
2009 Price Controls Review for ADWEC Final Proposals

CR/E02/039

10 June 2010

Contents

Foreword.....	3
Executive Summary	4
1. Introduction and background	11
Background.....	11
ADWEC's separate businesses	12
Previous price controls	14
2009 price controls review	15
Structure of this document	17
2. Form of controls	18
Introduction.....	18
Draft Proposals.....	19
ADWEC's response to Draft Proposals	20
Bureau's assessment	21
Introduction of proposed supply businesses	23
Final Proposals.....	27
3. Price control calculations	31
Introduction.....	31
Our overall approach to calculation.....	31
Base level of procurement costs.....	32
Allowed profit element for procurement costs	32
Notified values for procurement businesses for 2010	33
4. Performance Incentive Scheme.....	35
Introduction.....	35
Draft Proposals.....	36
ADWEC's response to Draft Proposals	37
Revised Incentive Rates	39
Final Proposals.....	40

Foreword

1. The previous price controls for ADWEC's procurement businesses are intended to be replaced by new price controls for 2010 onwards. Our Draft Proposals issued in January 2010 and earlier consultation papers explained our proposal to subject ADWEC to a different price control cycle and structure than the other price-controlled companies in the sector. In March 2010, we received a generally positive response from ADWEC to our Draft Proposals.
2. This present document describes our Final Proposals for the new controls for ADWEC, taking into account ADWEC's response to the Draft Proposals. We have largely retained our Draft Proposals on the pass-through treatment of PWPA and fuel costs, the enhanced Performance Incentive Scheme (PIS), the five-year duration of controls (2010-2014), and the annual automatic adjustment of the price-controlled costs – albeit with some refinements of our approaches in some cases.
3. We have however amended our proposed treatment of ADWEC's profits from its unlicensed activities and taken into account the proposed extension of ADWEC's licensed activities to include supply to customers connected to the transmission system in the Emirate of Abu Dhabi. We have therefore now proposed separate but similar price controls for the existing procurement businesses and the new supply businesses of ADWEC's licensed activities.
4. We are also in the process of issuing a draft licence modification to ADWEC for its review to give effect to these Final Proposals on 1 January 2010. ADWEC is requested to communicate in writing to the Bureau its acceptance or otherwise of the proposed licence modification by **22 July 2010** to the following address:

Nick Carter
Director General
Regulation and Supervision Bureau
PO Box 32800, Abu Dhabi
Fax: 02-4439-334
5. If accepted by ADWEC by the above date, these proposals will come into effect on 1 January 2010. Otherwise, the existing licence will remain in force until such time as it is modified.

NICK CARTER

DIRECTOR GENERAL

2009 Price Controls Review for ADWEC: Final Proposals

Author	Document	Version	Publication date	Approved by
AR / MPC	CR/E02/039	Issue 1	10 June 2010	NSC

Executive Summary

Introduction

1. This document describes our Final Proposals for the new price controls for ADWEC for 2010 onwards, taking into account ADWEC's response to the Draft Proposals published in January 2010.

Final Proposals

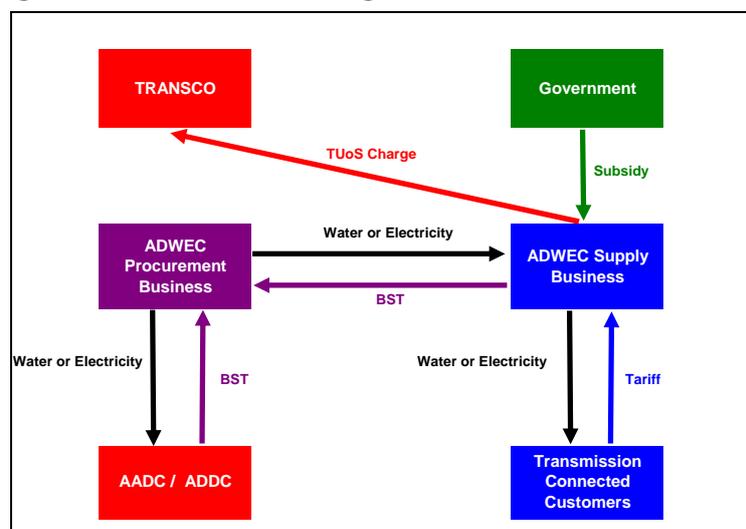
Retention of main features

2. Under our proposed new framework for ADWEC's price controls for 2010 onwards, the following main features of the existing price controls will continue:
 - (a) Current pass-through treatment of PWPA and fuel costs for procurement businesses;
 - (b) Current separation of controls between water and electricity businesses; and
 - (c) Current scope of controls (i.e., covering only the Licensed Activities).

Extension of scope of controls

3. The Bureau has recently proposed that ADWEC's Licensed Activities be extended to include supply to major customers connected directly to the transmission system in the Emirate of Abu Dhabi, as shown in **Figure 1** below:

Figure 1: ADWEC's existing and new Licensed Activities

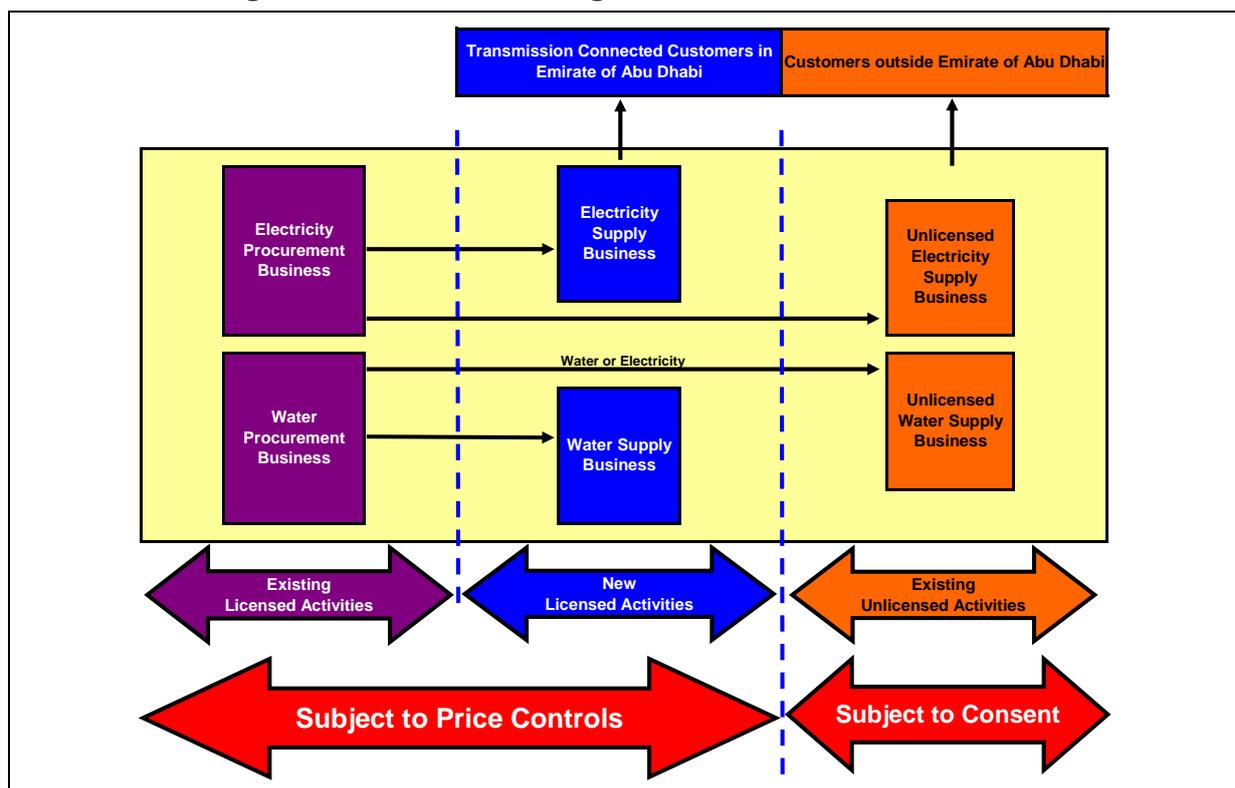


2009 Price Controls Review for ADWEC: Final Proposals

Author	Document	Version	Publication date	Approved by
AR / MPC	CR/E02/039	Issue 1	10 June 2010	NSC

4. Separate price controls and hence MAR calculations are now therefore proposed for ADWEC's licensed procurement and supply businesses. Supplies to customers outside the Emirate of Abu Dhabi would continue to be Unlicensed Activities outside the scope of price controls, requiring the Bureau's consent. The various activities of ADWEC and their regulation by the Bureau are summarised in **Figure 2** below:

Figure 2: ADWEC's existing and new Licensed Activities



Separation and structure of controls

5. ADWEC will be subject to four separate price controls for its four separate businesses: electricity procurement, water procurement, electricity supply and water supply. The MAR for each of these businesses will be calculated as follows:

- (a) MAR for a water or electricity procurement business:

$$\text{MAR}_P = \text{PWPA costs} + \text{Fuel costs} + A_P + Q_P - K_P$$

- (b) MAR for a water or electricity supply business:

$$\text{MAR}_S = \text{BST costs} + \text{TUoS costs} + A_S - K_S$$

6. Bulk Supply Tariff (BST) and Transmission Use of System (TUoS) costs charged by ADWEC's procurement businesses and TRANSCO will be treated on a pass-through basis for ADWEC's supply businesses, in line with the treatment of PWPA and fuel costs for the procurement businesses. K or correction factors continue to apply as present to adjust MAR for any under or over-recovery of revenue in the preceding year. The Q term for a water or electricity procurement business will also provide incentives under the Performance Incentive Scheme (PIS) for the water or electricity supply business.
7. A_P and A_S are the notified values set by the Bureau to finance ADWEC's own costs of undertaking the relevant procurement and supply businesses and adjusted annually as proposed below.

Initial notified values

8. The notified values (A_P) for the water and electricity procurement businesses of ADWEC's Licensed Activities for 2010 onwards will be as follows:

Table 1: Notified values (procurement) for 2010 – Final Proposals

AED million, 2010 prices		Electricity	Water	Total
Notified values for 2010	2010 prices	21.01	22.30	43.31

Source: Bureau calculations.

