

# **The Planned Regional Electricity Distributors (REDS) for Namibia**

## ***Introduction and Background***

The Energy White Paper was developed by the Ministry of Mines and Energy and published in May 1998. The energy policies contained in the white paper were designed to achieve the following goals: Effective Governance, Security of Supply, Social Upliftment, Investment and Growth, Economic Competitiveness and Efficiency & Sustainability.

In accordance with the policy to increase sector efficiency “Government will investigate options for improving sector efficiency through electricity supply industry (ESI) restructuring”, the Ministry of Mines and Energy embarked upon a detailed ESI restructuring study. The study commenced in 1998 and lasted 2 years during which extensive stakeholder consultations took place. The Namibian Cabinet approved the recommendations of the ESI restructuring study in 2000.

## ***Problems with the current Electricity Distribution Industry (EDI)***

The main problems with the current EDI can be summarized as follows:

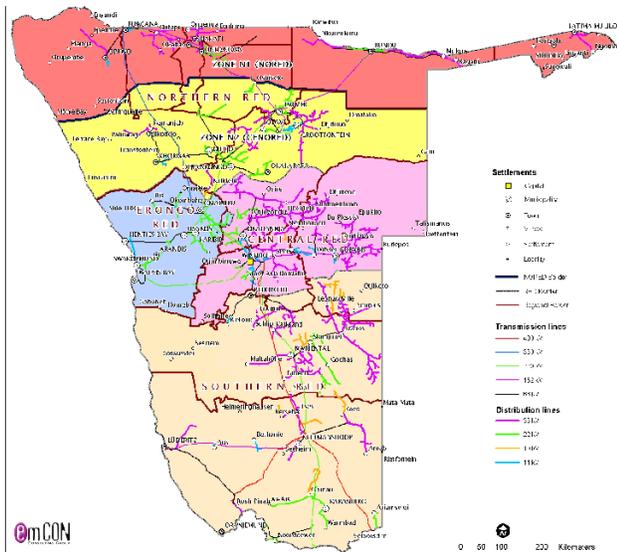
- The large number of individual distributors (almost 50) is not practical for a small country (in terms of population) like Namibia and leads to the loss of economies of scale;
- The large number of distributors also led to a proliferation of a large number of electricity tariffs, often not cost-reflective, with resulting efficiency losses as well as large differences in quality of supply and service to customers amongst the multitude of distributors;
- The large number of distributors also led to diverse financial performance of the multitude of electricity distributors. Typically large distributors like Windhoek and Wlavis Bay financially outperform the smaller distributors like Okakarara and Usakos;
- There is a lack of adequately skilled and experienced human resources in the EDI contributing to inefficiencies in the sector. This is especially notable amongst smaller distributors;
- Many of the current distributors are financially not capable of making the necessary large investment requirements in the short to medium term. Most of Namibia’s distribution infrastructure was developed in the 1960’s and 1970’s: distribution infrastructure has a lifetime of about 30 years and hence the time has come for replacement of these assets at a very high cost. Because the required investments are not made in time quality of supply has been deteriorating

- Most current distributors have insufficient customer focus, leading to poor quality of service;
- Many of the current distributors are unable to plan, finance and sustain electrification programmes in their areas of distribution;

The above problems are significant and, if not addressed as soon as possible, could lead to a totally unsustainable distribution industry in Namibia. Because distribution lies at the bottom end of the ESI value chain (Generation – Transmission- Distribution) an unsustainable distribution industry could render the whole ESI unsustainable.

### ***The Electricity Supply Industry (ESI) restructuring study recommendations for the EDI***

The main recommendation was the establishment of REDs in Namibia. A RED is an asset-based company that is directly responsible to distribute and supply electricity to customers within a defined, large geographic area. The shareholders of a specific RED are all the previous individual distributors. Shareholding is determined by the depreciated replacement asset value (50% weighting) and the average amount of unit sales (50% weighting). The envisaged 5 REDs for Namibia are NORED, CENORED, Erongo RED, Central RED & Southern RED, as indicated in the map on the right.



