



EThekweni Electricity Getting Their House in Order

Presentation by :-

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TABLE OF CONTENT

- 1.Introduction
- 2. Background
- 3.Projects undertaken by e`Thekwini Electricity.
- 4.The Audit of measurement & Metering Equipments
 - 4.1 Strategy Used
 - 4.2 Type of Faults
 - 4.3 Methodology
 - 4.4 Case Study - Bakery
 - 4.5 Conclusion

TABLE OF CONTENT...

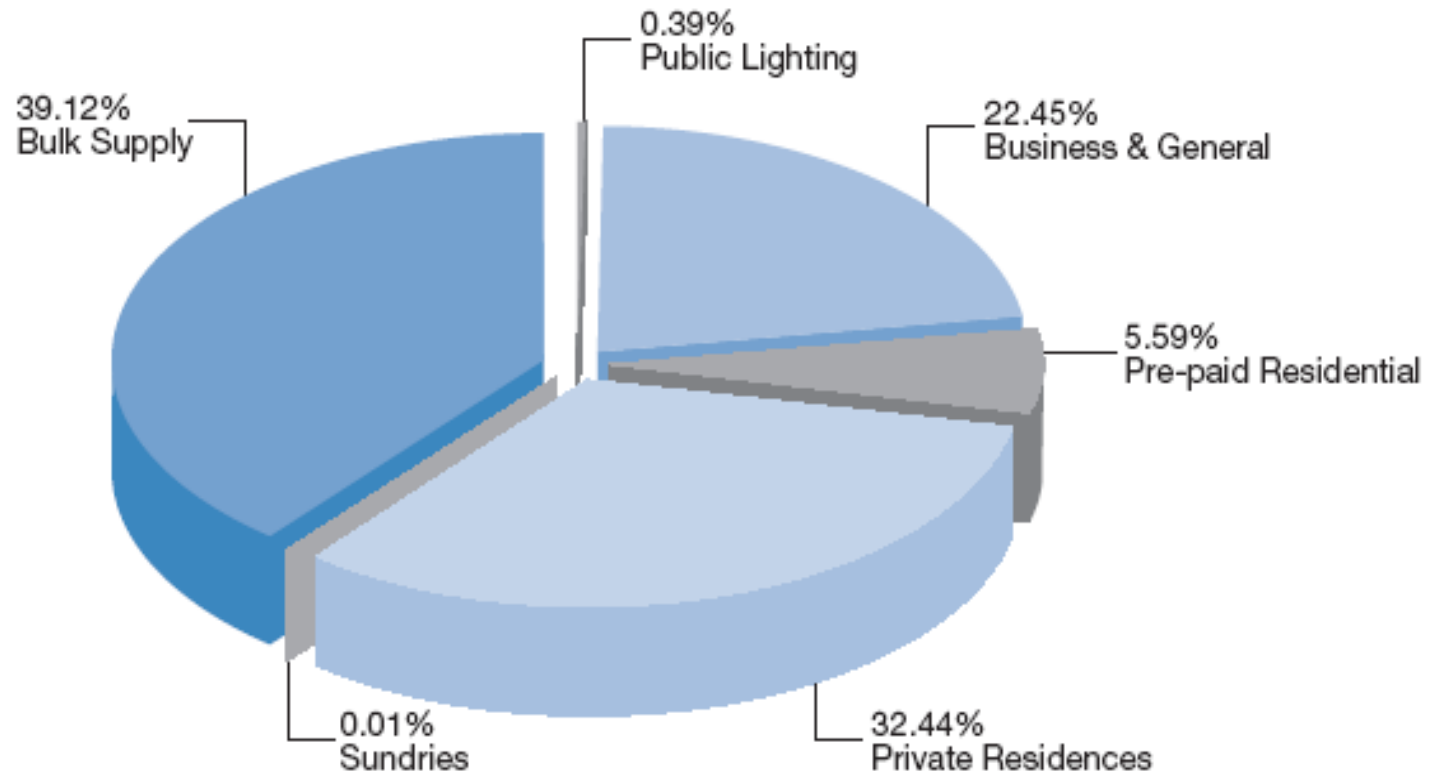
- 5. The Retrofitting and the use of Prepayment Metering System to enhance Revenue Collection.**
 - 5.1 Background**
 - 5.2 Tamper Rate**
 - 5.3 Methodology**
 - 5.4 Challenges**
 - 5.5 Results – Sales**
- 6. Conclusion**