9. As these procurement costs are already based on the actual UAE CPI for 2009, they will not be adjusted for actual 2009 UAE CPI as suggested in the Draft Proposals.
10. For ADWEC's water and electricity supply businesses, since the reasonable level of such costs is not yet known, we will issue a licence derogation to set the notified values (A_S) for the first year of undertaking these businesses. These will be equal to the actual audited amounts of supply businesses' own costs incurred in such a year when such costs are known, subject to review by the Bureau and any representations from ADWEC. These values will also include a profit element calculated in line with that for the procurement businesses. There will be separate notified values for water and electricity supply businesses.

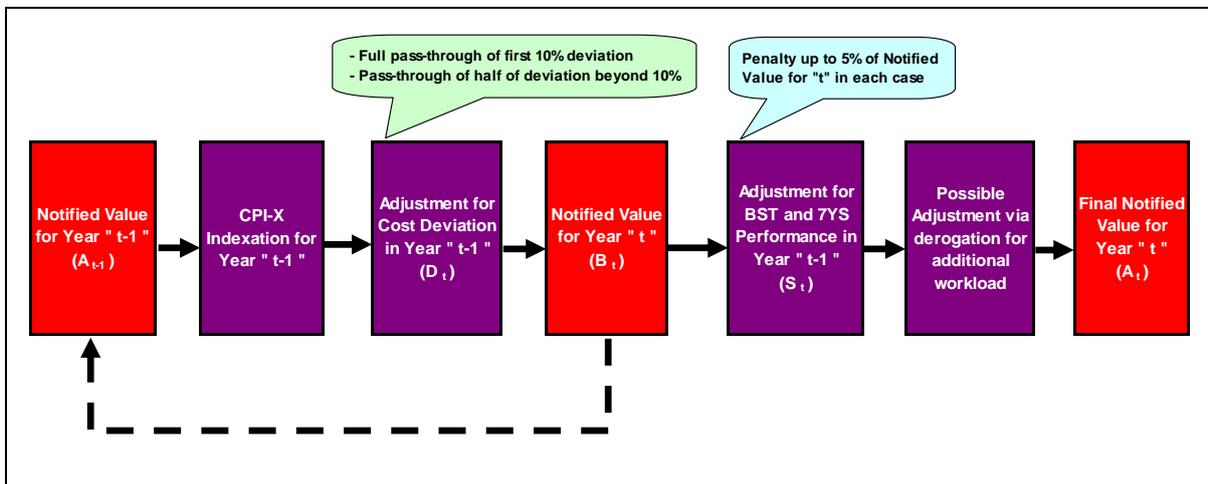
Annual adjustments to procurement costs

11. For 2011 onwards, the initial notified values for the procurement businesses will be adjusted each year by the standard CPI-X indexation (where X is set to zero) and for actual cost deviation and performance as follows:
 - (a) The price-controlled procurement costs applicable otherwise for a year will be adjusted (i) by 1% upward or downward for each 1% increase or decrease in

the actual audited procurement costs in the preceding year in comparison with the allowed procurement costs for that preceding year, for cost increases / decreases of up to 10%; and (ii) for further cost increase or decrease beyond 10%, by 0.5% upward or downward in the allowed procurement costs for a year for each 1% further increase or decrease, without any cap.

- (b) If the draft Seven Year Planning Statement (7YS) or draft Bulk Supply Tariff (BST) (which draft is later approved by the Bureau) is not submitted by 31 May or 30 November, respectively, the price-controlled procurement cost for each of ADWEC's water and electricity businesses for the following year will be adjusted downward by 1% for each month of delay in such submission up to a maximum of 5% adjustment in each case.

Figure 3: Annual adjustments to price-controlled procurement costs



12. For any additional workload requested or approved by the Bureau, the existing mechanism to allow pass-through of costs using a licence derogation will continue, to the extent such costs are not covered by the automatic mechanism described above.

Annual adjustments to supply costs

13. For the second year of undertaking the supply businesses, the notified values for ADWEC's electricity and water supply businesses (A_s) will be subject to standard CPI-X indexation.
14. For any subsequent year after the second year of undertaking the supply businesses, these notified values will be subject to CPI-X indexation and the automatic adjustment mechanism for cost deviation in the same manner as described in paragraph 11(a) above.

Other aspects of regulation

15. Any subsidy requirement for a supply business (water or electricity, as the case may be) for a year will be calculated as the difference between the MAR and the tariff income for that supply business.
16. Each year ADWEC will retain (as retained earnings on its balance sheet) the first AED 100 million of any profits from its Unlicensed Activities. This will be adopted as the regulatory policy for 2010 onwards without any licence modification to this effect.
17. The new framework will apply for 5 years from 1 January 2010 (i.e., from 2010 to 2014) and will be reviewed and revised, if necessary, in 2014 for 2015 onwards.

Performance Incentive Scheme (PIS)

18. The PIS will be applied to the price controls for ADWEC's procurement businesses only. However, the Category A timeliness indicators will cover the performance of both the procurement and supply businesses. Our Final Proposals on the PIS are summarised in following two tables:

Table 2: Category A Indicators for ADWEC – Final Proposals

	Category A indicator	Performance target	Incentive Rate	Bonuses / Penalties	Cap on Bonuses / Penalties
Electricity	Timeliness of Audited SBA*	30 April	35,000 AED/month	Only penalty	12 times incentive rate
	Timeliness of Audited PCR*	30 April	35,000 AED/month	Both bonus/penalty	6/12 times incentive rate
	Timeliness of AIS*	31 October	105,000 AED/month	Both bonus/penalty	6/12 times incentive rate
	Accuracy of Peak Demand Forecast	+/-3%	70,000 AED/1%	Both bonus/penalty	1% of procurement cost
Water	Timeliness of Audited SBA*	30 April	37,000 AED/month	Only penalty	12 times incentive rate
	Timeliness of Audited PCR*	30 April	37,000 AED/month	Both bonus/penalty	6/12 times incentive rate
	Timeliness of AIS*	31 October	112,000 AED/month	Both bonus/penalty	6/12 times incentive rate
	Accuracy of Peak Demand Forecast	+/-3%	74,000 AED/1%	Both bonus/penalty	1% of procurement cost

Notes: SBAs = Separate Business Accounts; PCR = Price Control Return; AIS = Annual Information Submission
 * These timeliness indicators for the water or electricity procurement businesses also cover performance of the water or electricity supply business, as the case may be.

Table 3: Category B Indicators for ADWEC – Final Proposals

Category B Indicator	Cap on financial adjustments
Generation Security Standard	Overall cap of
Desalination Security Standard	1%
Interim profit & loss account timeliness	of procurement cost
Annual future fuel supply requirement forecast submission	for each year

19. In addition to the revised incentive rates which will apply to ADWEC's performance or submission in 2011 and thereafter, and cover SBAs, PCRs and AIS for both the procurement and supply businesses, note the following main changes from the existing PIS (shown in RED font in the above tables):

2009 Price Controls Review for ADWEC: Final Proposals

Author	Document	Version	Publication date	Approved by
AR / MPC	CR/E02/039	Issue 1	10 June 2010	NSC

- (a) Change in target dates for Category A timeliness indicators (consistent with recent changes for the network companies);
 - (b) Penalty only (no bonus) for audited accounts related Category A indicator (consistent with recent changes for the network companies);
 - (c) Targets for Category A demand forecasting accuracy indicators widened and expressed in percentage terms;
 - (d) An individual cap on the bonus/penalty for Category A demand forecasting accuracy indicators (no need for an overall cap for Category A indicators);
 - (e) An additional Category B indicator relating to fuel forecast submission; and
 - (f) Reduction in overall cap on Category B indicators to 1% of procurement cost (consistent with recent changes for the network companies).
20. While the new price controls are proposed to take effect from 1 January 2010, we propose that the new targets and incentive rates for Category A indicators should apply to performance or submissions due in 2011 and onwards. That is, these indicators will remain subject to the PC3 targets and incentive rates for performance and submissions in 2010.

Changes from Draft Proposals

21. The main differences between the Draft Proposals and the Final Proposals are summarised in the following table:

2009 Price Controls Review for ADWEC: Final Proposals				
Author	Document	Version	Publication date	Approved by
AR / MPC	CR/E02/039	Issue 1	10 June 2010	NSC

Page 9 of 41

Table 4: Summary of main changes from Draft Proposals

Main feature	Draft Proposals	Final Proposals
Scope of price controls	Procurement businesses of Licensed Activities	Procurement and supply businesses of Licensed Activities
Separation of controls	Two separate controls: Electricity procurement; Water procurement	Four separate controls: Electricity procurement; Water procurement; Electricity supply; Water supply
Form and structure of supply business price controls	Not discussed	Various proposals made in line with those for procurement controls
Q term for procurement business	Applied to performance of procurement business only	Applies to performance of both procurement and supply businesses
2008 UAE CPI	Actual 112.30 (rounded off)	Actual 112.25 (latest published)
2009 UAE CPI	Assumed 113.07	Actual 114.00
2010 procurement cost adjustment	To be adjusted for actual 2009 UAE CPI when known	No adjustment required
Annual adjustment to procurement cost for previous year cost deviation	+/-10% for previous year cost deviation by more than +/- 10%	1% for each 1% previous year cost deviation up to 10%, and 0.5% for each 1% previous year cost deviation thereafter, without any cap
Annual adjustment to procurement cost for previous year performance	Based on the date of Bureau's approval of 7YS or BST	Based on the date of ADWEC's submission of draft 7YS or BST which is later approved
Target dates for 7YS and BST	30 April and 17 December for Bureau's approval	31 May and 30 November for ADWEC's submission
Treatment of profits from Unlicensed Activities	<ul style="list-style-type: none"> • Full retention of profits up to an adequate capital base (assumed to be AED 2 billion) • Thereafter 10% of profits up to AED 100 million per annum, with remaining profits to be passed through under BST • Requires licence modification 	<ul style="list-style-type: none"> • No full retention of profits up to an adequate capital base • Retention of first AED 100 million per annum of such profits • Adopted as a regulatory policy with no requirement for licence modification for this purpose
Error margin for peak demand forecasting accuracy Category A indicator	+/-2%	+/-3%
PIS targets and incentive rates for Category A due in 2010	Intended to be same as proposed for subsequent years	Same as applied for PC3 (2010 only)

