1 PURPOSE
The purpose of this document is to outline the process the National Energy Regulator of South Africa will follow to ensure that any transmission licence holder complies with its licence conditions. This is a living document and the intention is to incorporate new ideas and processes into this document as further developments take place.

2 OBJECTIVE
The prescribed framework needs to meet the following regulatory objectives:

- To establish a monitoring process that facilitates the measurement of compliance with licence conditions.

- To ensure that all non-compliances are identified; corrective measures are instituted to rectify these non-compliances, monitored and followed through.

- To ensure that the transmission system is reliable and power transmission is sustainable during times of an increase in power consumption.

- To ensure that customers and regulatory requirements are met through high reliability, and

- that outages or possible outages are not as a result of negligence or carelessness.

3 INTRODUCTION
The National Energy Regulator of South Africa ('NERSA' or 'the Energy Regulator') is a regulatory authority established as a juristic person in terms of Section 3 of the National Energy Regulator Act, 2004 (Act No. 40 of 2004). NERSA’s mandate is to regulate the electricity, piped-gas and petroleum pipeline industries in terms of the Electricity Regulation Act, 2006 (Act No. 4 of 2006), Gas Act, 2001 (Act No. 48 of 2001) and Petroleum Pipelines Act, 2003 (Act No. 60 of 2003) respectively.

In order to regulate the Electricity Supply Industry (ESI) in a well-coordinated and structured manner, the Energy Regulator is mandated to regulate the ESI by the Electricity Regulation Act, 2006 (Act No. 4 of 2006) (hereinafter referred to as ‘the Act’).
This is a Transmission Compliance Framework to be followed by NERSA when conducting compliance monitoring on a transmission licensee to establish compliance with licence conditions, the South African Grid Code, Transmission Grid Code, Electricity Industry directives, standards and regulations.

4 BACKGROUND AND OVERVIEW

In the past, the then National Electricity Regulator (NER) entered into some activities that are very useful for the way forward with regard to Transmission Compliance Monitoring. A number of these activities as well as their status are listed below. These activities will be further developed to enable NERSA to regulate transmission services effectively.

It must be noted that this transmission compliance monitoring and enforcement framework is developed with the view that it is applicable to all the cross-cutting Eskom activities under the present transmission licence, Grid Code, applicable directives and the relevant standards with some observation of possible changes in some of these cross-cutting activities of Eskom.

These activities revolve around the responsibility to operate, maintain, plan, invest and control/dispatch the Transmission system which forms part of the Interconnected Power System (IPS). This also includes the operation, maintenance, control/dispatch of any plant equipment within the borders of the Republic of South Africa used for the transmission of power that is under their custodianship. This framework is therefore inclusive and applicable to all the licensees as licensed by NERSA in the current ESI that own, operate and maintain any transmission facility for the transmission of electricity whose facilities are within the Republic of South Africa.

4.1 REGULATORY INTERFACE AND COMMUNICATION CHANNELS

A transmission regulatory interface was established by Eskom in 2003. One of the major contributing factors that led to the establishment of the interface was the constant interaction between the then NER and Eskom regarding the Grid Code exemptions and the Transmission licence that was amended at that time. The Transmission licence was amended to enforce and accommodate the Grid Code and other industry changes that occurred since the first Transmission licence was issued. Since then, NER and Eskom
Transmission’s regulatory interface communicated on an ongoing basis on operational issues. Issues regarding compliance were discussed and Eskom was made aware of the NER’s (now NERSA’s) requirements with regard to compliance with licence conditions.

As far as official communication channels were concerned, the Managing Director (MD) of Transmission was identified as the channel of communication through which the NER would conduct compliance audits and also monitor Eskom’s compliance with licence conditions. All correspondence was to be copied to the appointed representative. This arrangement is still applicable and NERSA will continue to apply it to all Eskom Transmission Licence Compliance issues.

4.2 GRID CODE

During 2003, the NER indicated that a Grid Code was required for the Electricity Supply Industry (ESI) and a Grid Code Advisory Committee (GCAC) was established which is only mandated to review and recommend amendments to and exemptions from the Grid Code. Special expert teams were then appointed by the Grid Code Advisory Committee to develop a Transmission Grid Code. The Grid Code was completed and the amended Transmission licence enforced the Grid Code on 01 April 2004. The Grid Code is a living document and is updated on an ongoing basis by the GCAC under the chairmanship of NERSA and the System Operator (SO) as the secretariat.

