



Electricity Distribution Industry (EDI) South Africa

**Presentation to the Portfolio Committee on Energy
21 February 2012**

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presented

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Overview

- The EDI is an asset intensive business
 - Asset base replacement value ~ R260 billion (2008 value)
 - Distribution overhead lines >400 000 km
 - Distribution underground cables >210 000 km
 - Average age of asset base ~45 yrs
- Customer centric business
 - Serving ~9.2 million customers
- Large employer
 - ~31 000 people employed in the EDI
 - On average 26% of electricity staff are 50 and older, 62% are between 31 & 50 and 12% are under 30
 - Average age of electricity staff in critical technical positions >50 years
 - 35% average vacancy rate
- Significant player in the economy of South Africa

Challenges

- Despite pockets of good performance the EDI infrastructure shows that reliability and asset management needs urgent investment
- Current practices in the EDI are no guarantee for business sustainability and economic growth
- Evidence of significant under investment in people development, infrastructure and asset management
- Deterioration of electricity related service delivery in many areas in the country
- Supply interruptions cost the Economy ~ R2.9 bn to R 8.6 bn p.a (2006)*
- The EDI Holdings infrastructure assessment (2008) and the development of the Approach to Distribution Asset Management (ADAM), revealed that:
 - The maintenance, refurbishment and strengthening backlog ~R27,4 billion (2008)
 - The backlog is growing at a rate of ~R2.5bn per annum
- Note: *Cost to the economy of unplanned system outages, based on the NIRP 2006 guidelines (NERSA, NIRP report 17January 2006)

Prognosis

- While there is a plan in place to address the generation related challenges, there is no integrated strategy/plan in place to address the distribution related challenges
- The current performance of the EDI will not be able to underpin the projected economic growth or create sustainable jobs
- The performance of the EDI is deteriorating at a rapid rate and service delivery is going to become an even bigger challenge going forward
- If we are serious about a sustainable solution to the electricity challenges of South Africa; the EDI and the electricity supply industry (ESI) as a whole, requires an integrated and holistic approach, with support; from government, all industry players, business and citizens of this country

Options

- To ensure amongst others the sustainability of the EDI, to support the required economic growth and create job opportunities in South Africa , it is essential that:
 - Staff recruitment, training/development and retention be addressed
 - Technology be leveraged to enhance service delivery and to improve amongst others customer service, revenue management & network performance
- Update the ADAM plan, adopt it and roll it out as an integrated multi year plan to address the current electricity distribution infrastructure related challenges
- Identify the entities and institutions with capacity to provide assistance/consolidation to bring about improvement in the areas where the biggest challenges are

Conclusion

- Visible and committed strategic leadership/sponsorship and firm decisions are required to bring about the desired change in the EDI
- The support of every participant in the EDI will be required to bring about the desired change
- From a technology deployment perspective it is essential to move away from the business as usual approach and pursue appropriate technology solutions and create a more intelligent grid which will improve service delivery
- For an EDI infrastructure turnaround strategy it is of governance and finance, It would be advisable to consider a similar approach as what is used in respect of the national electrification programme
- It is essential that the infrastructure funding allocation be defined and that the investment of the money earmarked for infrastructure is correctly applied
- The infrastructure investment must be monitored to ensure that the refurbishment and replacement backlog shrinks



THANK YOU