



Report on:

Implementation of a Local Authority Surcharge in Namibia

Submitted to:

Electricity Control Board (ECB) - Namibia

by:

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Table of Contents

1	Executive Summary	4
2	Introduction	9
3	Methodologies	11
3.1	Loan Compensation charges	11
3.2	Service Level charges	11
3.3	Local Authority surcharge	12
3.4	RED Dividends	13
4	Implementation Considerations	14
4.1	Collection Responsibility	14
4.2	Method of Collection	14
4.3	Allocation of LA surcharges	15
4.4	Non-Payment	15
4.5	Impact on dividends from REDs	16
4.6	Loan transfers	17
4.7	Application and Approval Process	17
4.8	Service Level Agreements	18
4.9	Asset Values	19
4.10	Legal Status	20
5	Economic impact of LA surcharges and other cross subsidies	21
6	Possible Transition/Evolution	23
7	Appendix 1: Results from Analyses	25
7.1	CenoRED	25
7.2	Erongo RED	26
7.3	Southern RED	27
7.4	Central RED	30
7.5	NORED	31

List of Figures

Figure 1: Summary Results for 1 st year	8
Figure 2: LA surcharge application and approval process	18
Figure 3: CenoRED - LA surcharge as % of selling price	26
Figure 4: Erongo RED - LA surcharge as % of selling price	27
Figure 5: Southern RED - LA surcharge as % of selling price	29
Figure 6: Southern RED - LA surcharge expressed as a c/kWh charge	30
Figure 7: Central RED - LA surcharge as % of selling price	31

List of Tables

Table 1: Summary of Implementation Recommendations and Positions	5
Table 2: Summary of LA surcharge development process	10
Table 3: CenoRED - Loan Compensation charges	25
Table 4: CenoRED: - Transitional Service charges	25

Implementation of LA surcharges in Namibia

Table 5: CenoRED - LA surcharges.....	25
Table 6: Erongo RED - Loan Compensation charges	26
Table 7: Erongo RED: - Transitional Service charges	26
Table 8: Erongo RED - LA surcharges	26
Table 9: Southern RED - Loan Compensation charges.....	28
Table 10: Southern RED: - Transitional Service charges.....	28
Table 11: Southern RED - LA surcharges.....	29
Table 12: Central RED - Loan Compensation charges	30
Table 13: Central RED: - Transitional Service charges	30
Table 14: Central RED - LA surcharges	30

Abbreviations

ECB	Electricity Control Board
ESI	Electricity Supply Industry
GRN	Government of the Republic of Namibia
LA	Local Authority
MME	Ministry of Mines and Energy
RC	Regional Council
RED	Regional Electricity Distributor
SLA	Service Level Agreement

1 Executive Summary

In November 2000, the Cabinet of the Government of the Republic of Namibia (GRN) approved the restructuring of the Electricity Supply Industry (ESI). The main thrust of the programme is to improve service delivery and financial viability of the industry. One of the key reform initiatives involves the establishment of a number of financially viable Regional Electricity Distributors (REDs) through the consolidation of the current fragmented distribution industry.

The introduction of REDs and the resulting handover of the electricity distribution function have the potential to significantly impact on the financial positions of Local Authorities (LAs) and Regional Councils (RCs). Currently, LAs and RCs use the revenues from electricity sales not only to cover the cost of electricity purchases and distribution but also to cross-subsidise other municipal services. Understandably, LAs/RCs are concerned that the formation of REDs could undermine this important source of funding.

The process to quantify the impact of REDs on the financial positions of LAs/RCs commenced in 2004. Since then, the ECB issued a number of reports and conducted several national and regional stakeholder workshops to discuss and explain the LA surcharge methodology and process. In the addition, the ECB assisted virtually all the LAs/RCs with ring-fencing of their electricity departments in order to produce reliable financial statements. These financial results played an important role in quantifying the financial impact of the establishment of REDs on the LAs/RCs.

The purpose of this report is to summarise the main findings and results of the work that has been carried out over the past two years. Before presenting the results, it is worth pointing out that LAs/RCs use the revenue from the sale of electricity to cover the cost of bulk purchases and to pay for the cost to distribute the electricity. However, many LAs/RCs sell their electricity at price which is higher than the cost of supply. The result is that they generate surpluses on the sale of electricity, which is then used to cross-subsidise other services. This “tax” (or LA surcharge) on electricity contributes approximately N\$250 million per year to the coffers of local government and is therefore a major source of revenue to Namibian LAs/RCs.

One of the key findings from the study is that a LA/RC could potentially qualify for four different revenue streams following the establishment of the RED. These revenue streams all have different characteristics in terms of purpose, level and duration. If carefully designed and implemented, the sum of the four streams can be structured so that the financial position of the LA/RC is not adversely affected after the introduction of the RED. The four revenue streams are:

- a) **Loan Compensation charge:** The purpose of this charge is to fairly compensate the LA/RC for any outstanding loan obligations, including loan redemption and interest payment. The charge will stay in place as long as there are outstanding loans. Once the loans have been fully serviced the charge will fall away.
- b) **Service Level charge:** A RED and a LA/RC could enter into service level agreements whereby the LA would provide the RED with agreed services at negotiated prices for a defined period. In addition there will be a Transitional Service charge. This charge has been introduced to partly compensate the LA

for certain overhead costs that will not fall away soon after the establishment of the RED. It is assumed that the LA will adapt its organisation structure to accommodate the fact that electricity distribution will be done by the RED. The charge will therefore be phased out over a three year period.

- c) **Local Authority charge:** The purpose of the LA surcharge is to continue providing financial support to the LAs and RCs after the establishment of the REDs. The initial charge is based on the actual difference between revenue and costs as reflected in the ring-fenced electricity accounts.
- d) **RED dividends:** LAs and RCs will, as shareholders in the RED, qualify for dividends once the RED is in a position to declare such dividends.

This study has sought to seek out and quantify the first three revenue streams. These results are presented and discussed in the remainder of the document. This study has not made any pronouncements on the size and timing of dividends from the REDs. It is understood that each RED has developed a customised financial model and that these results have been shared with the stakeholders at various platforms.

Many of the stakeholders requested the ECB to develop guidelines to assist with the implementation of the various charges. In response to these requests, the ECB has included in this report several key implementation recommendations, positions and clarifications. The critical implementation issues and recommendations that have been addressed in this report are summarised in the following table:

Table 1: Summary of Implementation Recommendations and Positions

<i>Implementation Consideration</i>	<i>Recommendation / Position</i>
Collection responsibility	The licensed RED has the responsibility to collect the necessary funds from the electricity consumers. The RED must include the approved charges and surcharges on the customer's bill (or pre-paid tariffs) in order to pay over the agreed surcharge amounts.
Method of collection	REDs must include the agreed charges and surcharges as a constant c/kWh amount to the RED's approved set of tariffs.
Allocation of LA surcharges	Each customer will pay the LA surcharge which has been calculated and approved for the area where he or she lives.
Non-payment	REDs must pay over the invoiced amounts of charges and surcharges (rate x quantity) to the LAs & RCs regardless of the levels of non-payment and theft experienced.
Impact of dividends on REDs	Lower charges and surcharges will improve the financial position of the RED and enable it to declare dividends sooner.
Loan transfers	Existing loans (for the creation of electricity infrastructure) against the electricity department of a LA will be serviced by the RED through a back to back arrangement, which is facilitated by the Loan Compensation charge.

Implementation of LA surcharges in Namibia

<i>Implementation Consideration</i>	<i>Recommendation / Position</i>
Application and approval process	Every LA/RC can apply to the ECB for a LA surcharge amount. The LA surcharge amount will be determined subject to an approved surcharge methodology. The LA surcharge will be calculated by the ECB on an annual basis. A RED can only impose a LA surcharge if the LA surcharge amount and rate have been approved by the ECB.
Role of Service Level Agreements	LAs have the responsibility to re-engineer their business models, structures and process soon after the responsibility of electricity distribution has passed over to the RED. The RED could in some instances enter into SLAs with LAs to manage cost and improve service delivery. In addition the Transitional Surcharge will provide some relief to the LAs during a short transitional period.
Asset Values	REDs should not include the values of any assets transferred from the LAs/RCs in their tariff rate base.
Legal Status of LA surcharges	In parallel to the above processes the ECB has developed enhancements to the proposed surcharge provisions in the Electricity Bill 2006 to support the introduction of a LA surcharge and to set a statutory base for surcharges

Any discussion on the role of subsidies would not be complete unless the macro economic implications of these subsidies are also taken into consideration. The report therefore provides a wider perspective of the merits and de-merits of cross-subsidies. Although there are some valid reasons why cross-subsidies are needed, any form of cross-subsidy leads to price distortions which impacts on investment (including disinvestments) and consumption decisions. Ultimately, these distortions lead to sub-optimal resource allocation in the economy, which could negatively impact on economic growth and job creation. It follows that the bigger the cross-subsidy, the bigger the overall macro economic distortion.