### ***The Advantages of REDs***

The main advantages of the establishment of REDs can be summarized as follows:

- Economies of scale will lead to lower electricity prices to the electricity consumers.
- The pooling of human, operational and capital resources will lead to reductions in cost.
- A company specializing in only electricity distribution will be better focused to meet the current, significant distribution challenges.

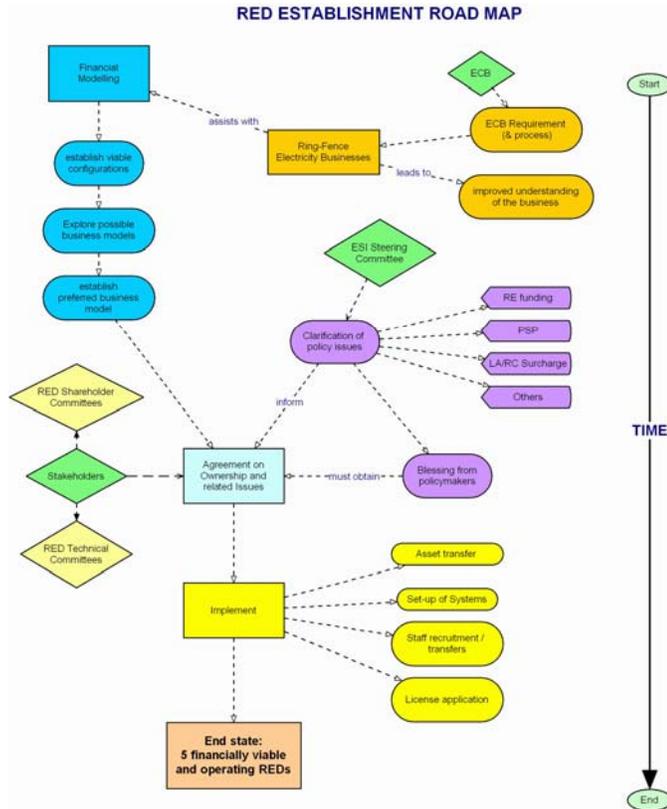
Through the above competitive advantages, REDs will be in a much stronger position to address the problems in the distribution industry than the current fragmented EDI players, thus having the greater potential in bringing quality, uniformity, viability and sustainability to the electricity distribution industry in the long-term.

### Progress on the establishment of REDs

NORED was the first RED to be established and operationalised in Namibia in 2002. CENORED was established in 2003 and recently became operational in October 2005. Erongo RED has been established early in 2005 and became operational in July 2005. The Central and Southern RED are planned to be established during this year and should be operational by July 2006.

In 2004 the Ministry of Mines and Energy outsourced the management of the establishment and operationalisation of REDs in Namibia to the Electricity Control Board (ECB).

The ECB appointed Emcon Consulting Engineers through an open and transparent tendering process to assist us in this process. Since then regular, monthly technical and policy meetings have been held and significant progress has been made with regard to the principles for shareholding in, corporate governance of, capitalisation of and staff transfers to the REDs. The process whereby REDs are established is graphically illustrated in the above figure:



