arrangement information for the proposal

#### 11.1 Services offered

The NGR and the AER's RIN require the access arrangement to describe the pipeline services to be provided and to specify the reference services. A reference service is defined in Rule 101 as "a pipeline service that is likely to be sought by a significant part of the market".

ActewAGL Distribution offers nine pipeline services, comprising seven reference services and two non-reference services. These services are the same as those offered in the earlier access arrangement, plus the addition of the ancillary service treated as an additional service.

The seven reference services, as set out in part 2 of the access arrangement, are as follows:

Capacity Reservation Service—a transport service from the receipt point to a single non-tariff delivery point. Charges are determined on the basis of capacity reserved. Additional capacity reservation options for this service are:

- Summer Tranche Option—provides an option to book capacity between the months of October and April (inclusive);
- Short Term Capacity Option—available to end use customers using gas for purposes other than space heating (subject to available capacity). There are two options—one for 30 TJ or less of gas per year, the other for over 30 TJ of gas per year. A short term capacity charge (premium) may be charged for the under 30 TJ option;

Managed Capacity Service—a transport service from receipt point to a single non-tariff delivery point. Charges are determined on the basis of capacity reserved;

**Throughput Service**—a transport service from the receipt point to a single non-tariff delivery point. Charges are determined on the basis of throughput;

Multiple Delivery Point Service—a transport service from the receipt point to a number of non-tariff delivery points. Charges are based on the relevant service at each delivery point;

Tariff Service—a transport service from the receipt point to one or more tariff delivery points. Charges are determined on the basis of throughput;

Meter Data Service—a service comprising the reading of meters and handling of metering data.

Ancillary service—a service for the provision of: (i) requests for services; (ii) special meter reads; (iii)

disconnection; and (iv) reconnection.

The two non-reference services offered by ActewAGL Distribution are:

Interconnection of Embedded Network Service—a service to provide for the establishment of a single delivery point from the network to an embedded network; and,

**Negotiated Service**—any service negotiated to meet the needs of a user which is not met by the reference services.

The reference services are those pipeline services which are likely to be sought by a significant part of the market. The non-reference services have not been sought by any customers or potential customers during the earlier access arrangement period, and they are unlikely to be sought by a significant part of the market during the access arrangement period. The reference and non-reference services therefore remain appropriate for the access arrangement period.

#### 11.1.1 Allocating costs between services

The NGR set out requirements for allocating costs between reference services and other pipeline services. The portion of total revenue allocated to reference services is determined by the ratio in which costs are allocated between reference and other services (Rule 93(1)). Rule 93(2) requires allocation of directly attributable costs to reference and other services as appropriate, and other costs (such as overheads) to be allocated (consistent with revenue and pricing principles) between these services on a basis determined or approved by the AER.

As outlined above, ActewAGL Distribution offers seven reference services and two non-reference services. While the non-reference services continue to be offered, they are not currently used by any customers and therefore ActewAGL Distribution incurs no costs in relation to them. Further, the cost of maintaining the availability of non-reference services is negligible. Accordingly, ActewAGL Distribution's costs are fully allocated to reference services.

Costs are allocated between customer classes in order to set the tariffs for each reference service, as described in the following sections.

# Box A.2 Replacement text for Chapter 12 of the access arrangement information for the proposal

#### 12 Changes to the access arrangement

This chapter of the access arrangement information for the proposal summarises the revisions to the access arrangement in the earlier access arrangement period.

ActewAGL Distribution retains much of its access arrangement from the earlier access arrangement period. Terms and conditions of access to the network remain largely unaltered and changes mostly reflect changed requirements from those of the former Gas Code to those of the NGL and NGR. The reference tariff structure applying in the earlier access arrangement period has been retained, with the addition of the Ancillary Service, which is for the provision of: (i) requests for services; (ii) special meter reads; (iii) disconnection; and (iv) reconnection.

There are changes to the tariff variation mechanism (in relation to cost pass through and an adjustment mechanism for unaccounted for gas and fees, taxes and levies), to ensure that the impacts of ongoing developments in the regulatory framework and gas market can be appropriately managed.

#### 12.2 Revisions to Part 2—Services policy

Part 2 of the access arrangement has been amended to include the new reference service, the Ancillary Service.

