SARPA's 14th National Annual Conference – 29th/30th July 2010

SubMetering – Have we created a monster?

Definition and Background to SubMetering, PM&D and our specific offer.

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

The market is any supply point that may benefit from a bulk electricity supply and includes Sectional Title Housing Estates, Free Hold "Walled" Housing Estates, Shopping Centers, Industrial Hives, Blocks of apartments, Retirement Villages and any other supply point which can justify, by load, a commercial or large power user tariff with sufficient down stream separate supply points to enable a profit by charging those down stream supply points at the tariff they would be charged if supplied directly by the local; authority.

Within our company, Power Measurement & Distribution c.c., we came into SubMetering almost by default. Because Cape Town Metropolis policy for cluster points of supply such as sectional title sites required for all the metering to be outside of the site i.e. on the sectional titles border, we were approached by various Electrical Consulting Engineers who were looking for a more cost effective solution for their clients, the Developers.

Our solution was for us to take over a bulk supply point and do the internal metering ourselves. This internal metering is prepayment, post payment or a mixture as required. The end user was charged the tariff that he would have paid if he were a direct consumer of the local supply authority and we paid the bulk account at the applicable bulk tariff.

This solution was proposed and accepted by numerous developers throughout South Africa in 2004. The solution has been so well accepted that we now have some 25,000 SubMetering customers of whom some 19,000 are prepayment.

SubMetering – General market background, size, distribution and involvement (commercial, domestic and industrial).

There are at least 20 other companies offering a similar solution/proposal. Some of these company's such as ourselves, Itron, Landis & Gyr, PEC Metering etc are national and have substantial databases and then some are small localized company's focusing on a select core.

We have SubMetering solutions in Cape Town, Parklands, Strand/Somerset West, Bellville, Brakenfell, Durbanville, Fissershoek, Hout Bay, Camps Bay, Sea Point, Retreat, Simons Town, Saldanha, St Helena Bay, Hermanus, Kleinmond, Worcester, Mosselbay, George, Knysna, Plettenberg Bay, Port Elizabeth, East London, Botrivier, Kimberley, Springs, Boksburg, Pretoria, Johannesburg, Hoedspruit and Durban.

In short SubMetering is national and affects every supply authority inclusive of Eskom and based on our experience and the number of companies offering a similar solution (20 as per our previous paragraph) we believe that there must be at least some 300,000 consumers serviced by companies such as ourselves.

Previous Market model

Using is a typical site (Abbeyfield in Parklands an Eskom supply area) where we offer the SubMetering solution our model looks as follows (please note this is a real site and uses real usage data)

Abbeyfield with 38 Residential Units has an average Energy Consumption of 12230 kWh/month.

Our reconciliation is then as follows –

Purchases (from Eskom)	
Monthly Service Charge @	R 118.10
Monthly Network Charge	R 253.25
12230 kWh @ R 0.2162 Energy charge =	R 2,644.13
Total Cost	**R 3,015.48**

Sales (to consumers)
Assuming all the residential consumers purchase the same amount of energy then it is –
12230 kWh/38 = 321.84 kWh/residence for the month.

321.84 X R 0.3882 =	R 124,94
R 124,94 X 38	
Total income for Abbeyfield =	**R 4,747.65**
Less 38 X 50 X R 0.2162 (FBE issued)	R 410.78
Gross Profit/month	**R 4,336.87**

The 30% gross profit margin was used to fund the replacement of faulty meters, our 24 hour technical call out facility (from all three branches), our administration costs, commission payments to the switching house, EasyPay, bank charges, vendors and our profit.

New market model.

The latest approved tariffs for Eskom, and on our understanding for all the utilities, make use of an upward sliding tariff for all residential customers. The Eskom sliding tariff is as follows –

0 – 50 kWh	R 0.5470
51 – 350 kWh	R 0.5848
351- 600 kWh	R 0.7635
601 and above	R 0. 8374

The Business Rate 3 Tariff is now R8.77/day Service Charge, R29.65/day Network Charge, R0.5634/kWh Energy charge and R0.228/kWh Environmental levy charge.

Abbeyfield with 38 Residential Units has an average Energy Consumption of 12230 kWh/month.

Our reconciliation is then as follows –

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 @ R 0.5862 Energy and Environmental Levy charge =	R 7,169.23
Total Cost	**R 8,321.82**

Sales (to consumers)	
Assuming all the residential consumers purchase the same amount of energy then it is –	
12230 kWh/38 = 321.84 kWh/residence for the month.	
50 X R 0.5470 =	R 27.35
271.84 X R 0.5848 =	R 158.97
Total income/residence =	R 186.32
Total income for Abbeyfield =	**R 7,080.16**

A loss of in excess of R 1,300.00/month on the one site alone and this excludes any FBE that might be given away.

Consequences

With an average loss of R 34.21/consumer PM&D is loosing in excess of R 850,000.00 per month and will be out of business with 6 months.

Too bad and hard luck?????

No because you The Utility will be left having to deal with in excess of 300,000 consumers with multiple supply group codes, multiple installation standards, multiple metering types. Are you ready, prepared and set up for these challenges? Do you have the resources?

Proposed solutions

We have proposed two possible solutions.

1. NERSA propagates, with immediate effect, a special SubMetering tariff. This tariff will have to allow for all SubMetering companies to be supplied energy at a cost below which they are required to supply the energy to the end users. This might require an additional special tariff for the energy supplied to the Supply Authorities to enable the Supply Authorities to supply the energy at this special SubMetering Tariff.

2. We, PM&D, will supply each of our customers, on an annual basis, with a certificate of their energy consumption for the previous 12 months and these customers can then, in turn, use these certificates to claim and FBE or subsidised tariff that they might have been eligible too. The issue is then from whom do they claim this subsidy from and how.

Attachment – Letter addressed to NERSA