

ADDRESS BY O Aphane, Department of Energy

**ASSOCIATION OF MUNICIPAL ELECTRICITY UNDERTAKINGS
(AMEU) CONVENTION - STELLENBOSCH**

27 SEPTEMBER 2010

President of the AMEU Mr. _____, President Elect Mr. _____,

Honorary Members and Past Presidents present here today,
our foreign guests, Dignitaries, Ladies and Gentlemen, I am
grateful that you invited me on this occasion of the AMEU
Convention for 2010.

I am honoured to speak on behalf of the Minister of Energy
who is unable to attend the proceedings here this week.

The AMEU is an important stakeholder as we grapple with the
challenges that the electricity sector faces. Last year we
outlined a set of issues that we had identified as priorities for
the year, in order to take the electricity distribution sector
forward as it grapples with the challenges it faces. To recap, we

had indicated that some of the priorities that government was driving included:

- On the supply side, the power stations are performing sub-optimally as they edge closer to their end of life. We had started to see a declining system performance not inconsistent with 30- and 40-year old plant. We indicated that were it not for the global economic downturn that started in September 2008, we would have struggled to continue keeping the lights on.
- In April this year we announced that electricity tariffs would increase by an aggregate 25% this year and for the next 2 years, against a backdrop of 20% of our households lacking access to electricity. We are not lost to the central role that the Municipalities play as a key component of the state machinery, and your role had been identified at the centre of electricity security, which is crucial in the quest to create jobs.

- We indicated that the disparity in the service provision takes a number of dimensions – credit worthiness, tariff levels, service standards, maintenance backlogs, Free Basic Electricity provision, quality of customer service, skills capability etc. we need to start dealing with the estimated R27bn infrastructure refurbishment backlog, or the estimated [R5bn] in bad debts and related credit control problems.

We have been fairly successful in managing the distribution sector during the FIFA World Cup, and network interruptions were reduced to a minimum in the middle of the winter *nogal*. We need to find a way of mobilizing municipalities around a similar rallying point, in order to move into the highest quartile of distributor performance. The World Cup experience did indicate that it is possible for South Africa to eliminate unplanned power disruptions, if we put our hearts and minds to it.

Now there are 187 licensed municipalities plus Eskom, providing disparate services to a captive domestic and industrial user and this is perhaps the challenge we would like to focus on this year.

Where South Africa's infrastructure spend over the past few years peaked with the infrastructure investment in preparation for hosting the FIFA World Cup 2010, this has also buoyed the country against the full impacts of the global financial crisis in 2008. Infrastructure maintenance has been and remains a critical challenge to economic development in the country. Studies show that there is a correlation between the country's investment in infrastructure and its growth indicators.

Over the years there has been inadequate investment in economic infrastructure and the backlogs continue to grow. Consequently economic growth has been constrained by the lack of infrastructure in some instances, and in other instances by the infrastructure going into disrepair due to inadequate investment in maintenance.

This problem stems from the lack of long term planning in a manner that takes into account projected economic demand growth. The lack of co-ordination between capital investment programs by the public and private sectors, including its sequencing and financing, leads to poor harnessing of potential synergies that exist for the countries common good.

Funding in a constrained economic climate is an additional problem, but we have not been able to manage this through innovative approaches to mitigating the financing risks. Poor leveraging of finance sometimes leads to investments in old technologies, in a cost cutting attempt which in the long run becomes costly for the country in time and financial terms.

The lack of adequate electricity distribution infrastructure in certain geographical locations in South Africa has been identified as a constraint to economic growth. Whilst access to electricity might be seen as a social program, there is correlation between access to electricity by households and economic growth. Consequently mechanisms need to be put in place to ensure that universal access is not a constraint to economic growth.

Lack of maintenance and refurbishment

Maintenance of economic infrastructure does not enjoy the level of priority commensurate to ensure sustainability and reliability of the service. In some sectors the problem is due to service providers appropriating inadequate levels of funding for maintenance, and in others the problem is due to the funding not being used for the intended purpose. Poor maintenance leads to accelerated asset degradation and if there is no investment in refurbishment, the infrastructure will reach a state of complete degradation– the problem of infrastructure that needs complete overhauling is commonplace in the electricity distribution sector.

Poor maintenance and refurbishment of infrastructure can be located in the lack of enforcement of regulatory instruments. Are we perhaps guilty as policy makers and as the regulators of the sector, of not ensuring that budgets provided for maintenance programs are monitored for compliance with some predetermined norm and standard? In some cases incentives are provided to utility managers, which direct them against investments in maintenance in a perverse manner – for

example, where bonuses for managers are linked to the budget savings that have been achieved.