### Challenges facing the establishment of REDs

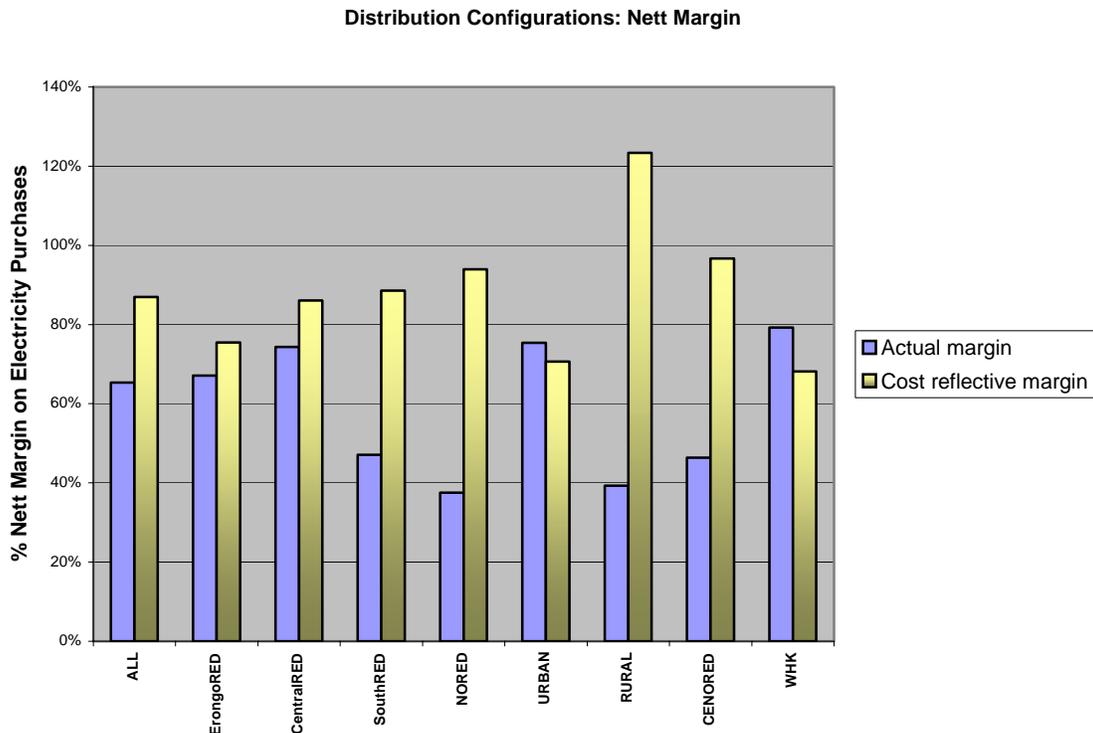
Local Authorities have been using electricity sales to subsidise other commercially non-viable services. Special legal and contractual arrangements are being prepared to ensure that Local Authorities do not lose these revenue streams with the establishment of REDs.

Significant capitalisation funds are required to ensure that the RED will be able to conduct its operations effectively. The ECB held a successful workshop in March 2005 that investigated funding sources for the capitalisation of REDs.

There are legal obstacles to the establishment of REDs. To remedy this, the Electricity Act, the Local Authorities Act and the Regional Councils Act are being amended to ensure the legality of REDs.

### REDs and Electricity Prices

The following graph indicates the profitability of REDs as at 31 January 2003 based on a RED feasibility study done by Emcon Consulting Engineers. It is clear from the graph that current electricity prices in Namibia is not cost-reflective and need to be raised in real terms to reach cost-reflective levels. Worsening the situation is the fact that current electricity prices includes cross-subsidies to other commercially non-viable services carried out by Local and Regional authorities.



This situation is not sustainable and hence the ECB, which regulates electricity prices in Namibia, will allow real tariff increases over the next years in a gradual move towards cost-reflective price levels. In addition there is a looming generation capacity shortage within the SADC region, which will also require large investments in the generation sector as well, that will put further upward pressure on electricity prices. Thus it is inevitable that electricity prices in Namibia will increase by above inflation over the next years irrespective of the formation and establishment of REDs.

## ***Conclusions***

The EDI is experiencing significant problems and the establishment of REDs is essential to cope with these challenges.

Although significant progress has been achieved with the establishment of REDs, many challenges still lie ahead.

The EDI can only be commercially viable in the long run if above inflation electricity price increases are allowed over the next 10 years. Future electricity price increases should therefore not be blamed on the establishment of REDs, in fact REDs will contribute significantly towards minimising future price increases.

The support of all consumers and stakeholders are required to make the successful establishment and operationalisation of REDs a reality in Namibia.

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