The expert teams and the GCAC are industry representative bodies established to ensure the views of the affected parties are obtained. The committee must consist of NERSA, Eskom, the Association of Municipal Electricity Undertakings (AMEU)/Municipality, Independent Power Producers (IPPs) and large customer representatives. Eskom or any Licensee holding a transmission licence is required to adhere to all the requirements of the Grid Code except for approved exemptions and derogations. Where non-compliance is identified, the licensee concerned will be given the opportunity to rectify, failing which appropriate action will be taken by NERSA.
4.3 CAPEX AUDITS

Eskom is a regulated entity and will continue to be regulated by virtue of being a monopolistic business. Since Eskom is also a National Transmission Network Service Provider (TNSP), it is responsible for making investments in the transmission business according to the approved and non-discriminatory criteria to ensure acceptable performance levels.

The Transmission System Investment Framework contained in the Network Code within the South African Grid Code (SAGC) mainly deals with the regulation of any major investments in the transmission business. The NTC shall annually publish a minimum five-year TS development plan by end October, indicating the major investments planned (but not yet approved).

In planning transmission investments, the licensee needs to develop detailed investigation reports, which contain the evaluation of alternatives over the expected life of the assets and economic justification of the expenditure. NERSA approves prices for transmission services; the licensee must, as part of this compliance monitoring framework, submit projects for review by NERSA.

4.4 ENVIRONMENTAL AND SAFETY ASPECTS

The licensee has to monitor and keep records of all environmental and safety issues which have a direct impact on the reliability of electricity supply and/or could be a possible danger to the lives of the people and to the environment due to operation of the system. NERSA will monitor the compliance of the licensees on the above aspects that have a direct or indirect impact on the reliability of the electricity supply - section 14(s) of the Act.

4.5 POWER QUALITY REPORTING

Given the nature of the ESI, some regulatory requirements on Power Quality (PQ) are required by NERSA. NERSA developed a PQ Directive under the guidance of its PQ Advisory Committee. According to this PQ Directive, Transmission licensees are expected to report on their performance annually. They are also responsible for the PQ levels delivered to all their customers and the management of network incidents and quality.
degradation by customers connected to the Transmission Grid. As a result, NERSA will use the Power Quality Directive as amended as a guide in order to measure the licensee’s compliance with the Power Quality standards. This entails that NERSA needs to continuously review its PQ Directive as and when necessary according to new developments in the ESI.

4.6 POWER QUALITY ADVISORY COMMITTEE

The Power Quality Advisory Committee was established in 2001. This group was a representative body consisting of experts from the stakeholders, manufacturers, licensees and academics. Their primary role was to give direction and the technical knowledge on how to get the ESI going forward in terms of power quality. After the successful development of the Power Quality Directive, the name of the working group changed to the Technical Advisory Committee, and the mandate has been expanded to cover a wider range of industry issues and other related technical matters. This activity is chaired by NERSA and ongoing meetings will take place as required.

The ESI is an interconnected power system and the power quality issues are cross-cutting in the entire industry. In the light of this, the Technical Advisory Committee must observe this interconnection all the time when making any amendments to the Power Quality Directive.

5 TRANSMISSION LICENCE CONDITIONS

5.1 THE NATIONAL TRANSMISSION LICENCE

The National Transmission Licence No. 1 (Variation 2) was issued to Eskom Holdings on 01 April 2004. The Transmission licensee must comply with all the conditions as set out in the licence including applicable standards regulations, codes, directives, and guidelines as effected from time to time.

The current transmission licence clearly obligates the licensee to undertake and carry out specific activities. Some of these activities are: Transmission Network Service Provider (TSNP), System Operator (SO), Transmission System Planner, Grid Code Secretariat and the Integrated Resource Planner.
**Transmission Network Service Provider (TNSP)**

This activity gives Eskom Holdings the responsibility to operate and maintain the licensee’s transmission assets. It spells out that the licensee may own, operate and maintain assets on its Transmission System in accordance with the licence and that the licensee will deal with new connections in accordance with the Grid Code. NERSA will therefore monitor the performance of the TNSP (Eskom), or any licensee that may hold such licence, on how they operate and maintain the Transmission network. The Grid Code (Network Code) states all the TNSP responsibilities in terms of transmission network maintenance.