The economic purist would argue against any form of cross-subsidisation. From a practical perspective, however this may not be attainable. The report therefore suggests that the decision-makers must perform a balancing act when they consider the approval of cross-subsidies. On the one hand they must take into account the benefits (non-economic) of having cross subsidies, and on the other they must weigh up the economic distortions introduced by such a cross-subsidy. Every situation has a point where these two competing forces cross-over. The purpose of this document is not to define this cross-over point but rather to highlight its existence and draw the attention to the detrimental economic ramifications of too much cross-subsidisation.

Many stakeholders have enquired about the possible evolution and transition of the LA surcharge in the future. At this point the ECB's position is that LA surcharges will remain at their current levels. In other words, there will be no increases or decreases to any of the calculated LA surcharges. However, there is strong evidence to support the regulation of the LA surcharge. This position is based on the following observations:

Implementation of LA surcharges in Namibia

- a) LA surcharges differ substantially from one LA/RC to the next for no clear reason. This leads to varying electricity tariffs which cannot be easily explained;
- b) LA surcharges are essentially “unregulated”. It appears as if there are no norms or standards in effect to guide the setting of LA surcharges;
- c) High LA surcharges are a major obstacle in the way of achieving cost reflective electricity tariffs;
- d) The need to promote macro economic efficiencies by controlling the impact of cross-subsidy distortions;
- e) The desire to achieve greater levels of tariff harmonisation, which can only be achieved through the harmonisation of LA surcharges;
- f) The obligation to protect electricity consumers against potential monopoly power abuse from unregulated LA surcharges;
- g) The need to remove the distortions of the past and to put all LAs/RCs on equal footing in terms of LA surcharges (e.g. some LAs/RCs receive make no or little surplus on the sale of electricity while others extract significant benefits);
- h) The requirement to ensure that REDs become viable business entities to ensure the sustainability of the electricity distribution industry;
- i) The need to introduce other important cross-subsidies such as cross subsidy to alleviate the needs of the poor, e.g. through the introduction of a support tariff; and
- j) The intent to simplify and reduce the cost regulation.

The ECB plans to initiate a separate process to deal with the challenges of regulating LA surcharges. This process will also involve other spheres of Government such as the Ministry of Regional and Local Government and Housing and Rural Development. The ECB will inform stakeholders about any developments in due time.

The last section of this report shows the results for every LA/RC which has been ring-fenced. The results have been determined in accordance with the methodology described in this report and consist of Loan Compensation charges, Transitional Service charges and LA surcharges.

Figure 1: Summary Results for 1st year

	Loan Compensation charge N\$	Transitional Service charge N\$	LA surcharge N\$	Total N\$		Loan Compensation charge N\$	Transitional Service charge N\$	LA surcharge N\$	Total N\$
Central RED					CENORED				
Gobabis	1,129,226	724,014	7,650,963	9,504,203	Tsumeb	2,358,790	976,151	6,015,286	9,350,227
Witvlei	-	39,875	-	39,875	Okakarara	-	111,487	-	111,487
Windhoek	8,747,303	-	124,321,312	133,068,615	Grootfontein	447,489	373,810	7,447,616	8,268,915
Omaheke	-	-	-	-	Khorixas	-	141,897	121,830	263,727
Okahandja	452,099	414,702	5,442,141	6,308,942	Otavi	50,156	-	53,514	103,670
Total	10,328,628	1,178,591	137,414,416	148,921,635	Otiwarongo	885,574	854,297	6,138,977	7,878,848
Southern RED					Outjo	179,702	309,073	978,238	1,467,013
Aroab	-	44,374	-	44,374	Kamanjab	-	77,890	-	77,890
Gibeon	-	61,611	-	61,611	NamPower	50,156	-	-	50,156
Tses	-	52,478	69,798	122,276	Total	3,971,867	2,844,605	20,755,461	27,571,933
Maltahohe	-	54,119	-	54,119	Erongo RED				
Bethanie	-	110,227	140,371	250,598	Walvis	3,487,509	425,218	24,578,452	28,491,179
Leonardville	-	15,973	50,086	66,059	Karibib	-	85,843	-	85,843
Berseba	-	39,244	-	39,244	Arandis	-	140,153	20,657	160,810
Luderitz	317,160	703,038	15,116,746	16,136,944	Henties	-	177,880	2,365,724	2,543,604
Mariental	380,049	393,517	3,851,021	4,624,587	Usakos	-	-	1,249,299	1,249,299
Hardap	-	-	-	-	Omaruru	54,078	171,539	887,224	1,112,841
Rehoboth	-	-	1,139,213	1,139,213	Swakop	3,562,321	591,656	10,570,062	14,724,039
Aranos	-	-	673,403	673,403	Erongo RC	-	-	-	-
Karasburg	-	-	427,952	427,952	Uis	-	37,096	-	37,096
Keetmanshoop	-	-	1,431,132	1,431,132	Total	7,103,908	1,629,385	39,671,418	48,404,711
Koes	-	71,223	242,727	313,950	Grand Total	22,101,612	7,225,542	220,983,744	250,310,898
Gochas	-	27,157	-	27,157					
Omaheke RC	-	-	-	-					
Kalkrand	-	-	-	-					
Total	697,209	1,572,961	23,142,449	25,412,619					

Note: The results for Southern and Central REDs are based on provisional information which will be finalised once the rind-fenced financial statements have been confirmed. Loan Compensation and Transitional Service charge will vary from year to year depending on its unwinding status.

2 Introduction

In 2001 the Electricity Control Board (ECB) of Namibia commissioned a study to review and analyse electricity tariffs in Namibia. One of the most surprising results from this study was the fact that electricity tariffs vary significantly from one Local Authority (and Regional Council) to the next. There are several reasons for these variations but one of the key drivers is the fact that Local Authorities (LAs) and Regional Councils (RCs) increase the price of electricity above the cost of supply with the purpose to cross-subsidise other municipal services.

This process applied by LAs and RCs, which is referred to as a LA surcharge, has been practised for many years. However, the fact that it has been done without sufficient oversight or regulation has resulted in a situation where LAs/RCs have been able to set the price of electricity without significant oversight. The fact that different LAs impose different electricity surcharges is a major contributor to vastly differing electricity tariffs across Namibia.

In 2004 the ECB commissioned a study to further investigate the practise of LA surcharges. There are several reasons why the ECB called for such study. Some of the reasons are highlighted hereunder:

- a) The first is that the current practise of setting and applying LA surcharges has the potential to expose electricity consumers to monopoly power abuse. The ECB has the mandate to regulate electricity tariffs in Namibia and it was felt that the process applied by LAs/RCs should be subject to the ECB's oversight.
- b) The second reason is that the introduction of Regional Electricity Distributors (REDs) brought the practise of LA surcharges into sharp focus. LAs felt that the establishment of REDs could potentially cut them off from a major source of revenue, which again could affect service delivery. The study would therefore be used to determine the size of the LA surcharges. The results from the study would assist the ECB to put mechanisms in place to ensure that LA financial positions are not adversely affected.
- c) The third reason is that the ECB is adjusting the electricity tariffs to closer reflect the cost of supply and to achieve a more balanced and harmonised tariff regime across the country. This will help to restore equality and fairness in the price of electricity for the different customers regardless of where they are located in Namibia.
- d) Where cross-subsidies are allowed they should be made more transparent.

