



مكتب التنظيم و الرقابة
Regulation & Supervision Bureau

Consultation Document

2009 Price Controls Review for ADWEC

Draft Proposals

21 January 2010

CR/E02/037

www.rsb.gov.ae

water, wastewater and electricity sector of the Emirate of Abu Dhabi

2009 Price Controls Review for ADWEC Draft Proposals

CR/E02/037

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Foreword

1. The previous price controls for ADWEC were intended to be replaced by new price controls for 2010 onwards.
2. In March 2009, we published the Second Consultation Paper following a response from ADWEC to our First Consultation Paper which supported our proposal to subject it to a different control cycle and structure than the other price-controlled companies in the sector. The Second Consultation Paper set out more details on our thinking on the new price control framework. In August 2009, we received a generally positive response from ADWEC to the paper.
3. This present document describes our Draft Proposals for the new controls for ADWEC, taking into account ADWEC's response to the Second Consultation Paper. Under the proposed new framework, PWPA and fuel costs will continue to be treated on a pass-through basis. The price controls, focusing on ADWEC's procurement cost (mainly staff and administrative costs) with an enhanced Performance Incentive Scheme (PIS), will apply for five years (2010-2015). However, to enable the price control to respond flexibly to changes in ADWEC's workload, at the end of each year, the price-controlled procurement cost for the next year can be automatically adjusted for pre-specified criteria. We have also proposed a new treatment of any profits earned from ADWEC's unlicensed activities.
4. Written responses to the Draft Proposals are requested by **4 March 2010** to the following address:

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Director of Economic Regulation
Regulation and Supervision Bureau
PO Box 32800, Abu Dhabi
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5. Following consideration of responses to the Draft Proposals, we intend to issue our Final Proposals for ADWEC's new price controls in April 2010.

NICK CARTER

DIRECTOR GENERAL

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Executive Summary

Introduction

1. This document describes our Draft Proposals for the new price controls for ADWEC for 2010 onwards, taking into account ADWEC's response to the Second Consultation Paper published in March 2009.

Draft 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;
 - (b) Current separation of controls between water and electricity businesses; and
 - (c) Current scope of controls (i.e., covering only the Licensed Activities);

Price-controlled procurement costs for 2010

3. The price-controlled procurement costs for water and electricity businesses of ADWEC's Licensed Activities for 2010 onwards will be as follows:

Table 1: Allowed procurement costs for 2010 – Draft Proposals

AED million, 2010 prices		Electricity	Water	Total
Allowed procurement cost for 2010	2010 prices	20.99	22.31	43.30

Source: Bureau calculations.

4. As these procurement costs are based on an assumed UAE CPI for 2009, they will be adjusted for actual 2009 UAE CPI when available.

Annual adjustments to procurement costs

5. For 2011 onwards, the initial notified values will be adjusted each year by the standard CPI-X indexation and for actual cost deviation and performance as follows:
 - (a) If ADWEC's actual audited procurement costs for a year are 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 will be adjusted upward or downward by 10%.

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- (b) If the Bulk Supply Tariff (BST) or the Seven-Year Planning Statement (7YS) is 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 will be adjusted downward by 5% in each case.
6. 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.
 7. In respect of profits from Unlicensed Activities in 2010 and subsequent years, the Bureau proposes that ADWEC should continue to retain such profits (as retained earnings) on its balance sheet until it has adequate capital assets on a standalone basis to back the risks to which it is exposed. Thereafter, we propose that ADWEC should retain (as retained earnings on its balance sheet) 10% of such profits up to a maximum of AED 100 million per annum and the remaining profit should be passed on to the customers through the following year's BST (or BST Exceptional Charges) once the audited accounts confirming such profits are available.
 8. 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)

9. Our Draft Proposals on the PIS are summarised in following two tables:

Table 2: Category A Indicators for ADWEC – Draft 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	+/-2%	105,000 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	+/-2%	112,000 AED/1%	Both bonus/penalty	1% of procurement cost

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

Table 3: Category B Indicators for ADWEC – Draft 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

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10. In addition to the revised incentive rates which will apply to ADWEC's performance in 2010 and thereafter, note the following main changes from the existing PIS (shown in **RED** font in the above tables):
- (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 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).

