

**PUBLIC WORKS AND SERVICES**  
**CENTRAL UTILITY BILLING**  
**REVIEW**







**VALUE FOR MONEY REPORT**

***FINAL V1.0***

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## EXECUTIVE SUMMARY

The Central Utility Billing Review forms part of the Value For Money Audit Plan 2007/08. The objective of the audit was to determine whether the newly formed Central Utility Billing Section of the Public Works and Services Department (PW&SD) is working as intended and producing the expected benefits of an efficient utilities software package, a cost effective meter reading service, a reduced utilities debtor level and an improved customer services.

St Helena Government (SHG) estimates in 2007/08 revenue of approximately £1.5 million from electricity and water consumers and in 2004 members of the Legislative Council had raised concerns over the level of debtors arising from the former electricity and water billing sections. PW&SD was also experiencing inefficiencies in the former billing software package and addressed both concerns by introducing the Comprehensive Utility Billing and Control (CUBIC) system and creating a centralised billing section.

Value For Money audits assess whether resources have been used with proper regard to economy, efficiency and effectiveness. We also determined during this audit whether expected benefits of the Central Utility Billing Section are achieved.

Based upon the work undertaken and the findings detailed in the body of this report, the overall opinion is given below. The range of possible audit opinions given for Value For Money is good, adequate and inadequate. Definitions of the audit opinions can be found at Appendix A to the main report.

### CENTRAL UTILITY BILLING

#### Adequate

Management arrangements are generally conducive to achieving Value For Money – but further important enhancements could be made.

Whilst CUBIC, the utilities software package carries all features required by PW&SD to operate the utility billing, these features were not utilised efficiently. CUBIC could not produce the required management information. A Microsoft Access program called Operations Cubic was created in addition to CUBIC by the ex-project manager, to produce management information. This increased the running cost of the billing system as PW&SD is now required to pay for support of both CUBIC and Operations Cubic. Most customers have expressed dissatisfaction with the estimation of utility usage. The CUBIC calculation tends to over or under estimate the usage for the quarter. The current billing section staff does not have the technical knowledge to adjust the calculation range for an accurate estimate. This requires PW&SD to buy in consultancy services from the ex-project manager.

PW&SD contracted their meter reading service to the private sector to provide annual meter readings for SHG. The expected benefits of this were realised. The contract freed-up staff resources of both Electricity and Water Division, who previously spent approximately 3 weeks each quarter reading customers' meters.

Whilst PW&SD had set an unrealistic target of collecting 100% of outstanding debts, the level of debt for electricity and water bills decreased by 19% between March 2006 and March 2007. By combining the billing of utilities to one invoice PW&SD improved their service to their customers. This includes providing dedicated customer services officers to assist customers with their utility accounts.

Overall PW&SD have created an adequate centralised utility billing section. The section has a flexible billing system that improved customer service, reduced the outstanding debt level and reduced staff resources required for meter readings by contracting out the service. However, we have identified areas for improvement in usage estimates, management of the billing software and management information.

A total of 6 recommendations were made and agreed by management. All recommendations are intended to improve the current practices, the most significant are:

- PW&SD management and billing staff should review the current estimation calculation and possibly reset it;

- Performance measures and targets should be made to give an overview of how the billing section is performing;
- At least two customer services officers should undertake the administrator role of the CUBIC system. Whereby they would have the authority to amend features of the CUBIC system;
- The CUBIC administrator and IT Section should research and utilities CUBIC operating functions, that was originally requested by PW&SD;
- PW&SD management should review the current target of 100% recovery of outstanding balances to ensure targets are realistic; and
- PW&SD should consider keeping a standard customer complaints log. Management should then review the number and types of complaints made, and where applicable improve upon the service provided.

## 1. INTRODUCTION

1.1 The Central Utility Billing Review forms part of the Value For Money Audit Plan 2007/08. The objective of the audit was to determine whether the newly formed Central Utility Billing Section of the PW&SD is working as intended and producing the expected benefits of:

- An efficient utilities software package;
- A cost-effective meter reading service;
- A reduced utilities debtor level; and
- Improved customer service.