The above points provide a brief but strong rationale for the ECB project. This document is the last in a series of deliverables under the project and captures the development and results of the process as it unfolded over the past few years. The table below summarises the key project deliverables and milestones:

Table 2: Summary of LA surcharge development process

<i>Deliverables</i>	<i>Date</i>	<i>Description</i>
LA Surcharge Phase 1 Report	Jul 2004	The focus of this report was to: <ul style="list-style-type: none"> • Develop principles for LA asset compensation charges and LA surcharges when NORED is established • Apply the principles to NORED's results to determine the appropriate charges and surcharges • Outline the basic asset compensation charges and LA surcharge principles for all other REDs.
Stakeholder Workshop 1	Oct 2004	The workshop focussed on pro-forma asset lease and service level agreements which could assist LAs when entering into agreements with the REDs. In addition the LA surcharge principles were presented to stakeholders for comment.
LA Surcharge Phase 2 Draft Report	Oct 2004	The Phase 2 Report contained significant enhancements to the approaches and methodologies that had been presented in the Phase 1 Report. Feedback from stakeholders revealed the need for more comprehensive consideration of the Municipal Accounting Practices. The Report also provided a broader discussion of the role and impact of cross-subsidies, as well as a tighter integration with the ECB's tariff methodology.
Road-shows	Nov 2004	A series of road-shows were held to present the principles, methodologies and results from the Draft Phase 2 report.
LA surcharge Phase 2 Report	Nov 2004	The final Phase 2 Report included further refinements to the Asset Compensation as well as LA surcharge methodologies. The Report also included more detailed results when the updated methodologies were applied to several LAs and RCs.
Ringfencing of LAs and RCs electricity departments		The Phase 2 work highlighted the need for accurate ring-fenced data in order to produce accurate results. Hence, the ECB embarked on an extensive programme to assist virtually all LAs and RCs in Namibia to ring-fence their electricity departments. This process took several months to complete.
CENORED stakeholder presentation	May 2005	Presentation of study results for the CENORED area. The results were based on the principles and methodologies described in the Phase 2 Report as well as the ring-fenced financial statements.
ERONGO RED stakeholder presentation	Jun 2005	Presentation of study results for the ERONGO area. The results were based on the principles and methodologies described in the Phase 2 Report as well as the ring-fenced financial statements.
SORED stakeholder presentation	Apr 2006	Presentation of study results for the Southern RED area. The results were based on the principles and methodologies described in the Phase 2 Report as well as the ring-fenced financial statements.
CENTRAL RED stakeholder presentation	Apr 2006	Presentation of study results for the Central RED area. The results were based on the principles and methodologies described in the Phase 2 Report as well as the ring-fenced financial statements.
Implementation of LA Surcharge Report	Aug 2006	This document describes many of the implementation considerations for introduction of the Loan (previously Asset) Compensation charge, Transitional charge and LA surcharge.

In parallel to the above process the ECB has developed enhancements to the proposed surcharge provisions in the Electricity Bill 2006 to support the introduction of a LA surcharge and to set a statutory base for surcharges.

3 Methodologies

The LA surcharge methodology and results have been presented and explained in detailed at several regional workshops over the past twelve months. The detailed results including presentations and models have been submitted to the ECB. The main results are summarised in Appendix 1 to this report.

This project has determined that a LA could potentially qualify for four different revenue streams after having agreed to participate in a RED. These revenue streams all have different characteristics including purpose, level and duration. The four revenue streams are discussed below:

3.1 Loan Compensation charges

This charge was previously referred to as the Asset Compensation charge. The purpose of this charge is to fairly compensate the LA for any outstanding loan obligations including loan redemption and interest payment. Any outstanding loan (whether internal or external) which has been taken out for the sole purpose to create electricity related infrastructure has been included in the analysis. Ideally the outstanding interest and loan amounts as well as the payback period should be taken from the LA's loan schedule. However, when such information was not available, the amounts were calculated using the LA's ring-fenced information. Once the amounts are determined it will not change (e.g. increase with inflation or adjust with interest rate fluctuations) until the loan has been repaid. The RED will have no further Loan Compensation obligations once all the loans have been repaid.

3.2 Service Level charges

The Service Level charge actually consists of two components or charges. The first, and more significant, is the charge that a RED will pay a LA for the purchase of agreed services. The services and charges will be defined in a Service Level Agreement (SLA) between the RED and the LA. The establishment of SLAs is an entirely voluntary process between the concerned parties (the buyer and the seller).

One of the stakeholders felt strongly that there should be a mandatory service charge to compensate the LAs for overhead costs that will remain in the LA after the REDs have taken over the responsibility for electricity distribution. After some careful thought, and taking into account the needs of the LA as well as the needs of the RED and the electricity consumers, the ECB decided to include a Transitional Service charge. The purpose of this charge is to partly compensate the LA for certain overhead costs that will not fall away soon after the establishment of the RED.

The ECB, after reviewing the accounts submitted by the LAs, decided to include the following cost elements into the Transitional Service charge:

- a) Indirect Salaries & Wages;
- b) Security Services
- c) Directors' Fees; and
- d) Travel & Subsistence (for support staff only).

Implementation of LA surcharges in Namibia

The Transitional Service charge will be adjusted with actual inflation but will be phased out over three years. The phasing out will be structured as follows:

- In the first year after RED creation the charge will be 67% of the calculated total amount;
- In the second year the charge will be 33% of the total amount; and
- In the third year it will be 0%.

It must be remembered that the LA has the responsibility to re-engineer its business model as soon as possible after the RED has taken over the responsibility of electricity distribution. Hence, the Transition Service charge period has been kept short, not least as an incentive for the LA to conclude and implement its restructuring plans (including entering into SLAs with the RED) as soon as possible. The interaction between the SLA charges and the Transitional Service charge is discussed in more detail in section 4.8.

3.3 Local Authority surcharge

The purpose of the LA surcharge is to continue providing financial support to the LAs and RCs after the establishment of the REDs. The initial charge is based on the actual difference between revenue and costs as reflected in the ring-fenced electricity accounts. This is consistent with Government policy that LAs and RCs should not be adversely affected when they join the RED.

The above method could not be used in instances where LAs have engaged the services of a private company to undertake the electricity distribution function. In these cases the LA surcharge has been determined by quantifying the financial benefit that these LAs received during the year under review. The rationale for this approach is the same as what has been used for other LAs, and that is that the LA/RC should not be adversely affected by the introduction of a RED.

Some of the stakeholders from affected LAs have argued that they should receive the benefit they currently receive from the private company, as well as any profits made by the private company. This argument unfortunately does not hold. The main reason is that a company's profits belong to the shareholders of the company and is a reward for the investments they have made as well as the risks that they have been exposed to. None of the LAs in question are shareholders of the private companies and none have invested any money in these business ventures.

The analysis also showed that several of the LAs and RCs in fact have and still are making losses on the sale of electricity. For practical reasons the LA surcharge for these entities are deemed to be nil. Furthermore, it is not expected that the Government of Namibia will continue subsidising these LAs/RCs when they have moved into the RED.

The increase or decrease of the LA surcharge over time, as well as the duration of the LA surcharge, have not been discussed in detail with any of the stakeholders. This will be the subject of a separate stakeholder process, which will include the Ministry of Regional, Local Government, Housing and Rural Development, the Ministry of Mines and Energy and the Government as a whole. The current position which has been shared with all the stakeholders is that the LA Surcharge component will stay constant in nominal terms.

3.4 RED Dividends

As shareholders in the RED, LAs and RCs will qualify for dividend pay-outs when the RED is profitable and declares a dividend. This report has not attempted to quantify the size and timing of potential dividend pay-outs from the REDs. It is understood that all the REDs have developed financial models to simulate the financial positions of the REDs, with the model simulations including estimates of when the first set of dividends could be paid out.

However, it must be emphasised that there is strong inverse relationship between LA surcharges and RED dividends. This relationship is explored and discussed in more detail in section 4.5.

4 Implementation Considerations

A number of points regarding the implementation of the LA surcharges were raised at several of the stakeholder workshops. This section provides a detailed description of the key implementation arrangements.

4.1 Collection Responsibility

Once a RED has been established it will assume the full responsibility of electricity distribution for its designated license area. This implies that the RED will be responsible for all the functions related to electricity distribution including the revenue cycle which consists of metering, billing and collection.

The RED will be responsible to pay over to the LA/RC the relevant and approved charges and surcharges including: Loan Compensation charge, Transitional surcharge and LA surcharge.

Although there are other potential arrangements, the proposed method is the most efficient and requires the least amount of resources to implement and manage. Importantly, it creates only one interface for the customer, which is the RED.

Recommendation 1: The licensed RED has the responsibility to collect the necessary funds from the electricity consumers. The RED must include the approved charges and surcharges on the customer's bill (or pre-paid tariffs) in order to pay over the agreed surcharge amounts.

4.2 Method of Collection

There are several ways for REDs to collect the necessary funds resulting from the LA charges from the customers. However, it should be borne in mind that customers already pay for these charges as these charges are embedded in the current electricity tariffs charged.

The principle is to keep the method of collection as simple and as efficient as possible, to avoid any duplication and possible expensive modifications to billing systems. The method of collection should also encourage the efficient use of electricity and should therefore be consumption based.

Current legislation does not allow the surcharge to appear as a LA/RC charge separate from the electricity tariff charges of the RED. It must therefore be included in the approved set of RED tariffs. Once the proposed new legislation has been approved, the REDs will be required to show the LA surcharge as a transparent and separate charge on the customer's invoice.

Recommendation 2: Until the Electricity Bill 2006 is promulgated, REDs must include the agreed charges and surcharges as a constant c/kWh amount to the RED's approved set of tariffs.

Once the Act has been promulgated, the REDs must show the approved LA surcharge as a transparent and separate constant c/kWh charge on the customer's monthly invoice due and owing to the LA/RC.