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 Abu Dhabi Water and Electricity Company (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 is subject to the CPI-X price controls set by the Bureau. These price controls have been reset after 3 or 4 years:
- (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 has recently published its Final Proposals (4 November 2009) for PC4 controls for the network companies.
- 1.4 In contrast to the network companies in the sector, ADWEC has a negligible capital base. However, it manages a number of long-term PWPAs with production plants both inside and outside the Emirate of Abu Dhabi. ADWEC handles an annual turnover of about AED 6.7 billion (in 2008) for its Licensed Activities, which is more than half of the total turnover of the sector (about AED 12.4 billion in 2008). 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 1.5 billion in 2008) and the GCC countries.

- 1.6 ADWEC's licence defines two separate businesses (water and electricity) for its Licensed Activities. Each year, it produces 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.

Current price controls

- 1.7 The price controls have been in the form of revenue caps, defining Maximum Allowed Revenue (MAR) for ADWEC's Licensed Activities, 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 in UAE Dirhams (or AED) allowing ADWEC to recover its staff and other operating costs relating to the Licensed Activities. **'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:

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

- (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.
- 1.8 There have been separate price controls for the water and electricity businesses of ADWEC's Licensed Activities.
- 1.9 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.
- 1.10 The following table summarises the allowed procurement costs in the price controls for the recent years:

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Table 1.1: ADWEC's price-controlled procurement cost 'A'

AED millions (nominal prices)	PC2			PC3			
	2003	2004	2005	2006	2007	2008	2009 (estimated)
UAE CPI (base 2000 = 100)	109.10	114.60	121.70	133.00	147.80	165.98	167.12
UAE CPI Inflation	3.12%	5.04%	6.20%	9.29%	11.13%	12.30%	0.69%
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. Actual UAE CPI data for 2003-2007 from Ministry of Economy.

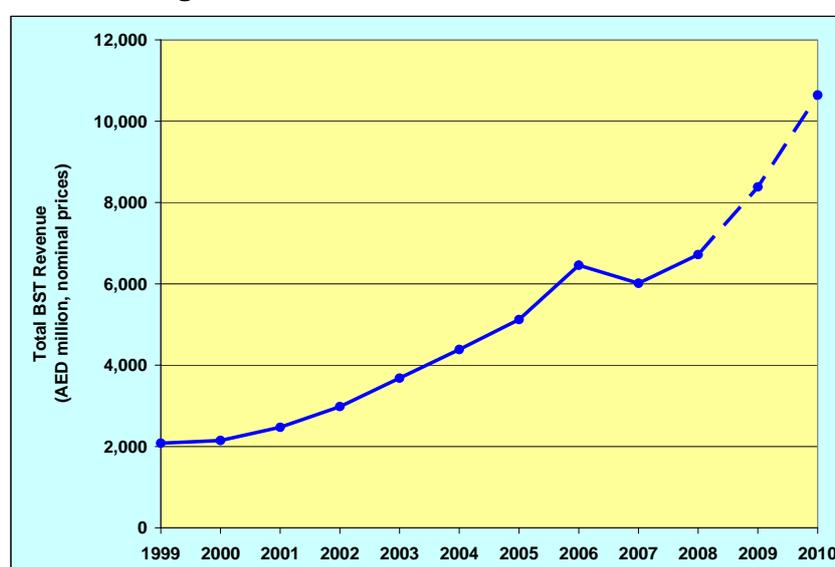
Notes: 2009 UAE CPI is as assumed by the Bureau for the PC4 Final Proposals dated 4 November 2009 for the network companies.

ADWEC's financial performance

Revenue and profit

1.11 In line with the increase in electricity and water demand and production capacity in the sector, ADWEC's revenue (in nominal prices) from the sale of electricity and water to the distribution companies has increased from about AED 2.1 billion in 1999 to about AED 6.7 billion in 2008 i.e., an average rate of about 14% per annum (see **Figure 1.1** below). The revenue is projected to reach AED 10.6 billion in 2010 (source: ADWEC's 2009 AIS converted into nominal prices).

Figure 1.1: ADWEC's total BST revenue



1.12 ADWEC's average annual profit for its Licensed Activities from 1999 to 2007 was around AED 6.2 million per annum, mainly from interest income and a nominal profit element allowed in the procurement cost. However, its net profit from the Unlicensed Activities has increased significantly in recent years, reaching over AED 440 million in 2008.