**System Operator (SO)**

This activity is to ensure system reliability, safety, stability of the power system and personnel. The licensee should also dispatch generation, set operational procedures, control the operation of the Interconnected Power System (IPS), ensure that ancillary services are acquired, that operational information is provided for the industry etc. The SO shall also facilitate the import and export of electricity in accordance with any agreements that may exist regarding international trading.

Pending the establishment of the Independent System and Market Operator (ISMO), at the moment this activity is housed within Eskom. NERSA will, as a result, monitor Eskom’s performance on all the SO responsibilities according to the stipulation of the Grid Code, System Operator as amended, including implementation of the dispatch rules. Note that the dispatch rules, which will form part of the Grid Code, are still under development.

Should any of the licensee’s activities or responsibilities mentioned above change as a result of new developments in the current ESI or applicable policy or due to a Ministerial directive, the licensee must apply for such licence amendments to the Energy Regulator as per the applicable change in its activities.

**Transmission System Planner**

The Transmission System Planner shall plan and augment the Transmission System in accordance with the Grid Code and enter into a connection agreement with a customer...
(load or generation) where a new connection or extension to an existing connection is made. NERSA will monitor the compliance with this condition.

**Grid Code Secretariat**

This function is at present with the licensee (Eskom), hence the licensee is responsible for all the administration duties of the Grid Code. The Grid Code Secretariat processes recommendations for changes to the Code. However these recommendations are subject to NERSA approval. The Grid Code Secretariat is responsible for making any recommendations for proposed Grid Code amendments and exemptions to NERSA and keeps an accurate record of all amendments and exemptions approved by NERSA.

**Integrated Resource Planner**

The ISMO bill states that the Minister may require ISMO to provide assistance for the purpose of developing and monitoring the IRP. NERSA will monitor the ISMO and ISMO bill developments and enforce such developments by amending the licence accordingly. In the mean time, NERSA will monitor Eskom’s performance on implementation of the IRP from a transmission perspective (transmission network planning/development to support the IRP).

### 5.2 GRID CODE AND OTHER DIRECTIVES

The licensee must prove compliance with all of the activities as listed in the National Transmission Licence, as well as with all the Grid Code requirements, which are described in the following codes:

- Preamble
- Governance Code
- Network Code
- System Operations Code
- Information Exchange Code
- Metering Code
- Tariff Code

The licensee must be in a position to provide proof of any exemption granted by NERSA from any of the above requirements.
Furthermore, the compliance with the Power Quality Directive will also be monitored.

5.3 MECHANISMS TO COLLECT DATA AND INFORMATION

NERSA shall be entitled to collect any information from the Licensee or its customers, as it deems necessary. The Licensee is further obliged to ensure that it provides such information as is necessary to customers, to facilitate the development of a market, in accordance with the prevailing Grid Code, Information Exchange Code as amended.

NERSA may also call upon the licensee to furnish to it such periodical or other returns in such a format as NERSA may from time to time prescribe. In addition to this, NERSA, or any person authorised by NERSA in writing, has the powers of entry to inspect any equipment, plant, machinery, books, accounts and other documents of the licensee.

6 COMPLIANCE MECHANISMS

NERSA will use the following mechanisms to audit and monitor licensees’ compliance with licence conditions.

6.1 REGULATORY COMPLIANCE AUDIT

NERSA will conduct audits on the licensee. The audits will comprise an evaluation of compliance with all licence conditions, codes and directives. The audits will be conducted every three years. Subsequent to the audit, a report will be compiled and the results will be communicated to the licensee. For the next two years after the initial audit NERSA will engage the licensee to rectify non-compliance and put appropriate remedies in place. An annual report with regard to the progress made on implementation of the remedial actions will be captured in the self monitoring report by the licensee.