Introduction

- EThekweni Electricity supplies more than 583 153 customers – Area +/- 2 000 square kilometres.
- Electricity (Main Supply) purchased from Eskom at 275 000 Volts.
- Also purchased electricity from Eskom for Tongaat and for the town of Mpumalanga at 11 kV.
- Electricity is transmitted and distributed for use by the full spectrum of customers ranging from the large, sophisticated industrial and commercial sector, to the rural and peri-urban informal community.
- Maximum Demand – 1890 MW
- Turn over - +/- 3 Billion
- Purchases almost 6% of the total Energy Generated by Eskom

Introduction...

Distribution of Revenue From Sales



Background

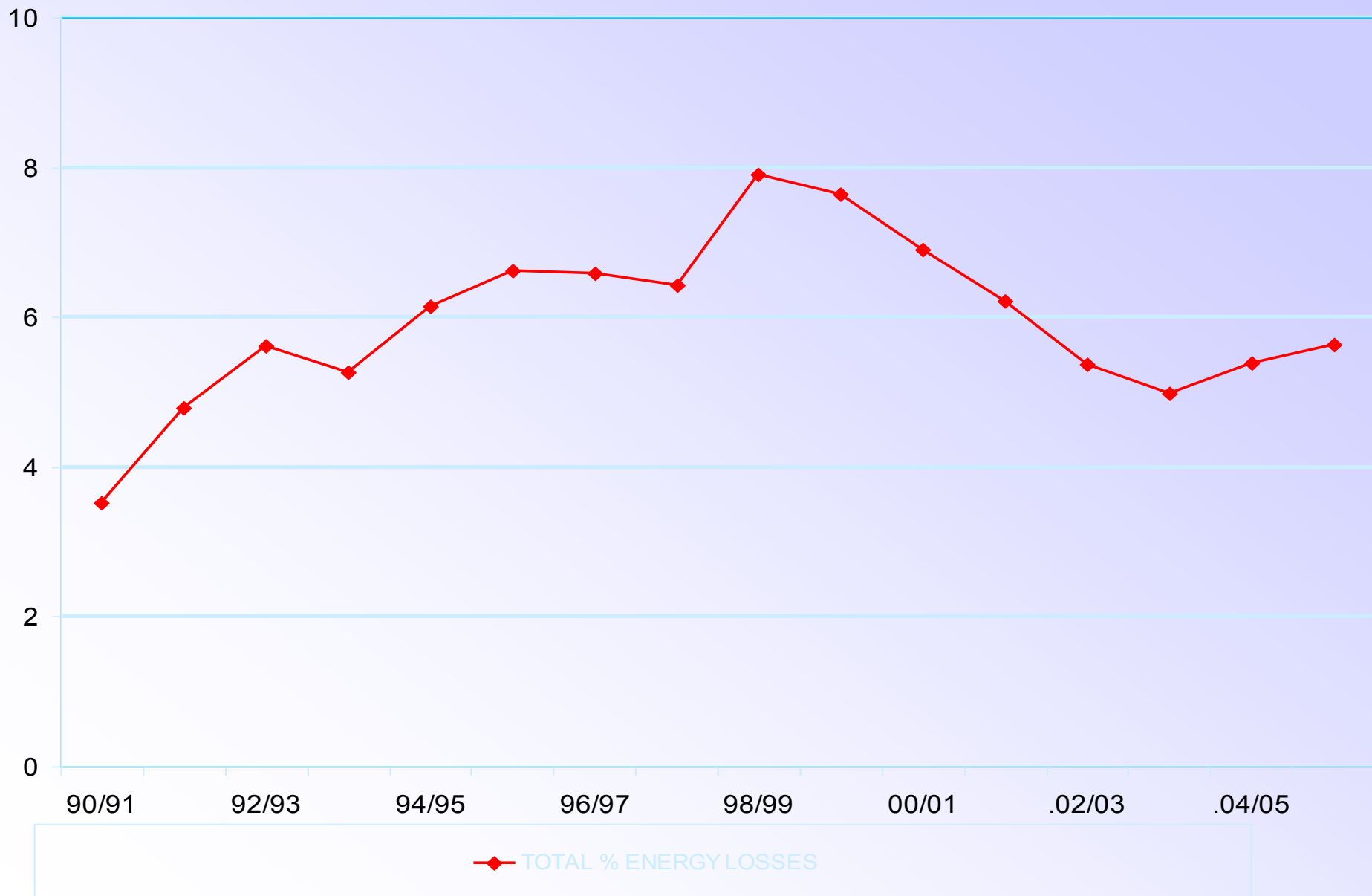
- **Restructuring 2004 – Formation of Revenue Protection Division within Customer Services & Sales Department.**