4.3 Allocation of LA surcharges

A question which has been raised at several of the stakeholder workshops is whether all customers in a RED will pay the same LA surcharge or whether each customer will pay the LA surcharge relevant to its Local Authority.

There is little doubt that introducing a single flat LA surcharge for the RED will be the simplest and lowest cost option. However, the introduction of such an average charge will mean that some customers will have to pay more for electricity because of higher LA surcharges in other parts of the RED. It could be argued that this arrangement would be unfair because a customer would pay more without receiving more or better services in the area where he or she lives. Hence, a single flat LA surcharge would therefore introduce another form of LA/RC cross-subsidy which should be avoided at this stage.

The above inequality (of different LA surcharges) will disappear when LA surcharges are harmonised in the RED. This can happen if the industry decides to move towards a flat rate surcharge in the longer term. Under such an arrangement it could be argued that it would lead to greater fairness between various LA/RC residents in that everybody would contribute more or less the same toward the cross-subsidisation of other municipal services irrespective of where they live. Whether the latter can be achieved (and is actually desirable) is part of a follow-on study by the ECB to investigate the transition of the LA surcharges.

Recommendation 3: Each customer will pay the LA surcharge which has been calculated and approved for the area where he or she lives.

4.4 Non-Payment

Several stakeholders enquired about the impact of non-payment (including theft) on the pay-out of the charges and surcharges from the RED to the LA/RC. This is an important issue which requires careful attention. Before any recommendation can be made it is pertinent to note the following points:

- a) Electricity non-payment occurs in all the licensed areas before the establishment of REDs. What is noticeable from the data presented to the ECB is that non-payment levels vary dramatically from one licensee to the next.
- b) Because the LA surcharge has been determined using the actual financial statements of the licensees, it means that the current level of non-payment is already “build-into” the LA surcharges. In other words, if the existing levels of non-payment continue after the RED is established, then the RED should receive sufficient revenues to meet its LA surcharge obligations.

Any proposed mechanism to deal with non-payment must encourage REDs to collect as much of the outstanding amounts as possible. Non-payment and theft are realities which can be controlled through efficient management and credit control policies but cannot be fully avoided. To this end the ECB’s tariff methodology includes a small provision for non-payment.

Following on the above observations it is believed that:

Implementation of LA surcharges in Namibia

- a) The REDs should adopt the necessary management approaches and policies to control non-payment and theft.
- b) There should be build-in financial penalties and rewards for controlling non-payment and theft.
- c) A small percent of non-payment and theft is a reality which will remain in the system. The RED will receive relief for this through the ECB's tariff methodology.
- d) Once the responsibility for electricity distribution and revenue collection has passed over to the RED, the LA has little control over the effectiveness of billing and collection and should therefore, in terms of prudent risk management practices, not be held responsible for the success or failure of the RED's revenue cycle. The LA surcharge should be seen in the same light as any other debtor. In other words the RED cannot argue that it will not pay the surcharge because of non-payment or theft.

Recommendation 4: REDs must pay over the invoiced amounts of charges and surcharges (rate x quantity) to the LAs and RCs regardless of the levels of non-payment and theft experienced.

The above recommendation implies that the LA surcharge amount will be paid on the levied amount (included in or shown on the bill), irrespective of actual payment. Non-payments or late payments will therefore not influence the surcharge amount that is paid over to the LAs. The main advantages of this recommendation are:

- A) The LA can rely and plan on the amount of revenue it will receive from the LA surcharge; and
- B) The RED is able to manage its debtors in a non-intrusive way.

4.5 Impact on dividends from REDs

A key development of the restructuring of Namibia's electricity industry and the establishment of REDs is that all LAs/RCs who own assets and/or have customers will become shareholders in a RED. This will entitle such LAs/RCs to all the privileges and benefits reserved for company shareholders, including being the recipients of any dividend pay-outs.

Naturally the RED will only declare dividends when it is in a position to do so and in line with the company's dividend policy, which will be set by the shareholders (LAs, RCs and NamPower). There is therefore an interesting dynamic between LA surcharges and RED dividends. What it means is that lower LA surcharges would:

- a) Improve the RED's cash flow position;
- b) An improved cash flow position will lead to lower company risk, which in turn will result in lower borrowing costs (e.g. lower interest rates);
- c) Lower interest rates will further improve the cash flow position of RED;
- d) Lower LA surcharges and finance charges will increase the profitability of the RED; and

- e) With improved cash flow and profitability levels, the RED will be in a better position to declare and pay dividends to its shareholders.

In other words, if LA surcharge payments to LA are lowered, the LA will be partly compensated for this loss via an increase in dividend payouts. It is important to realise that the opposite argument also holds true. Put differently, higher LA surcharges decrease cash flows which increase risk and therefore finance charges. Higher LA surcharges and finance charges will reduce profitability and as a result dividends.

4.6 Loan transfers

Some of the delegates at the stakeholder workshops suggested that any outstanding loans against the electricity department should be transferred to the RED. This makes intuitively sense but there are a number of practical challenges with such an arrangement.

Perhaps the most important reason why the option of loan transfer has not been recommended as an instrument to deal with outstanding loans is that a RED will have to obtain credit to settle any existing outstanding loans. It is unlikely that the RED would obtain the credit at an interest rate which is more competitive than that of the LA. The loan transfer arrangement would then replace existing low cost debt with more expensive debt. In the end this will increase the RED's financial charges and put further upward pressure on already high electricity prices.

In order to retain the advantage of existing low cost debt, it is recommended that the RED should service the debt of outstanding loans against the electricity department through back to back arrangements. This arrangement is facilitated through the Loan Compensation charge.

Some concern was expressed about the status of internal loan accounts. It should be remembered that the Local Authority Act prevents an electricity department from obtaining finance from private institutions. This has resulted in the practise of internal loan arrangements so that the necessary funding can be made available for asset creation. It is our understanding that this practise is recognised under the GAMAP accounting rules, and any relevant outstanding internal loan amounts have therefore been included in the calculations.

Recommendation 5: Existing loans (for the creation of electricity infrastructure) against the electricity department of a LA will be serviced by the RED through a back to back arrangement, which is facilitated by the Loan Compensation charge.

4.7 Application and Approval Process

The ECB carries the mandate to approve electricity tariffs in Namibia. Once the Electricity Bill of 2006 has been promulgated, the ECB will also be responsible for setting the LA surcharge as a separate LA/RC charge. As such no RED can impose a LA surcharge unless the surcharge has been formally approved by the ECB. The process for applying and approving LA surcharges are set out below:

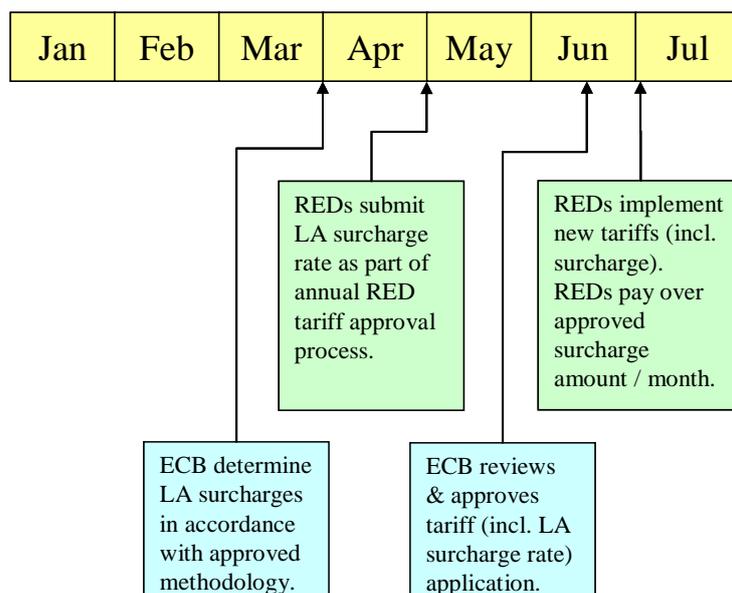
- a) The ECB will review and update the LA surcharge (including loan compensation and transitional service charges) by the end of March every

year. The calculation of the charges and surcharges will be subject to ECB Board approved methodologies.

- b) REDs will incorporate the latest ECB approved charges and surcharges in the annual tariff application.
- c) ECB reviews and approves the RED's tariffs (including the charges and surcharges).
- d) REDs apply new approved tariffs from the agreed date.
- e) Note that the surcharge under the Electricity Bill 2006 is not regarded as a tariff for electricity. It is a separate charge which an LA/RC may impose on its residents. However, the surcharge would be collected by the RED and thus the RED plays an integral part in the surcharge.
- f) As surcharges would already be in operation by the time the Electricity Bill 2006 is promulgated and put into force, it will be deemed that the surcharges existing at the time of the coming into operation of the Bill were determined in accordance with the provisions of the Bill on surcharges. This means that there will be no need to again apply for surcharges once the Bill commences.