6.2 SELF MONITORING AND REPORTING

All the transmission licensees are expected to monitor their own compliance with all requirements as set out in the conditions in their licence. The licensee must prove (through submissions) to NERSA that there exists a working mechanism and/or processes, i.e. a corporate audit function that performs a verification exercise. The licensee will then be
expected to submit a report to NERSA on an annual basis highlighting their compliance or non-compliances. NERSA staff will then assess the information received and enter into discussions with the licensee. Non-compliances will be investigated and the reasons for these non-compliances will be evaluated before the appropriate remedy is applied. The NERSA Compliance Monitoring team may then audit a selection of the findings on an ad-hoc basis.

7 COMPLIANCE FRAMEWORK

it is important to follow a comprehensively developed compliance monitoring programme and plan to ensure objectivity and improvement of service delivery in general. Due to the extensive nature of the compliance requirement, licensees shall be audited every third year on all applicable licence conditions, including compliance with codes, directives and guidelines as effected from time to time.

The licensee will be informed in advance about the technical compliance audit to be conducted, confirming a date and the scope of the audit. NERSA will inform the licensee about information required concerning the audit and the content as well as the format of the reporting which will be agreed on.

The audit report findings will be forwarded to the licensee who will be given at least one month to respond to the findings. In a case of non-compliance, the licensee will be expected to submit a corrective action plan with target dates. Once the licensee has confirmed the findings, the Energy Regulator will be informed of the outcome of the audit by means of a report submission.

The audit results will be used to formulate the process to be followed by NERSA in enforcing compliance. During the two-year period after the audit, NERSA will give the licensee sufficient time during which all non-compliances will be addressed as informed by the outcome of the audit report.

The licensee will be audited on all aspects of the Transmission business and activities as contained in the current licence.
7.1 CONTRAVENTIONS AND PENALTIES PROVISIONS

The penalties provisions are provided for in the Electricity Regulation Act in:

- **Section 18** (Contraventions of licence)
- **Section 19** (Order by Court)

The two sections allow NERSA to deal with non-compliance with the provisions of the Act and/or licence conditions by the licensee. Should NERSA find that a licensee has contravened a provision of the Electricity Regulation Act, or contravened a condition of a licence imposed by NERSA, the non-compliance can be dealt with in terms of section 18 or 19.

The present Transmission licence states that the Licensee shall not derogate from the conditions contained in the licence with reference to the conduct of its Transmission Division for the provision of any services conducted under this licence, unless it can demonstrate good cause to NERSA for such derogation. NERSA shall decide what constitutes good cause by taking into account all matters pertinent to the case under consideration.

In the event of non-compliance by the Licensee with any of its duties and obligations under the licence, NERSA may take any or all of the following enforcement actions:

- issue a notice requiring the Licensee to remedy the breach within a set period;
- in the event of the breach not being remedied, issue such penalties as may be permitted by legislation or regulation;
- require the licensee to deliver a report by a set date, setting out the causes of the failure to comply with its duties and obligations, and the action taken to prevent a re-occurrence of the breach;
- undertake an enquiry into the failure to comply, with which the licensee shall cooperate and failure to cooperate shall be considered a further breach of its obligations;
- issue directives as to how the licensee shall in future act so as to prevent further failures to comply; and/or
- revoke the licence in terms of Section 12 of the present Transmission licence.
In addition to the above, the licensee shall comply with all applicable laws in the ESI including regulations, codes, directives and guidelines as effected from time to time. NERSA will therefore monitor and enforce compliance on the Eskom Transmission division with all these requirements since all the above mentioned activities are currently housed within Eskom until such time where some of the activities or responsibilities are removed from Eskom as new developments in the ESI come into place.

8 AUDIT FINDINGS FOLLOW-UP PROCESS
Licensees are expected to report annually on progress made on the implementation of corrective action plans to remedy the non-compliances as identified in the audit report. The report format and level of detail will be determined by NERSA in consultation with the licensee, and the submission should be made by 30 June of each year. Based on the outcome of the audit, necessary steps and corrective action will be instituted.

9 NON-COMPLIANCE PROCESS
Should the licensee fail to correct the non-compliances, the relevant governmental departments [e.g. DoE, the Department of Public Enterprise (DPE), etc] shall be informed of the situation and actions will be taken by the Energy Regulator as per the authority given to NERSA by the Act, such as imposing fines (see section 7.1).

10 INVESTIGATIONS
NERSA may embark on an investigation at the offices of the licensee whenever the need arises. NERSA will notify the licensee about issues selected from the detailed report for verification at least two weeks in advance.