Procurement cost

1.13 As shown in **Table 1.2** below, ADWEC's actual procurement cost (in nominal prices) for its Licensed Activities 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)

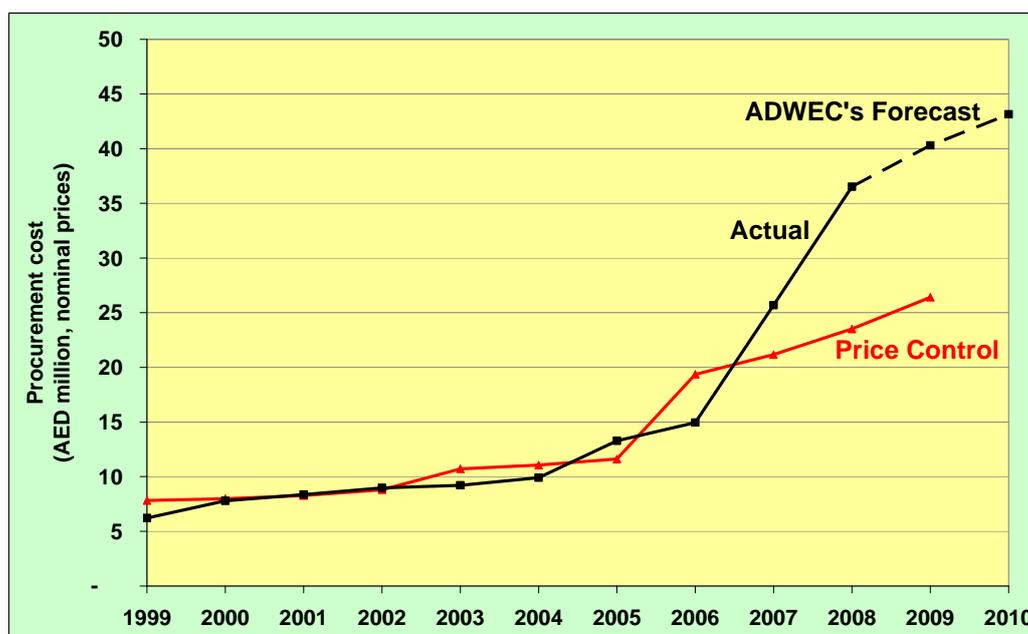
AED millions (nominal prices)	2003	2004	2005	2006	2007	2008
Staff costs	6.87	6.54	7.25	7.97	11.63	16.55
Administrative and other expenses	2.20	3.22	5.90	6.86	14.01	19.86
Depreciation	0.14	0.16	0.12	0.13	0.04	0.10
Total	9.22	9.91	13.28	14.95	25.69	36.51

Source: Company's audited SBAs.

1.14 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.

1.15 **Figure 1.2** below shows ADWEC's performance on actual procurement cost (water and electricity combined) against the price-controlled procurement cost (i.e., notified value 'A') since 1999 for its Licensed Activities:

Figure 1.2: ADWEC's performance on procurement cost against price controls



- 1.16 The above chart shows 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.

Framework for price control calculations

- 1.17 Currently, the price controls for ADWEC (and the network companies) are set for a period of 3 to 4 years. At each price control review, the notified value of the price-controlled procurement cost "A" for each of ADWEC's water and electricity businesses is determined for the first year of the control period. This notified value "A" is then automatically adjusted each year for actual UAE CPI inflation.
- 1.18 The price-controlled procurement cost for each of ADWEC's water and electricity businesses is set to recover reasonable, efficient costs incurred by ADWEC in relation to the Licensed Activities. These costs include operating as well as capital costs such as depreciation.
- 1.19 The price-controlled procurement cost also includes a nominal profit margin on ADWEC's BST turnover forecast over the control period. At the 2005 price controls review, a profit margin of 0.021% was used based on the 5% cost of capital (real, post-tax) estimated for the sector companies at that time.

Timetable for the 2009 price controls review

- 1.20 The Second Consultation Paper in March 2009 set out the timetable for the review process that the Bureau intends to undertake to set the new controls for ADWEC. A meeting was held on 28 June 2009 where the Bureau and ADWEC discussed and clarified various issues raised in the paper. We received ADWEC's response dated 13 August 2009 to the Second Consultation Paper, which is discussed in the relevant sections of this document.
- 1.21 Due to the delay in the receipt of ADWEC's response to the Second Consultation Paper, these Draft Proposals for ADWEC were delayed until after the completion of the 2009 price controls review for the network companies. **Table 1.2** below sets out the timetable for the remainder of the review for ADWEC (assuming a timely

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response from ADWEC to these Draft Proposals). This timetable allows a six-week period for ADWEC to respond to the Bureau's consultation papers:

Table 1.3: Timetable for 2009 Price Controls Review

Approximate Date	Task
21 January 2010	Bureau to publish <i>Draft Proposals</i>
4 March 2010	ADWEC to respond to Draft Proposals
April 2010	Bureau to publish <i>Final Proposals</i>

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 This Section 2 summarises the discussions in the earlier consultation papers on the new framework for ADWEC's price controls for 2010 onwards and ADWEC's response to the Second Consultation Paper. It then sets out our Draft Proposals on the form of new price controls for ADWEC.