1.2 SHG estimates in 2007/08 revenue of approximately £1.5 million from electricity and water consumers. In 2004, members of the Legislative Council raised concerns over the level of debtors arising from the former Electricity and Water billing sections, whilst SHG acknowledged the inefficiencies of the former billing software package. PW&SD addressed these concerns by combining these billing sections in a Centralised Utility Billing Section and introducing the Comprehensive Utility Billing and Control (CUBIC) system, with the intention of creating an effective billing system.

1.3 Value For Money audits assess whether resources have been used with proper regard to economy, efficiency and effectiveness. We also determined during this audit whether expected benefits of the Central Utility Billing Section are achieved.

## 2. SCOPE AND RESOURCING

2.1 To determine whether the Central Utility Billing Section is working as intended and producing the expected benefits, the Audit Service structured a programme to assess the inputs, process, outputs and outcomes of the Central Utility Billing Section.

2.2 This was done by:

- Analysing costs and non-financial benefits expected and actually received of the new utilities software package and comparing it to the old utilities software package;
- Determining what contracts the Central Utility Billing Section has awarded and whether they were awarded in compliance with the Contract Regulations and with economy, efficiency and effectiveness;
- Researching the annual debt levels, in relation to the debt collection policy and current procedures;

- Carrying out a small telephone poll to assess the level of satisfaction by customers on the new Central Utility Section; and
- Determining what performance measures and reporting arrangements are in place for management to assess whether the Central Utility Billing Section is running as intended.

2.2 The audit was undertaken during the period September 2007 to January 2008 by Helena Bennett VFM Audit Manager (trainee), and Sheridan Richards, VFM Auditor (trainee). Support and guidance was given by Tony Kilner, Chief Auditor. The total cost of undertaking the audit was £4,000.

2.3 The assistance given by all SHG staff and third parties involved is acknowledged with appreciation. A list of those involved is included at Appendix B to this report.

2.4 Copies of this report were provided to PW&SD Manager, Public Works and Services Committee, Chief Secretary, Financial Secretary and Legislative Council. The report is made available to the public through publication at [www.audit.gov.sh](http://www.audit.gov.sh) in the Jamestown library and at the Audit Service Offices. The executive summary will be provided to the Audit Committee.

## 3. FINDINGS AND CONCLUSIONS

3.1 The main findings and conclusions are presented here and are based upon the agreed scope of the audit and the actual work undertaken and evidence gathered.

3.2 Those findings which have resulted in recommendations being made are presented in Section 4 of this report together with management responses and action plans.

### An efficient utilities software package

3.3 PW&SD did not have the option of keeping the previous utility software package. This previous package was creating technical difficulties which IT could no longer support. PW&SD arranged a steering group to identify a new utility package that could provide a range of features required by PW&SD to operate their utility services.

3.4 CUBIC was the package chosen by the steering group. The programming company (Frey) confirmed that CUBIC could perform all of the required features.

3.5 During set up of CUBIC, the project manager, Mr Stuart Moors, who was employed specifically to set up the software package and the Central Utility Billing section experienced difficulty in getting the system to produce the required reports. As a result, not all of CUBIC's functions were utilised. The project manager instead created a Microsoft Access database (Operations Cubic) to produce the required reports.

3.6 Upon completion of employment with PW&SD the project manager was contracted to provide a support and consultancy service to the Central Utility Billing Section including support for Operations Cubic.

3.7 PW&SD now pays additional support services to the ex-project manager to maintain Operations CUBIC. PW&SD pays support services to Frey for the CUBIC system.

