




Gearing up for the future



NATIONAL NUCLEAR REGULATOR

ANNUAL REPORT

2010/2011



This annual report is submitted to the Minister of Energy in accordance with Section 7(1j) of the National Nuclear Regulator Act (Act no 47 of 1999). The report reflects the activities of the NNR on the health and safety of workers, the public and the environment associated with nuclear authorised sites, and the financial aspects in accordance with Section 55 of the Public Finance Management Act (Act no 1 of 1999).

VISION

To be an independent world class regulatory authority on nuclear safety.

MISSION

To provide and maintain an effective and efficient national regulatory framework for the protection of persons, property and the environment against nuclear damage.

MANDATE

The NNR is mandated to provide for the protection of persons, property and the environment through the establishment of safety standards and regulatory practices suited for South Africa.

VALUES

Professionalism: We hold ourselves accountable to the highest standards of professionalism in everything we do

Integrity: We demonstrate integrity and ethical conduct in all our dealings

Excellence: We strive for excellence in all we do

Valuing People: We demonstrate that we value our people in all we do

Team Work: We demonstrate a team work approach across the NNR





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NATIONAL NUCLEAR REGULATOR

PART A:

GENERAL



PART A: GENERAL

1. LEGISLATIVE

The NNR operates within the following national regulatory framework;

- The Constitution of the Republic of South Africa Act no 108 of 1996
- Nuclear Energy Act 1999 (Act no 46 of 1999)
- National Nuclear Regulator Act 1999 (Act no 47 of 1999)
- Public Finance Management Act no 1 of 1999
- National Treasury Regulations
- National Radioactive Waste Management Bill – Notice no 654 of 2008
- Promotion of Access to Information Act 2 of 2000
- Promotion of Administrative Justice Act no 3 of 2000
- RSA Government Gazette 8755 – Safety Standards R388 28 April 2010

International safety conventions

South Africa is a signatory (contracting party) to the Convention on Nuclear Safety; and the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management. In terms of Section 5(e) of the NNR Act, the NNR is the national competent authority to fulfil national obligations in respect of international instruments concerning nuclear safety. The NNR implements the above two conventions on behalf of South Africa.



2. SUBMISSION OF ANNUAL REPORT TO THE EXECUTIVE AUTHORITY

DIRECTORS' RESPONSIBILITY AND APPROVAL

The Directors are required to develop and implement a strategy that will meet the objects set out in the National Nuclear Regulator Act, Act 47 of 1999 (NNR Act). As the Accounting Authority, the Board is responsible for instituting and maintaining measures that will provide assurance to the stakeholders of a robust regulatory system designed to protect the public, environment and persons from nuclear damage.

Accordingly, Directors have a responsibility to ensure that measures are in place to facilitate and enhance organisational performance in terms of the organisational strategic goals and outputs, while also ensuring sound financial performance. The NNR uses a balanced scorecard to manage and track organisational performance, which is articulated later in this report in a section reflecting on the performance ratings achieved during the period under review. It is however notable that the NNR, during the period under review, attained only 60% performance level in relation to its targets. This is a matter that has been noted and a further narrative is provided in the body of the report to contextualise this level of performance. The Board and the Executive have submitted proposals on the enhancement of performance and capacity of the NNR and have commissioned a restructuring process to increase efficiency and effectiveness.

The Directors are required to maintain adequate accounting records and are responsible for the content and integrity of the annual financial statements and related financial information included in this report. It is their responsibility to ensure that the annual financial statements fairly present the state of affairs of the entity as at the end of the financial year and the results of its operations and cash flows for the period then ended, in conformity with Generally Recognised Accounting Practice (GRAP).

The annual financial statements are prepared in accordance with GRAP and are based upon appropriate accounting policies consistently applied and supported by reasonable and prudent judgements and estimates.

The Directors are of the opinion, based on the information and explanations given by Management, that the system of internal control provides reasonable assurance that the financial records may be relied on for the preparation of the annual financial statements. However, any system of internal financial control can provide only reasonable and not absolute assurance against material misstatement or loss.

The Directors are pleased to submit this annual report containing both the organisational and financial performance of the NNR for the 2010/11 financial year.