#### 12.3 Revisions to Part 3—General terms and conditions for access

Part 3 of the Access Arrangement has been updated to reflect the change from the National Gas Code to the NGL/NGR. For example, the access arrangement now refers to "Access Determinations" in place of "arbitrated access decisions", reflecting Chapter 6 of the NGL. No other significant amendments have been made.

References to the Ancillary Services, and moved provisions relevant to the Ancillary Services, namely suspension of supply, are included in a new Attachment 3I.

The position with respect to title to gas in clause 3.41 is important for some aspects of the proposed CPRS. However, this does not represent a change to the position under the current access arrangement, merely a confirmation of that position.

As the result of consultations with Users and the ICRC in the period before approval of the access arrangement in the earlier access arrangement period, the terms and conditions were substantially rewritten to put them into a plain English style that is more readily understood by Users.

#### 12.11 Revisions to access arrangement attachments

Attachment 1—Definitions has been amended to include a new definition of the Ancillary Service, and other definitions have been amendment consequential to this change.

Attachment 2—Requests for service has been amended for minor changes in section 112 of the NGR.

A new Attachment 3I has been included setting out the terms and conditions for the provision of the Ancillary Service.

# Box A.3 Replacement text for section 11.2 of the access arrangement information for the proposal

#### 11.2 Tariffs for reference services

#### 11.2.1 Tariff classes

The NGR specify that, for the purpose of determining reference tariffs, customers must be divided into tariff classes. Tariff classes must be constituted with regard to grouping of customers together on an economically efficient basis and the need to avoid unnecessary transaction costs.

Customers are grouped into two classes:

- Tariff customers; and
- Contract customers.

The split is based on the nature and size of the connection and load. Within each group customers have broadly similar load and connection characteristics. The tariffs available for each group reflect the different economic costs of supplying each group. Transactions costs, particularly the costs of metering, are also taken into account in determining the appropriate tariffs to be offered to each group, as discussed further below.

Contract customers are those that consume more than 10 TJ of gas per annum. These customers have different load and connection characteristics to the tariff customers, often requiring multiple connection points, and are generally more responsive to price signals regarding capacity. The relatively large loads consumed by the customers in this group mean that the transactions costs associated with installing more sophisticated metering, to measure maximum daily and hourly consumption, are warranted.

The reference services for the contract customer class comprise:

- Capacity reservation services;
- Managed capacity services;
- Throughput services;
- Multiple delivery point services;
- Meter data services; and
- Ancillary services.

While the contract customers face several service options, the existing contract customers all take the capacity reservation service with meter data services. Within the meter data services, most contract customers take the communications option that allows meters to be read remotely. However, one customer with 97 meters finds it more efficient to have its meters manually read monthly.

The tariff customer class comprises residential and business customers consuming fewer than 10 TJ per annum. The reference services for tariff customers are:

Tariff services;

- Meter data services; and
- Ancillary services.

The tariff for the tariff service involves a fixed charge and a throughput charge consistent with an efficient two part tariff structure. More complex tariffs, involving capacity charges as for the contract market services, would require more costly metering capability.

#### 11.2.2 Revenue and cost allocation

The NGR require the access arrangement information to include the proposed approach to the setting of reference tariffs including the method used to allocate costs.

ActewAGL Distribution has allocated the total cost of providing reference services between contract and tariff markets using the methodology approved by the ICRC in the earlier access arrangement period and applied since the 2001 access arrangement decision. The methodology uses a series of rules to allocate operating and capital costs to contract and tariff market segments in line with their respective use of network services as required in Rule 93. Costs that are directly attributable to either market segment (contract or tariff) are allocated to that segment, while other costs which are shared between segments, are allocated on the basis of reasonable cost drivers. The cost allocation model is described below.