3.8 None of the staff working in the section are able to manage the CUBIC software and Operations Cubic. The section therefore requires the assistance of the ex-project manager to make any adjustments to the CUBIC and Operation Cubic's features.  
*(Recommendation 1)*

3.9 The Central Utility Billing Section produces monthly outstanding balances reports from Operation Cubic for the Finance Department. These reports however contain the most recently issued bills. The Central Utility Billing staff must manually remove these new bills before submitting the reports. These reports do not include aged debtors analysis, which indicates how old the outstanding balances are. Finance voiced their dissatisfaction with these reports and together with IT, had recently contacted Frey to produce the reports from the CUBIC reporting programme. The reports are now being produced using CUBIC software.  
*(Recommendation 2)*

3.10 CUBIC includes a special estimation calculation feature, which estimates quarterly usage of utilities for each customer. This important feature of CUBIC either under or over estimate quarterly usage. Most customers are dissatisfied with this feature and have opted to telephone their actual readings to the billing staff.

3.11 The estimation formula is supposed to use the most recent actual readings to estimate future usage, however the billing staff have found the formula to be unreliable as it has been known to

revert to the original readings and produce either a zero or a high usage bill.  
*(Recommendation 3)*

#### Example of inaccurate estimation

Gardeners use water seasonally and are overestimated at times when they are not using water on their crops, or underestimate when they are using water.

3.12 To conclude, a new software package was a necessity. PW&SD did procure the software package in an economical fashion. However, the software package has not been utilised efficiently. This result in PW&SD paying additional support services to the ex-project manager for assistance on Operation Cubic.

#### A cost effective meter reading service

3.13 The previous meter reading service consisted of water and electrical staff spending approximately 12 weeks per year, reading utility meters. This caused inefficiencies within the respective divisions as jobs were often delayed during the meter reading periods, as well as PW&SD having to provide budget provision for overtime and additional SHG vehicle hire.

3.14 With the CUBIC system, each utility meter is only required to be read annually. This service was contracted to Prime Numbers, managed by the ex-project manager.

3.15 Concerns were raised on whether Prime Numbers should have been allowed to tender for the contract, due to the manger having intimate knowledge of both the billing section and the process to contract out the meter reading. Legal advice was sought, upon which the tender group could satisfy themselves that Primer Numbers met the required criteria to tender.

3.16 In conclusion, the contracting of the meter reading service provides an efficient service to the water and electricity divisions.

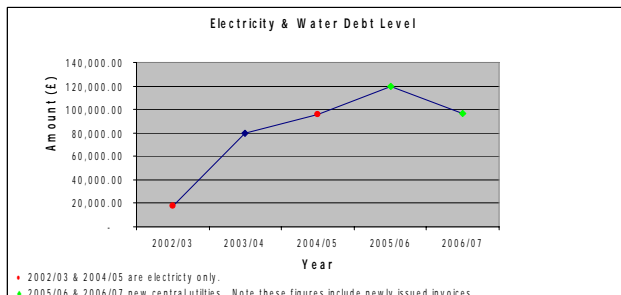
#### Did You Know?

##### Usage Report

For the month of September 2007 the following amount of services was consumed on Island:  
Electricity – 569,759 units (kWh)  
Water – 29,634 units (cu.meter)

### A reduced utilities debtor level

3.17 The level of debtors has been a concern of members of the Legislative Council previously. As mentioned above, whilst the outstanding report include newly issued bills, as shown in the graph below, the level of debt has decreased by 19% since the operation of new central utilities section.



3.18 The billing staff have commented that since utility charges were combined into a single bill, more customers pay for both utility usage. If the customer under pays the bill, the billing staff divides the amount paid between the electricity and water accounts, instead of allocating the amount to one utility. Dedicated staff in the billing section focus on outstanding accounts. The billing staff personalises the follow up procedure by telephoning outstanding account customers.

3.19 Outstanding balances at March 2007 are approximately £96,000. PW&SD in their 2007/08 business plan set the following target; 100% of outstanding accounts recovered and current accounts paid in full by 2010. The target of 100% seems to be unrealistic as provision is required for outstanding balances that may never be recovered. See below for examples of non-recovery.  
(Recommendation 4)

#### Examples of Non-Recovery of Outstanding Balances

- Customers migrating;
- Customer relying heavily on benefits; and
- Death of a customer, who leaves no estate.