A particular problem that is prevalent in municipalities is the lack of institutional capacity for maintenance, due to skills shortages. Generally, there is a lack of sector specific asset management policies, life-cycle management models and management capacity for executing maintenance to the desired standard.

Increasing electricity tariffs

The need for capital investment will undoubtedly lead to upward pressure on tariffs. We need to mitigate the adverse impact of electricity tariff increases on the poor through a number of mechanisms over and above the Free Basic Electricity Programme. The first mechanism is based on inclining block tariffs and the second one is related to the savings on the electricity bill derived from, amongst others, efficiency improvements through the solar water heating programme. As you might be aware, we announce a programme to retrofit electric geysers with solar water heaters.

For example, the tariff increase applicable to the indigent will be the lowest part of the block tariff proposed by NERSA, and this is (minus 10%) for year 1 for consumption below 50 units per month, followed by 5.4% for year 2 and 5.5% for year 3. The highest increase is applicable to customers who consume more than 350 units per month, and this is in line with the 'user-pays' principle.

We need to work together with municipalities to ensure that metering technology is not a constraint to implementing such measures for protecting the poor. We are aware that where prepaid technology is used, the implementation of block tariffs remains a challenge. In the meantime we call on municipalities to apply surcharge increases in a manner that is sensitive to the circumstances of the indigent.

Energy efficiency

The low electricity tariff has also worked against efforts to use electricity more efficiently, particularly in the industrial and

commercial sectors. We estimate that there is at least a 30% upside in energy efficiency opportunities that South Africans can harness. In other words, that is the extent of our energy wastage and we need to do something about it.

The integrated resource plan (IRP2010), will be promulgated soon, and will indicate demand side options as well, particularly energy efficiency interventions. Energy efficiency interventions at the domestic level can only be effected with municipal collaboration.

Since NERSA promulgated renewable energy feed-in tariffs for a number of clean energy technologies, we have kick-started the process of procurement of clean power. This week we intend to issue a Request for Information regarding clean energy opportunities that are ready for introduction into the

grid, as we give practical meaning to the target of 10TWh of renewable energy by 2013. Invariably the renewable energy projects are located in areas where the biggest need for employment and infrastructure development are located. Municipalities could play a key role in ensuring access to land, environmental impact assessment, connection to the distribution network, local community mobilization etc. The socio-economic potential and impact of renewable energy must be maximized through collaboration with municipalities.

Conclusion

Electricity distribution has been characterized by supply disruptions which impact negatively on the economy. We identified the following key issues that when successfully addressed, will significantly improve the distribution and sustainable supply of energy for the country:

- (i) the introduction of a long term planning framework (Integrated Resource Plan or IRP). The need to provide a

long-term plan for electricity capacity expansion is premised on the need to trigger timely investment decisions that will be in tandem with economic growth. Historically South Africa has either over-invested in new power stations, or delayed investments to such an extent that energy security has been jeopardized. This problem is based on the lack of a co-ordinated approach to initiating timely investments, exacerbated by the lack of a long-term plan that provides certainty about the investments necessary for the sector. The IRP is designed to address this problem. It also provides a framework for meeting other government objectives for the electricity sector, including diversification from coal as a dominant source of or primary energy, curbing environmental degradation caused by the sector (through renewable energy and energy efficiency) and aligning with the Growth Path set for the country.

- (ii) the IRP must be accompanied by the development of a funding model for the capital program of the country, including distribution network rehabilitation. We need to start a process of mapping all the critical distribution infrastructure, with view of identifying the hotspots and to refurbishing the affected networks.

- (iii) the introduction of a regulatory framework that defines distribution sector norms and standards that are enforceable, and that will improve the asset management in the sector,
- (iv) increasing access to electricity by domestic households.

The distribution leg provides the critical interface with the end-user in the electricity value chain. Whilst it is necessary to build new power stations and to increase supply capacity, it is equally important that the integrity of the distribution sector is improved for energy security. The reliability of municipal distribution infrastructure in particular, is compromised by huge backlogs in maintenance and refurbishment. Reliability can be improved through the reduction of current levels of maintenance and refurbishment backlogs in municipalities and Eskom (currently estimated at R27bn) to the targeted R15 billion by 2014.

The reduction of distribution infrastructure maintenance backlogs to R15bn by 2014 can be achieved through a tariff-funded program, which would be earmarked for the purpose and without any fiscal support. Municipal distributors would

access the funding subject to agreeing to use the funds on the conditions set for them. As an illustration, a 1c/kWh refurbishment levy could provide about R600m annually.

We need to make such interventions, so that we can improve the reliability of the electricity distribution sector.

I thank you.