

SARPA Annual Conference 2010 - Gallagher Estate

SubMetering

Neal Douglass

Have we created a
Monster?

Definition

- SubMetering is the activity whereby any company, agent or person sells electricity for a potential profit.
- This excludes Managing Agents etc who pass on the purchased electricity at cost.

Market

- The Potential Market for SubMetering is any Supply Point that may benefit from a bulk electricity supply including-
 - Sectional Title Housing Estates
 - Free Hold “Walled” Housing Estates
 - Shopping Centers
 - Industrial Hives
 - Apartment Blocks
 - Retirement Villages

Market -/2

- Any other Supply point which can justify, by load, a Commercial or Large Power User tariff with sufficient down stream separate supply points (diversity) to enable a profit by charging those down stream supply points at the tariff that these down stream supply points would have been charged if they were to have been supplied directly by the local authority.

Power Measurement

- In 2003/2004 Cape Town Metropol introduced an electricity by-law requiring all municipal metering points to be outside the erf boundary in a separate locked cubical/room.
- Because of the increased costs to the developers we were approached by various Electrical Consulting Engineers requiring a more cost effective solution.

Proposed Solution

- We would take a bulk supply point, at the applicable bulk supply tariff and to do the internal metering ourselves.
- We supplied the internal metering and this was prepayment, post payment or a mixture as required - this now also includes for the supply of Smart Metering.
- The consumer was charged the applicable rate he would have paid if he were contracted to the Supply Authority directly.

PrePayment Solution

- We acquired, initially, two Supply Group Codes - 1 for our Farmers Solution and the other for our SubMetering Solution.
- Initially we sold electricity via a terminal in our office in Cape Town but later, as we grew, we contracted with the then Actaris and later with EasyPay to use their outlets for consumer sales.

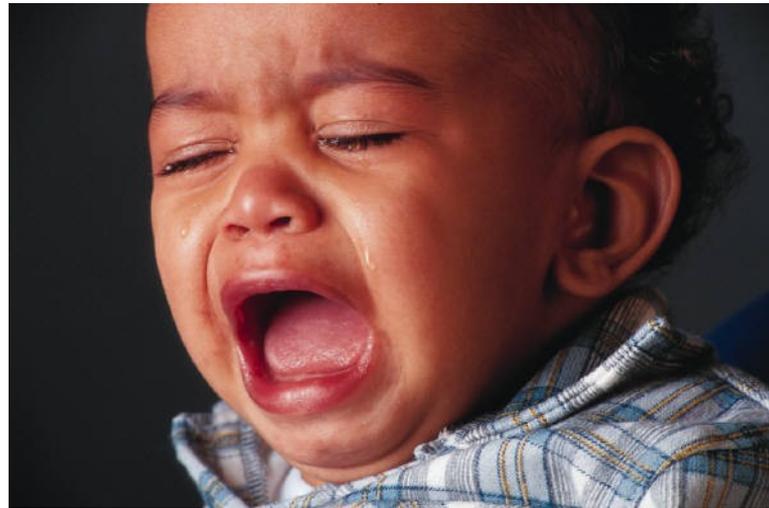
PrePayment Solution /-2

- Eventually because of the two different reporting structures we decided to consolidate our entire PrePayment data base with EasyPay.
- Hence our consumers could buy tokens at Pick 'n Pay, Checkers, Shoprite, Lewis stores, on-line and various other National Outlets.

PrePayment Solution /-3

- This solution was accepted by numerous developers and Consulting Electrical Engineers.
- In June 2004 we had 38 Residential PrePayment Consumers.
- In June 2006 we had 3,300 Residential PrePayment Consumers.
- In June 2010 we have approximately 24,937 Residential PrePayment Consumers.

So where's the Monster?



General Market Background

- There are, to our knowledge, at least 20 other companies offering a similar solution/proposal.
- Some of these companies such as ourselves, Itron, Landis & Gyr, PEC Metering etc are national and have substantial databases and some are smaller localized companies focusing on a select core.

Background continued

- There are SubMetering solutions in place and active in-
 - Cape Town Metropol, Saldanha, St Helena Bay, Hermanus, Kleinmond, Worcester, Mosselbay, George, Stellenbosch, Paarl, Knysna, Plettenberg Bay, Port Elizabeth, East London, Botrivier, Kimberley, Ethekweni, Tswane, Ekhurleni, and Hoedspruit that **WE** know of.