Any LA/RC would be able to approach the ECB for assistance in calculating their LA surcharge amounts.

Figure 2: LA surcharge application and approval process



Recommendation 6: The LA surcharge amount will be determined subject to an approved surcharge methodology. The latest LA surcharge will be calculated by the ECB on an annual basis. A RED can only impose a LA surcharge if the LA surcharge amount and rate have been approved by the ECB.

4.8 Service Level Agreements

The RED will be responsible for managing its costs and service delivery in an efficient way. One of the options available to the RED is to enter into service level

agreements with some of the LAs/RCs. The benefit of such an arrangement is that the services in question could be obtained at a lower cost than what the RED can provide it for or, alternatively, because of improved service delivery. There could be many reasons for this including sharing of overheads costs as well being geographically closer to the customer base.

Once the RED has decided to make use of a LA's services the two parties will enter into a Service Level Agreement (SLA). The agreement will amongst other issues describe the expected quality of service that will be provided as well the price that will be paid.

The ECB will expect that the SLA will be negotiated on an arm's length basis. In other words, the expected quality of service and price will not be more than what is available from any other commercial enterprise.

Once a LA has entered into a SLA it will have to arrange its business structure and processes in a way to meet the expectations of the RED. LAs that do not enter into SLAs will have to restructure their business to adapt to the changing responsibilities. If not, the LA may end up with a higher cost structure than what is necessary. This could lead to inefficiencies and impact on overall service delivery.

The Transitional Service charge is a short term temporary arrangement to assist LAs/RCs in a small way during a transitional 3-year period while they restructure their businesses to fit the new business environment (where electricity is provided by REDs and not by the LA/RC).

LAs/RCs are encouraged to re-engineer their business models swiftly once the REDs have taken over the responsibility for electricity distribution. This process is in the hands of the LAs but they can use the opportunity to redeploy staff to areas where additional resources are required.

Recommendation 7: LAs have the responsibility to re-engineer their business models, structures and process soon after the responsibility of electricity distribution has passed over to the RED. The RED could in some instances enter into SLAs with LAs to manage cost and improve service delivery. In addition the Transitional Surcharge will provide some relief to the LAs during a short transitional period.

4.9 Asset Values

Stakeholders have enquired whether the asset values of assets that have been transferred from the LA/RC to the RED should be included (in partial or full) in the RED's tariff base.

In short, the answer to the above request is "no". There are two reasons that inform the ECB's position on this matter:

- a) Firstly, if the assets are included (partly or fully) in the RED's tariff base, then the RED will earn a return on these assets. If this is allowed then the customer will effectively pay twice for the return on these assets. It must be remembered that customers pay for the loan redemption and the loan interest on these assets. The interest portion already represents a return on the asset. If the assets are included in the RED's rate base then it will attract a return component again. This is obviously not fair.

Implementation of LA surcharges in Namibia

- b) Some REDs may argue that they need the return on the LAs/RCs assets to build a reserve in order to replace the assets when they reach the end of their life. This approach is not consistent with the ECB's tariff methodology. The ECB's tariff methodology allows tariffs to increase only after the assets have been created and not before. This tariff increase is sufficient to repay any funding obligations, including a return to the investor. This approach is consistent with international regulatory practices.

Recommendation 7: REDs should not include the values of any assets transferred from the LAs/RCs in their tariff rate base.

4.10 Legal Status

The ECB and the MME (with input from various stakeholders) have proposed a number of changes to the current Electricity Act (in the form of a new Electricity Bill), inter-alia to entrench the statutory right of LAs and RCs to receive a surcharge.

Once the Electricity Bill has been passed the ECB will be granted specific powers to deal with the LA surcharge in accordance with its mandate. It will also pave the way to show the LA surcharge transparently on a customer's invoice. In this way customers are informed about what is included in their electricity charges. It is expected that this arrangement will help explain the difference in electricity tariffs between towns in the same RED. Over time, this may assist with making tariffs more equitable through the harmonisation of tariffs. This transparency will also enhance LA/RC responsibilities towards their residents with regard to accounting for income received from electricity.

The Electricity Bill has been approved by Cabinet and is currently residing with the State's legal drafters. Once certified, it will be submitted to Parliament.

Until the commencement of the Electricity Bill, the ECB is able to support the collection of LA surcharges under section 25 of the Act dealing with approved schedule of tariffs. This clause gives the ECB sufficient powers to allow the inclusion of the LA surcharge amount as part of a Licensee's revenue requirement, which is used to set tariff levels.

5 Economic impact of LA surcharges and other cross subsidies

Both the GRN and the ECB have stated that the electricity industry must move towards more cost reflective tariffs. The presence of LA surcharges (which is a form of cross subsidy) will therefore prevent the industry from fully reaching this objective. The challenge that many decision-makers wrestle with is to find the correct balance between the economic benefits of cross-subsidies and the economic distortions that they create.

In light of the fact that electricity costs will rise significantly over the next few years in Namibia (and the region), primarily due to massive new investments required in generation and transmission infrastructure and shortage of supply, the ECB has identified the need to undertake a macro economic study into the affects of real electricity price increases on the Namibian economy. The study will also examine the impact of cross subsidies on Namibia's macro economic position and outlook. The results from this study will only be available towards the end of 2006.

Nevertheless, most leading economists are in agreement that cost reflective tariffs (without any cross-subsidies) are the best way to achieve long term economic efficiency. The reason for this is that it will result in the optimum allocation of scarce resources. This logic can briefly be described as follows:

- ***If prices are too low*** (well below the full cost of efficient supply) demand will be higher than what it should be. The higher demand level will require additional infrastructure which again will consume scarce resources (money and skills), making it more expensive for other firms. These resources (if they are priced lower) could have been used elsewhere to create more economic value in other sectors of the economy. Low prices that result in additional consumption can also lead to unnecessary environmental pollution through the consumption of non-renewable resources such as coal.
- ***If prices are too high*** (higher than the full cost of efficient supply), demand will be lower than what it should be. The high prices prevent people and firms from using electricity to develop new business opportunities. Even worse is that the high prices may lead to the shut-down of existing business ventures. These developments will lead to lower economic growth, greater levels of unemployment and poverty.

The above brief explanation shows that any deviation from cost reflective tariffs, such as the introduction of a levy or surcharge, is likely to result in (or permeate) sub-optimal economic efficiencies. Does this mean that the electricity industry should do away with all forms of cross subsidies? Ideally the answer is yes. However, we do not live in an ideal world and certain trade-offs may be necessary. Policy makers and regulators must balance conflicting objectives such as the need to have tariffs that:

- Promote economic efficiency;
- Keep electricity affordable to the poor;
- Stimulate economic growth; and
- Support the economic viability of the industry.

There should be no doubt that the key principle of cost reflective tariffs must underpin the basis for tariff design. However, cross-subsidies may be retained in the tariff for two reasons:

- Firstly, an immediate removal of cross-subsidies may lead to a sudden and socially unacceptable tariff adjustment; and
- Secondly, Government may adopt certain social or economic policies to cross-subsidise specific segments of the economy (e.g. prices to rural and low-income consumers). In this case, cross-subsidies may be a feature of electricity tariffs in the long-term.

There are four key questions to answer when the policy makers decide to develop and implement cross-subsidies (or deliberately retain existing cross-subsidies):

- **Who should benefit from the subsidy?** It is preferable to target cross-subsidies to those groups that are most in need of it. However, experience has proven that this can be difficult to achieve. One way to facilitate achievement is to develop transparent selection criteria. However, careful judgement is required not to cause inadvertent discrimination or prejudice that may be viewed as unreasonable, unjust or even unconstitutional.
- **How large should the subsidy be?** Again, this is a policy issue that needs to be carefully considered by the policy makers. The policy makers must weigh up the need for the cross-subsidy against the economic distortions that the subsidy will cause. In the longer term the country and its citizens are better off with smaller subsidies.
- **Who should pay for the subsidy?** Subsidies can of course never be free. The only question that must be answered is who will pay for it. There are generally two choices. The first is that the burden is shifted to other customers through an increase in the tariffs they pay. The second option is to move it to the taxpayer via funding arrangements from the national treasury. A combination of these two methods is also possible. The advantage of a national treasury cross subsidy arrangement is that the burden is spread over a much larger base and hence the economic distortions in the industry are less. The second advantage is that the subsidy will have to compete against other demands on Government funding. In this way the appropriateness of the subsidy will be periodically reviewed by senior Government officials.¹
- **How should the subsidy be implemented and administered?** Lastly, policy makers also need to decide how the subsidy should be implemented and how it will be administered. The correct approach will vary from case to case depending on the unique circumstances.