The annual financial statements set out on pages 82 to 112, which have been prepared on the going concern basis, were approved by the Board of Directors on 26 July 2011 and are signed on its behalf by:

Dr T Cohen
Chairperson
Centurion
26 July 2011

Adv BM Mkhize
Chief Executive Officer



3. CORPORATE GOVERNANCE REPORT

3.1 INTRODUCTION

The NNR is committed to good corporate governance and practising ethical standards in discharging its mandate. Corporate governance embodies processes and systems by which organisations are directed, controlled and held accountable. It is also concerned with the organisational arrangements that are in place to ensure an appropriate set of checks and balances.

3.2 BOARD OF DIRECTORS

The Board of Directors, appointed by the Minister of Energy (the Executive Authority) in terms of the NNR Act, derives its power from Section 8 of the NNR Act. It acts as the NNR's Accounting Authority in terms of the Public Finance Management Act (PFMA).

The role of the Board is to ensure that the NNR effectively carries out its mandate as set out in the NNR Act and PFMA by collectively directing the affairs of the NNR whilst meeting the interest of the stakeholders, including the Executive Authority. The Board fully appreciates the demand for accountability, honesty and transparency in fulfilling its fiduciary duties towards the Executive Authority and the organisation. To this end, the Board is striving to ensure that the NNR complies with the obligations imposed by various laws and regulations that are applicable to the NNR and the Protocol on Corporate Governance, which includes the King II report.

The Board consists of 12 non-executive directors who are independently appointed by the Minister of Energy in terms of the NNR Act and one executive director (Chief Executive Officer). Board members, including the CEO, hold office for a maximum of three years, but are eligible for reappointment.

During the year under review, the following changes occurred to the Board of Directors:

NAME	APPOINTMENT	DATE
Mr B Nemagovhani	Resigned as alternate Board member for Department of Energy	1 August 2010
Mr D Netshivhazwaulu	Appointed as alternate Board Member for Department of Energy	1 August 2010
Ms E Thema	Appointed as an Independent member of the Audit and Risk Committee	1 October 2010
Prof D van der Merwe	Resigned from the NNR Board and Transformation and Development Committee	30 November 2010
Mr D Elbrecht	Appointed as member of the Transformation and Development Committee	27 October 2010
Mr D Netshivhazwaulu	Appointed to the Audit and Risk Committee	27 October 2010
Mr D Elbrecht	Resigned as member of Audit and Risk Committee	27 October 2010
Dr T Motshudi	Appointed as an independent member of the Board	15 February 2011



PART A: GENERAL

	<p>Dr T Cohen</p> <ul style="list-style-type: none"> • Chairperson: Board of Directors 		<p>Mr T Mofokeng</p> <ul style="list-style-type: none"> • Deputy Chairperson: Board of Directors • Chairperson: Audit and Risk Management Committee
	<p>Mr N Lesufi</p> <ul style="list-style-type: none"> • Member: Board of Directors • Chairperson: Transformation and Development Committee, • Member: Audit and Risk Management Committee 		<p>Mr D Elbrecht</p> <ul style="list-style-type: none"> • Member: Board of Directors • Member: Transformation and Development Committee
	<p>Ms M Liefferink</p> <ul style="list-style-type: none"> • Member: Board of Directors • Member: Transformation and Development Committee 		<p>Ms D Kgomo</p> <ul style="list-style-type: none"> • Member: Board of Directors • Chairperson: Technical Committee • Member: Transformation and Development Committee
	<p>Mr J Leaver</p> <ul style="list-style-type: none"> • Member: Board of Directors • Member: Audit and Risk Management Committee • Member: Technical Committee 		<p>Mr D Netshivhazwaulu</p> <ul style="list-style-type: none"> • Member: Board of Directors • Member: Audit and Risk Management Committee
	<p>Adv B Mkhize (CEO)</p> <ul style="list-style-type: none"> • Executive Director 		<p>Dr T Motshudi</p> <ul style="list-style-type: none"> • Member: Board of Directors • Member: Member of Technical Committee
	<p>Ms B Laka</p> <ul style="list-style-type: none"> • Company Secretary 	<p>Mr I Abader</p> <ul style="list-style-type: none"> • Member: Board of Directors 	
<p>Mr K Maphoto</p> <ul style="list-style-type: none"> • Alternate member: DoE 	<p>Ms N Cobbinah</p> <ul style="list-style-type: none"> • Alternate member: DEA 		



PART A: GENERAL

3.3 BOARD CHARTER

The Board of the NNR has adopted a Board Charter, which expands on the responsibilities of the Board of Directors set out in the abovementioned Acts. It also defines the responsibilities of the Board as a unitary working group, covering areas that are not explicitly dealt with in the Acts. The Board Charter is reviewed annually to ensure that it meets standards of best practice within the Regulator's unique environment as far as is reasonably possible.