1. Introduction and background

Background

- 1.1 The water and electricity sector in the Emirate of Abu Dhabi is characterised by the single-buyer structure, whereby ADWEC purchases water and electricity from a number of production companies, both inside and outside the Emirate of Abu Dhabi, under the terms of long-term Power and Water Purchase Agreements (PWPAs). This water and electricity is then sold by ADWEC to the two distribution companies (AADC and ADDC) at Bulk Supply Tariffs (BSTs) (referred to as the “**Licensed Activities**”) and to certain utilities outside the Emirate (referred to as the “**Unlicensed Activities**”). ADWEC also procures natural gas for the production companies.
- 1.2 Like other monopoly companies in the sector (AADC, ADDC, ADSSC, RASCO and TRANSCO), ADWEC has been subject to the CPI-X price controls set by the Bureau:
- (a) The first price controls (PC1) set in 1999 ran for four years (1999-2002);
 - (b) The second price controls (PC2) applied for three years (2003-2005); and
 - (c) The third price controls (PC3) were set in 2005 for four years (2006-2009).
- 1.3 PC3 controls for ADWEC and the network companies in the sector were intended to apply until the end of 2009 and required new price controls from 1 January 2010. The Bureau published its Final Proposals for PC4 controls for the network companies on 4 November 2009.
- 1.4 In contrast to the network companies, ADWEC has a negligible capital base. However, the PWPAs mean that ADWEC handles an annual turnover of about AED 8 billion (in 2009) for its Licensed Activities, which is about 60% of the total turnover of the sector (about AED 13.5 billion in 2009). It undertakes two further important work streams each year; namely, preparation of the BST and the Seven-Year Statement (7YS), which have significant implications for the entire sector.
- 1.5 Further, ADWEC deals with the trading of electricity and water with other Emirates in the UAE (with a turnover of about AED 1.9 billion in 2009) and the GCC countries.

ADWEC's separate businesses

Existing businesses

- 1.6 ADWEC's licence presently defines two separate businesses; namely **electricity procurement business** and **water procurement business**; each one involving mainly the following:
- (a) purchase of water or electricity from production plant;
 - (b) purchase of fuel for delivery to the production plant; and
 - (c) sale of water or electricity to the distribution companies.

New businesses

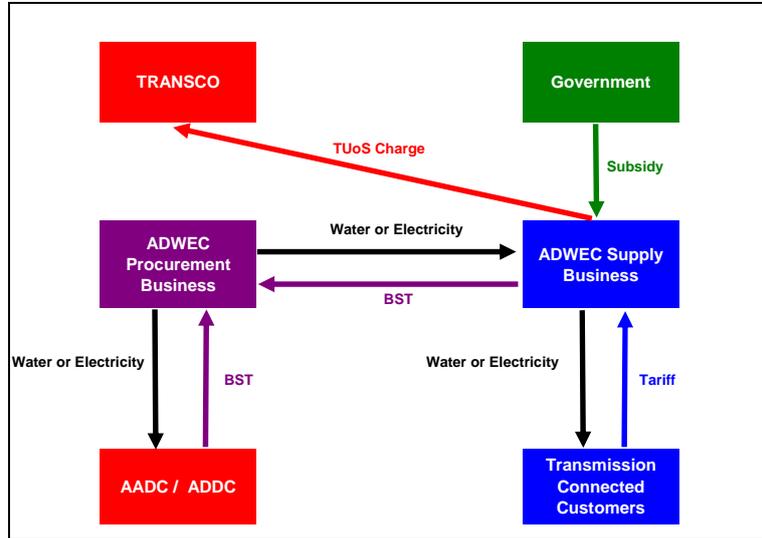
- 1.7 The recently passed Law No (9) of 2009 which amended Law No (2) of 1998 expressly allows the Bureau to license entities to engage in multiple regulated activities. The Bureau has therefore proposed to license ADWEC to also undertake the regulated activity of supplying electricity and water to customers connected directly to the transmission system in the Emirate of Abu Dhabi. Supplies to customers outside the Emirate would continue to be Unlicensed Activities, requiring the Bureau's consent.
- 1.8 ADWEC will therefore have two new businesses within its Licensed Activities; namely, **electricity supply business** and **water supply business**; each one involving mainly the following within the Emirate of Abu Dhabi:
- (a) purchase of water or electricity from ADWEC's procurement businesses; and
 - (b) sale of water or electricity to the transmission connected customers.

Interaction between businesses

- 1.9 The proposed supply businesses of ADWEC will be customers of its own procurement businesses. As in the case of the supply businesses of the two distribution companies, ADWEC's supply businesses will purchase water and electricity from the procurement businesses at BSTs and pay Transmission Use of System (TUoS) Charges to TRANSCO for using the transmission system for water and electricity supplies to the transmission connected customers. In addition to the tariff income from the transmission connected customers, ADWEC's supply businesses will also receive subsidy from the government in respect of transmission

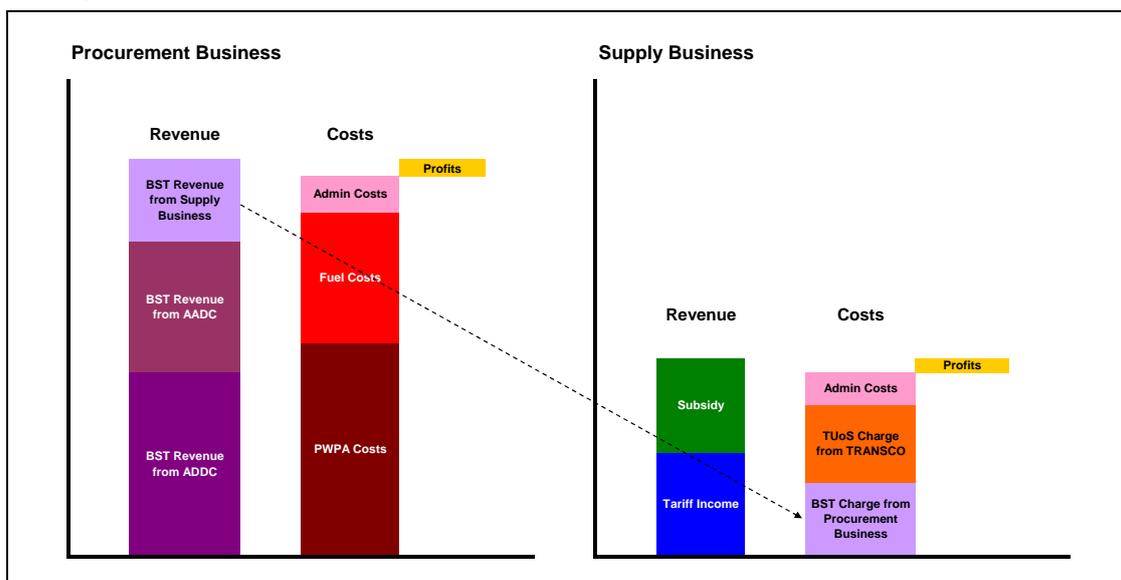
connected customers which are subject to subsidised tariffs. These transactions are graphically presented in the following chart:

Figure 1.1: Transactions between existing and new businesses



1.10 At present, ADWEC produces two types of audited statements each year separately for its procurement businesses: audited Separate Business Accounts (SBAs), allocating costs and incomes in accordance with the Bureau’s guidelines, and audited Price Control Returns (PCRs) showing compliance against the price controls. The recently proposed new supply businesses for ADWEC would require SBAs and PCRs for each such business. This is necessary to ensure transparency and ring-fencing of costs and subsidy within the businesses. The following charts summarise the main revenue and cost items of these businesses:

Figure 1.2: Main cost and revenue items of ADWEC’s licensed businesses



Previous price controls

- 1.11 The price controls have been in the form of revenue caps, defining Maximum Allowed Revenue (MAR) for ADWEC's Licensed Activities (procurement businesses only), for each year of the price control duration as follows:

$$\text{MAR} = \text{PWPA costs} + \text{Fuel costs} + A + Q - K$$

where:

- (a) **PWPA and fuel costs** are the costs which are pass-through on an actual basis subject to ADWEC's economic purchasing obligation.
- (b) **'A'** is the price-controlled procurement cost or the notified value in UAE Dirhams (or AED) allowing ADWEC to recover its staff and other operating costs relating to the Licensed Activities. The notified value **'A'** is set by the Bureau for the first year of the control period and is then automatically adjusted each year according to the following formula for (i) the UAE Consumer Price Index (CPI) inflation for the previous year and (ii) an **'X'** factor (zero to date) set by the Bureau:

$$A_t = A_{t-1} \times (1 + ((\text{CPI}_t - X) / 100))$$

- (c) **'Q'** is the revenue adjustment for performance during a year under the Performance Incentive Scheme (PIS), discussed in Section 4 of this paper.
- (d) **'K'** is the correction factor adjusting any over- or under-recovery of revenue in the preceding year.

- 1.12 There have been separate price controls for the water and electricity businesses of ADWEC's Licensed Activities. To date, the Licensed Activities have consisted solely of ADWEC's procurement businesses as mentioned earlier.

- 1.13 While Unlicensed Activities require the Bureau's prior consent (as per ADWEC's licence), these activities are not subject to any price controls by the Bureau and are financially ring-fenced to avoid any cross subsidy from Licensed Activities.