If measured against the above criteria, it is apparent that the existing LA surcharge practise is far from optimal and that it does not provide clear and consistent answers. Thus, there is a definite requirement to review the process of LA surcharges to make sure that it is supported by Government's overall approach and national priorities.

¹ This process already exists. For example, LAs/RCs undercharging for electricity are able to pay their electricity accounts to NamPower by using grants they receive from MRLGHRD. The latter receives the money from Parliamentary appropriation and thus from the broader tax payer.

6 Possible Transition/Evolution

It is obvious from the LA surcharge calculations and results that there are major differences in the LA surcharge levels between the different LAs and RCs in Namibia. It is also noticeable that there is no clear pattern in the level of LA surcharges. In other words, one cannot conclude that smaller towns impose a higher LA surcharge (c/kWh or %) than bigger towns or visa-versa. This confirms the earlier observation that LA surcharges have developed in an ad-hoc and relatively uncontrolled way. There is also no set methodology in Local Government that governs the calculation and level of LA surcharges.

As highlighted in section 5, unrealistically high LA surcharges will hurt the poor and undermine business confidence and development. It will also lead to the wrong allocation of resources (e.g. investment and disinvestment decisions). All these outcomes are undesirable and points to the fact that LA surcharges must be regulated in some way to ensure that electricity pricing support national objectives. This is particularly relevant given the electricity situation on Southern Africa and the fact that the cost of electricity is expected to rise substantially over the next few years.

To put the above discussion in context, it is estimated that LAs/RCs receive a cross subsidy of approximately N\$250 million per year from the sale of electricity. As mentioned earlier this should raise questions such as:

- a) Is the subsidy needed?
- b) What is subsidised?
- c) Who is subsidised?
- d) If so, how should the subsidy amount be determined?
- e) What economic distortions are caused by the subsidy?
- f) Are there alternatives to lighten the burden of the electricity consumer (e.g. make the price of other municipal services more cost reflective, better revenue collection, financial support from the fiscus, etc.)?
- g) Is the above in line with Government priorities and objectives? For example could a part of the subsidy be used to support the implementation of a Support Tariff to assist the poor?

At the same time there is also realisation and appreciation of the fact that many local authorities depend heavily on the surpluses generated from electricity sales to fund other services, and that it will take time for any LA/RC to adjust and rebalance its revenue streams.

The proposed Electricity Bill is quite clear in that it protects the right of Local Government to receive a levy on the sale of electricity, even if the accountability and responsibility of supply moves to the RED. However, the amounts to which the electricity customers will be “taxed” for other Local Government services must be approved by the ECB in accordance with an approved methodology which has been developed through a consultative process.

To address the question of the possible transition and harmonisation of the LA Surcharge the ECB will initiate a project to provide further insight and guidance on

Implementation of LA surcharges in Namibia

the issue. The process will involve all stakeholders including other spheres of Government.

7 Appendix 1: Results from Analyses

The results are summarised and presented per region.

7.1 CenoRED

Table 3: CenoRED - Loan Compensation charges

LC Charge		05/06	06/07	07/08	08/09	09/10
Tsumeb	N\$	2 358 790	1 436 381	126 955	15 375	15 375
Okakarara	N\$	-	-	-	-	-
Grootfontein	N\$	447 489	447 489	417 744	413 225	413 225
Khorixas	N\$	-	-	-	-	-
Otavi	N\$	50 156	50 156	50 156	50 156	50 156
Otjiwarongo	N\$	885 574	885 574	885 574	885 574	885 574
Outjo	N\$	179 702	179 702	179 702	179 702	179 702
Kamanjab	N\$	-	-	-	-	-
NamPower	N\$	50 156	50 156	50 156	50 156	50 156
Total	N\$	3 971 868	3 049 459	1 710 287	1 594 189	1 594 189

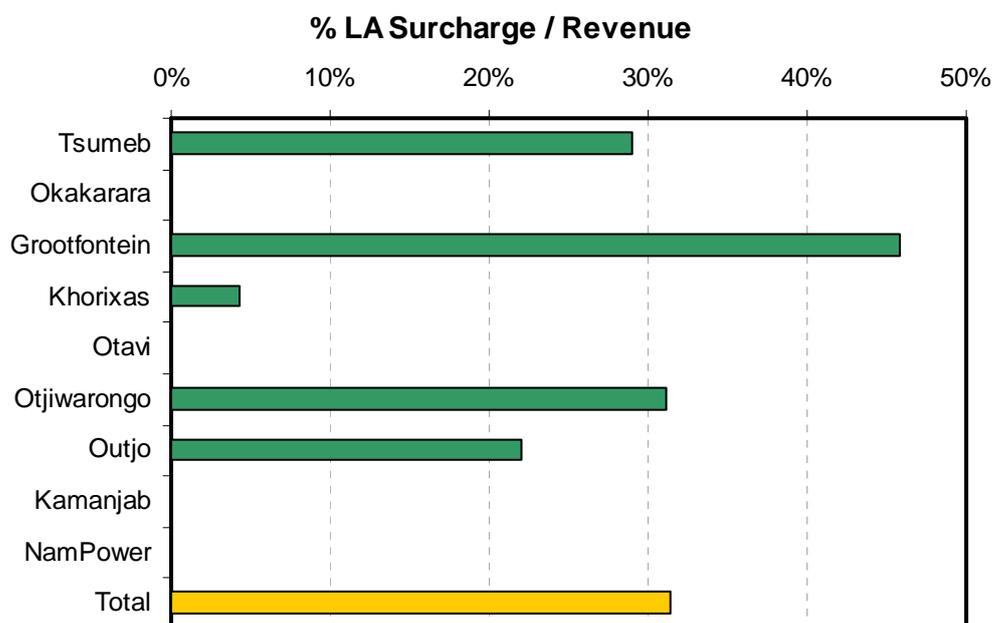
Table 4: CenoRED: - Transitional Service charges

Transitional Surcharge		04/05	05/06	06/07	07/08	08/09	09/10
Tsumeb	N\$	976 151	650 767	325 384	-	-	-
Okakarara	N\$	111 487	74 325	37 162	-	-	-
Grootfontein	N\$	373 810	249 206	124 603	-	-	-
Khorixas	N\$	141 897	94 598	47 299	-	-	-
Otavi	N\$	-	-	-	-	-	-
Otjiwarongo	N\$	854 297	569 532	284 766	-	-	-
Outjo	N\$	309 073	206 049	103 024	-	-	-
Kamanjab	N\$	77 890	51 927	25 963	-	-	-
NamPower	N\$	-	-	-	-	-	-
Total	N\$	2 844 605	1 896 403	948 202	-	-	-

Table 5: CenoRED - LA surcharges

LA Surcharge		05/06	06/07	07/08	08/09	09/10
Tsumeb	N\$	6 015 286	6 015 286	6 015 286	6 015 286	6 015 286
Okakarara	N\$	-	-	-	-	-
Grootfontein	N\$	7 447 616	7 447 616	7 447 616	7 447 616	7 447 616
Khorixas	N\$	121 830	121 830	121 830	121 830	121 830
Otavi	N\$	53 514	53 514	53 514	53 514	53 514
Otjiwarongo	N\$	6 138 977	6 138 977	6 138 977	6 138 977	6 138 977
Outjo	N\$	978 238	978 238	978 238	978 238	978 238
Kamanjab	N\$	-	-	-	-	-
NamPower	N\$	-	-	-	-	-
Total	N\$	20 755 461				

Figure 3: CenoRED - LA surcharge as % of selling price



7.2 Erongo RED

Table 6: Erongo RED - Loan Compensation charges

LC charge		04/05	05/06	06/07	07/08	08/09	09/10
Walvis	N\$	3 487 509	3 487 509	3 325 598	3 325 598	3 325 598	3 325 598
Karibib	N\$	-	-	-	-	-	-
Arandis	N\$	-	-	-	-	-	-
Henties	N\$	-	-	-	-	-	-
Usakos	N\$	-	-	-	-	-	-
Omaruru	N\$	54 078	54 078	54 078	54 078	54 078	54 078
Swakop	N\$	3 562 321	3 562 321	3 562 321	3 562 321	3 562 321	3 303 640
Erongo RC	N\$	-	-	-	-	-	-
Uis	N\$	-	-	-	-	-	-
Total	N\$	7 103 908	7 103 908	6 941 996	6 941 996	6 941 996	6 683 315