RP Division`s Objectives

- To ensure that energy losses (non technical) on the distribution network are kept to a minimum by :-
 - ✓ Effectively Disconnecting Customers who are in arrears to tighten Credit Control.
 - ✓ Removal of Illegal Connections.
 - ✓ Ensuring timeous reconnection for customers who have settled or made arrangement to settle their accounts.

Background...

Technical + Non Technical = Total Losses



Revenue Protection Projects

- Customer Audit using GIS Equipments & Data Clean up.
- Disconnection (+/- 150 000 per annum) & Reconnections (+/- 120 000 per annum)
- Removal Of Illegal Services – Informal Settlements.
- Installation of Protective Structures.
- Retrofitting of Conventional Meters
- ✓ The Audit of Measurement and metering Equipments
- ✓ The Retrofitting and the use of Prepayment Metering System to enhance Revenue Collection.

The Audit of Measurement & Metering Equipment

Why do Audit or Verification of Measurement & Metering Equipment ?

- Errors in meter installations may result in huge losses.
- Many possibilities in making incorrect connections during installation.
- In many cases, installation faults are rarely discovered at the time of billing and, sometimes, not recognised for many years. This results in considerable losses to energy suppliers.
- Comply with NRS 057.

Strategy Adopted

- Ensuring that Revenue Protection & Meter Engineering Divisions work hand-in-hand.
- Have the resources i.e. equipment, skills and ability, to carry out re-commissioning and verification of measurement and metering equipment
- Maintain a high level of equipment security by sealing the metering equipment with appropriate seals in accordance with the of e`Thekwini Electricity`s Code of Practice on the sealing of metering equipment.