- 1.14 The following table summarises the allowed procurement costs or the notified values in the price controls for the recent years:

2009 Price Controls Review for ADWEC: Final Proposals

Author	Document	Version	Publication date	Approved by
AR / MPC	CR/E02/039	Issue 1	10 June 2010	NSC

Table 1.1: Notified values 'A' for procurement businesses to date

AED millions (nominal prices)	PC2			PC3			
	2003	2004	2005	2006	2007	2008	2009
Electricity procurement cost				11.80	12.90	14.33	16.09
Water procurement cost				7.56	8.26	9.18	10.31
Total procurement cost	10.72	11.05	11.61	19.36	21.16	23.51	26.40

Source: Company's audited PCRs

- 1.15 As shown in **Table 1.2** below, ADWEC's actual procurement cost (in nominal prices) for its Licensed Activities as reported in its accounts increased from about AED 9 million in 2003 to over AED 36 million in 2008 i.e., an increase at an average rate of about 32% per annum:

Table 1.2: ADWEC's actual procurement costs (water and electricity combined)

AED millions (nominal prices)	2003	2004	2005	2006	2007	2008
Staff costs	6.87	6.54	7.25	7.97	11.63	16.55
Administrative and other expenses	2.20	3.22	5.90	6.86	14.01	19.86
Depreciation	0.14	0.16	0.12	0.13	0.04	0.10
Total	9.22	9.91	13.28	14.95	25.69	36.51

Source: Company's audited SBAs.

- 1.16 Recently, administrative and other expenses have accounted for the majority (about 55%) of ADWEC's actual procurement cost, with the remaining (about 45%) accounted for by the staff costs. Depreciation accounts for a very small proportion. Each of the electricity and water businesses contributes about half of these procurement costs.
- 1.17 The above two tables show that ADWEC had been managing its actual costs quite successfully against the procurement cost allowed under its price controls until 2007. However, recently, its actual costs have increased significantly as compared to the allowed procurement costs and are projected to increase further in the near future. In 2008, its actual costs reached AED 36.5 million (in nominal prices) as compared to the allowed procurement costs of AED 23.5 million for Licensed Activities. We understand that such an increase has been mainly due to the personnel policy changes for ADWEA group of companies during recent years of economic growth in the UAE combined with increases in ADWEC's workload.

2009 price controls review

- 1.18 The previous PC3 price controls for ADWEC were intended to apply until the end of 2009. The new price controls were therefore required for 2010 onwards.

2009 Price Controls Review for ADWEC: Final Proposals

Author	Document	Version	Publication date	Approved by
AR / MPC	CR/E02/039	Issue 1	10 June 2010	NSC

- 1.19 In November 2008, the Bureau commenced the present consultation process to set the new price controls by publishing the First Consultation Proposals. This was followed by our Second Consultation Paper in March 2009. Due to the delay in receiving a response from ADWEC to the Second Consultation Paper, the Draft Proposals for ADWEC were deferred until after the completion of the price controls review for the network companies (January 2010). We received generally supportive responses from ADWEC to these papers. The table below summarises the progress of this process to date:

Table 1.3: Progress to date on 2009 Price Controls Review for ADWEC

Actual Date	Task
18 November 2008	Bureau published <i>First Consultation Paper</i>
26 March 2009	Bureau published <i>Second Consultation Paper</i>
28 June 2009	Meeting held between Bureau and ADWEC
13 August 2009	ADWEC response to Second Consultation Paper
21 January 2010	Bureau published <i>Draft Proposals</i>
7 March 2010	ADWEC response to Draft Proposals
29 March 2010	Meeting held between Bureau and ADWEC
6 April 2010	Bureau response to ADWEC on proposed changes to Draft Proposals
10 June 2010	Bureau publishes <i>Final Proposals</i>

- 1.20 ADWEC's response dated 7 March 2010 and the discussion at the recent meeting held on 29 March 2010 are discussed in the relevant sections of this document. We have given due consideration to these responses and modified our Final Proposals in a number of areas as a result.

- 1.21 The proposed licence modification that gives effect to these Final Proposals (along with the introduction of licensed supply business for customers connected directly to the transmission system in the Emirate of Abu Dhabi) is being issued to ADWEC separately. ADWEC is required to communicate to the Bureau its acceptance or otherwise of the proposed licence modifications by **22 July 2010**. If accepted by the above date, these proposals will come into effect on 1 January 2010. Otherwise, the existing licence will remain in force until such time as it is modified.

Table 1.4: Remaining timetable for 2009 Price Controls Review for ADWEC

Target Date	Task
10 June 2010	Bureau issues draft licence modification to ADWEC
22 July 2010	ADWEC to respond to Final Proposals / draft licence modification
1 January 2010	New price controls to take effect

Structure of this document

1.22 The remainder of this document is structured as follows:

- (a) **Section 2** discusses the form of the new controls, including their type, structure, scope and duration and the future review process;
- (b) **Section 3** describes our price control calculations; and
- (c) **Section 4** sets out our proposal on the PIS scheme for the new controls.

2. Form of controls

Introduction

- 2.1 Earlier consultation papers described ADWEC's procurement business as different in nature to that of the network companies and listed some uncertainties and risks that ADWEC has limited financial capability to manage. We therefore considered it to be appropriate for ADWEC to have a more flexible control structure than the network companies. It was suggested that the main structure of the MAR formula for ADWEC may remain the same as at present (see Section 1). However, the notified value "A" can be adjusted on an annual basis to reflect ADWEC's performance or requirements – rather than CPI adjustment only as at present.
- 2.2 Under the new framework, the following elements of the current framework for ADWEC's price controls were suggested to be retained, given their desirable features and their consistency over time and among sector companies:
- (a) Current MAR formula structure;
 - (b) Current pass-through treatment of PWPA and fuel costs;
 - (c) Current separation of controls between water and electricity businesses;
 - (d) Current scope of controls (i.e., covering only the Licensed Activities);
 - (e) Current PIS, with certain necessary changes;
 - (f) Current scope of price-controlled procurement costs to cover staff costs, depreciation, administrative expenses, and a nominal profit element;
 - (g) Current periodic review to reset the price-controlled procurement costs for a control period (3 to 5 years); and
 - (h) Current automatic annual CPI-X indexation of such costs.
- 2.3 This Section 2 summarises our Draft Proposals and ADWEC's response to the Draft Proposals. It then discusses the proposed introduction of separate price controls for the recently proposed new supply businesses for ADWEC's Licensed Activities and the resulting MAR formulae for procurement and supply businesses. Finally, this section sets out our Final Proposals on the form of new price controls for ADWEC in relation to both the existing procurement businesses and the new supply businesses.

Draft Proposals

2.4 In the Draft Proposals, we proposed the following framework for ADWEC's price controls focusing on its procurement businesses:

- (a) The price-controlled procurement costs for ADWEC's electricity and water businesses separately for 2010 onwards would be as calculated in Section 3 of the Draft Proposals (i.e., AED 20.99 million and AED 22.31 million, respectively, in 2010 prices).
- (b) If ADWEC's actual audited procurement costs for a year were higher or lower than its price-controlled procurement cost for that year by more than 10%, the price-controlled procurement cost applicable otherwise for the following year would be adjusted upward or downward by 10%. In this regard:
 - (i) the price controlled procurement cost applicable otherwise would mean the price-controlled procurement cost as adjusted by CPI-X indexation but before other annual adjustments for that year (e.g., for BST and 7YS under paragraph (c) below); and
 - (ii) the actual audited procurement cost will comprise the following expenses from audited income statement for the water or electricity business (as the case may be) of the Licensed Activities: (A) staff costs; (B) depreciation; and (C) administrative and other expenses.

This was designed to provide the flexibility to address the risks and uncertainties (including increase in staff costs and allowances) to which ADWEC is exposed as well as the incentives to reduce costs.

- (c) If the BST or 7YS were not approved by the Bureau by 17 December or 30 April, respectively, the price-controlled procurement cost for each of ADWEC's water and electricity businesses for the following year would be adjusted downward by 5% in each case.

This reflected the fact that the costs of meeting these obligations in a timely manner are already financed in the allowed procurement costs. It was explained that ADWEC would agree with the Bureau a timetable to be followed for the submission of the draft BST leaflet and draft 7YS statement, for our review and comments on such drafts, and submission of the final draft leaflet/statement addressing such comments.

- (d) For any additional workload or obligation requested or approved by the Bureau, the existing mechanism to allow pass-through of related costs (once

the actual costs are known) using a licence Derogation issued by the Bureau would continue.

- (e) In respect of any profits from its Unlicensed Activities each year, we proposed that ADWEC should retain these profits as retained earnings in its balance sheet (not distributed to shareholders) until it has adequate working capital to back the risks to which it is exposed. For the purpose of the Draft Proposals, we assumed that ADWEC requires AED 2 billion in retained earnings (aggregate across all businesses) to back such risks.

We proposed that once ADWEC is adequately capitalised, ADWEC would thereafter retain (as retained earnings on its balance sheet) 10% of any profits from its Unlicensed Activities up to a maximum of AED 100 million per annum. The remaining profit would then have been passed on to the customers through the following year's BST (or BST Exceptional Charges) once the audited accounts confirming such profits are available. In the Draft Proposals, we therefore proposed a new term "B" to be introduced into ADWEC's MAR formulae for Licensed Activities to allow this profit sharing.

- (f) The new framework would apply for 5 years commencing from 1 January 2010 (i.e., from 2010 to 2014) and would be reviewed and revised, if necessary, in 2014 to apply for 2015 onwards.

It was explained that the proposed framework may in theory enable the controls to continue indefinitely. However, a periodic review of the price controls, as at present, is required to improve the framework based on the experience over a period and to reset the price-controlled procurement costs based on the latest information. This would allow the Bureau and ADWEC to address any uncertainties faced by ADWEC and to incorporate adjustments which may become permanent and would therefore be better reflected in the framework rather than be addressed through annual adjustments in future.

ADWEC's response to Draft Proposals

2.5 In its response dated 7 March 2010 to the Draft Proposals and subsequent meeting on 29 March 2010, ADWEC supported various suggestions made in the paper but made alternative proposals on some aspects of the price controls, as summarised below:

- (a) ADWEC welcomed the Bureau's proposed treatment of the profits from ADWEC's Unlicensed Activities as a means to build up its capital reserves to

manage the risks without the need to call upon an implicit or explicit financial guarantee from the Abu Dhabi Government.