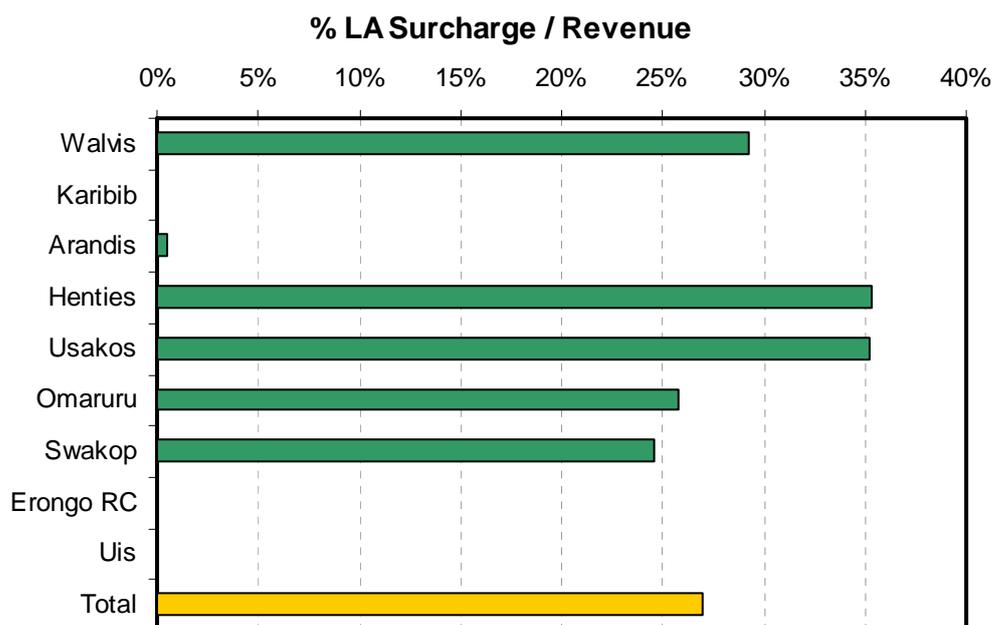
Table 7: Erongo RED: - Transitional Service charges

Transitional Surcharge		04/05	05/06	06/07	07/08	08/09	09/10
Walvis	N\$	425 218	283 478	141 739	-	-	-
Karibib	N\$	85 843	57 229	28 614	-	-	-
Arandis	N\$	140 153	93 435	46 718	-	-	-
Henties	N\$	177 880	118 587	59 293	-	-	-
Usakos	N\$	-	-	-	-	-	-
Omaruru	N\$	171 539	114 360	57 180	-	-	-
Swakop	N\$	591 656	394 437	197 219	-	-	-
Erongo RC	N\$	-	-	-	-	-	-
Uis	N\$	37 096	24 731	12 365	-	-	-
Total	N\$	1 629 385	1 086 257	543 128	-	-	-

Table 8: Erongo RED - LA surcharges

Implementation of LA surcharges in Namibia

LA Surcharge		03/04	04/05	05/06	06/07	07/08	08/09	09/10
Walvis	N\$	22,444,230	23,297,111	24,578,452	24,578,452	24,578,452	24,578,452	24,578,452
Karibib	N\$	-	-	-	-	-	-	-
Arandis	N\$	18,864	19,580	20,657	20,657	20,657	20,657	20,657
Henties	N\$	2,160,301	2,242,392	2,365,724	2,365,724	2,365,724	2,365,724	2,365,724
Usakos	N\$	1,140,819	1,184,170	1,249,299	1,249,299	1,249,299	1,249,299	1,249,299
Omaruru	N\$	810,184	840,971	887,224	887,224	887,224	887,224	887,224
Swakop	N\$	9,652,231	10,019,016	10,570,062	10,570,062	10,570,062	10,570,062	10,570,062
Erongo RC	N\$	-	-	-	-	-	-	-
Uis	N\$	-	-	-	-	-	-	-
Total	N\$	36,226,628	37,603,240	39,671,418	39,671,418	39,671,418	39,671,418	39,671,418

Figure 4: Erongo RED - LA surcharge as % of selling price**7.3 Southern RED**

Please note that the information for the Southern RED is still provisional. The final results will be confirmed once the ring-fenced statements have been verified.

Table 9: Southern RED - Loan Compensation charges

LC charge		05/06	06/07	07/08	08/09	09/10	10/11
Aroab	N\$	-	-	-	-	-	-
Gibeon	N\$	-	-	-	-	-	-
Tses	N\$	-	-	-	-	-	-
Maltahohe	N\$	-	-	-	-	-	-
Bethanie	N\$	-	-	-	-	-	-
Leonardville	N\$	-	-	-	-	-	-
Berseba	N\$	-	-	-	-	-	-
Luderitz	N\$	317 160	317 160	317 160	317 160	317 160	317 160
Mariental	N\$	380 049	380 049	380 049	380 049	380 049	318 571
Hardap	N\$	-	-	-	-	-	-
Rehoboth	N\$	-	-	-	-	-	-
Aranos	N\$	-	-	-	-	-	-
Karasburg	N\$	-	-	-	-	-	-
Keetmanshoop	N\$	-	-	-	-	-	-
Koes	N\$	-	-	-	-	-	-
Gochas	N\$	-	-	-	-	-	-
Omaheke RC	N\$	-	-	-	-	-	-
Kalkrand	N\$	-	-	-	-	-	-
Total	N\$	697 210	635 731				

Table 10: Southern RED: - Transitional Service charges

Transitional Surcharge		05/06	06/07	07/08	08/09	09/10	10/11
Aroab	N\$	44 374	29 583	14 791	-	-	-
Gibeon	N\$	61 611	41 074	20 537	-	-	-
Tses	N\$	52 478	34 985	17 493	-	-	-
Maltahohe	N\$	54 119	36 080	18 040	-	-	-
Bethanie	N\$	110 227	73 485	36 742	-	-	-
Leonardville	N\$	15 973	10 649	5 324	-	-	-
Berseba	N\$	39 244	26 162	13 081	-	-	-
Luderitz	N\$	703 038	468 692	234 346	-	-	-
Mariental	N\$	393 517	246 790	100 063	-	-	-
Hardap	N\$	-	-	-	-	-	-
Rehoboth	N\$	-	-	-	-	-	-
Aranos	N\$	-	-	-	-	-	-
Karasburg	N\$	-	-	-	-	-	-
Keetmanshoop	N\$	-	-	-	-	-	-
Koes	N\$	71 223	47 482	23 741	-	-	-
Gochas	N\$	27 157	18 104	9 052	-	-	-
Omaheke RC	N\$	-	-	-	-	-	-
Kalkrand	N\$	-	-	-	-	-	-
Total	N\$	1 572 960	1 033 085	493 211	-	-	-

Table 11: Southern RED - LA surcharges

LA Surcharge		05/06	06/07	07/08	08/09	09/10	10/11
Aroab	N\$	-	-	-	-	-	-
Gibeon	N\$	-	-	-	-	-	-
Tses	N\$	69 798	69 798	69 798	69 798	69 798	69 798
Maltahohe	N\$	-	-	-	-	-	-
Bethanie	N\$	140 371	140 371	140 371	140 371	140 371	140 371
Leonardville	N\$	50 086	50 086	50 086	50 086	50 086	50 086
Berseba	N\$	-	-	-	-	-	-
Luderitz	N\$	15 116 746	15 116 746	15 116 746	15 116 746	15 116 746	15 116 746
Mariental	N\$	3 851 021	3 851 021	3 851 021	3 851 021	3 851 021	3 851 021
Hardap	N\$	-	-	-	-	-	-
Rehoboth	N\$	1 139 213	1 139 213	1 139 213	1 139 213	1 139 213	1 139 213
Aranos	N\$	673 403	673 403	673 403	673 403	673 403	673 403
Karasburg	N\$	427 952	427 952	427 952	427 952	427 952	427 952
Keetmanshoop	N\$	1 431 132	1 431 132	1 431 132	1 431 132	1 431 132	1 431 132
Koes	N\$	242 727	242 727	242 727	242 727	242 727	242 727
Gochas	N\$	-	-	-	-	-	-
Omaheke RC	N\$	-	-	-	-	-	-
Kalkrand	N\$	-	-	-	-	-	-
Total	N\$	23 142 448					