#### 11.2.2.1 Allocation of operating costs

Operating costs are allocated between tariff and contract customers using an activity based costing methodology. Eleven operating cost categories which account for approximately 99.9 per cent of total operating expenditure are allocated to contract and tariff cost pools. The remaining 0.1 per cent of the operating expenditure has been allocated in accordance with the average percentage derived from the eleven operating cost categories. Costs for each activity are based on expenditure levels in the 2009/10 base year, apart from ancillary services which are based on the 2010/11 forecast, which represents a normal year. Where a cost category is only driven by one market (tariff or contract), all costs have been allocated directly to that market segment. However, where costs are shared, an allocation 'key' provides the rule for attributing costs to either contract or tariff markets. The keys used to allocate costs to operating expenditure categories are the same as those approved in the ICRC's *Final decision: Review of access arrangement for ActewAGL natural gas system in ACT, Queanbeyan and Yarrowlumla*, October 2004, with the exception of the UNFT which is added to government levies and ancillary services which have been directly allocated to tariff customers according to relevant activity. The operating cost categories and the allocation keys are provided in Table 11.1.

Table 11.1 Allocation keys used to allocate operating cost categories

| Opex category          | Allocation key   |
|------------------------|--|
| Asset Services costs   | Where the costs have not been allocated directly to tariff and contract customers, they are allocated based on the allocation determined in the earlier access arrangement using relative size of MDQs (actual peak data from 2007/08), customer numbers, new connections and the actual revenue split in 2007/08. |
| Asset Management costs | Costs allocated by relative size of MDQs.  |
| Corporate overheads    | The actual revenue split in 2007/08 has been used as a proxy to distribute corporate overhead costs.   |

| Non System Asset<br>Charge | Costs allocated by relative size of MDQs.  |
|----------------------------|--|
| Marketing                  | Costs allocated entirely to the tariff market.   |
| Ancillary services         | Costs directly allocated according to activity   |
| Other direct costs         | Costs allocated by relative size of MDQs.  |
| Government levies & UNFT   | The actual revenue split in 2007/08 has been used as a proxy to allocated government levies. |
| Contestability Charge      | Costs allocated entirely to the tariff market.   |
| UAG                        | The actual revenue split in 2007/08 has been used as a proxy to distribute UAG and           |
| Other Opex                 | Other Opex.  |

#### 11.2.2.2 Allocation of capital costs

Capital costs are split in proportion to the market segments' relative shares of the capital base. The methodology requires the regulated asset base (as at 1 July 2010 from the RFM) and capital expenditure over the access arrangement period to first be allocated to asset classes and second, split into contract and tariff markets. Two asset classes—contract meters and tariff meters—have been allocated directly to the relevant market segments. The other asset classes have been allocated via the relative size of contract and tariff MDQs. The capital costs for medium pressure mains—utilised almost entirely by the tariff market—have been allocated using the same allocator as in the earlier access arrangement period. The allocation of the rolled forward capital base is shown in Table 11.2. Table 11.2 has been updated to reflect the order made by the Tribunal on 23 September 2010.

Table 11.2 Allocation of the average values of the capital base 2010/11 to 2014/15

| \$million .                     | Total          | Contract     | Tariff         |
|---------------------------------|----------------|--------------|----------------|
| HP Mains                        | 75. <u>86</u>  | 6.3 <u>4</u> | 69.5 <u>2</u>  |
| HP Services                     | 0.79           | 0.07         | 0.72           |
| MP Mains                        | 148.2 <u>2</u> | 0.10         | 148.1 <u>1</u> |
| MP Services                     | 61.2 <u>3</u>  | 0.04         | 61.1 <u>9</u>  |
| TRS & DRS - Valves & Regulators | 24.6 <u>2</u>  | 2.0 <u>6</u> | 22.5 <u>7</u>  |
| Contract meters                 | 1.57           | 1.57         | 0.00           |
| Tariff meters                   | 18. <u>71</u>  | 0.00         | 18. <u>71</u>  |
| Regulatory Costs                | 0.34           | 0.03         | 0.31           |
| IT System                       | 0.80           | 0.07         | <u>0.73</u>    |
| Total                           | 332.13         | 10.27        | 32 <u>1.86</u> |

Table 11.3 shows the allocation of operating and capital costs to the contract and tariff markets. <u>Table 11.3 has been updated to reflect the order made by the Tribunal on 23 September 2010.</u>

Table 11.3 Allocation of operating and capital costs

| \$ million nominal | Total         | Contract     | Tariff        |
|--------------------|---------------|--------------|---------------|
| Operating costs    | <u>123.82</u> | 6.26         | <u>117.56</u> |
| Capital costs      | <u>182.32</u> | <u>5.64</u>  | <u>176.69</u> |
| Total allocation   | <u>306.14</u> | <u>11.90</u> | <u>294,24</u> |

For each year of the access arrangement period, the costs allocated to each of the contract and tariff markets based on the operating expenditure and capital base splits are described above. The proportion of total costs allocated to each of these classes over the period is used to allocate revenues.