3.20 To conclude, the level of debt has decreased significantly since the operation of the centralised utility billing section. To recover 100% of outstanding accounts is considered

unrealistic and management should budget for outstanding balances that may never be recovered.

### Improved customer service

3.21 With the central utility billing section in place, the customer services officers previously known as water and electrical division clerks are now allocated specifically to the billing section. With the CUBIC system, all officers have access to the individual accounts and are able to answer customer queries instantly. All customers that were approached commented that they have found the new set up 'an improvement' and considers it to work well.



3.22 Although the billing section is new, and was set up partly to improve customer service, it does not keep a customer complaint log. This could log all customer complaints and give management an indication of how well the section is working and where, if necessary, any improvements could be made.  
(Recommendation 5)

3.23 There are no set reporting arrangements in the central utility billing section. With exception of reports being produced for other divisions, or departments, management reports are only produced when management requests them. There is no feedback from management to the billing section from these reports, which contributes to staff motivation and responsibility.  
(Recommendation 6)

3.24 With the new section, management had not set any performance measures and targets to determine whether the section is working as intended. As stated in paragraph 3.19 the only target set in the business plan is 100% recovery of outstanding accounts.  
(Recommendation 6)

3.25 In conclusion, there are no supporting performance measures or feedback that confirms whether the central utilities billing section is working as intended. This is vital to ensuring a new venture is achieving value for money.

#### 4. MANAGEMENT RESPONSE & ACTION PLAN

Please see Appendix A for Audit Recommendation Priorities Definitions.

Recommendation <b>1</b>	<b>At least two customer services officers (one being the senior customer services officer) should undertake the administrator role of the CUBIC system. Whereby they would have the authority to amend features of the CUBIC system ie change estimation formula.</b>
Priority: (H/M/L)	<b>This would reduce the amount of external assistance currently required to operate CUBIC.</b>
<b>MEDIUM</b>	<i>(For Audit Finding on which this is based, refer to Main Report, Section 3.8)</i>
Management Response	General Comments: <i>The section is in a position at the moment where the Senior Customer Services Officer has been off work almost 8 months with illness and there is no clear indication of her return, whilst the acting Senior Customer Officer has resigned to take up employment in the Private sector. This will be addressed as soon as the section is adequately staffed.</i>
	Officer responsible for Implementation: <i>PW&amp;SD Manager</i>
	Implementation expected to be complete by: (Month & Year) <i>December 2008</i>

Recommendation <b>2</b>	<b>The CUBIC administrator (if the above recommendation is accepted) and Frey (through the IT Section) should research and utilise CUBIC operating functions, that were originally requested by PWSD.</b>
Priority: (H/M/L)	<b>Doing so could possibly remove the need to produce reports from both CUBIC and Operations CUBIC. This would decrease the amount of money spent on both Frey and the ex-project manager providing support.</b>
<b>MEDIUM</b>	<i>(For Audit Findings on which this is based, refer to Main Report, Section 3.9)</i>
Management Response	General Comments: <i>PW&amp;SD no longer runs both CUBIC and Operations Cubic. All reports are now generated in CUBIC and are supported by the IT Section only.</i>
	<i>Recommendation Implemented.</i>
	Officer responsible for Implementation: <i>N/A</i>
	Implementation expected to be complete by: (Month & Year) <i>N/A</i>

Recommendation <b>3</b>	<b>PWSD management and Billing staff should review the current estimation calculation and possibly reset it.</b>
Priority: (H/M/L)	<i>(For Audit Findings on which this is based, refer to Main Report, Section 3.11)</i>
<b>HIGH</b>	
Management Response	General Comments: <i>This will be reviewed.</i>
	Officer responsible for Implementation: <i>PW&amp;SD Manager</i>
	Implementation expected to be complete by: (Month & Year) <i>Review and advice given by June 2008.</i>