First Consultation Paper

2.2 The First Consultation Paper described ADWEC's procurement business as different in nature to that of the network companies and listed some uncertainties and risks that ADWEC does not have the financial capability to manage. The paper therefore considered it to be appropriate for ADWEC to have a more flexible control period 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.

Second Consultation Paper

2.3 Taking account of ADWEC's supportive response to the First Consultation Paper, we further developed our thinking in the Second Consultation Paper on the new framework for ADWEC's price controls, as summarised below:

Retention of current features

2.4 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.

Annual adjustment of price-controlled procurement costs

2.5 Under the new framework, it was suggested that at the end of each year during the new control period (commencing from 2010), the price-controlled procurement costs for the following year can be adjusted as follows:

- (a) Automatic 10% upward or downward adjustment if ADWEC's actual audited procurement cost for a year is higher or lower than its price-controlled procurement cost for the previous year by more than 10%;
- (b) Upward adjustment for new workload or obligations approved by the Bureau; and
- (c) 5% downward adjustment in each case if ADWEC's is unable to obtain the Bureau's approval of the following year's BST by 17 December each year and of the current year's 7YS by 30 April each year.

2.6 We explained that:

- (a) These adjustments would apply only on a forward-looking basis rather than retrospectively to the previous year.
- (b) These adjustments will be considered and applied separately for ADWEC's water and electricity businesses and relate only to its Licensed Activities.
- (c) The actual audited procurement cost will comprise the following expenses from the audited income statement for the water or electricity business (as the case may be) of the Licensed Activities: (i) staff costs; (ii) depreciation; and (iii) administrative and other expenses.
- (d) ADWEC can 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.

Duration of control

- 2.7 The Second Consultation Paper expressed the Bureau's thinking to set the new price controls for 5 years commencing from 1 January 2010 (i.e., from 2010 to 2014). The next price control review for ADWEC would therefore be undertaken in 2014 to set the price controls for 2015 onwards.
- 2.8 PC4 controls for the network companies have recently been set for a 4-year control duration (2010-2013) with the next review for them due in 2013. ADWEC would therefore be subject to a different price control cycle than the network companies, thereby allowing greater focus on the issues specific to ADWEC's businesses.

ADWEC's response to Second Consultation Paper

- 2.9 In its response dated 13 August 2009 to the Second Consultation Paper, ADWEC supported various suggestions made in the paper but made alternative proposals on some aspects of the price controls, as summarised below:
- (a) A long-term price control for ADWEC may not be the best way to allow ADWEC to adequately respond to various changes and uncertainties. An alternative solution may be in the form of an annual budget approved by the Bureau and ADWEA. In this regard, ADWEC suggested that the price-controlled procurement costs should be equal to its budget submission to the Bureau and ADWEA in August each year.
 - (b) The annual budget submission will include details of new workloads and obligations. For any additional workload or obligation requested by the Bureau or not already budgeted, the actual cost should be allowed ex-post using an 'open book' approach (i.e. pass-through basis).
 - (c) In addition to the risks and uncertainties listed in the paper, the responsibility for fuel procurement and the associated uncertainty of fuel prices and supplies have become a significant risk area for ADWEC with an impact on its staff and advisor costs.
 - (d) ADWEC agreed to the annual adjustments to price-controlled procurement costs for its performance on BST and 7YS and the proposed approval deadlines (17 December and 30 April, respectively), provided these statements use its winter/spring demand forecasts without any further update. It argued that the use of such demand forecasts for the BST is reasonable in view of the correction factor mechanism that automatically adjusts the revenue in the following year for any over- or under-recovery due to forecasting errors.

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- (e) While ADWEC agreed to the review of price controls after 5 years in relation to the performance indicators relating to the BST, the 7YS and the PIS, it suggested procurement cost should remain be subject to annual budget submission / review.
- (f) ADWEC also made various suggestions on the PIS, which are discussed in Section 4 of this paper.