Revenues for each tariff class are further split into meter provision, meter communication, meter reading and network use in order to allocate costs within contract and tariff customer classes to reference services.

The revenue allocation of operating and capital costs is presented in Table 11.4 in nominal dollars. Table 11.4 has been updated to reflect the order made by the Tribunal on 23 September 2010.

Table 11.4 Revenue Allocation

| Tubic 11:4 Nevertue Anocution  |                |                  |               |                | AR YAR BURGALU F |
|--|----------------|------------------|---------------|----------------|------------------|
| \$ million nominal   | 2010/11        | 2011/12          | 2012/13       | 2013/14        | 2014/15          |
| Contract   | <u>2.04</u>    | 2.28             | 2.45          | <u>2.52</u>    | <u>2.61</u>      |
| Tariff   | <u>50.4030</u> | <u>56.485148</u> | 60.5144       | <u>62.4363</u> | <u>64.46252</u>  |
| Contract- meter provision  | <u>0.36</u>    | 0.40             | 0.43          | 0.44           | <u>0.45</u>      |
| Contract - meter communication   | 0.07           | 0.07             | 0.08          | 0.08           | 0.08             |
| Contract - meter reading   | 0.03           | 0.04             | 0.04          | 0.04           | 0.04             |
| Contract - ancillary   | 0              | 0                | 0             | 0              | 0                |
| Contract - network use   | <u>1.58</u>    | <u>1.78</u>      | <u>1.90</u>   | <u>1.96</u>    | <u>2.03</u>      |
| Tariff- meter provision  | <u>3.46</u>    | <u>3.88</u>      | <u>4.16</u>   | <u>4.29</u>    | 4.43             |
| Tariff - meter reading (including<br>special meter reads- an ancillary<br>service) | 0.68           | 0.76             | 0.81          | 0.84           | 0.86             |
| Tariff – ancillary disconnection and reconnection                                  | 0.03           | 0.03             | 0.03          | 0.03           | 0.03             |
| Network use  | 46.236         | <u>51.814</u>    | <u>55.514</u> | <u>57.2834</u> | <u>59.103</u>    |

Note: The split between meter communications and meter provision from the earlier access arrangement period is projected for the access arrangement period.

#### 11.2.3 Relationships between costs and revenues

The NGR require information on the relationship between costs and tariffs for tariff classes and reference services. The NGR include requirements regarding costs and expected revenues from tariff classes and reference tariffs.

#### 11.2.3.1 Standalone and avoidable costs.

Rule 94 states that for each tariff class, the revenue expected to be recovered must lie between the standalone cost of providing the reference service to customers who belong to that class (upper bound) and the avoidable cost of not providing the reference service to those customers (lower bound).

The tariff segment accounts for approximately 99.6 per cent of customers and 86 per cent of sales for the ACT, Queanbeyan and Palerang gas distribution network. Contract customers represent a very small part of the market and are allocated an appropriately small share of costs.

The standalone cost for tariff customers is therefore very close to the total cost of providing the network

would not be incurred in the absence of the contract customers). The relevant contract customer costs to be deducted are the contract operating, meter and ancillary service costs.

The avoidable cost for the tariff customer class is the cost that would be avoided if tariff customers were not supplied. The avoidable cost would be the full cost of the network—that is, without the tariff customers there would be no network and therefore all costs would be avoided. However, if it is assumed that the network would continue to exist, then avoidable costs for tariff customers would be defined as those costs which are directly attributable to tariff customers and hence would be avoided if they were not supplied. These avoidable costs would be the operating and meter costs.