- (b) ADWEC also welcomed our proposed mechanisms (of automatic annual adjustment and adjustment via derogation) for the price-controlled procurement costs allowing flexibility in price controls to respond to changes in ADWEC's workload. However, ADWEC considered that the proposed automatic annual adjustment mechanism might provide undesirable incentives to exceed (or avoid) a 10% cost increase (or savings). It therefore suggested a smooth adjustment mechanism within the +/-10% cost variation range. ADWEC and the Bureau discussed further options to refine the automatic annual adjustment mechanism to address such concerns and strengthen the incentives and flexibility for ADWEC to manage its costs efficiently, particularly the increasing staff costs.
- (c) While highlighting the need for the price controls to support Emiratisation, ADWEC argued that a straight pass-through treatment of certain such costs was previously agreed with the Bureau for the purpose of price controls.
- (d) ADWEC presented the current difficulties in meeting the Bureau's proposed target date of 30 April for the Bureau's approval of the 7YS statement and suggested an alternative target date of 30 June. According to ADWEC, as quality of data from network companies and external sources required for forecasting improves, it should be possible to move towards the target date of 30 April in future.
- (e) For both 7YS and BST timeliness, ADWEC proposed that the date of the final drafts should be used for annual adjustments to price-controlled procurement costs, rather than the Bureau's approval date since the Bureau's approval process lies outside ADWEC's control.
- (f) ADWEC also made various suggestions on the PIS, which are discussed in Section 4 of this paper.

Bureau's assessment

2.6 Our views on ADWEC's response to the Draft Proposals are as follows. These views were communicated to ADWEC during the 29 March meeting and via our subsequent letter dated 6 April 2010. As with the Draft Proposals and ADWEC's response, these views focus mainly on ADWEC's procurement businesses. However, the form of controls for ADWEC's supply businesses discussed later in this Section 2 follows similar principles:

2009 Price Controls Review for ADWEC: Final Proposals

Author	Document	Version	Publication date	Approved by
AR / MPC	CR/E02/039	Issue 1	10 June 2010	NSC

- (a) We welcome ADWEC's concurrence to our proposed treatment of the profits from its Unlicensed Activities. However, since the publication of the Draft Proposals, discussions have taken place between the Bureau's senior management and the Government on this issue. The Bureau's view now is that ADWEC does not need the capital base of the magnitude we assumed for our Draft Proposals. We therefore propose that ADWEC should retain (as retained earnings on its balance sheet) only the first AED 100 million of such profits each year. We adopt this as a regulatory policy without any requirement to modify ADWEC's licence for this purpose. This approach is similar to our existing regulatory policy for such profits.
- (b) We share ADWEC's concerns with some details of the annual adjustment mechanism for procurement costs suggested in the Draft Proposals and have given due consideration to the options discussed at the 29 March meeting with ADWEC. We now propose a change to the annual adjustment mechanism to allow:
- (i) for cost increases / decreases of up to 10%, a 1% increase or decrease in the allowed procurement costs for a year for each 1% increase or decrease in the actual procurement costs in the preceding year in comparison with the allowed procurement costs for that preceding year; and
 - (ii) for further cost increase or decrease beyond 10%, a 0.5% increase or decrease in the allowed procurement costs for a year for each 1% further increase or decrease, without any cap.

This will avoid the potential for distortion that ADWEC mentioned as well as enable ADWEC to manage various uncertainties and its Emiratisation program and provide strong and continuous incentives for ADWEC to manage its costs efficiently.

- (c) For the purposes of annual adjustment described in paragraph (b) above:
- (i) the price controlled procurement cost (**AP**) applicable otherwise would mean the price-controlled procurement cost as adjusted by CPI-X indexation, including all adjustments in the previous years under paragraph (b) above, but before other annual adjustments for that year (e.g. for BST and 7YS under paragraph (e) below); and
 - (ii) the actual audited procurement cost will comprise the following: (A) staff costs; (B) depreciation; and (C) administrative and other

expenses, from the audited income statement for the water or electricity procurement business (as the case may be) of the Licensed Activities, and (D) the assumed or allowed profit for that year (as calculated in Section 3 for the relevant procurement business adjusted for inflation). The addition of this allowed profit to the actual cost is necessary for the automatic adjustment mechanism to compare the notified value and the actual cost on a like-for-like basis in order to allow ADWEC to earn the allowed profit included within the notified value.

- (d) With regards to ADWEC’s argument relating to Emiratisation, we have advised ADWEC that there is no previously agreed mechanism for a pass-through of any costs other than PWPA and fuel costs under the price controls. To date, Emiratisation costs have been treated in the same manner as other operating costs. However, the proposed annual adjustment to the allowed procurement costs for actual cost deviations in the preceding year, described above, will enable ADWEC to manage unforeseen cost increases.
- (e) In response to ADWEC’s concerns about 7YS and BST related annual adjustments, we are making three changes to our Draft Proposals:
 - (i) The target date for the purpose of annual adjustment mechanism will be for ADWEC’s submission date (rather than the Bureau’s approval date), provided that same submission is later approved by the Bureau.
 - (ii) Instead of full penalty upon late submission, a late submission will only accrue a penalty for each month of delay up to a maximum penalty of 5% of allowed procurement cost in total over 5 months (i.e. 1% per month) for each submission.
 - (iii) The target dates for 7YS and BST submissions (which are later approved by the Bureau) will be 31 May and 30 November each year.

These changes, which were discussed at the 29 March meeting, will address ADWEC’s concerns about target dates and penalty arising due to delays in Bureau’s approval. Further, the monthly penalty mechanism will provide a continuous incentive for an acceptable submission.

Introduction of proposed supply businesses

2.7 Section 1 describes the recently proposed new supply businesses for ADWEC. We propose to follow a form and structure of price controls for these businesses identical

or similar to those for ADWEC's existing procurement businesses. In essence, we propose to allow pass-through of such costs for supply businesses which are subject to regulation or competition elsewhere and to adopt CPI-X regulation for the businesses' own costs. In this regard, our proposals are as follows:

Separation and structure of price controls

2.8 In order to ensure transparency and ring-fencing of costs and subsidy within the businesses, we propose to set price controls for the supply businesses, separate to the procurement businesses and separately for water and electricity. That is, ADWEC's Licensed Activities are proposed to be subject to four separate price controls for four separate businesses: namely, electricity procurement, water procurement, electricity supply and water supply.

2.9 As mentioned in Section 1, the price controls for ADWEC's **procurement businesses** have been in the form of revenue caps, defining Maximum Allowed Revenue (MAR) for each year of the price control duration as follows:

$$MAR_P = PWPA \text{ costs} + \text{Fuel costs} + A_P + Q_P - K_P$$

2.10 In line with this approach and the principles described in paragraph 2.7 above, we propose that the price controls for ADWEC's **supply businesses** should also be in the form of revenue caps, defining Maximum Allowed Revenue (MAR) for each year of the price control duration as follows:

$$MAR_S = BST \text{ costs} + TUoS \text{ costs} + A_S - K_S$$

where:

- (a) **BST and TUoS costs** are the costs charged to the supply businesses by ADWEC's procurement businesses and TRANSCO, respectively, which will be treated as pass-through on an actual basis.
- (b) **'A_S'** is the price-controlled supply business cost or the notified value in UAE Dirhams (or AED) allowing ADWEC to recover its staff and other operating costs relating to the supply businesses. The notified value **'A_S'** will be set by the Bureau for the first year of undertaking supply activity and will then automatically be adjusted each year according to the following formula for (i) the UAE CPI inflation for the previous year and (ii) an 'X' factor set by the Bureau (which will be set to zero as is the case with procurement businesses):

$$A_{St} = A_{St-1} \times (1 + ((CPI_t - X) / 100))$$

- (c) 'K_S' is the correction factor adjusting any over- or under-recovery of revenue of the supply business in the preceding year. This will be calculated in the same manner as presently calculated for the procurement businesses. That is, for any year 't':

$$K_{St} = (RR_{S\ t-1} - MAR_{S\ t-1}) \times (1 + i_{t-1})$$

where:

- (i) **MAR_{S t-1}** is the MAR for the supply business for year t-1 calculated using the formula proposed above in this paragraph 2.10.
- (ii) **RR_{S t-1}** is the regulated revenue for the supply business for year t-1 comprising the tariff income of the supply business from the transmission connected customers and any subsidy received from the government in respect of transmission connected customers.
- (iii) **i_{t-1}** is the average specified rate for year t-1 as presently defined in the licence based on the average of monthly average interest rates on one-year interbank deposits published by the UAE Central Bank.

2.11 The electricity and water supply businesses will be subject to separate price controls. The MAR for each supply business will be calculated by using the formula proposed above.

2.12 Note that the proposed MAR formulae for supply businesses do not presently contain the term "Q" for PIS bonuses and penalties. As discussed below, the Q term for the procurement businesses will cover the performance of both the procurement and supply businesses until the next price controls review.

Regulation of supply business "own" costs

2.13 As the costs of undertaking supply businesses by ADWEC are not known at present, we are not presently proposing the relevant notified values "A_S" for these businesses. Rather, we will issue a licence derogation to set these notified values for the first year of undertaking these businesses (whether for 2010 or a later year). These will be equal to the actual audited amounts of supply businesses' own costs incurred in such a year when such costs are known (subject to review by the Bureau and any representations from ADWEC) plus a profit element calculated in line with that for the procurement business (see Section 3). Such costs are expected to comprise (A) staff costs; (B) depreciation; and (C) administrative and other expenses attributable to the supply businesses. There will be separate notified values for water and electricity supply businesses.