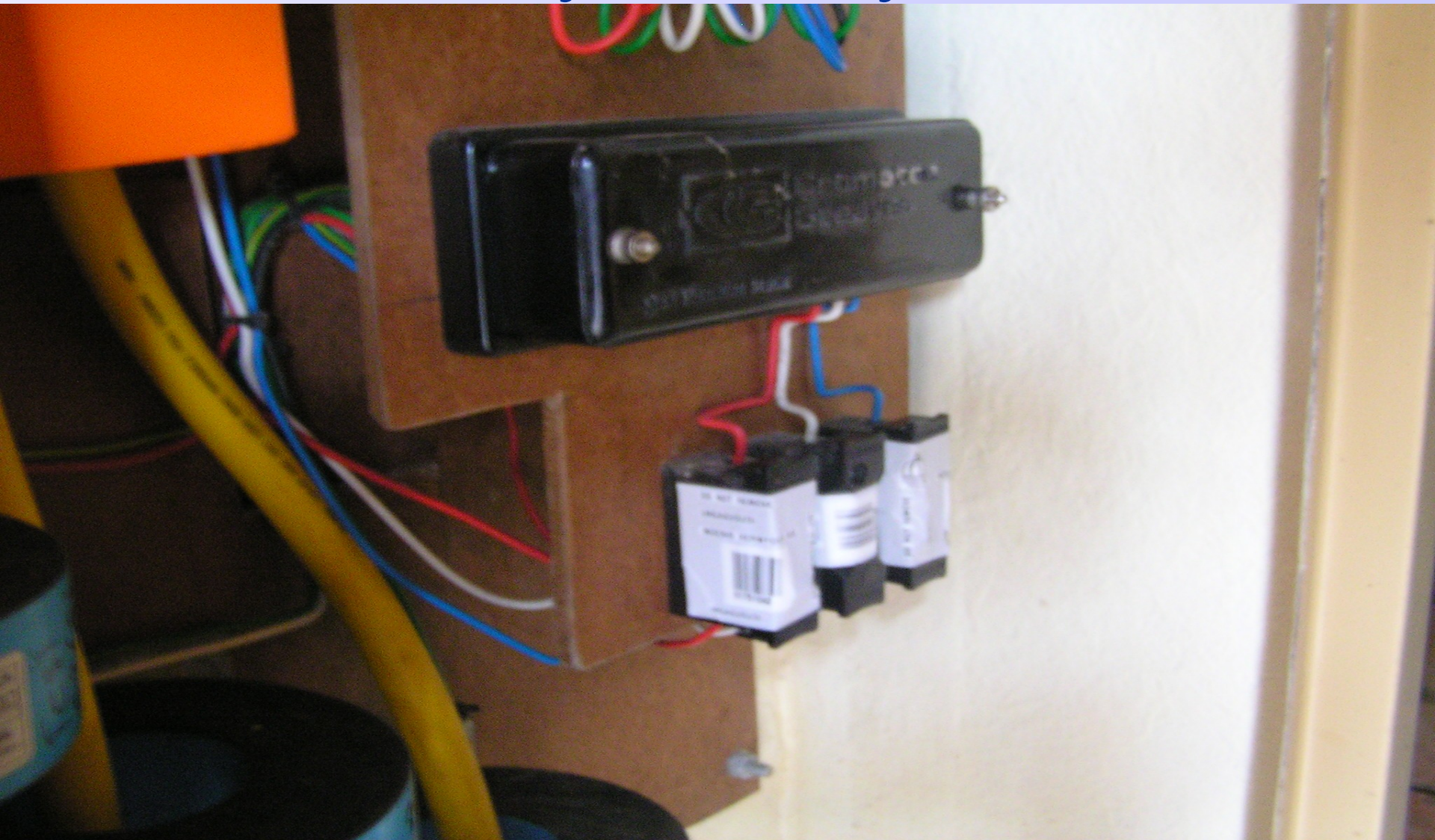
METHODOLOGY

- Compile CT Metering Module.
- Training of staff.
- Extract of CT Bussines Report
- On Site Inspection.
- Raising Backdated Consumption Charges
- Handling of account Queries.
- Settlement of Account – Legal Depart., Business Support Centre & Electricity Depart.

Type of Faults Found

- Faulty circuit – Fuse Blown, Damaged CTs or VTs, Reverse CTs, Faulty Meters, etc.
 - Reverse Polarity – meter will only register $1/3^{\text{rd}}$ of what it should register
 - Open Circuit Meter Fault - Meter will only register $2/3^{\text{rd}}$ of what it should register.
- Incorrect Billing Data
- No Seals
- Tampering – Deliberately Removing or blowing Fuses, Breaking Seals, ect.
- CT`s upgraded without EE permission or knowledge.

Case Study - Bakery



➤ 511040 kWh Raised = R 119 165

Conclusion

- This project has been a great learning experience for those involved.
- More than R 2 million backdated consumption charges raised & as a result, non-technical losses reduced.
- Shortage of Technical staff is a challenge @ e`Thekwini Electricity.
- Correct metering reading is vital for utilities to avoid a loss in revenue. EThekwini Electricity will have to use experienced and qualified staff or consultants to perform all the necessary audit inspections to ensure that meter errors do not go undetected.

Retrofitting and the use of Prepayment Metering to enhance revenue collection

1. Background

- To share the eThekweni experience wrt the losses incurred over the past years and remedy there of.
- Council Owned Flats / houses which were built over the past 48 years – Rental Purposes
- Council Owned flats began to be the political arena where various parties made promises to the communities in order to get their votes i.e. Houses / flats ownership.
- Soon after the '94 elections, the tenants started boycotting rent payments since the promises that were made were not kept.