Avoidable and standalone costs tariff classes are shown in Table 11.5. <u>Table 11.5 has been updated to reflect the order made by the Tribunal on 23 September 2010.</u>

Table 11.5 Avoidable and stand alone costs (2010/11)

| \$ million nominal | Avoidable Cost   | Expected<br>Revenue | Stand-alone<br>Cost        |
|--------------------|------------------|---------------------|----------------------------|
| Contract Class     | 1.3 <u>1</u> 5   | 2.20                | 2 <u>8</u> 7. <u>46</u> 79 |
| Tariff Class       | 23. <u>30</u> 97 | 49.56               | 50.4 <u>5</u> 4            |

The expected revenue recovers the total cost of the contract and tariff class reference services. The stand alone cost for contract customers is calculated as the total cost less the avoidable cost of the tariff customers. Similarly, the stand alone cost for tariff customers is calculated as the total cost less the avoidable cost of the contract customers.

The costs and revenues of the contract class are derived from the Capacity Reservation Reference Service, the associated Meter Data Reference Service that relates to that service and associated Ancillary Services. While there are other Reference Services listed, there are no customers taking those services. The costs and revenues of the Tariff Class are derived from the Tariff Reference Service, the Meter Data Reference Service and the Ancillary Services that relate to the tariff service. The Meter Data Reference Service and the Ancillary Services are an integral part of each of the pipeline services, as discussed above, and do not have their own avoidable or stand alone cost.

#### 11.2.3.2 Long run marginal cost and transactions costs

The NGR also include requirements regarding long run marginal cost and transactions costs. Rule 94 says that each charging parameter for a tariff class must:

- take into account the long run marginal cost for the reference service or the element of the service to which the charging parameter relates; and
- be determined having regard to transaction costs and the ability of customers to respond to price signals.

While the stand alone and avoidable cost requirement involves a specific requirement that revenues are within certain bounds (between stand alone and avoidable costs), the long run marginal cost requirement refers factors that are appropriate and necessary to be taken into account.

#### 11.2.3.3 Charging parameters

charge. The capacity charge reflects the cost of providing capacity and provides an incentive for contract customers to manage their daily demand. The Throughput Reference Service would suit a customer with a variable load as it has only a throughput charge and does not have a capacity charge. There are no customers in the ACT region that have chosen this service.

Contract customers have separate parameters for meters that reflect the varying cost of meters with different capacities. Meter communications costs and meter reading costs do not vary with the capacity of the meter. However, where a customer has multiple meters and multiple meter sites, meter communications and meter reading charges may apply to each meter, depending upon the location of the meters

Reference tariffs for tariff customers have fixed, throughput, metering and meter reading parameters. They do not include capacity charges. Relevant transactions costs include the costs of more sophisticated metering, the costs of more complex billing and the costs to customers of understanding, and responding to, a more complicated tariff structure.

The fixed charge signals the cost of connecting and maintaining a connection service to the consumer. Where a customer does not require a service, it encourages the customer to disconnect and lower the cost of providing network services.

There are two metering charge options for tariff customers. For those with a meter capacity of less than 6 cubic meters per hour, there is a fixed annual charge. For meters with a capacity of more than 6 cubic meters per hour, the metering charge is based upon the throughput. There are two meter reading charge options for tariff class customers depending upon whether the meter is read quarterly or monthly.

There are four Ancillary Services available to both Contract and Tariff customers. However, the Request for Service charge is relevant only to contract customers and the other charges (special meter read, reconnection fee and disconnection fee) are relevant mainly to tariff customers.

#### 11.2.3.4 Revenue equalisation

Rule 92(2) requires that the reference tariff variation mechanism be designed to equalise (in terms of present values) forecast revenue from reference services over the access arrangement period; and the portion of total revenue allocated to reference services for the access arrangement period.

#### Capacity reservation service

The revenue requirement for the capacity reservation service customers using the building block approach for contract customers is as shown in Table 11.6. <u>Table 11.6 has been updated to reflect the order made by the Tribunal on 23 September 2010.</u>

Table 11.6 Revenue requirement for capacity reservation service customers

| Smillion nominal | 2010-11        | 2011-12        | 2012-13        | 2013-14         | 2014-15        |
|------------------|----------------|----------------|----------------|-----------------|----------------|
| Contract revenue | 1.9 <u>4</u> 4 | 2.1 <u>7</u> 4 | 2.3 <u>3</u> 9 | 2. <u>40</u> 37 | 2.4 <u>8</u> 4 |

When discounted at the nominal vanilla WACC of  $\underline{109.0472}$  per cent, the net present value of these revenues is  $\$8.\underline{48}43$  million.