Recommendation <b>4</b>	<b>PWSD management should review the current target of recovering 100% of outstanding balances to ensure targets are realistic.</b>
Priority: (H/M/L) <b>MEDIUM</b>	<i>(For Audit Finding on which this is based, refer to Main Report, Section 3.20)</i>
Management Response	General Comments: <i>To be reviewed</i>
	Officer responsible for Implementation: <i>Senior Executive Officer (Administration)</i>
	Implementation expected to be complete by: (Month & Year)
	<i>April 2008 (In line with new Business Plan)</i>

Recommendation <b>5</b>	<b>PWSD should consider keeping a standard customer complaints log. This could be used for all services provided by PWSD. Management should then review the number and types of complaints made and where applicable improve upon the service provided.</b>
Priority: (H/M/L) <b>LOW</b>	<i>(For Audit Findings on which this is based, refer to Main Report, Section 3.23)</i>
Management Response	General Comments: <i>Consideration already being given to complaints and reports log for all sections of PW&amp;SD.</i>
	Officer responsible for Implementation: <i>Chief Engineer</i>
	Implementation expected to be complete by: (Month & Year)
	<i>December 2008</i>

Recommendation <b>6</b>	<b>Routine reports should be made and submitted for management for review. Performance measures and targets should be made to give an overview of how the billing section is performing. Performance measures also provide motives for the respective sections to operate well, with realistic goals to achieve.</b>
Priority: (H/M/L) <b>HIGH</b>	<b>Examples are:</b> <ul style="list-style-type: none"> <li>• Quarterly utility bills to be issued by target date;</li> <li>• Target level of debtors each quarter; and</li> <li>• Number of complaints received by customers.</li> </ul>
Management Response	<i>(For Audit Findings on which this is based, refer to Main Report, Section 3.24 &amp; 3.25)</i>
	General Comments: <i>Performance measures will be put in place.</i>
	Officer responsible for Implementation: <i>Senior Executive Officer (Administration) for inclusion with staff appraisals and departmental policy.</i>
	Implementation expected to be complete by: (Month & Year) <i>July 2008</i>

**APPENDIX A****AUDIT OPINION DEFINITIONS**

Every Value For Money audit concludes with an overall opinion based upon individual opinions that are applied to each of the review areas identified in the scope of the audit. The range of opinions, together with an explanation of their meanings, is as follows:

<i>Value Form Money Opinions</i>	
<b>GOOD</b>	Management arrangements are conducive to achieving Value For Money and only minor enhancements, if any, can be identified.
<b>ADEQUATE</b>	Management arrangements are generally conducive to achieving Value For Money – but further important enhancements could be made.
<b>INADEQUATE</b>	Management arrangements are not considered to be adequately conducive to achieving maximum Value For Money.

**AUDIT RECOMMENDATION PRIORITIES**

<i>Priority</i>	
<b>HIGH</b>	Immediate risk to achieving the outputs of the operation at lowest cost, efficiently and effectively.
<b>MEDIUM</b>	Issues identified which would improve the quality of the operation, with regards to cost-effectiveness and / or output.
<b>LOW</b>	Minor enhancements identified to improve the effectiveness of the operation.

**APPENDIX B****LIST OF PERSONNEL CONSULTED DURING THE AUDIT**

The assistance given to the Audit Service by all those listed below during the course of the audit is acknowledged with appreciation.

<b>NAME</b>	<b>JOB TITLE</b>	<b>SECTION/AREA</b>
Derek Richards	PW&SD Manager	PW&SD
Simon Oliver	Acting PW&SD Manager & Head of Energy	PW&SD
Stasia Plato	Customer Services Officer	PWSD (Central Utilities Billing Section)
Angela Scipio	Customer Services Officer	PWSD (Central Utilities Billing Section)
Nettie ? Thomas	Customer Services Officer	PWSD (Central Utilities Billing Section)
Herman Williams	Senior Engineer (Water)	PWSD (Water)
Janatta Leo	Senior Executive Officer	PWSD (Admin)
Stuart Moors	Ex Project Manager/Consultant/Meter Reader Contractor	Private Sector
Dax Richards	Senior Accountant	Finance
Jerry Roberts	IT Manager	Finance (IT Section)
Susan O'bey	Contract & External Services Manager	OCS