Background...

- Arrear rentals and other services accumulated significantly in the Council Rental Units.
- As a result, the concept of consolidating accounts for Rental Units was introduced with the objective of using Electricity and Water as a leverage to recover arrear amounts.
- Due to poverty, disputes in respect of debts for services (Maintenance of flats, Promises made, etc) the tenants boycotted to pay for all services.
- This resulted in the high rate of tampering with electricity meters (“Operation Bypass”)

Arrears & Tamper Rate

AREA	TAMPER RATE	ARREARS
BAYVIEW	70%	R12 027 255
WESTCLIFFE	45%	R6 922 939
LAMONTVILLE	25%	R1 021 513
TOTAL		R19 971 708

Poor residents fight for lights

ZOUBAIR AYOOB

RESIDENTS of Beverly Castle flats in Dinapur Road, Merebank, formed a human chain yesterday between eThekweni Municipality officials and security guards and their electricity and water boxes, in an attempt to stop them disconnecting their electricity.

While residents were occupied at Beverly Castle, other officials disconnected electricity at neighbouring flats, including at the home of a day-old baby. The family was R138 in arrears.

Community spokesman Ebrahim Shaik said the municipality had failed to provide the free 50-kilowatt hours of electricity and 6000 litres of water they were promised.

"I had arrears of R2200 on my water, lights and rates bill. I offered to pay R1000 and the balance in instalments, but they insisted on the full amount.

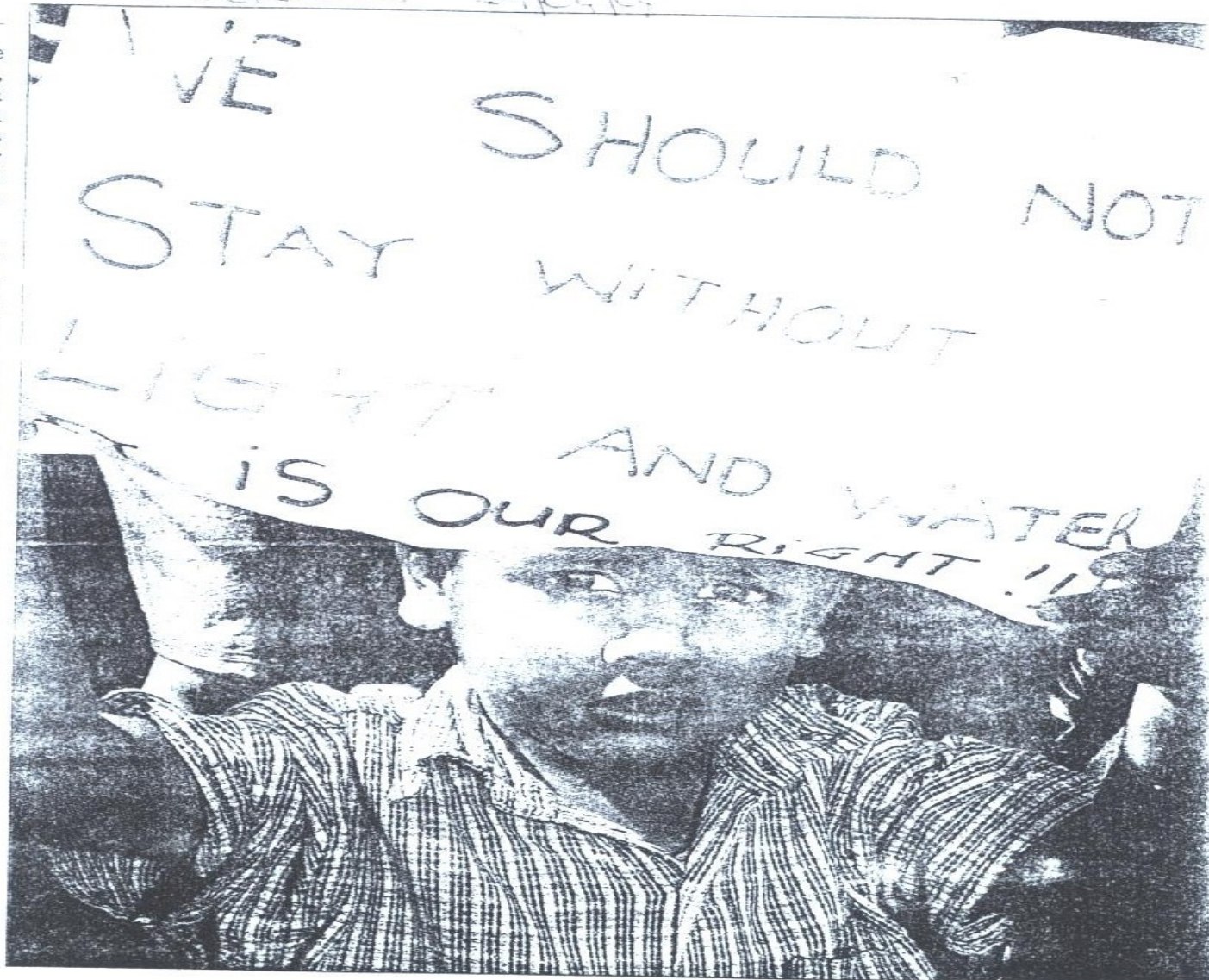
"We can't afford to pay, so we have been without electricity for two years," said Naomi Williams.