Figure 5: Southern RED - LA surcharge as % of selling price

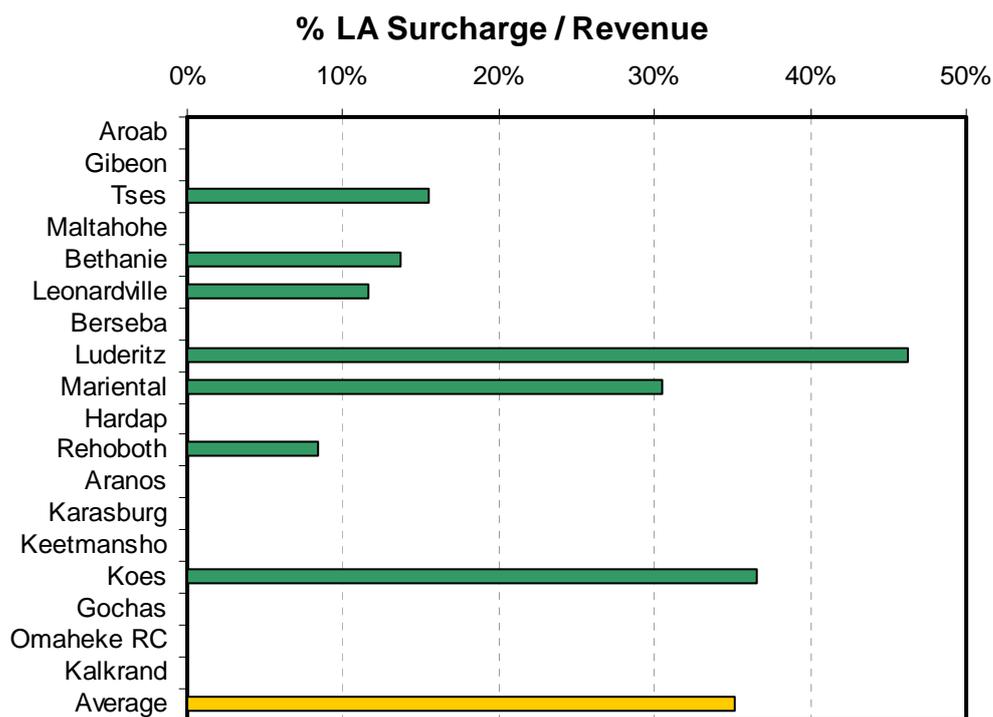
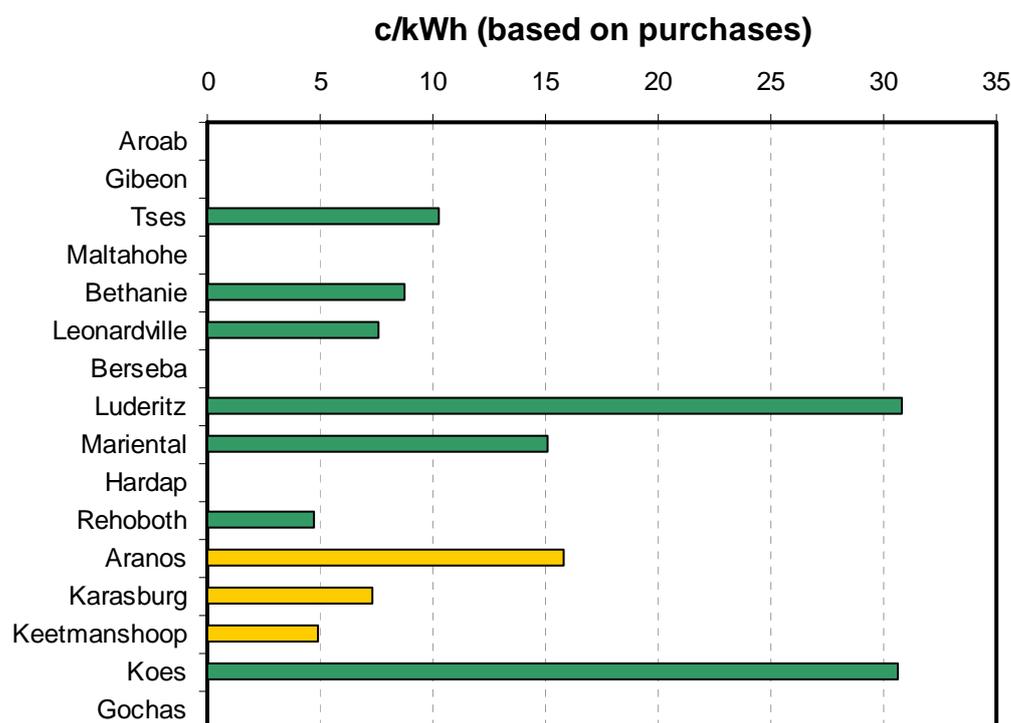


Figure 6: Southern RED - LA surcharge expressed as a c/kWh charge



7.4 Central RED

Please note that the information for the Central RED is still provisional. The final results will be confirmed once the ring-fenced statements have been verified.

Table 12: Central RED - Loan Compensation charges

LC charge		05/06	06/07	07/08	08/09	09/10	10/11
Gobabis	N\$	1 129 226	1 129 226	1 129 226	1 129 226	1 129 226	377 109
Witvlei	N\$	-	-	-	-	-	-
Windhoek	N\$	8 747 303	8 747 303	8 747 303	8 747 303	8 747 303	8 747 303
Omaheke	N\$	-	-	-	-	-	-
Okahandja	N\$	452 099	452 099	452 099	452 099	452 099	452 099
Total	N\$	10 328 628	9 576 511				

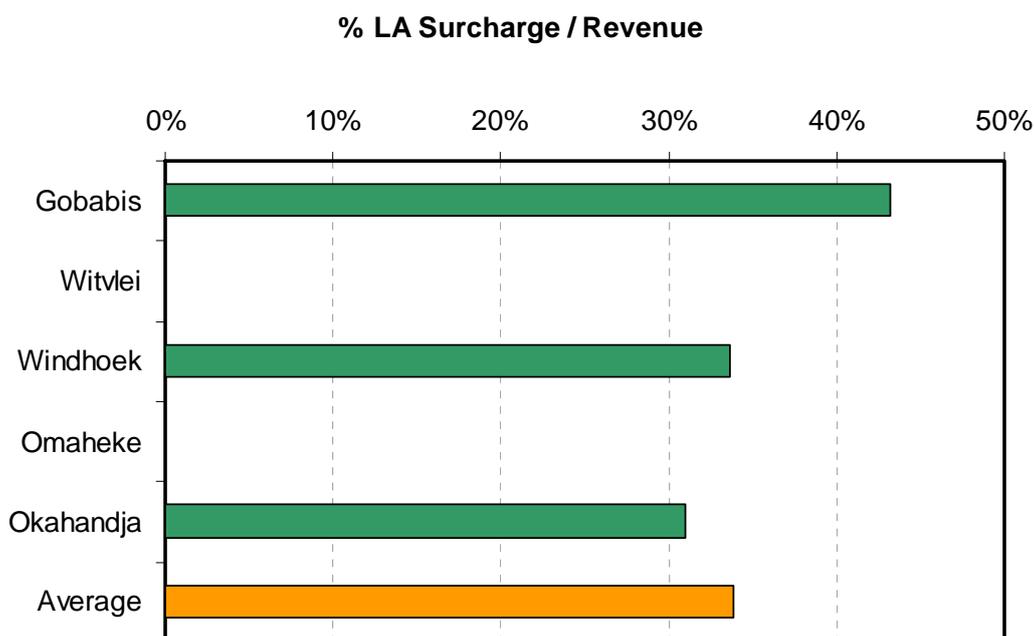
Table 13: Central RED: - Transitional Service charges

Transitional Surcharge		05/06	06/07	07/08	08/09	09/10	10/11
Gobabis	N\$	724 014	482 676	241 338	-	-	-
Witvlei	N\$	39 875	26 583	13 292	-	-	-
Windhoek	N\$	-	-	-	-	-	-
Omaheke	N\$	-	-	-	-	-	-
Okahandja	N\$	414 702	276 468	138 234	-	-	-
Total	N\$	1 178 590	785 727	392 863	-	-	-

Table 14: Central RED - LA surcharges

LA Surcharge		05/06	06/07	07/08	08/09	09/10	10/11
Gobabis	N\$	7 650 963	7 650 963	7 650 963	7 650 963	7 650 963	7 650 963
Witvlei	N\$	-	-	-	-	-	-
Windhoek	N\$	124 321 312	124 321 312	124 321 312	124 321 312	124 321 312	124 321 312
Omaheke	N\$	-	-	-	-	-	-
Okahandja	N\$	5 442 141	5 442 141	5 442 141	5 442 141	5 442 141	5 442 141
Total	N\$	137 414 415					

Figure 7: Central RED - LA surcharge as % of selling price



7.5 NORED

Due to NORED's unique history a special LA surcharge was developed for NORED's circumstances. The final recommendation was that NORED's LA surcharge should increase from 2 c/kWh to 4 c/kWh. It is also noted that NORED has a unique shareholder arrangement and that its financial position has enabled it to declare and pay-out dividends to its shareholders.

More information about the specific methodologies and results can be obtained from the ECB's report titled *Phase 1 Report: Development of Methodology to Determine a Local Authority Electricity Surcharge in Namibia* dated 8 July 2005.