



## The NER's new Web-Based Reporting System for Licensees

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### 1. Introduction

#### 1.1 Background

The National Electricity Regulator of South Africa (NER) is the regulatory authority over the Electricity Supply Industry (ESI) in South Africa. It is a statutory body, established in terms of the Electricity Act, No. 41 of 1987, as amended by the Electricity Amendment Acts of 1994 and 1995. The role of the NER is to regulate the ESI by ensuring that the most efficient and effective ESI is in place to meet the requirements of existing and future electricity customers. Activities of the NER include:

- Issuing licenses for the generation, transmission and distribution of electricity;
- Determining the price at which licensees sell electricity and (in the case of Eskom) the rate of return allowable;
- Regulating tariffs of licensees, to prevent undue discrimination between customers;
- Regulating quality of supply and service standards;
- Performing inspections of the equipment of licensees;
- Regulating to protect low-income customers by keeping tariffs affordable;
- Settling disputes between licensees and customers, and between licensees themselves, regarding the right to supply electricity;
- Collecting information that it deems necessary from electricity undertakers or consumers; and
- Advising the Minister on any matter relating to the electricity supply industry.

#### 1.2 Objective of the paper

The objective of this paper is to provide an overview of the new NER reporting system for

licensees. The new NER reporting system for licensees was approved by the NER board in August 2005, and shall be rolled out to all licensees during 2005 and 2006.

#### 1.3 Information and the regulator

Relevant, accurate, reliable and timely information plays a key role in the NER's regulatory function, including planning and decision-making. However, collecting data and information has resource implications, both for the regulator and the licensees.

## 2. NER reporting system project

### 2.1 Rationale for developing a new reporting system

The NER collects information from licensed electricity generators and distributors, mainly annually through the use of forms (G-forms and D-forms respectively) that were designed in the 1990s. The G-forms are used to collect generation data from electricity generators, and D-forms (D1-D8) are used to collect data related to the distribution of electricity from electricity distributors. The data is collected at the end of the financial year of the Municipalities and Eskom respectively, and submitted manually to the NER. While T-forms exist for collection of data and information from Eskom Transmission, these forms are presently not being used. All the forms are captured manually into the NER's databases. The quality (completeness, accuracy and timeliness) of the information is generally poor.

The NER recognises that there are a number of problems with the current processes and procedures for collecting data and information from licensees. Such problems include:

- too much information required by the NER;
- incomplete forms sent to the NER;
- poor response rate by licensees;
- incorrect data submitted;

- lack of capacity in some licensees to comply to the reporting requirements;
- refusal to report some information by licensees; and
- manual submission of information, which is inefficient, and has the potential of introducing errors at several stages.

The objective of this project was to develop a robust reporting system for the NER's interaction with licensees. The guiding principle was to develop a system that would collect relevant information that would assist both the NER and licensees to better manage their business.

## 2.2 How the new reporting system was developed

The new system was developed by conducting the following:

1. A review the existing reporting systems, identification of gaps, and making preliminary recommendations for improvement;
2. Development of a specification of information needed according to the current and known future regulatory system in South Africa;
3. Preparation of draft data reporting schedules, manuals and procedures (manual and electronic) through the involvement of the relevant departments within the NER;
4. Pilot testing of the web-based reporting system and the draft reporting schedules at Tshwane, City Power and Eskom, and modification of the reporting system based on the feedback that was obtained. In addition there was interaction with Nokeng Tsa Taemane to understand their concerns regarding the present reporting system;
5. Finalising the reporting schedules, manuals and procedures. The operating and reporting manual (ORM) should be user-friendly and complete with a dictionary of the data elements in the

reporting schedules to ensure a common understanding. The reporting schedules should have reporting dates and deadlines that specifically coincide with and facilitate the budgeting cycle of licensees;

6. Finalising the computerised system to capture, validate, analyse and report information based on the new reporting schedules.

An industry reference group consisting of representatives from the AMEU, Eskom, EDI Holdings and the NER was established. The role of the reference group was to give guidance to the project team during the development of the reporting system.

In addition, discussions were held with key people in the Department of Minerals and Energy and the Energy Intensive Users Group. The new reporting system was also reviewed by an international consultant.