Other residents told similar stories. Some have been without water for years, and survive by bathing at neighbours' houses and by using hose pipes.

Residents who wanted to change to prepaid meters would, however, have to pay R739 to the municipality, and a further amount of about R500 to an electrician to make the connection.

Residents accused the municipality of intransigence in the face of their desperate plight.

Neil Macleod, head of the municipality's water services, and Howard Whitehead, head of electricity, were not available for comment.



CAMERON Moodley voices the feelings of Merebank's Beverly Castle flats residents, many of whom have had their water and electricity disconnected over the years

PICTURE: S'BU MFEKA

Mother sees teen son shot in front of her

Mercury 25 June 2004

LATOYA NEWMAN

A PHOENIX teenager died yesterday after he was shot, allegedly by a security guard escorting eThekweni Electricity Department workers who were disconnecting illegal connections and the electricity of residents in arrears.

Residents of Ringgreen Walk in Phoenix said that Marcell King, 18, was shot in the mouth while trying to assist his mother after a guard apparently hit her. King died en route to hospital.

Outreach worker Judy Chetty said the shooting occurred when people

approached the workers to find out about the pay-as-you-go system for electricity.

"We believe we can survive better on that. We had contacted a local newspaper to take a photo of us blocking the vans, to get the message across (of their desperation in not being able to pay their bills). So we asked the electricity guys to wait until the paper got here," she said.

Chetty said King's mother, Alaemane Dunn, had been sitting on the steps of one of the vans when a security guard "pulled her off and hit her".

Dunn said that as her son

approached her, the security guard who was hitting her pulled back and cocked his gun. Security guards at the top of the driveway then starting firing into the air.

"Then another security guard pointed his gun at her," she said.

"That's when my son stood in front of me and he shot him. He didn't even have a weapon."

Police spokesman Michael Read said: "No suspects have been arrested. They are unknown at this stage."

"The Serious and Violent Crimes Unit are handling the case. We've opened a murder docket and urge witnesses to come forward."

Durban City Manager Mike Sutcliffe said: "I was really saddened to hear about this young person, and my sympathies go out to his family."

"At this time, I don't want to comment, as it is clearly a matter for the police to deal with. The city believes in due process and we would like the police to conduct a thorough investigation into all aspects of the incident."

Howard Whitehead, head of Electricity for eThekweni, said they had an ongoing process of inspection and disconnection. They were experiencing a 2% revenue loss due to illegal connection and tampering.

