

S2-4

## **Power Quality Monitoring System and Program for Ekurhuleni Metropolitan Municipality**

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### **Abstract**

The Mayoral Committee of the Ekurhuleni Metropolitan Municipality resolved in September 2003 that a Power Quality Management System and Program must be implemented for its key customers, as well as those identified by experience as requiring special attention.

Reference is made to the Power Quality Directive of the National Energy Regulator of South Africa (NERSA), the new NRS standards and the new draft Regulatory Framework for the Regulation of Municipal Distributors of South Africa.

Brief explanation of some different standards, methods, definitions as well as addressing basic power quality issues e.g. Voltage Regulation, Dips – Sags, Voltage Unbalance, Harmonics, Other disturbances, Events, Trends.

Licensees are at this stage of NERSA's power quality management program already required to communicate the customer's power quality management rights and to make available information on quality of supply.

Licensees are also required to supply suitable power quality information related to the customer complaints process as well as non-conformance management processes with NERSA.

In light of the abovementioned the experience gained by the Ekurhuleni Metropolitan Municipality Electricity and Energy Department, the following will be shared:-

- The phased approach followed.
- The role of key Power Quality Management information.
- What level of PQ information is currently captured and the vision for the future.
- The importance of capturing data to support and develop reliable decision-making because power quality standards and planning information is heavily reliant on statistics.
- Benefits achieved in areas such as operations, customer complaint handling, etc.
- Structured implementation of the Ekurhuleni Metropolitan Municipality power quality program.
- Benefits of making PQ information visible - to measure is to know – if you do not measure, how can you manage?