3.4 CODE OF PRACTICE AND CONDUCT

The Board of the NNR has adopted a code of conduct and good ethics, which requires Board members and employees to conduct themselves with integrity, openness and accountability when dealing with all stakeholders. In terms of the code, declaration of interest has to be made by both Board members and staff of the NNR. The declaration of interest register is updated annually and seeks to avoid real, perceived or potential conflicts of interest.

3.5 BOARD MEETINGS

The Board meets regularly and retains full and effective control over the organisation. The Board met seven times to discuss and review the NNR's operational performance and to address issues of strategic importance. It monitors Management on implementing Board plans and strategies. Special Board meetings were convened when necessary to consider issues that required Board resolutions between scheduled meetings. Members of Management were periodically invited to attend Board meetings.

The Board held four ordinary and three special meetings.

Board members were exposed to the following training and development programmes:

- Nuclear Forum Conference hosted by Siyenza Management
- NNR Act training presented by NNR Legal Counsel
- Workshop on Corporate Governance by Wits Commercial Enterprise
- Lecture by University of Pretoria on Fukushima nuclear power plant.

BOARD MEETING ATTENDANCE REGISTER: APRIL 2010 – MARCH 2011

DATE OF MEETING ATTENDED	29 Apr 2010	27 May 2010	28 Jun 2010	28 Jul 2010	27 Sep 2010	27 Oct 2010	28 Jan 2011
Names							
Dr T Cohen – Chairperson	P	P	P	P	P	P	P
Mr T Mofokeng – Deputy Chairperson	P	P	A	P	P	P	P
Mr J Leaver	P	P	A	A	P	P	P
Dr D van der Merwe	P	P	P	P	P	A	N/A
Mr D Elbrecht	P	P	P	P	A	P	P
Ms M Liefverink	P	P	P	A	P	P	P
Mr N Lesufi	A	P	P	P	P	P	P
Adv B Mkhize - Chief Executive	P	P	P	P	P	P	P



PART A: GENERAL

DATE OF MEETING ATTENDED	29 Apr 2010	27 May 2010	28 Jun 2010	28 Jul 2010	27 Sep 2010	27 Oct 2010	28 Jan 2011
Names							
Ms J Yawitch	P	P	A	A	A	A	P
Mr B Nemaguvhani	P	P	A	P	A	N/A	N/A
Ms D Kgomo	P	P	A	P	A	P	P
Mr D Netshivhazwaulu	N/A	N/A	N/A	N/A	N/A	P	P
Dr T Motshudi*	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Dr T Motshudi was appointed as an independent member of the Board on 15 February 2011.

3.6 COMMITTEES OF THE BOARD

The Board was advised and assisted by two Board committees, ie the Audit and Risk Committee and the Transformation and Development Committee. Board committees are mechanisms that assist the Board to discharge its responsibilities in specific areas of its duties and responsibilities, such as audit, risk management, human resources and finance. Board committees met at least once per quarter and all the committees have adopted formal terms of reference (TOR) and provide the required feedback to the Board through committee reports. TOR of Board committees were reviewed annually to ensure continuing relevance.

The CEO is an *executive member of the Board*. Management representatives were invited to attend relevant meetings of the various committees as appropriate.

3.6.1 Transformation and Development Committee

The Transformation and Development Committee is responsible for determining human resources strategies and policies and recommends these to the Board for approval. These include staff remuneration, human resources development and conditions of service, employment equity reports, performance management systems and any other organisational development initiatives.

The Transformation and Development Committee comprised the following members:

- Mr N Lesufi (Chairperson)
- Prof D van der Merwe (resigned 30 November 2010)
- Ms D Kgomo
- Ms M Liefferink
- Mr D Elbrecht (appointed 30 November 2010)

The Transformation and Development Committee convened five times during the year.

