

# **Explanatory notes regarding the price control arrangements**

## **ELECTRICITY NETWORKS CORPORATION ("WESTERN POWER")**

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{Outline: This document provides explanatory notes for *price control*, which is included in Western Power's *access arrangement* in accordance with section 5.1 of the *Code*.}

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## 1. Introduction

The purpose of this appendix is to provide further information in relation to the proposed revenue cap arrangements set out in this *access arrangement*. It is intended that these notes may assist in the interpretation of the *price control* arrangements set out in section 5 of this *access arrangement* should the need arise.

The cost recovery and incentive mechanisms described in the *access arrangement* commence from 1 July 2009, even though the *access arrangement revisions commencement date* is likely to be 1 March 2010. Where references are made to this *access arrangement period* with respect to cost recovery and incentive mechanisms, this term should be interpreted as referring to the period from 1 July 2009 to 30 June 2012.

## 2. Details of proposed control

Western Power has adopted a revenue cap for the transmission and distribution networks. The form of revenue cap, the correction factor and the investment adjustment mechanism are essentially the same for both the transmission and distribution networks (so the following comments are equally applicable to both).

The revenue cap formulae specify a total dollar amount (in \$ million) that can be recovered by Western Power from its customers for each year of the *access arrangement period* in respect of the sale of *reference services* (where actual revenue received by Western Power is apportioned appropriately between the transmission and distribution networks). The specified dollar amounts will be increased to take account of actual inflation (CPI) over the course of the *access arrangement period*. This type of adjustment is standard in many forms of “CPI minus X” incentive-based price controls. However, given that the revenue cap formulae specify maximum allowed revenues in dollar terms for each year (derived from forecasts of efficient total costs) there is no need for the formulae to contain X factors.

The revenue cap formulae also use a correction factor (termed the “K factor”), which allows the maximum revenue in one year to be adjusted (up or down) for any shortfall or over-recovery of revenue in preceding years. Such shortfalls or over-recoveries typically occur because actual revenue depends on a number of parameters, notably tariff sales, which are difficult to forecast with 100% accuracy.

It is particularly difficult to forecast accurately capital contributions and *non-reference services* because they depend on the actions of third parties who are making decisions to connect to Western Power’s network (and pay a capital contribution) or to procure a particular *non-reference service*. In this *access arrangement*, the costs and revenues associated with the provision of *non-reference services* fall outside the revenue caps. Similarly, capital contributions are not treated as revenue for price control purposes. The charges for non-reference services will be negotiated in good faith, be consistent with the Code objective and be reasonable. Capital contributions are levied in accordance with Western Power’s contributions policy. Therefore there is no regulatory need for capital contributions or *non-reference service* revenue to fall within the revenue caps.

In formulating its *access arrangement* proposal for this *access arrangement period*, Western Power has decided to adopt a conventional approach to regulatory treatment of capital contributions, as opposed to the “Queensland Method” that was adopted in the first *access arrangement period*. Under the conventional approach, the associated asset costs and revenues are excluded from the building block cost and revenue calculations, and the revenue cap. In contrast, the Queensland Method treats the capital contribution as revenue in the year in which it is received, whilst the costs are amortised over the life of the asset (and the costs

and revenues are included in the building block calculation and the revenue cap). The effect of the Queensland Method is therefore to reduce revenue requirements from network tariffs today, but to require higher network tariffs in the future to compensate. Western Power's decision to adopt the conventional approach is consistent with principles of economic efficiency and established regulatory practice.

In the previous *access arrangement*, Western Power introduced a capital contributions adjustment mechanism to address the likely errors in forecasting capital contributions. Whilst this mechanism does not apply in the *access arrangement* for the second *access arrangement period* (because an alternative approach to regulatory treatment of capital contributions has been adopted as outlined above), the necessary adjustments are made to the revenue caps in this *access arrangement period* to give effect to the operation of the mechanism for the first *access arrangement period*. A similar issue arises in relation to any other adjustment mechanisms that operated in the first *access arrangement period*, whether or not such mechanisms continue to apply in the second *access arrangement period*. With this in mind, a term  $AA\#1_t$  has been included in each revenue cap. This term is defined as follows:

" $AA\#1_t$  is a positive or negative amount for the financial year  $t$  calculated to give effect to the following adjustments (if applicable) in accordance with the previous *access arrangement*.

- Adjusting target revenue for unforeseen events;
- Adjusting target revenue for technical rule changes;
- Investment adjustment mechanism; and
- Capital contributions adjustment mechanism.

For the avoidance of doubt,  $AA\#1_t$  must take account of inflation, the time value of money and estimates (if any) of the above adjustments that have been included in the calculation of  $TR_t$  in this section 5.46 of this *access arrangement*. Western Power will provide model outputs to the Authority to demonstrate that the above adjustments have been made in accordance with the previous *access arrangement*."

It should be noted that both the revenue model contained in the Authority's Final Decision and the Western Power's revenue model in Attachment 2 of the amended revised *Access Arrangement Information* already take account of mechanisms included in the definition of the term  $AA\#1_t$ . Therefore, Western Power expects the term  $AA\#1_t$  will be zero for the forthcoming *access arrangement period*. This term has been retained from Western Power's initial proposed revisions (lodged in October 2008) to accommodate the possibility that a revenue adjustment will be required to give effect to the mechanisms included in the first *access arrangement period*.

Western Power will continue to apply an investment adjustment mechanism (IAM) which addresses differences between forecast and actual capital expenditure for particular categories of capital expenditure. This adjustment is different in nature to the K factor, as the latter adjusts for differences between allowed and actual revenue – whereas the IAM adjusts for differences in forecast and actual capital expenditures. The IAM applies to capital expenditure that Western Power believes is especially difficult to forecast accurately.