## 2.3 Description of the new NER reporting system for licences

The new reporting system is a web-based set of centrally stored and maintained documents (reference documents and input formats) that are accessed over the Internet. The system will allow licensees to access the NER via the Internet, and directly capture their information into the NER's databases. During the initial stages of implementation, provision will be made for using alternative (off-line and manual) methods for reporting data until all licensees can fully utilise the web-based system.

Figure 1 shows the structure and processes involved in web-based reporting solution. The system contains two main parts:

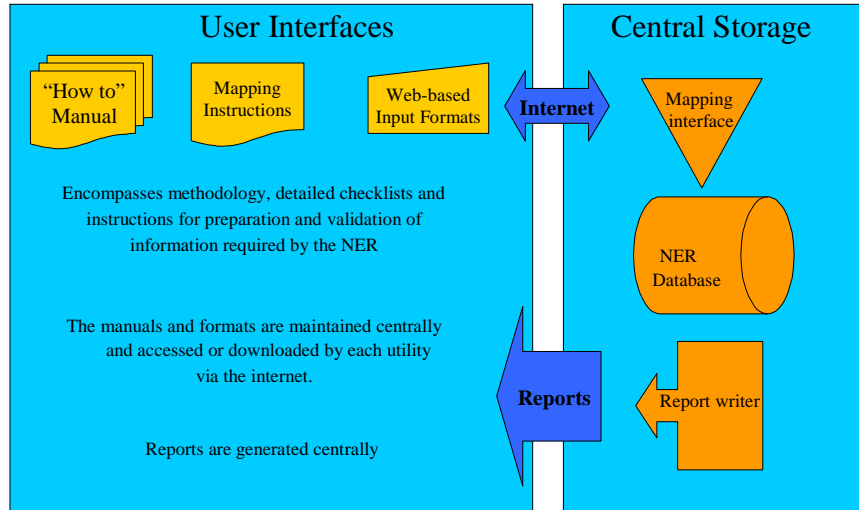
- User Interfaces comprising:
  - "How To" manuals;
  - Mapping Instructions; and
  - Web based Input Formats.

and

- Central Storage comprising:
  - An internet Mapping Interface;
  - The NER database; and
  - A report writer.

**Figure 1: Overview of new NER reporting system**

## Overview of the web-based reporting system for licensees



The input formats will feed the NER's central database through a web-server. The technical and financial reporting system will consist of documents and software applications that are specifically designed for:

- a) structuring and capturing of all data required by the NER presently for licensing purposes for electricity Distribution, Transmission and Generation and other licensed activities; and
- b) structuring and capturing of data to accommodate future requirements expected to become the responsibility of the NER<sup>1</sup>.

A Web-based data capture concept offers the distinct advantages of:

- a) easy access to the most current version of forms and documents from anywhere in the country via the internet;

- b) easy maintenance and updating of documents and forms in one central server without the cost, time delay and risk involved in having to disseminate software updates to a large number of users (and assisting many of them in the upgrade procedure);
- c) enabling the NER to monitor the submission of information from individual licensees or utilities online, ie the NER would have daily updates of who captured/submitted information, and what the information was;
- d) automatically generated e-mail reminders to users regarding deadlines; and all data being stored in one secure location and being immediately accessible to the NER for report generation;
- e) enabling licensees to access their own reports. The plan is to also have reports that compare similar licensees that can be viewed by licensees.

### **3. Roll-out and implementation of the new reporting system**

To kick-start the roll-out, a presentation on the new reporting system was made to the AMEU's 20<sup>th</sup> technical meeting in Richards Bay in October 2004. Starting in September 2005, workshops shall be held with relevant stakeholders. In addition, it is anticipated that all licensees will be visited to demonstrate the new reporting system and to ensure that licensees can access the NER databases and work through the reporting system. This process is scheduled for September 2005 to mid-2006.

Eskom and the metropolitan municipalities will be required to report their 2004/05 using the new web-based reporting system. Smaller municipalities will report their 2004/5 data using the existing D-forms. However, as from 2006, all licensees will be required to report their 2005/6 data using the new web-based reporting system.

### **4. Conclusion**

The new web-based reporting system has been developed in order to address most of the problems that have been experienced so far. Licensees will be required to report their information using the new system. The new reporting system can only be truly beneficial to the NER and licensees if there is buy-in and collaboration from both parties.

### **References**

1. Electricity Act, 1987 (Act No. 41 of 1987)
2. NER website.