Attendance at meetings was as follows:

Date of the meeting attended	20 Jul 2010	9 Sep 2010	19 Oct 2010	04 Nov 2010	22 Mar 2011
Mr N Lesufi	P	P	P	P	P
Prof D van der Merwe	A	P	P	P	N/A



PART A: GENERAL

Date of the meeting attended	20 Jul 2010	9 Sep 2010	19 Oct 2010	04 Nov 2010	22 Mar 2011
Ms M Liefferink	P	A	P	P	P
Ms D Kgomo	P	P	P	P	A
Mr D Elbrecht	N/A	N/A	N/A	N/A	P

P - Member present at the meeting

A - Member not present and had apologised for the meeting

N/A - Not Applicable refers to, member not yet appointed to the Board/Board Committee or member resigned from the Board/Board Committee

3.6.2 Audit and Risk Management Committee

The Audit and Risk Management Committee comprised three non-executive Directors and one independent member. A non-executive Director who is not the Chairperson of the Board chaired the committee. The Audit Committee assisted the Board in overseeing:

- The quality and integrity of the financial statements and the disclosure thereof;
- The scope and effectiveness of the outsourced internal audit function, and
- The effectiveness of the organisation's internal control.

The current members of Audit and Risk Management Committee are:

- Mr T Mofokeng (Chairperson)
- Mr N Lesufi
- Mr J Leaver
- Mr D Netshivhazwaulu
- Mr B Nemagovhani
- Ms E Thema (independent Audit Committee member)

The Audit and Risk Management committee convened six times during the year.

Attendance at meetings was as follows:

Date of the meeting attended	19 Apr 2010	17 May 2010	14 Jul 2010	2 Aug 2010 telecon	18 Oct 2010	18 Jan 2011
Mr T Mofokeng	P	P	P	P	P	P
Mr N Lesufi	A	A	P	P	P	A
Mr D Elbrecht	P	P	A	P	P	N/A
Mr B Nemagovhani	A	A	P	A	N/A	N/A
Mr J Leaver	P	P	A	A	P	P
Ms E Thema*	N/A	N/A	N/A	N/A	A	P
Mr D Netshivhazwaulu	N/A	N/A	N/A	N/A	N/A	P

P - Member present at the meeting

A - Member not present and had apologised for the meeting

N/A - Not Applicable refers to, member not yet appointed to the Board/Board Committee or member resigned from the Board/Board Committee



3.7 BOARD REMUNERATION

The remuneration of Board members is determined by the Minister of Energy with the concurrence of the Minister of Finance and is reviewed annually. Board members are paid for attending board or committee meetings. The details of the remuneration for the year ended 31 March 2011 are stated in Note 13 to the annual financial statements on page 104.

3.8 INDEPENDENCE OF THE BOARD

The independence of the Board is achieved and maintained through a number of measures, including:

- Board members being remunerated only for attending meetings
- Separation of position of the Chief Executive Office and Chairperson
- All Board committees being chaired by non-executive directors
- The Board having access to independent external advice at the cost of the organisation

3.9 FINANCIAL PLANNING AND MANAGEMENT

During the period under review, all financial reporting processes were carried out in accordance with the requirements of the PFMA, the NNR Act, Treasury Regulations and GRAP.

The strategic plan and the business plan, with accompanying budgets, were prepared, approved by the NNR Board and submitted to the Minister of Energy for approval, as required in terms of the PFMA.

Section 17 of the NNR Act states that, for purposes of the regulation of authorisation holders, NNR funds include authorisation fees and state allocation or grants and interest. The final step in the development process of the NNR's strategic and business plans, with accompanying budgets, is the determination of levies to be imposed on regulated entities.

3.10 INTERNAL AUDIT

The internal audit provides an independent, objective evaluation of the NNR, as well as consulting services designed to add value to and improve the organisation's operations. The internal audit assists the Board in determining whether the NNR's network of risk management, control and governance processes, as designed and represented by Management, is adequate and functioning in a manner to ensure, *inter alia*, that:

- risks are appropriately identified and managed;
- significant financial, managerial and operating information is accurate, reliable and available on time;
- resources are acquired economically, used efficiently and are adequately protected, and
- programmes, plans and objectives are achieved.

Opportunities to improve management control, service delivery and the organisation's image, as identified during audits, are communicated to the appropriate level of management.