The proposed revenue stream in nominal dollars using the building block approach for contract customers is as per Table 11.7. <u>Table 11.7</u> has been updated to reflect the order made by the Tribunal on 23 September 2010.

Table 11.7 Proposed revenue stream for capacity reservation service customers

| Smillion nominal | 2010-11                     | 232 A 2 (52-65) | 2012-13        | 2013-14        | 2014-15         |
|------------------|-----------------------------|-----------------|----------------|----------------|-----------------|
| Contract revenue | 2. <u>09</u> 4 <del>0</del> | 2.1 <u>9</u> 5  | 2.2 <u>5</u> 4 | 2. <u>3</u> 28 | 2. <u>40</u> 36 |

When discounted at the nominal vanilla WACC of  $\underline{109.0472}$  per cent, the net present value of these revenues is  $\$8.4\underline{6}3$  million which is equal to the revenue requirement.

#### Tariff service

The revenue requirement for the tariff service customers in nominal dollars using the building block approach for contract customers is as per Table 11.8. <u>Table 11.8 has been updated to reflect the order made by the Tribunal on 23 September 2010.</u>

Table 11.8 Revenue requirement for the tariff service customers

| Smillion nominal | 2010-11                    | 2011-12                   | 2012-13                    | 2013-14                    | 2014-15                    |
|------------------|----------------------------|---------------------------|----------------------------|----------------------------|----------------------------|
| Tariff revenue   | 4 <u>9</u> 8. <u>73</u> 85 | 5 <u>5</u> 4.7 <u>2</u> 6 | 5 <u>9</u> 8. <u>70</u> 66 | 6 <u>1</u> 0. <u>60</u> 53 | 6 <u>3</u> 2. <u>55</u> 46 |

When discounted at the nominal vanilla WACC of <u>10</u>9.<u>0472</u> per cent, the net present value of these revenues is \$21<u>7</u>5.<u>39</u>48 million.

The proposed revenue stream for the tariff service customers in nominal dollars using the building block approach for contract customers is as per Table 11.9. <u>Table 11.9 has been updated to reflect the order made by the Tribunal on 23 September 2010.</u>

Table 11.9 Proposed revenue stream for tariff service customers

| \$million nominal | 2010-11 | 2011-12                    | 2012-13                    | 2013-14                    | 2014-15           |
|-------------------|---------|----------------------------|----------------------------|----------------------------|-------------------|
| Tariff revenue    | 48.89   | 5 <u>6</u> 4. <u>55</u> 80 | 5 <u>9</u> 8. <u>28</u> 19 | 6 <u>1</u> 0. <u>62</u> 49 | 6 <u>42.15</u> 98 |

When discounted at the nominal vanilla WACC of <u>109.0472</u> per cent, the net present value of these revenues is \$2175.3948 million which is equal to the revenue requirement.

#### Meter data service

The revenue requirement for the meter data service in nominal dollars using the building block approach for contract customers is as per Table 11.10. <u>Table 11.10 has been updated to reflect the order made by the Tribunal on 23 September 2010.</u>

#### Table 11.10 Revenue requirement for the meter data service

| \$million nominal  | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15 |
|--------------------|---------|---------|---------|---------|---------|
| Meter data revenue | 0.77    | 0.87    | 0.93    | 0.96    | 0.99    |

When discounted at the nominal vanilla WACC of  $\underline{109.0472}$  per cent, the net present value of these revenues is \$3.3844 million.