### **3. Gain Sharing Mechanism and Service Standard Adjustment Mechanism**

Sections 5.13 to 5.14F of this *Access Arrangement* describe the gain sharing mechanism. This mechanism differs from that proposed by Western Power in its initial proposed revisions in October 2008. The mechanism has been developed by the Authority, and reflects some

(but not all) of the features of the efficiency benefit sharing scheme that is employed by the Australian Energy Regulator. A single gain sharing mechanism applies to the sum of the total annual non-capital costs incurred in providing transmission and distribution reference services. Adjustments are made with respect to benchmark and actual non-capital costs to ensure that a like-for-like comparison is made, and that efficiency improvements are measured appropriately.

Sections 5.24A and 5.24B set out Service Standard Adjustment Mechanisms (SSAMs) with respect to a number of service standard benchmarks for each of the transmission and distribution networks. It should be noted that a number of service standard benchmarks in sections 3.15 to 3.23 of the *access arrangement* do not form part of the SSAM. In accordance with the Authority's Final Decision, the SSAMs are uncapped with the exception of two transmission service benchmarks (relating to System Minutes Interrupted) that are subject to a combined cap of 1% of total annual transmission revenue.

#### **4. Revenue Adjustment for Unforeseen Events**

In accordance with sections 5.4 and 5.5 of this *Access Arrangement*, the *target revenue* for the next *access arrangement period* may be adjusted for unforeseen events that occur from 1 July 2009.

This section describes the process under which Western Power will determine this revenue adjustment amount. There is no provision in forecast expenditures to account for possible *force majeure* events although there is provision to cover reasonable insurance costs.

This provision for revenue adjustment covers those costs (termed "unrecovered costs" in section 6.6 of the Code) which are net of any insurance payment or other cost recovery, and which were incurred prudently.

It is proposed that the expenditure included in the adjustment to *target revenue* for unrecovered costs be treated as an addition to the forecast revenue entitlement submitted in the next *access arrangement period*. This amount is to be spread evenly over each year of the next *access arrangement period*.

To give effect to this purpose, the adjustment to the *target revenue* for the next *access arrangement period* must leave Western Power economically neutral by taking account of:

- (a) The effects of inflation, both in this *access arrangement period* and the next; and
- (b) The time value of money as reflected by the real pre-tax WACC as applied in this *access arrangement period* and the next.

#### **5. Revenue Adjustment for Technical Rule Changes**

In accordance with sections 5.7 to 5.10 of this *Access Arrangement*, the *target revenue* for the next *access arrangement period* may be adjusted for changes to the *technical rules* that occur from 1 July 2009.

This section describes the process under which Western Power will determine this revenue adjustment amount.

It is proposed that the expenditure included in the adjustment to *target revenue* for changes to *technical rules* be treated as an addition or subtraction to the forecast revenue entitlement submitted in the next *access arrangement period*. This amount is to be spread evenly over each year of the next *access arrangement period*.

To give effect to this purpose, the adjustment to the *target revenue* for the next *access arrangement period* must leave Western Power economically neutral by taking account of:

- (a) The effects of inflation, both in this *access arrangement period* and the next; and
- (b) The time value of money as reflected by the real pre-tax WACC as applied in this *access arrangement period* and the next.

## 6. Revenue Adjustment for Investment Adjustment Mechanism

Pursuant to sections 5.49 to 5.53 of this *Access Arrangement*, the *target revenue* for the next *access arrangement period* may be adjusted in accordance with the IAM.

As noted in section 2 of this appendix, the IAM adjusts for differences between forecast and actual capital expenditures, but only in relation to expenditure categories that are particularly difficult to forecast. These expenditure categories are defined in section 5.53 of this *Access Arrangement*.

The revenue adjustment may be positive or negative, depending on whether Western Power's actual capital expenditure in the defined expenditure categories exceeds or is less than the forecasts used in the determination of the revenue caps.

It is proposed that the adjustment to *target revenue* arising from the application of the IAM be treated as an addition or subtraction to the forecast revenue entitlement submitted in the next *access arrangement period*.

To give effect to this purpose, the adjustment to the *target revenue* for the next *access arrangement period* must leave Western Power economically neutral in relation to forecasting errors in the relevant categories of capital expenditure (the *investment difference*) in this *access arrangement period* by taking account of:

- (a) The effects of inflation, both in this *access arrangement period* and the next;
- (b) The time value of money as reflected by the real pre-tax WACC as applied in this *access arrangement period* and the next; and
- (c) The cost of depreciation and the value of capital additions to the *capital base* at the next *access arrangement period*.

## 7. Revenue Adjustment for D factor scheme

Pursuant to sections 5.54 to 5.57 of this *Access Arrangement*, the *target revenue* for the next *access arrangement period* may be adjusted in accordance with the D factor scheme. This D factor scheme will apply to both transmission and distribution expenditure. The intention of the D factor scheme is to provide an opportunity for Western Power to recover the full costs associated with efficient capital expenditure deferral and demand side initiatives. The scheme provides for regulatory approval of expenditure, but also recognises the importance of keeping regulatory costs to a low proportion of the expected expenditure.

To give effect to the D factor scheme, the adjustment to the *target revenue* for the next *access arrangement period* must leave Western Power economically neutral by taking account of:

- (a) The effects of inflation, both in this *access arrangement period* and the next; and
- (b) The time value of money as reflected by the real pre-tax WACC as applied in this *access arrangement period* and the next.