3.11 RISK MANAGEMENT

The Board is responsible for governing risk management processes in accordance with corporate governance requirements. During the period under review, an annual risk assessment was conducted, with the following objectives:

- Providing the Board with the assurance that significant business risks are systematically identified, assessed and reduced to acceptable levels, to achieve an optimal risk reward balance.
- Making risk identification and risk management an integral part of the daily activities of every person in the organisation.

The NNR's enterprise-wide risk management process is guided by the following key principles:

- A clear assignment of responsibilities, as well as accountability.
- The existence of a common enterprise-wide risk management framework and process.
- The identification of uncertain future events that may influence the success of business plans and strategic objectives.
- The integration of risk management activities within the organisation, as well as across its value chains.

The NNR's integrated risk management implementation approach, *inter alia*, entails the development of strategic, functional and process risk profiles. Strategic risk is typically defined as risks that may influence the achievement of strategic business objectives. Similarly, functional and process risks are defined as risks that may influence the achievement of functional and process objectives respectively.

3.12 IT GOVERNANCE

The Board is ultimately responsible for information technology (IT) governance. Responsibility for the implementation and monitoring of the IT governance framework has been delegated to Management, who will ensure adequate management of IT governance.

Business continuity plan

The implementation of the approved business continuity plan (BCP) began during the year under review, but is yet to be tested in the new office occupied since December 2010. This plan offers on- and off-site recovery capabilities for NNR information, preparation and management of, among others, natural disaster, power outage, hardware/telecommunications failures, data corruption, explosives and chemical, biological and any other hazards. It also provides guidance for the resumption and recovery of time-sensitive business operations in accordance with pre-established timeframes.



The primary role of the National Nuclear Regulator (NNR) is to provide for the protection of persons, property and the environment against nuclear damage through the establishment of safety standards and regulatory frameworks suitable for South Africa.

I am pleased to report that the regulated entities continued to maintain satisfactory safety performance results in line with the requirements of the conditions of their licence. There were no nuclear accidents reported in South Africa during the reporting period. The NNR Board was successful in meeting and fulfilling its fiduciary duties during the period under review.

Creating stakeholder value through effective corporate governance

South Africa's stable performance in nuclear safety during 2010/11 has demonstrated our ability to deliver meaningful stakeholder value despite the challenges that prevail in the world of nuclear energy, which were exacerbated by the nuclear accident at the Fukushima Daiichi nuclear power plant as a result of the tsunami in Japan.

As we reflect on those tragic events of March 2011, we are reminded that our industry needs to remain diligent. From this tragedy emerges a need for continuous collaboration and a reaffirmed commitment to nuclear safety by the global nuclear community. South Africa and, in particular, the NNR has been participating in ongoing dialogue with colleagues around the world to learn and share invaluable lessons on the events in Japan. Here at home, the NNR has embarked on a safety review programme of nuclear installations and for this reason has directed Eskom and the Nuclear Energy Corporation of South Africa (Necsa) to conduct safety reassessments of the respective nuclear installations in line with international nuclear safety standards and to improve the already viable emergency preparedness plans. This reassessment is meant to incorporate lessons learnt from the Fukushima accident on the adequacy of safety measures in the light of extreme external events.

The Board is fully supportive of government's endorsement of the 20-year electricity plan for South Africa and recognises that the nuclear energy option comes in as a base-load option from 2023. The NNR will play a key role by having to ensure that nuclear safety is of paramount priority when authorising potential new nuclear power plants. It is therefore imperative for the NNR to be cognisant of these dynamics and strengthen its capacity and resources to meet future stakeholder expectations.

Management and corporate governance

Our approach to achieving strategic objectives was informed by a proactive and yet independent Board of Directors and its governance committees, which provided ongoing strategic guidance to Executive Management based on sound principles of corporate governance. The Board of Directors regularly reviewed the effectiveness and overall strength of the governance and controls framework within the NNR. During the year under review, the Board took the opportunity to streamline and verify some of the NNR's policies and procedures and to refocus its time and attention on material strategic and operational improvements designed to further improve its efficiency. The Board and its committees continued to discharge their mandate in accordance with the set charters and King III Code of Good Governance.