Bureau's assessment

2.10 Our views on ADWEC's response to the Second Consultation Paper are as follows:

- (a) In line with the best regulatory practice and incentive regulation, the Bureau would not like to be involved in the company's annual budget review and approval process. This process should remain with the company's management and shareholders. We believe that our proposed 10% automatic annual adjustment for actual procurement cost deviation by more than 10% provides the required 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.
- (b) However, we agree with ADWEC on the ex-post pass-through of actual costs of any additional workload or obligation requested or approved by the Bureau. In this regard, the existing mechanism to allow such pass-through of such costs on a case-by-case basis using a licence Derogation issued by the Bureau may continue.
- (c) We also agree with ADWEC on the fuel-related uncertainties and the annual adjustments to procurement costs for its performance on BST and 7YS submissions.
- (d) With regards to the duration of controls, we currently envisage that the proposed framework comprising annual adjustments to procurement cost for actual cost deviation and performance 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.

Capitalisation of ADWEC and treatment of profits from Unlicensed Activities

- 2.11 As mentioned in Section 1, ADWEC has very large turnover but few capital assets. It has therefore relied on a guarantee (implicit or explicit) from its parent company ADWEA to back the risks to which it is exposed. Were ADWEC a standalone company, it would require considerable capital in order to back such risks.
- 2.12 Allowing ADWEC to retain the profit (as retained earnings on its balance sheet) from its activities is one means of building its capital base. In particular, ADWEC's profit from the Unlicensed Activities has increased significantly in recent years. This is because the tariffs charged for these activities have proven to be higher than the average production costs of electricity and water in the sector as reported in ADWEC's audited accounts and PCRs. While the tariffs for these activities are not regulated by the Bureau, the Bureau requires these tariffs to be cost-reflective and not to receive any cross-subsidy from the Licensed Activities. This is achieved through the Bureau's consents under ADWEC's licence for the Unlicensed Activities and the Bureau's guidelines for cost allocation for the purpose of Separate Business Accounts (SBAs).
- 2.13 According to its latest audited accounts (for the 2008 financial year), ADWEC's retained earnings (due principally to accumulated profits from Unlicensed Activities) are AED 931 million at the end of 2008. The Bureau proposes that this treatment of profits (if any) from Unlicensed Activities should continue until such time as it judges that ADWEC is adequately capitalised to support its risks on a standalone basis.
- 2.14 Profits from Unlicensed Activities are possible only because ADWEC undertakes the Licensed Activities. We therefore believe that once ADWEC is adequately capitalised, its future profits from Unlicensed Activities should be passed on to the customers in terms of lower BST.

Draft Proposals

- 2.15 In view of the above, we propose the following framework for ADWEC's price controls:
- (a) The price-controlled procurement costs for ADWEC's water and electricity businesses separately for 2010 onwards will be as calculated in Section 3.
 - (b) If ADWEC's actual audited procurement costs for a year are 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 will be adjusted upward or downward by 10%. In this regard:

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- (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.
- (c) If the BST or 7YS is 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 will be adjusted downward by 5% in each case.
- (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 will continue.
- (e) In respect of any profits from its Unlicensed Activities each year, we propose 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 these Draft Proposals, we have assumed that ADWEC requires AED 2 billion in retained earnings (aggregate across all businesses) to back such risks.
- (f) Once ADWEC is adequately capitalised, we propose that ADWEC can 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 should then be passed on to the customers through the following year's BST (or BST Exceptional Charges) once the audited accounts confirming such profits are available. A new term "B" will be introduced into ADWEC's MAR formulae for Licensed Activities to allow this profit sharing. That is, MAR for electricity or water business of Licensed Activities will be as follows for any year "t":

$$MAR_t = PWPA_t + F_t + A_t + Q_t - K_t - B_t$$

where:

if ADWEC's retained earnings as reporting in the balance sheet of its audited accounts for year "t-2" are less than AED 2 billion in aggregate for all of its

businesses, B_t means zero; otherwise B_t means ADWEC's total net profit from its electricity or water business of Unlicensed Activities in year "t-1", less (i) 10% of such profit or (ii) AED 100 million, whichever is lower provided that any net profit not reflected in the term B_t shall be reported as retained earnings in the balance sheet of ADWEC's audited accounts.

- (g) 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 for 2010 in 2010 prices, separately for water and electricity businesses of ADWEC's Licensed Activities. Since the calculated cost is based on an assumed UAE CPI for 2009, it will be adjusted for the actual CPI for 2009 when it is known during 2010.
- 3.2 For 2011 onwards, this allowed cost 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.