The proposed revenue stream for the meter data service in nominal dollars using the building block approach for contract customers is as per Table 11.11. <u>Table 11.11 has been updated to reflect the order made by the Tribunal on 23 September 2010.</u>

Table 11.11 Proposed revenue stream for the meter data service

| \$million nominal  | 2010-11 | 2011-12         | 2012-13                  | 2013-14                  | 2014-15         |
|--------------------|---------|-----------------|--------------------------|--------------------------|-----------------|
| Meter data revenue | 0.78    | 0. <u>86</u> 97 | <u>0</u> 4. <u>91</u> 02 | <u>0</u> 4. <u>96</u> 08 | 1. <u>00</u> 43 |

When discounted at the nominal vanilla WACC of <u>10</u>9.<u>0472</u> per cent, the net present value of these revenues is \$3.<u>38</u>44 million which is equal to the revenue requirement.

#### Ancillary service

The revenue requirement for ancillary services in nominal dollars using the building block approach is included in the revenue requirements for capacity reservation services, tariff services and meter data services. The proposed revenue stream from ancillary services is included in the respective revenue streams for each service. A separate statement of revenue for ancillary services is provided in Table 11.12. Table 11.12 has been updated to reflect the order made by the Tribunal on 23 September 2010.

Table 11.12 Proposed revenue stream for ancillary services

| \$million nominal 2       | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15 |
|---------------------------|---------|---------|---------|---------|---------|
| Ancillary service revenue | 0.15    | 0.16    | 0.17    | 0.18    | 0.19    |

When discounted at the nominal vanilla WACC of <u>109.0472</u> per cent, the net present value of these revenues is \$0.65 million.

#### Other reference services

While there are other reference services available, there are no customers taking those services or expected to take them.

# Box A.4 Replacement text for section 11.3.1 of the access arrangement information for the proposal

#### 11.3.1 Annual reference tariff adjustment formula mechanism

Rule 97(1)(b) states that a reference tariff variation mechanism can provide for the variation of a reference tariff in accordance with a formula set out in the access arrangement.

The earlier access arrangement included an annual tariff variation formula in its tariff variation mechanism to escalate prices by CPI. This annual tariff variation adjustment for CPI is retained.

#### 11.3.1.1 Proposed annual tariff variation formula

In accordance with the earlier access arrangement period, that all Reference Tariffs be varied by CPI each year by the following formula.

$$P_{t} = P_{t}^{*} \left( 1 + CPI_{t} \right)$$

Where:

Pt is the varied Reference Tariff for the relevant financial year t, rounded to the same number of decimal places for that Reference Tariff, as provided in Attachment 3 of the Access Arrangement;

Pt\* is the unadjusted Reference Tariff, in 2010/11 dollars, for the relevant financial year t, as set out in Attachment 3 of the Access Arrangement;

CPI t is the result of the formula in clause 6.4, which is a decimal number, rounded to 4 decimal places;

t is the financial year for which Reference Tariffs are being varied.

CPI, is calculated in accordance with a formula in the access arrangement as follows:

$$CPI_{t} = \left(\frac{CPI_{Mar\ t-2} + CPI_{Jun\ t-2} + CPI_{Sep\ t-1} + CPI_{Dec\ t-1}}{CPI_{Mar\ 2009} + CPI_{Jun\ 2009} + CPI_{Sep\ 2009} + CPI_{Dec\ 2009}}\right) - 1$$

Where:

means the Consumer Price Index Number "All Groups, Australia", for the March quarter (and similarly for other quarters), published by the Australian Bureau of Statistics, or if the Australian Bureau of Statistics does not or ceases to publish the index, then CPI will mean an index determined by the Relevant Regulator that is its best estimate of the index.

**CPI**<sub>Dec2009</sub> means the CPI for the December quarter for the year 2009 and similarly for other quarters.

Year t is the financial year for which Reference Tariffs are being varied.

Year t-1 is the financial year previous to year t and, where relevant, refers to quarters within that previous financial year.

For example, the CPI, value to be applied in respect of the year ending 30 June 2012 is calculated as:

$$CPI_{2012} = \left(\frac{CPI_{\textit{Mar}\,2010} + CPI_{\textit{Jun}\,2010} + CPI_{\textit{Sep}\,2010} + CPI_{\textit{Dec}\,2010}}{CPI_{\textit{Mar}\,2009} + CPI_{\textit{Jun}\,2009} + CPI_{\textit{Sep}\,2009} + CPI_{\textit{Dec}\,2009}}\right) - 1$$