In Short

- SubMetering is National and affects all Eskom Regions and all Municipalities and there are probably in excess of

500,000

residential consumers that are serviced by the SubMetering service providers.

Financial Modeling

- We are now only addressing the Residential component of SubMetering and are using a real typical site (Abbeyfield, Parkland, Cape Town) that has a Bulk Supply from Eskom Western Cape.
- In the past Abbeyfield consumers received 50 kWh's free every month due to an arrangement between Eskom W Cape and Cape Town Metropol.
- Abbeyfield has 38 Residential Units and has an average Energy Consumption of 12230 kWh/month i.e. and ave. of 321.84 kWh/apartment/month.

July 2004 Financial Model

■ Purchases from Eskom

■ Monthly Service Fee @	R 118.10
■ Monthly Network Charge	R 253.25
■ 12230 kWh's @ R 0.2162	R 2,644.13
■ Total Cost	R 3,015.48

July 2004 Financial Model /-2

■ Sales

- 321.84 kWh's at R 0.3882 R 124.94
- R 124.94 X 38 residences R 4,747.65
- Less FBE of 38 x R 0.2162 R 410.78
- Less Cost of Energy R 3,015.48
- Gross profit of R 1,321.39 or 28% out
of which any replacement faulty meters, the 24
technical call out facility, our administration costs,
commission payments to EasyPay etc and our profit
was funded.

July 2010 Financial Model

- Purchases from Eskom
- 30 days Service Charge @ R 8.77/day R 263.10
- 30 days Network Charge @ R 29.65/day R 889.50
- 12230 kWh's @ R 0.5862 R 7,169.23
- Total Cost R 8,321.82

July 2010 Financial Model /-2

■ Sales

- 38 x 50 kWh's @ R 0.547 R 27.35
- 38 x 271.84 @ R 0.5848 R 158.97
- Total income/residence R 186.32
- Total income from Abbeyfield R 7,080.16
- Less cost of energy R 8,321.82
- A loss of R 1,241.66 or 17% before costs or the FBE is factored into the equation.

Why has this market changed

- Standard business practices has been ignored.
- The 1st steps or life-line tariff offered to the consumers is a subsidised tariff.

Consequences

- With an average loss of R 34.21/consumer/month PM&D stands to loose in excess of R 850,000.00/month
- To bad and hard luck?

Consequences /-2

- No because you The Utility will be left having to deal with the 500,000 residential consumers with multiple supply groups, multiple installation standards, multiple metering types.
- This is The Monster

Consequences /-3

- Are you ready, prepared and set-up for these challenges?
- Do you have the resources?

Proposed Solutions

- NERSA pass on, via a special tariff, the subsidies to us so that we can, in turn, pass on the subsidised tariff to our customers.
- We will issue all our qualifying consumers with a certificate indicating their annual consumption and the cost thereof and the consumer claims their subsidy form NERSA or their Local Authority.

NERSA Letter

- Attached to this presentation is a copy of our letter addressed to the CEO of NERSA and sent to him on the 4th May 2010 and again in early June 2010 to which we have received no response other than an acknowledgement of receipt of someone in NERSA that is leaving that establishment at the end of this month.

Reply from NERSA

Unfortunately I am very aware of the problems with sub-metering, which in the past have been problematic but relatively controlled. With the latest NERSA decisions on Eskom and municipal tariff structures, these issues have now been magnified a hundredfold. There are a number of implications which were not taken into account at the time the decisions were made. Unfortunately the block rate tariffs and subsidies for the low users were not handled through the public participation process, and have thus become a fait accompli without industry input. The decisions were made, and thus the potential solutions need to be sought, through NERSA Electricity Pricing and Tariffs Department. I would imagine that your letter has been referred to them to respond. There are a number of constraints however, including a lack of experience with the finer details of the implications of tariff structure decisions. Complete compliance with the Electricity Pricing Policy needs to be further examined in the search for solutions to the issues you have raised. In addition, there are legal constraints to making any changes to the municipal tariffs at this stage, so any solution is likely to be an interim one, more likely centering around changes to the way in which resellers charge rather than changes to the municipal (or Eskom) tariff structures. This might require each municipality allowing a moratorium on their bylaws governing electricity resale until a more equitable solution can be found.

Point of Interest

- Mr. Silas Zimu stated yesterday, during his Key Note Address, that “Distribution of electricity is only legal if NERSA Approved”.
- How do we get approved?

Questions