UAE CPI assumption and adjustment

- 3.3 We have used the following UAE CPI assumptions for conversion of nominal prices into real prices or vice versa:

Table 3.1: UAE CPI Assumptions

	2007	2008	2009
UAE CPI (base 2000 = 100)	100.00	112.30	113.07
Total procurement cost		12.30%	0.69%

Source: Actual UAE CPI data for 2007-2008 from Ministry of Economy.

Notes: 2009 UAE CPI is as assumed by the Bureau for the PC4 Final Proposals dated 4 November 2009 for the network companies based on the actual year-to-date CPI inflation as of end of April 2009.

- 3.4 The UAE CPI for the year 2009 in the above table is an assumption, as the actual CPI for 2009 will only be known in 2010. In the Final Proposals on PC4 for the network companies, we calculated their notified values for 2010 at this CPI assumption (113.07) and agreed to adjust these values for actual CPI for 2009 when known during the PC4 period. This adjustment would be done through the PCR for 2010 using appropriate formulae in the licence modification required to incorporate PC4. This was to address the companies' concerns regarding the use of an assumed or estimated CPI for 2009 to set the PC4 controls.
- 3.5 In case the out-turn CPI for 2009 is not published prior to the issue of our Final Proposals for ADWEC, we propose the same mechanism for the notified values of the procurement costs calculated for ADWEC. Accordingly, the allowed procurement cost for 2010, for water and electricity separately, will be adjusted for 2009 actual CPI as follows:

$$A_{2010} = A_{2010(\text{calculated})} \times (2009\text{CPI}_{\text{actual}} / 2009\text{CPI}_{\text{assumed}})$$

- 3.6 For 2011 onwards, the allowed procurement cost will be subject to the standard CPI-X indexation as follows (where X has been set to zero for all years):

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

Our overall approach to calculation

- 3.7 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.
- 3.8 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 UAE CPI assumptions set out in **Table 3.1** above) as the sum of:
- a reasonable base level of procurement costs; and
 - a nominal profit element.

Base level of procurement costs

- 3.9 In its response to the Second Consultation Paper, ADWEC submitted its forecast or budgeted procurement costs for 2009 and 2010 for consideration in setting the price-controlled procurement costs for 2010. The following table summarises ADWEC's submission on its budget or forecasts for various years and their deviations from actual out-turn costs for Licensed and Unlicensed Activities combined.

Table 3.2: ADWEC's submission on procurement costs (total)

AED million, nominal prices	2006	2007	2008	2009	2010
Approved budget	25.212	23.173	40.094	55.757	49.290
Actual	16.684	30.885	41.773	46.219*	
Deviation	8.528	-7.712	-1.679	9.538	

Source: ADWEC's response dated 13 August 2009 to Second Consultation Paper.

Notes: These are total procurement costs for Licensed and Unlicensed Activities combined. *estimate based on 6 month actual

- 3.10 The following table summarises ADWEC's submission on its forecasts for procurement costs for 2009 and 2010 for Licensed Activities only:

2009 Price Controls Review for ADWEC: Draft Proposals

Author	Document	Version	Publication date	Approved by
AR / MPC	CR/E02/037	Issue 1	21 January 2010	NSC

Table 3.3: ADWEC's forecasts for procurement costs (Licensed Activities)

AED million, nominal prices	2008*	2009	2010
Total procurement cost	36.514	40.287	43.146

Source: ADWEC's response dated 13 August 2009 to Second Consultation Paper.

Notes: * Procurement costs for 2008 are actual as per audited SBAs.

- 3.11 As summarised in the table below, ADWEC's unaudited interim profit and loss account for the first half of 2009 shows actual procurement cost of AED 17.792 million (2009 prices) for the Licensed Activities implying an annualised amount of AED 35.584 million (2009 prices). While this amount is lower than ADWEC's annual forecast for 2009 (AED 40.287 million in 2009 prices), we understand that there can be some additional costs expected to be incurred towards the year end not reflected in the first half figure.

Table 3.4: ADWEC's actual procurement costs for 2009H1 (Licensed Activities)

AED million, nominal prices	Electricity (2009H1)	Water (2009H1)	Total (2009H1)	Implied Total for Full Year 2009
Procurement cost	8.008	9.784	17.792	35.584

Source: ADWEC's Interim Profit & Loss Account as on 30 June 2009.

