MUNICIPAL TARIFF CHALLENGES

Ir Leon Kritzinger
28 September 2010
What lies behind us and what lies before us are tiny matters compared to what lies within us.

Walt Emerson
Challenges

1. Payment of Eskom account
2. Compiling fair tariffs to recover costs
3. Cross subsidies
4. Sustainability
Centlec statistics

- Municipal Entity – MFMA & Companies Act
- NMD’s 323 & 40 MW
- Buy on Megaflex tariff (TOU)
- Opex 2010/11 R 1 403m
- Capex 2010/11 R132m
- Customer base 177 000
- Residential 98% of customer base
- Residential income 48%
- SDA’s Mohokare, Naledi, Kopanong, Mantsopa
Challenge 1: Payment Eskom Account

- Tariff increase announcement date
- Actual increase
- Payment timing
- Cash flow problem
Historic Information

- Announced Eskom Tariff increased to LG average 34%
- Announced on 25th June 2009
Actual increase experienced

• ..\AMEU Presentation 2010\Eskom Account Comp 20100422.xls
<table>
<thead>
<tr>
<th>MONTH</th>
<th>UNITS</th>
<th>TARIFF</th>
<th>CHARGE</th>
<th>PERCENTAGE INCREASE (month on month)</th>
</tr>
</thead>
<tbody>
<tr>
<td>May-09</td>
<td>58892640</td>
<td>0.0952</td>
<td>5,606,579.33</td>
<td></td>
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<tr>
<td>Jun-09</td>
<td>59889120</td>
<td>0.1097</td>
<td>6,569,836.46</td>
<td>15.23%</td>
</tr>
<tr>
<td>Jul-09</td>
<td>62510880</td>
<td>0.157</td>
<td>9,814,208.16</td>
<td>43.12%</td>
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</tbody>
</table>

**High Season Peak Energy Charge**

<table>
<thead>
<tr>
<th>MONTH</th>
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<th>PERCENTAGE INCREASE (month on month)</th>
</tr>
</thead>
<tbody>
<tr>
<td>May-09</td>
<td>22401120</td>
<td>0.2162</td>
<td>4,843,122.14</td>
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<tr>
<td>Jun-09</td>
<td>27393120</td>
<td>0.762</td>
<td>20,873,557.44</td>
<td>252.45%</td>
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<tr>
<td>Jul-09</td>
<td>31341600</td>
<td>1.1279</td>
<td>35,350,190.64</td>
<td>48.02%</td>
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</table>

**High Season Standard Energy Charge**

<table>
<thead>
<tr>
<th>MONTH</th>
<th>UNITS</th>
<th>TARIFF</th>
<th>CHARGE</th>
<th>PERCENTAGE INCREASE (month on month)</th>
</tr>
</thead>
<tbody>
<tr>
<td>May-09</td>
<td>56182560</td>
<td>0.1341</td>
<td>7,534,081.30</td>
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</tr>
<tr>
<td>Jun-09</td>
<td>66450240</td>
<td>0.2015</td>
<td>13,389,723.36</td>
<td>50.26%</td>
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<tr>
<td>Jul-09</td>
<td>72551520</td>
<td>0.2934</td>
<td>21,286,615.97</td>
<td>45.61%</td>
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</tbody>
</table>
Cash Flow: Synchronise Payment Cycles

May
- 2nd Eskom Bill
- 15th May Eskom Paid

June
- 17th May All Cust Payments
- 15th Jun Eskom Paid

July
- 17th Jun All Cust Payments
- 15th July Eskom Paid

The
- 10th May bulk have paid
- 10th Jun bulk have paid
- 10th Jul bulk have paid

- 15th May Eskom Paid
- 15th Jun Eskom Paid
- 15th Jul Eskom Paid

17th Jun cust rest have paid
17th Jul cust rest have paid
“...Electricity supply agreements are entered into with key international customers who comprise utility companies and governments of neighbouring countries. These customers are not required to provide any security...

Payment terms vary between customer class as follows:

Key international customers 10 to 45 days,
Key and large power users (SA) up to a maximum of 15 days...”
Cash flow

- Shortfall of R39m
- Cash flow problem
- Timing problem – payment vs receipts
- Take months to recover
- Interest added aggravates problem
- Cash Flow Graph.xls
Challenge 2: Compiling fair tariffs

- Different tariff structures
- No control on customer migration
Current Tariff Structure

- Inclining Block Tariff (Residential Tariff).
- Declining Block Tariff (Commercial Tariff).
- TOU (Time-Of-Use Tariff) a variable tariff based on the time that the energy was used.
  - Homeflex (Residential TOU Tariff)
  - Commflex (Commercial TOU Tariff)
  - Elecflex (AMR TOU Tariff for Bulk Consumption)
One Part Tariff

Typical Prepaid Tariff

Cost

Rand

Units in kWh
Three Part Tariff

• Fixed cost per month
• Variable cost – units consumed during a month  c/kWh (c/unit)
• Max. Demand Charge (max half hour consumption per month) - R/kVA
  – Only measured in peak times
Declining Block Tariff

Units in kWh

Cost
Rand

Declining Block Tariff
Gazette Sep 2008

- To save and manage electricity all larger users to be switched to TOU tariffs.
- Households with consumption > 1000kWh per month to be converted to TOU by Jan 2012.
- Metering systems to be replaced with suitable Smart Metering systems.
- Feedback information to enable customers to manage consumption.
By Laws

• By-Law 57 extract.doc
Without hard work, nothing grows but weed.

Gordon Hinchley
Challenge 3: Cross subsidies

• Who is subsidising whom?
• Cost of Free Basic Electricity
Typical figures

- Sub_Metering_20100910.xls
Tariffs

• Residential
  – 2010_MLM_ResidentialTariff_1441.pdf

• Commercial
  – 2010_MLM_CommercialTariff_1442.pdf

• AMR TOU
  – 2010_MLM_BulkTariff_1443.pdf
Cross subsidies

- TOU implementation residential customers
- Townhouse complexes
- Centlec tariff comparison fin.xls
Challenge 4: Sustainability

- Recover cost
- Pos cash flow
- Supply integrity
Defining the Problem

Nature of the problem: Energy vs Demand

<table>
<thead>
<tr>
<th></th>
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<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
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</thead>
<tbody>
<tr>
<td>Gap</td>
<td>1.7%</td>
<td>0.5%</td>
<td>3.6%</td>
<td>3.5%</td>
<td>1.6%</td>
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<tr>
<td>+Buffer</td>
<td>0.3</td>
<td>2.4%</td>
<td>5.5%</td>
<td>5.3%</td>
<td>3.4%</td>
</tr>
</tbody>
</table>

Initial Gap (Reserve)

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<th>2012</th>
<th>2013</th>
<th>2014</th>
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<tr>
<td>15.9%</td>
<td>13.3%</td>
<td>12.4%</td>
<td>10.1%</td>
<td>14.9%</td>
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</table>

Energy Availability rather than Capacity is the challenge!
Conclusion

• Eskom tariff increase announced by Dec
• Funding for Smart metering – Jan 2012?
• Uniform payment conditions
• Season tariffs – applicable?
We must become the change we want to see

Mahatma Gandhi
Questions?

THANK YOU