- 2.14 The price control calculations in Section 3 of this paper therefore describe the calculations of the notified values for the procurement businesses only.
- 2.15 For the second year of undertaking the supply businesses, the notified values for ADWEC's electricity and water supply businesses will be determined simply by adjusting the notified values for the first year for CPI-X as per paragraph 2.10(b) above.
- 2.16 Further, for any subsequent year after the second year of undertaking the supply businesses, the price-controlled supply costs will be subject to CPI-X indexation and the automatic adjustment mechanism for cost deviation in the same manner as described for the procurement businesses in paragraph 2.6(b) above. (An adjustment in the second year for cost deviation in the first year will not be required since the notified values for the first year would be set taking account of the actual costs incurred in the first year). That is, the price-controlled supply costs applicable otherwise for a year will be adjusted upward or downward as follows, if ADWEC's actual audited supply costs for the preceding year deviate from its price-controlled supply cost for that preceding year:
- (a) for cost increases / decreases of up to 10%, a 1% increase or decrease in the allowed supply costs for a year for each 1% increase or decrease in the actual supply costs in the preceding year in comparison with the allowed supply costs for that preceding year; and
 - (b) for further cost increase or decrease beyond 10%, a 0.5% increase or decrease in the allowed supply costs for a year for each 1% further increase or decrease, without any cap.
- 2.17 For the purposes of annual adjustment described in paragraph 2.16 above:
- (a) the price controlled supply cost applicable otherwise would mean the price-controlled supply cost as adjusted by CPI-X indexation, including all adjustments in the previous years under paragraph 2.16 above; and
 - (b) the actual audited supply cost will comprise the following: (A) staff costs; (B) depreciation; (C) administrative and other expenses, from the audited income statement for the water or electricity supply business (as the case may be); and (D) the allowed profit, calculated by applying a suitable profit margin to the turnover of the supply business in line with the allowed profit calculations in Section 3 for the procurement businesses.

2.18 In contrast to the procurement businesses, the supply business notified values will not be subject to the annual adjustments for performance on BST and 7YS submissions as they are not performed by the supply businesses.

Determination of subsidy

2.19 The Bureau expects the tariffs approved for supply of electricity and water to transmission connected customers to be cost-reflective pursuant to the recently proposed licence conditions. However, there might be certain cases especially for the water supply business, where cost-reflective tariffs would be in excess of standard tariffs.

2.20 In such a case, the standard tariffs would be expected to apply and the subsidy requirement for the relevant supply business (water or electricity, as the case may be) for a year will be calculated as the difference between the MAR and the tariff income. These subsidy and correction factor calculations will be carried out in the audited price control return (PCR) for the relevant supply business, similar to the mechanism used for the distribution companies.

PIS within procurement businesses

2.21 We would like to provide the PIS incentives for ADWEC to submit audited SBAs, audited PCRs and AIS for its supply businesses on a timely basis in line with the incentives for these statements for the procurement businesses. As described in Section 4, the PIS incentive rates are calculated based on the notified value for the relevant business. Since the notified values for the supply businesses are not presently set, it is not possible to calculate the separate incentive rates for the supply businesses in this manner.

2.22 We therefore propose that the audited SBAs, audited PCRs and AIS for supply businesses be covered (together with those for the procurement businesses) by the PIS incentive rates for the procurement businesses with the same target dates. That is, the Q term for electricity or water procurement business will also cover the performance of the electricity or water supply business, respectively.

Final Proposals

2.23 We therefore propose the following framework for ADWEC's price controls:

Scope and separation of controls

2.24 The scope of the price controls, and hence the MAR calculations and PCRs, will be extended to include ADWEC's licensed supply activities.

2.25 ADWEC will be subject to four separate price controls for its electricity procurement, water procurement, electricity supply and water supply businesses. The MAR for each of these businesses will be calculated as follows:

(a) MAR for a water or electricity **procurement business**:

$$\text{MAR}_P = \text{PWPA costs} + \text{Fuel costs} + A_P + Q_P - K_P$$

(b) MAR for a water or electricity **supply business**:

$$\text{MAR}_S = \text{BST costs} + \text{TUoS costs} + A_S - K_S$$

Notified values for procurement businesses

2.26 The price-controlled procurement costs or the notified values (**A_P**) for ADWEC's electricity and water procurement businesses separately for 2010 onwards will be as calculated in Section 3 (i.e., AED 21.01 million and AED 22.30 million, respectively, in 2010 prices).

2.27 The price-controlled procurement costs (**A_P**) applicable otherwise for a year will be adjusted upward or downward as follows, if ADWEC's actual audited procurement costs for the preceding year deviate from its price-controlled procurement cost for that preceding year:

- (a) for cost increases / decreases of up to 10%, a 1% increase or decrease in the allowed procurement costs for a year for each 1% increase or decrease in the actual procurement costs in the preceding year in comparison with the allowed procurement costs for that preceding year; and
- (b) for further cost increase or decrease beyond 10%, a 0.5% increase or decrease in the allowed procurement costs for a year for each 1% further increase or decrease, without any cap.

2.28 For the purposes of annual adjustment described in paragraph 2.27 above:

- (a) the price controlled procurement cost (**A_P**) applicable otherwise would mean the price-controlled procurement cost as adjusted by CPI-X indexation, including all adjustments in the previous years under paragraph 2.27 above, but before other annual adjustments for that year (e.g. for BST and 7YS under paragraph 2.29 below); and
- (b) the actual audited procurement cost will comprise the following operating costs: (A) staff costs; (B) depreciation; and (C) administrative and other

expenses, reported in the audited income statement for the water or electricity procurement business (as the case may be) of the Licensed Activities, and (D) the assumed or allowed profit for that year.

- 2.29 If the draft 7YS or BST, which is later approved by the Bureau, is not submitted by 31 May or 30 November, respectively, the price-controlled procurement cost (**AP**) for each of ADWEC's water and electricity businesses for the following year will be adjusted downward by 1% for each month of delay in such submission after the relevant target date (i.e., 31 May or 30 November, respectively) up to a maximum of 5% adjustment (5 months delay) in case of each submission separately.
- 2.30 For any additional workload or obligation requested or approved by the Bureau, the existing mechanism to allow pass-through of related costs (once the actual costs are known) using a licence Derogation issued by the Bureau will continue, to the extent not covered by the automatic adjustment mechanism described in paragraph 2.27 above.

Notified values for supply businesses

- 2.31 We will issue a licence derogation to set the price-controlled supply costs or the notified values for ADWEC's supply businesses (**AS**) for the first year of undertaking these businesses when the actual audited amounts of supply businesses' own costs incurred in such a year are known. Such costs are expected to comprise (A) staff costs; (B) depreciation; and (C) administrative and other expenses attributable to the supply businesses, plus a profit element calculated in line with that for the procurement business (see Section 3). There will be separate notified values for water and electricity supply businesses.
- 2.32 For the second year of undertaking the supply businesses, the notified values for ADWEC's electricity and water supply businesses (**AS**) will be subject to standard CPI-X indexation.
- 2.33 For any subsequent year after the second year of undertaking the supply businesses, the price-controlled supply costs (**AS**) will be subject to CPI-X indexation and the automatic adjustment mechanism for cost deviation in the same manner as described in paragraphs 2.27 and 2.28 above. The notified values for the supply businesses will not be subject to the adjustments for performance on the BST and 7YS described for the procurement businesses in paragraph 2.29 above.

Other aspects of regulation

- 2.34 The Q term for the electricity or water procurement business will also cover the performance of the electricity or water supply business, respectively, to apply the PIS incentives to the latter businesses as well.
- 2.35 Any subsidy requirement for a supply business (water or electricity, as the case may be) for a year will be calculated as the difference between the MAR and the tariff income for that supply business.
- 2.36 Each year ADWEC will retain (as retained earnings on its balance sheet) the first AED 100 million per annum of any profits from its Unlicensed Activities. This will be adopted as the regulatory policy for 2010 onwards without any licence modification to this effect.
- 2.37 The new framework will apply for 5 years commencing from 1 January 2010 (i.e., from 2010 to 2014) and will be reviewed and revised, if necessary, in 2014 to apply for 2015 onwards.

3. Price control calculations

Introduction

- 3.1 This Section 3 describes the Bureau's calculation of the price-controlled procurement cost (A_P) for 2010 in 2010 prices, separately for the water and electricity procurement businesses of ADWEC's Licensed Activities. The notified values (A_S) for the recently proposed supply businesses for the first year of such businesses will be set via a licence derogation on the basis of actual audited costs for such a year (see Section 2).
- 3.2 Since the Draft Proposals used an assumed UAE CPI for 2009, the calculated procurement costs for 2010 in the Draft Proposals were to be adjusted for the actual 2009 CPI when it is known. However, the actual 2009 CPI is now available and hence used in these Final Proposals. The 2010 procurement costs calculated in these Final Proposals will therefore not require any further adjustment.
- 3.3 For these Final Proposals, we have used the following UAE CPI data for conversion of nominal prices into real prices or vice versa:

Table 3.1: Actual UAE CPI data

	2007	2008	2009
UAE CPI (base 2000 = 100)	100.00	112.25	114.00
Total procurement cost		12.25%	1.56%

Source: Actual UAE CPI data for 2007-2009 from the UAE Ministry of Economy.

Notes: 2008 UAE CPI was previously published to be 112.30 (used in the Draft Proposals) by the UAE Ministry of Economy. The latest published figure is 112.25 as shown in the above table.

- 3.4 For 2011 onwards, the allowed procurement costs will be adjusted each year for actual cost deviation and performance on BST and 7YS as proposed in Section 2, in addition to the standard CPI-X indexation each year.

Our overall approach to calculation

- 3.5 Our overall approach to calculation of the allowed procurement cost remains the same in broad terms as used at the previous price control reviews. At this review, the calculation has focused on one year only (i.e. 2010) instead of covering all the years of the price control period by the net present value (NPV) approach. This is because the allowed procurement cost for subsequent years (2011 onwards) will now be subject to annual adjustment for actual cost deviation discussed in Section 2.

- 3.6 Separately for the water and electricity businesses of ADWEC's Licensed Activities, the allowed procurement cost for 2010 has been calculated in 2010 prices (using actual UAE CPI data set out in **Table 3.1** above) as the sum of:
- (a) a reasonable base level of procurement costs; and
 - (b) a nominal profit element.

Base level of procurement costs

- 3.7 In the Draft Proposals, we discussed the various sources of actual and forecast procurement costs. Due to the inherent uncertainties with the forecasts or budgets demonstrated in the Draft Proposals, we used the latest procurement costs for which the audited data is available for the full year. That is, we used the actual procurement costs for 2008 as per the audited SBAs to set the base level of allowed procurement costs for 2010 and converted it into 2010 prices using the UAE CPI assumptions. This approach is consistent with the previous price control reviews as well as the PC4 Final Proposals for the network companies.
- 3.8 In the Final Proposals, we have retained the 2008 actual procurement costs as used in the Draft Proposals to set the base level of costs for 2010. However, we have now used the actual CPI data from **Table 3.1** above. The following table shows this base level for water and electricity procurement businesses of ADWEC, separately:

Table 3.2: Base levels of procurement costs for 2010 – Final Proposals

AED million, 2010 prices		Electricity	Water	Total
2008 actual audited costs	2008 prices	17.72	18.80	36.51
Base level of costs for 2010	2010 prices	20.20	21.43	41.63

Source: ADWEC's audited SBAs for 2008; Bureau calculations.