- 3.12 Due to the inherent uncertainties with the forecasts or budgets demonstrated above, we have used the latest procurement costs for which the audited data is available for the full year. That is, we have 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 from **Table 3.1** above. This approach is consistent with the previous price control reviews as well as the PC4 Final Proposals for the network companies. The following table shows this base level for water and electricity businesses of ADWEC's Licensed Activities, separately:

Table 3.5: Base levels of procurement costs for 2010 – Draft 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	20.03	21.26	41.29

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

- 3.13 The total base level for 2010 procurement costs as proposed above (AED 41.29 million in 2010 prices) lie between ADWEC's forecasts for 2009 and 2010 for the Licensed Activities.

Allowed profit element

- 3.14 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.

- 3.15 We have applied this profit margin to ADWEC's forecast of 2010 BST turnover from its 2009 AIS submission to calculate the allowed profit element as follows:

Table 3.6: Allowed profit element for 2010 – Draft Proposals

AED million, 2010 prices		Electricity	Water	Total
Forecast revenue for 2010	2009 prices	5,040.97	5,528.33	10,569.29
Forecast revenue for 2010	2010 prices	5,075.53	5,566.23	10,641.76
Profit margin	%	0.019%	0.019%	
Allowed profit for 2010	2010 prices	0.96	1.05	2.01

Source: ADWEC's 2009 AIS; Bureau calculations.

- 3.16 The estimated profit for each of the two licensed businesses therefore amounts to about AED 1 million per annum.

Allowed procurement costs for 2010

- 3.17 The price-controlled procurement costs 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:

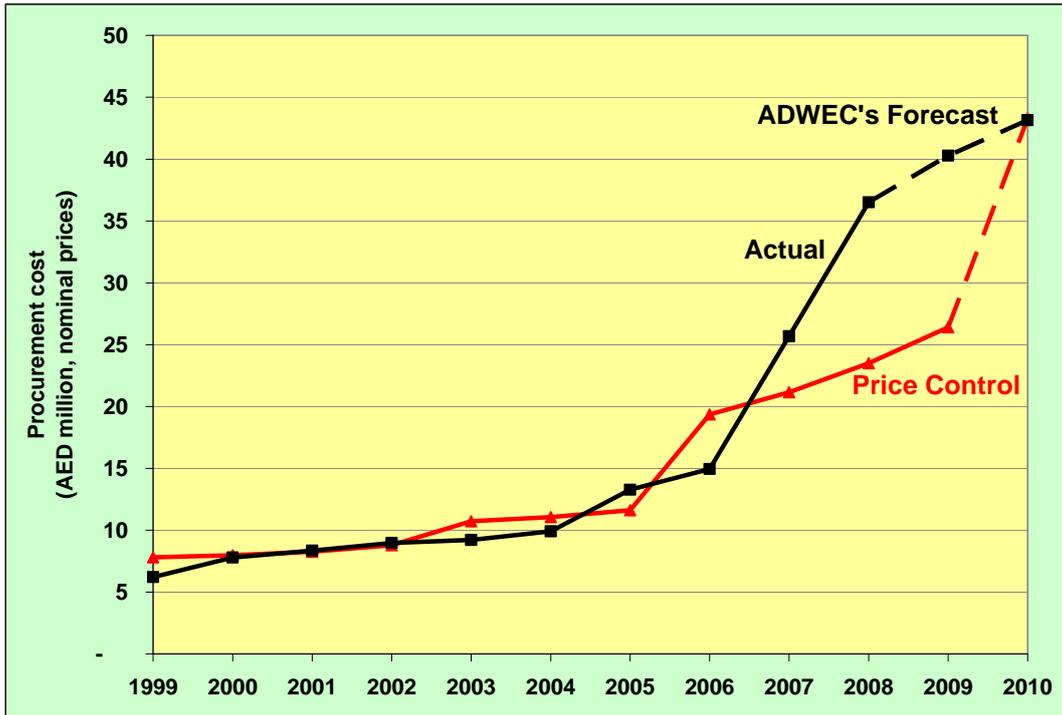
Table 3.7: Allowed procurement costs for 2010 – Draft Proposals

AED million, 2010 prices		Electricity	Water	Total
Base level of costs for 2010	2010 prices	20.03	21.26	41.29
Allowed profit for 2010	2010 prices	0.96	1.05	2.01
Allowed procurement cost for 2010	2010 prices	20.99	22.31	43.30

Source: Bureau calculations.