Illegal electricity users charged

LATOYA NEWMAN

MORE than 20 residents from the Merebank area protested outside the Wentworth Magistrate's Court at the weekend in solidarity with others who had been arrested for illegal electricity connections after charges were laid against them by eThekweni Municipality.

Ebrahim Shaik, President of the Crisis Care Line, said people representing 23 other households gathered to support those arrested as well as to highlight their plight with electrical disconnections by eThekweni Municipality.

"These residents want to pay the municipality, but the requirement is that a large deposit must be paid before reconnection can happen and accounts can be paid off," he said. "We have poor people owing big amounts like

R45 000 and they can't afford the deposits," she said.

He said the people were pleading for debts to be written off and pre-paid meters installed so that they could control consumption and also pay in advance. But he said the municipality would not install the pre-paid system until debts were cleared.

"The smallest amount owing is R5 038 and the largest is R46 552," said Sandile Maphumulo of eThekweni's Electricity Department. "(The people) don't pay the outstanding amount and illegally connect. This raises their reconnection amount and they are still charged for theft of the units."

Court prosecutor Calvin Govender said the residents had been released immediately on warning and without bail.

The matter was adjourned to February 17.

Flat dwellers will 'resist' water and power cuts

BONGANI MTHETHWA

FRIDAY TIMES

DESTITUTE Chatsworth residents have vowed to resist attempts by the eThekweni municipality to cut off their water and electricity.

Residents have asked for a moratorium on disconnections because they say they entered into a partnership with the municipality for the upgrading of flats in the area.

Their call is also in solidarity with the recent death of a young Phoenix resident, Marcel King, who was allegedly shot by security guards escorting council employees to remove illegal electricity connections.

Bayview Flats Residents' Association chairman Brandon Pillay said it was wrong for disconnections to continue while negotiations were under way to upgrade council flats.

"Every time there are disconnections, residents have to bear with added charges for tampering or disconnection fees," he said.

He said residents' grievances were raised at a meeting on Monday be-

tween the Chatsworth Steering Committee and the municipality.

"I must reiterate that it's not because people don't pay for services, but because they can't afford to pay. We also believe that the debt owed is an apartheid debt. We've said that the municipality should give us a clean slate."

If the municipality ignored their call for a moratorium on disconnections, "we will resist them by putting up barricades."

"There is no way that we will allow them to cut off services."