- 3.9 The total base level for 2010 procurement costs as proposed above (AED 41.63 million in 2010 prices) is slightly higher than that calculated in the Draft Proposals (AED 41.29 million in 2010 prices). This lies between ADWEC's forecasts for 2009 and 2010 for these businesses but is significantly higher than the annualised actual cost implied by ADWEC's interim accounts for the first half of 2009.

Allowed profit element for procurement costs

- 3.10 At the 2005 price controls review, a profit margin of 0.021% on forecast turnover was used to set the price controls for ADWEC, consistent with the cost of capital of 5.00% used for the network companies at that time. In our Final Proposals on PC4 controls for network companies, we have adopted a cost of capital of 4.50% for the network

companies. The profit margin on forecast turnover for ADWEC should therefore be adjusted to **0.019%** proportional to the revised cost of capital.

3.11 In the Draft Proposals, we applied this profit margin to ADWEC's forecast of 2010 BST turnover from its 2009 AIS submission to calculate the allowed profit element. However, since the publication of the Draft Proposals, ADWEC has published the 2010 BST leaflet and submitted the 2009 audited PCRs:

- (a) the 2010 BST leaflet shows a 2010 BST turnover forecast of AED 7.7 billion (in 2010 prices) for the Emirate of Abu Dhabi; and
- (b) the 2009 audited PCRs show the 2009 actual BST turnover of AED 8 billion (in 2009 prices) for the Emirate of Abu Dhabi.

3.12 To arrive at a reasonable forecast for the 2010 BST turnover, we have therefore used the 2009 actual BST turnover as the started point. We have however increased it by an assumed growth forecast of 10% in real terms and converted it into 2010 prices. We have then applied the profit margin of 0.019% to the resulting projected 2010 BST turnover to calculate the allowed profit element as shown in the following table:

Table 3.3: Allowed profit element for 2010 – Final Proposals

AED million, 2010 prices		Electricity	Water	Total
Actual revenue for 2009	2009 prices	3,865.18	4,117.32	7,982.50
Forecast revenue for 2010	2009 prices	4,251.70	4,529.05	8,780.74
Forecast revenue for 2010	2010 prices	4,317.98	4,599.66	8,917.64
Profit margin	%	0.019%	0.019%	
Allowed profit for 2010	2010 prices	0.82	0.87	1.69

Source: ADWEC's 2009 PCR; Bureau calculations.

3.13 The estimated profit for the two licensed procurement businesses therefore amounts to about AED 1.69 million per annum.

Notified values for procurement businesses for 2010

3.14 The price-controlled procurement costs or the notified values for 2010 have been calculated as follows by adding the proposed base levels of costs and profit elements separately for ADWEC's licensed water and electricity businesses:

Table 3.4: Notified values for procurement businesses for 2010 – Final Proposals

AED million, 2010 prices		Electricity	Water	Total
Base level of costs for 2010	2010 prices	20.20	21.43	41.63
Allowed profit for 2010	2010 prices	0.82	0.87	1.69
Notified values for 2010	2010 prices	21.01	22.30	43.31

Source: Bureau calculations.

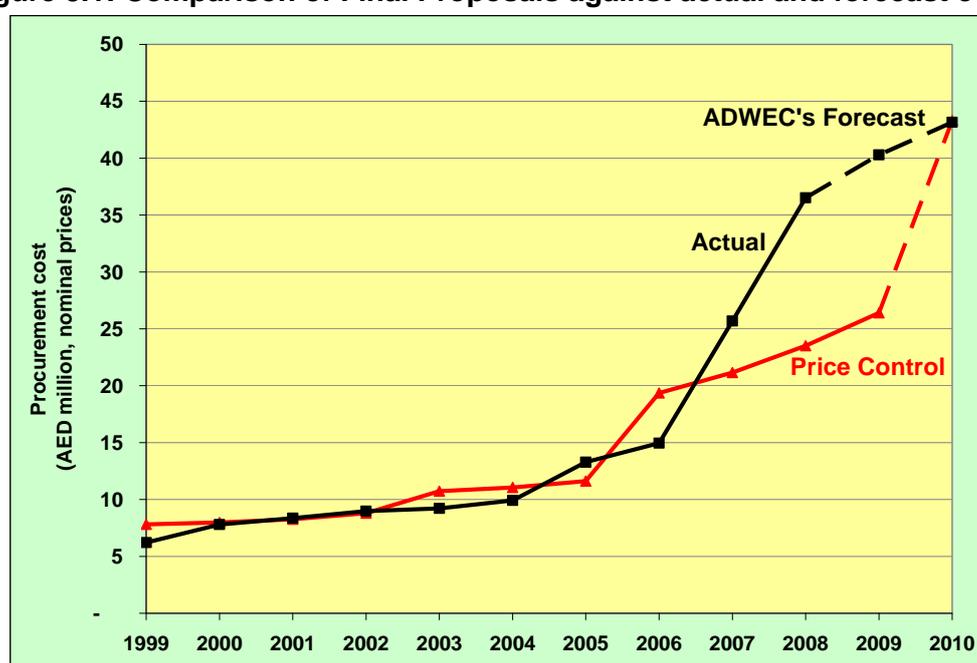
2009 Price Controls Review for ADWEC: Final Proposals

Author	Document	Version	Publication date	Approved by
AR / MPC	CR/E02/039	Issue 1	10 June 2010	NSC

3.15 As explained earlier in this Section 3, these values will be applied to 2010 without any further adjustment. For 2011 onwards, they will be adjusted each year by the standard CPI-X indexation and for actual cost deviation and performance as proposed in Section 2.

3.16 In total, our Final Proposals on the allowed costs for 2010 (AED 43.31 million in 2010 prices) are almost the same as ADWEC's forecast for 2010 (AED 43.146 in 2010 prices) for the licensed procurement businesses as contained in ADWEC's response dated 13 August 2009 to the Second Consultation Paper. A comparison of our Final Proposals against ADWEC's actual and forecast costs is shown in **Figure 3.1**.

Figure 3.1: Comparison of Final Proposals against actual and forecast costs



3.17 As summarised in the following table, the notified values for 2010 in our Final Proposals are almost the same as the Draft Proposals:

Table 3.5: Notified values (procurement) for 2010 – Draft and Final Proposals

AED million, 2010 prices		Electricity	Water	Total
Draft Proposals	2010 prices	20.99	22.31	43.30
Final Proposals	2010 prices	21.01	22.30	43.31

Source: Bureau

4. Performance Incentive Scheme

Introduction

4.1 The current Performance Incentive Scheme (PIS) for both water and electricity procurement businesses of ADWEC has two types of performance indicators:

- (a) Category A indicators (see **Table 4.1** below) with precise definitions, targets and incentive rates, and an automatic annual revenue adjustment for performance via a term “Q” in the MAR formulae, subject to an overall cap at 4% of the notified value “A” each year; and
- (b) Category B indicators (see **Table 4.2** below), less precisely defined but subject to a possible financial adjustment at the following review for exceptionally good or poor performance, subject to an overall cap at 2% of the notified value “A” each year.

Table 4.1: Current Category A Indicators for ADWEC

	Category A indicator	Performance target	Incentive Rate
Electricity	Timeliness of Audited SBA	30 June	20,000 AED/month
	Timeliness of Audited PCR	31 March	20,000 AED/month
	Timeliness of AIS	30 September	60,000 AED/month
	Accuracy of Peak Demand Forecast	+/-100 MW	1,000 AED/MW error
Water	Timeliness of Audited SBA	30 June	13,000 AED/month
	Timeliness of Audited PCR	31 March	13,000 AED/month
	Timeliness of AIS	30 September	39,000 AED/month
	Accuracy of Peak Demand Forecast	+/-20 MIGD	4,000 AED/MIGD error

Notes: SBAs = Separate Business Accounts; PCR = Price Control Return; AIS = Annual Information Submission

Notes: The incentive rates were set at the same levels for SBAs, PCRs and AIS at the 2005 price controls review. The Bureau and ADWEC have however subsequently agreed to triple the incentive rates for AIS submissions to reflect the cost associated with their preparation and audit.

Table 4.2: Current Category B Indicators for ADWEC

Category B Indicator
Generation Security Standard
Desalination Security Standard
Interim profit & loss account timeliness
Seven-Year Planning Statement timeliness
BST timeliness

4.2 This Section 4 summarises the changes we proposed in the Draft Proposals and ADWEC’s response to that paper. It then sets out our assessment of the issues and Final Proposals on the PIS along with the calculation of proposed incentive rates for Category A indicators over the new price control period.

4.3 Note that the PIS incentive rates have been calculated in this Section 4 with reference to the notified values for ADWEC's procurement businesses. However, as discussed in Section 3, the proposed PIS indicators, targets and incentive rates for these businesses will also apply to the performance of the supply businesses. The effect of this is that the incentive rates and the Q term for the water or electricity procurement business will also cover the performance on audited SBAs, audited PCRs and AIS submissions for the water or electricity supply business, respectively.

Draft Proposals

4.4 Given the positive results that the PIS has achieved in terms of improving sector companies' performance on the targeted measures, our earlier consultation papers suggested retaining the PIS (both Category A and B indicators) for ADWEC with revised incentive rates and with some changes as described in the Draft Proposals and summarised below:

- (a) In line with our Final Proposals on PC4 for the network companies and in recognition of the additional work required, we proposed continuation of both bonuses and penalties for submissions of audited PCRs as well as for the AIS. The PIS bonuses for Category A timeliness indicators for audited SBAs should however be removed so that only a penalty for delayed submission will apply.