- 3.18 In total, our Draft Proposals on the allowed procurement costs for 2010 (AED 43.30 million in 2010 prices) are almost the same as ADWEC's forecast for 2010 (AED 43.146 in 2010 prices) for the Licensed Activities as shown in **Figure 3.1** below.
- 3.19 As explained earlier in this Section 3, these procurement costs will be adjusted in 2010 for actual 2009 CPI. 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.

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



4. Performance Incentive Scheme

Introduction

4.1 The current Performance Incentive Scheme (PIS) for both water and electricity 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 price-controlled procurement cost “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 price-controlled procurement cost “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 Second Consultation Paper and ADWEC’s response to that paper. It then sets out our assessment of the issues and Draft Proposals on the PIS along with the calculation of proposed incentive rates for Category A indicators over the new price control period.

Second Consultation Paper

4.3 Given the positive results that the PIS has achieved in terms of improving sector companies' performance on the targeted measures, the Second Consultation Paper expressed our thinking to retain the PIS (both Category A and B indicators) for ADWEC with revised incentive rates and with some changes as summarised below:

- (a) The PIS bonuses for Category A timeliness indicators for audited SBAs and audited PCRs should be removed so that only a penalty for delayed submission will apply (bonuses should be retained for the AIS only).

Table 4.3: PIS bonuses for Category A timeliness indicators

Category A indicator	Current arrangement	First Consultation Paper	Second Consultation Paper
Audited SBA timeliness	Both bonus / penalty	Only penalty	Only penalty
Audited PCR timeliness	Both bonus / penalty	Only penalty	Only penalty
AIS timeliness	Both bonus / penalty	Only 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 target dates	First Consultation Paper	Second Consultation Paper
Audited SBA timeliness	30 June	30 April	30 April
Audited PCR timeliness	31 March	30 April	30 April
AIS timeliness	30 September	31 October	31 October

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

- (c) 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.
- (d) The Bureau would consider increasing the incentive rates otherwise calculated for the AIS timeliness indicator to reflect the associated costs (in line with the current arrangement).

ADWEC's response to Second Consultation Paper

4.4 In its response to the Second Consultation Paper, ADWEC made the following comments:

- (a) ADWEC argued for retaining bonuses for all Category A timeliness indicators to support ADWEA strategy planning, implementation of a balance score card and performance appraisal for the work.

- (b) It concurred with our thinking to extend the target date for AIS to 31 October to harmonise its three annual work streams namely the budgeting, BST and AIS.
- (c) ADWEC desired to explore the possibility of widening the forecasting accuracy margins (100 MW and 20 MIGD for electricity and water, respectively) for peak demand accuracy-related Category A indicators in view of the associated uncertainties.
- (d) Finally, ADWEC suggested an annual submission of future fuel supply requirement forecasts by 1 June each year as an additional Category B indicator. This would provide a high level status of the adequacy or otherwise of primary fuel inputs to the sector and identify the required actions.

Bureau's assessment

4.5 We have given further consideration to the issues raised by ADWEC and propose the following changes to the PIS:

- (a) In line with our Final Proposals on PC4 for the network companies and in recognition of the additional work required, we now propose continuation of both bonuses and penalties for submissions of audited PCRs as well as for the AIS.
- (b) For the peak demand forecast accuracy-related Category A indicators, we propose 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 propose that bonuses should apply when actual peak demands are within +/-2% of forecasts; otherwise penalties should apply. We consider this error margin to be reasonable and consistent with the 2% margin allowed in ADWEC's licence before a penalty interest rate is applied to the correction factor.
- (c) In line with our Final Proposals on PC4 for the network companies, we also propose that the bonuses and penalties for demand forecast accuracy-related Category A indicator should be subject to a 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 existing 2% to 1% of procurement cost for each year of the control period.

- (d) We accept ADWEC’s suggestion for the additional Category B indicator relating to fuel requirements forecast and request further details on the contents of the proposed submission (for example, a sample report).

Revised Incentive Rates

4.6 **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 procurement cost 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:
- (i) for all timeliness indicators: 6 month delay; and
- (ii) for demand forecasting indicators: 2% error.

4.7 As at present, the incentive rates for AIS timeliness indicators 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

	Procurement Cost (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	20.990	209,896	35,000	105,000	105,000
ADWEC Water	22.308	223,080	37,000	112,000	112,000

Draft Proposals

4.8 The following two tables summarise our Draft Proposals for the PIS:

Table 4.6: Category A Indicators for ADWEC – Draft 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	+/-2%	105,000 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	+/-2%	112,000 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 – Draft 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