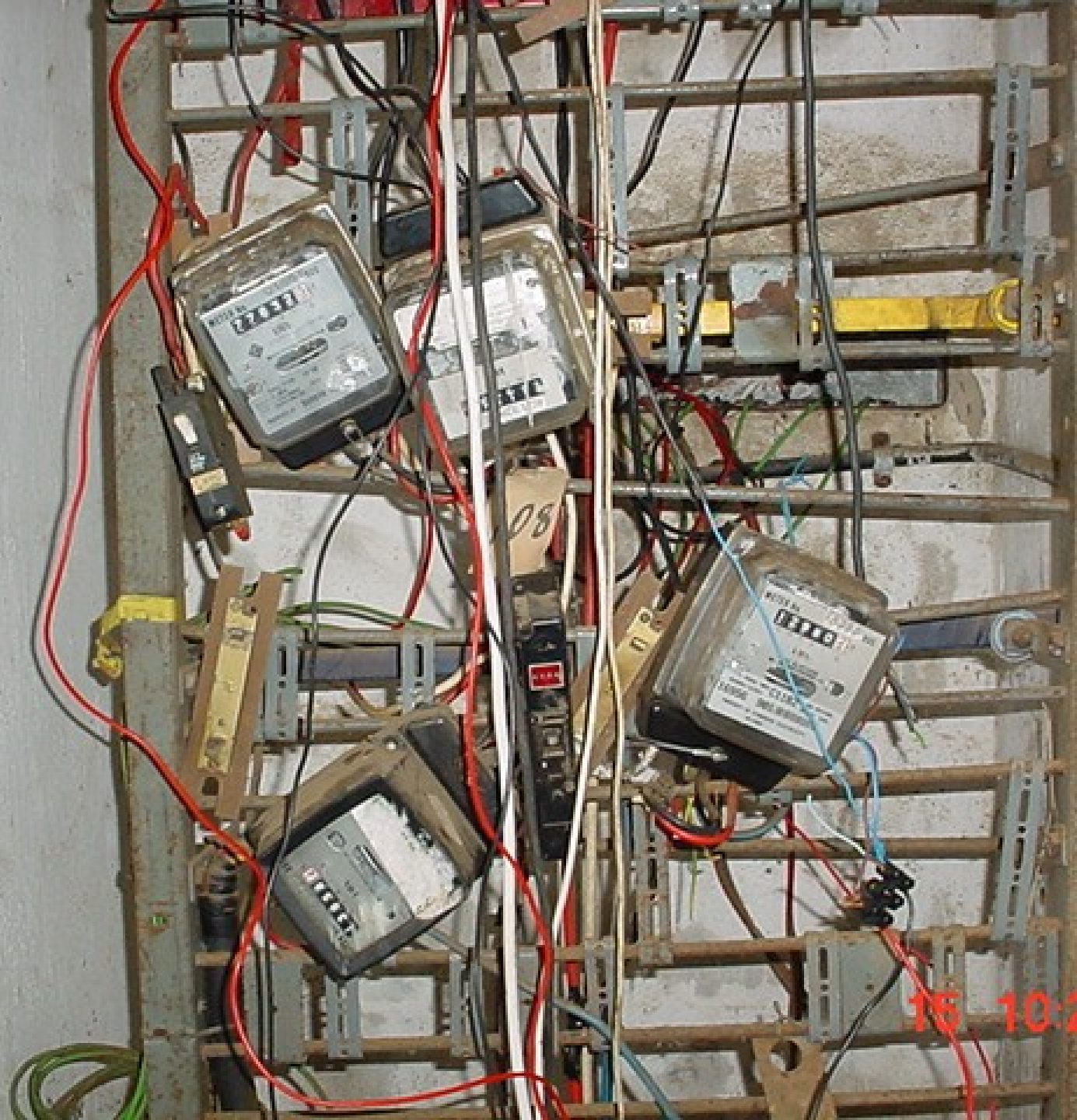
Deputy city manager Derek Naidoo said the municipality was not in a position to place a moratorium on either water or electricity disconnections.

He warned that the municipality would act against those transgressing the law.



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Methodology

1. COMMUNITY INVOLVEMENT
 - Gain support of the Councilors and Local Leaders
 - Community awareness campaigns.
2. PACKAGE DEAL FORMULATED AND ROLLED OUT TO THE COMMUNITIES I.E.
 - Housing Upgrade
 - Rewiring of flats
 - Acknowledgement of Debts (Rent ; Water; Electricity)
 - Free Basic Services etc.

Challenges

- Resistance due to non culture of payment
- They were calling for a complete wire off
- Customer adamant to change to a card system
- Poor performances by “electrical” contractors
- Theft of materials
- People who real can not afford.
- Damages on Meter Room Doors

Results – Sales

Area	No Of Arrear Customers	No Of Mtrs Installed	Arrears to be recovered	Revenue Collected
Bayview	647	708	R4 398 718	R867 174
Crossmoor	61	112	R395 210	R153 972
Merebank	24	24	R119 829	R58 446
Westcliffe	420	167	R3 926 871	R3 801
Total	1 152	951	R 8 840 628	R 1 083 393

Conclusion

- Revenue collected due to sales - R 1 083 393 since the installation of the prepayment metering system, this is the success on its own, taking into consideration that we have failed to collect revenue or to disconnect customers in these areas over a decade.
- Nothing is impossible - It took more than a year to negotiate with customers at all levels for this project to be implemented. One of the main objectives for this project was to instill the culture of payment for the services rendered to the customers and it has been achieved.

Conclusion

- A successful fight against electricity theft requires dedication to the Revenue Protection programmes at all levels of the organization. The involvement of the Deputy City Manager:- Procurement & Infrastructure on this project played a crucial role for this project to be successful.



THANK YOU

“He who passively accepts evil is as much involved in it as he who helps perpetrate it”

Dr. Martin Luther King jnr.