Table 4.3: PIS bonuses for Category A timeliness indicators

Category A indicator	Current arrangement	First Consultation Paper	Second Consultation Paper	Draft Proposals
Audited SBA timeliness	Both bonus / penalty	Only penalty	Only penalty	Only penalty
Audited PCR timeliness	Both bonus / penalty	Only penalty	Only penalty	Both bonus / penalty
AIS timeliness	Both bonus / penalty	Only penalty	Both bonus / penalty	Both bonus / penalty

Notes: SBAs = Separate Business Accounts; PCR = Price Control Return; AIS = Annual Information Submission

- (b) The PIS target dates for both PCRs and SBAs should be changed to 30 April, while extending the target date for AIS to 31 October (consistent with the recent changes for the network companies).

Table 4.4: PIS target dates for Category A timeliness indicators

Category A indicator	Current arrangement	First Consultation Paper	Second Consultation Paper	Draft Proposals
Audited SBA timeliness	30 June	30 April	30 April	30 April
Audited PCR timeliness	31 March	30 April	30 April	30 April
AIS timeliness	30 September	31 October	31 October	31 October

Notes: SBAs = Separate Business Accounts; PCR = Price Control Return; AIS = Annual Information Submission

2009 Price Controls Review for ADWEC: Final Proposals

Author	Document	Version	Publication date	Approved by
AR / MPC	CR/E02/039	Issue 1	10 June 2010	NSC

- (c) The incentive rates otherwise calculated for the AIS timeliness indicator should in case of ADWEC be increased by three times to reflect the associated costs (in line with the current arrangement).
- (d) For the peak demand forecast accuracy-related Category A indicators, we proposed to define the forecasting accuracy margins in percentage terms to allow higher margins in absolute terms as the peak demands increase. In this regard, we proposed that bonuses should apply when actual peak demands are within +/-2% of forecasts; otherwise penalties should apply.
- (e) In line with our Final Proposals on PC4 for the network companies, we also proposed that the bonuses and penalties for demand forecast accuracy-related Category A indicator should each be subject to an individual cap of 1% of ADWEC's price-controlled procurement cost. Each of the three Category A timeliness indicators remains subject to caps on bonuses (6 times incentive rate) and penalties (12 times incentive rate) as at present, wherein the bonus is also calibrated at 1% of the allowed procurement cost (as discussed in paragraph 4.6 below). There will therefore be no need for the existing overall cap on Category A indicators. The overall cap for Category B indicators will also be reduced from the existing 2% to 1% of procurement cost for each year of the control period in line with the network companies.
- (f) With the timeliness of BST and 7YS submissions incentivised through annual adjustments as proposed in Section 2, these submissions should be removed from the Category B.
- (g) We accepted ADWEC's suggestion for an annual submission of future fuel supply requirement forecasts by 1 June each year as an additional Category B indicator. This submission would provide a high level status of the adequacy or otherwise of primary fuel inputs to the sector and identify the required actions. (We requested further details on the contents of the proposed submission, for example, a sample report).

ADWEC's response to Draft Proposals

4.5 ADWEC's comments and suggestions on the Draft Proposals made via its response dated 7 March 2010 and subsequent meeting on 29 March 2010 are summarised below:

- (a) ADWEC made detailed comments on the peak demand forecast accuracy-related Category A indicators mainly highlighting the following:

- (i) the need for a similar mechanism for the network companies to incentivise them to provide timely and accurate demand forecasts to help ADWEC meet its licence obligations and forecast accuracy targets;
 - (ii) the need for a wider range of +/-5% for demand forecast accuracy to take account of the current quality of the forecasts from the network companies and other sources and the constraints on the water networks; and
 - (iii) the need for an explanation of how the bonus part of the proposed mechanism would work.
- (b) On the Category A timeliness indicator for audited SBAs, ADWEC considered the Draft Proposal to be stringent as it would reduce the submission period by two months from 30 June to 30 April and remove the bonus. ADWEC therefore proposed retaining the existing bonuses and caps for this indicator in line with the other timeliness indicators.

Bureau's assessment

4.6 ADWEC's response was discussed in detail at the meeting on 29 March 2010. Our views on the issues raised were communicated to ADWEC via our letter of 6 April 2010 and are summarised below, along with some changes to the Draft Proposals:

- (a) On the peak demand forecast accuracy related Category A indicators, we would like to clarify that:
 - (i) These indicators were introduced in PC3 on ADWEC's suggestion (and have been supported by ADWEC in its response to Second Consultation Paper for new price controls) in lieu of the interest penalty on BST correction factor (now replaced with the retrospective BST exceptional charges).
 - (ii) In addition to various Category A indicators for their operational performance, the network companies have been subject to capex efficiency review which explicitly takes account of their demand forecasting and other planning and procurement processes. In contrast to ADWEC, the network companies remain subject to the MAR correction factors (and many more Category A indicators than ADWEC).

- (iii) ADWEC would earn a bonus if its demand forecast is higher or lower than the actual demand by less than 2% and would incur a penalty if its demand forecast is higher or lower than the actual demand by more than 2%.
 - (iv) The originally proposed +/-2% range for demand forecasting accuracy was based on ADWEC's licence provisions on the same range for penalty interest rate for over or under-recovery under the correction factor. This range was also considered reasonable in view of the forecast accuracy achieved and bonuses earned by ADWEC to date. However, in response to the concerns and uncertainties that ADWEC highlighted, particularly related to major developments and the removal of water transmission system constraints, we now propose increasing this range to +/-3%.
- (b) On SBA and other timeliness indicators, we have already made some concessions on our original proposals. See our earlier consultation papers on new price controls for ADWEC and network companies for explanation of our proposals. These papers highlighted the need for early and simultaneous submissions of PCRs and SBAs and the reason for removing the bonuses for SBAs given the companies' statutory obligations. Our proposed incentive regime for ADWEC is structured in the same manner as proposed for the network companies. Given the practical difficulties in implementing different dates for audited accounts and PCRs for different companies in the sector and given our statutory duties to ensure consistency and undue discrimination, we have retained the suggestions made in the Draft Proposals on these indicators.

Revised Incentive Rates

4.7 **Table 4.5** below shows the calculation of the revised incentive rates for ADWEC's Category A indicators based on the procurement cost proposed in Section 3. We have applied the same methodology to this calculation as used at the previous price control reviews; that is:

- (a) first, we determine the amount 'at stake' for each Category A indicator based on 1% of the proposed notified value for the relevant business; and
- (b) then, the incentive rate for each indicator (rounded off appropriately) is calculated by dividing the amount at stake by a scheme calibration assumption as follows:

2009 Price Controls Review for ADWEC: Final Proposals

Author	Document	Version	Publication date	Approved by
AR / MPC	CR/E02/039	Issue 1	10 June 2010	NSC

- (i) for all timeliness indicators: 6 month delay; and
- (ii) for demand forecasting indicators: 3% error.

4.8 As at present, the incentive rates for AIS timeliness indicators for ADWEC have been set to three times the rates otherwise calculated to reflect the costs associated with the procurement of the Technical Assessor report in that case.

Table 4.5: Incentive rates for Category A Indicators – Final Proposals

	Notified value (AED million)	Incentive amount for each indicator (AED)	SBA and PCR timeliness indicator (AED / month)	AIS timeliness indicator (AED / month)	Demand forecasting indicator (AED / 1%)
ADWEC Electricity	21.011	210,112	35,000	105,000	70,000
ADWEC Water	22.300	223,002	37,000	112,000	74,000

4.9 These rates are the same as calculated in the Draft Proposals, with the exception of those for demand forecasting indicators which have now been reduced due to wider error range.

Final Proposals

4.10 The following two tables summarise our Final Proposals for the PIS:

Table 4.6: Category A Indicators for ADWEC – Final Proposals

	Category A indicator	Performance target	Incentive Rate	Bonuses / Penalties	Cap on Bonuses / Penalties*
Electricity	Timeliness of Audited SBA	30 April	35,000 AED/month	Only penalty	12 times incentive rate
	Timeliness of Audited PCR	30 April	35,000 AED/month	Both bonus/penalty	6/12 times incentive rate
	Timeliness of AIS	31 October	105,000 AED/month	Both bonus/penalty	6/12 times incentive rate
	Accuracy of Peak Demand Forecast	+/-3%	70,000 AED/1%	Both bonus/penalty	1% of procurement cost
Water	Timeliness of Audited SBA	30 April	37,000 AED/month	Only penalty	12 times incentive rate
	Timeliness of Audited PCR	30 April	37,000 AED/month	Both bonus/penalty	6/12 times incentive rate
	Timeliness of AIS	31 October	112,000 AED/month	Both bonus/penalty	6/12 times incentive rate
	Accuracy of Peak Demand Forecast	+/-3%	74,000 AED/1%	Both bonus/penalty	1% of procurement cost

Notes: SBAs = Separate Business Accounts; PCR = Price Control Return; AIS = Annual Information Submission

* For timeliness indicators: maximum bonus = 6 times incentive rate; maximum penalty = 12 times incentive rate (see paragraph 4.5(c))

Table 4.7: Category B Indicators for ADWEC – Final Proposals

Category B Indicator	Cap on financial adjustments
Generation Security Standard	Overall cap of 1% of procurement cost for each year
Desalination Security Standard	
Interim profit & loss account timeliness	
Annual future fuel supply requirement forecast submission	

2009 Price Controls Review for ADWEC: Final Proposals

Author	Document	Version	Publication date	Approved by
AR / MPC	CR/E02/039	Issue 1	10 June 2010	NSC

- 4.11 While the new price controls are proposed to take effect from 1 January 2010 as described in this document, we propose that the targets and incentive rates for Category A indicators should apply to submissions from 2011 onwards (rather than 2010 as proposed for the network companies). That is, these indicators will remain subject to the PC3 targets and incentive rates for submissions in 2010. This is to provide necessary prior notice to ADWEC to comply with the new target dates, since the new target dates for some indicators (e.g. SBA and PCR submissions) in 2010 have already passed.
- 4.12 The PIS targets, incentive rates and the Q term for the water or electricity procurement business will also cover the audited SBAs, audited PCRs and AIS submissions for the water or electricity supply business, respectively. There will be no separate incentive rates or Q term for the supply businesses.