International cooperation

South Africa is required, as a member state of the International Atomic Energy Agency (IAEA), to fulfil its international obligations and promote international cooperation to enhance safety globally. The NNR continued to fulfil national obligations for international instruments concerning nuclear safety by, *inter alia*, compiling the fifth National Report for the Convention on Nuclear Safety on behalf of South Africa. The presentation of this report received international acclaim and firmly entrenched the NNR on a sound international footing with peer review confirmation of the acceptability of its regulatory regime. The NNR continued to participate actively in the IAEA safety standards committees, working groups and technical committee meetings during the year under review.

Regional cooperation

At regional level, the NNR supports the objectives behind the formation of the Forum for Nuclear Regulatory Bodies in Africa (FNRBA) whose objectives are aligned to the IAEA. We intend to remain an exemplary contributor to the advancement of the regulation of nuclear safety, especially in Africa, where socioeconomic and environmental needs are the strongest. We will continue to provide technical input to working groups of the FNRBA.

National cooperation

At national level, the NNR supports the principles of good cooperative governance. To optimise the effectiveness of the nuclear safety regime in South Africa, provisions are made in the NNR Act for the NNR to delegate certain enforcement authority to other relevant organs of state. The NNR Act establishes the principles of cooperative governance and intergovernmental relations (contemplated in Chapter 3 of the Constitution of the Republic of South Africa 1996. In line with the provisions of Section 6 of the NNR Act, the NNR continued to implement the cooperative governance agreements with relevant organs of state.

Transformation and development

The NNR remains committed to demonstrating transformation through the development and effective implementation of policies and practices that embrace the country's transformation objectives as well as the organisation's ability to respond to changing external environmental factors. This is done through effective management of resources and the use of appropriate policies, technologies and processes. The NNR is faced with the need to develop and maintain an expert workforce, in the face of attrition and the lack of qualified candidates in the field of nuclear science. It plans to implement a robust human resources sustainability strategy to attract and retain scarce skills in a highly competitive environment. Additionally, to sustain its capacity to deliver on its regulatory mandate, the NNR will ensure that it has a continuous programme to maintain a sound skills base by providing training and development opportunities to its staff and instituting measures to retain staff by offering career advancement opportunities, and a challenging and rewarding environment that is conducive to the expression of talent.



Financial sustainability

The NNR finds itself confronted by a rapidly evolving and dynamic external environment characterised by significant changes to its social, political and legislative landscape. These changes to the NNR's business environment represent significant challenges in terms of financial viability for the organisation, in particular the implications of loss of revenue in the form of authorisation fees as a result of downscaling of the Pebble Bed Modulator Reactor (PBMR) project; the effects of recession on the industry, resulting in a number of consolidations in the mining and mineral operations, which impacted negatively on the revenue of the NNR due to liquidations, surrenders, revocations and reclassification of certificates of registration from a higher category to a lower one as well as the reduction in government grant.

During the year, we continued to manage the balance sheet conservatively. Total operating revenue for the year was R110,2 million, R89,9 million of which was derived from services rendered to holders of nuclear licences (Koeberg Nuclear Power Station and Necsa), and holders of certificates of registration (mines and small users of radioactive materials and processing), and R19,9 million from direct government grant.

Future outlook

In just over a year as the new Board, we would like to reassure all stakeholders that as we begin to emerge from the extremely difficult environment of the last three years, the NNR is well positioned to exploit the opportunities ahead. The organisation looks to the future with increasing confidence and enthusiasm to develop its strong local regulatory positions working from the foundation of cost effectiveness as well as strong and focused leadership.

In conclusion, I would like to take this opportunity to thank members of the Board for their significant and dedicated contribution during the past year and, of course, I would like to pay tribute to NNR employees for all their hard work and sustained efforts in ensuring that the NNR was able to carry out its mandate effectively. May I also take the opportunity to extend a special thanks to the Minister of Energy for her ongoing stewardship role, support and guidance to the NNR.

A handwritten signature in black ink, appearing to read 'Dr T Cohen', with some scribbles and a horizontal line extending to the right.

Dr T Cohen

Chairperson: Board of Directors

2011



During the period under review, the NNR largely fulfilled its mandate to provide for the protection of persons, property and the environment from nuclear damage. The following represents the highlights of the year under review, the details of which are contained in the body of this report.

SUMMARY OF KEY HIGHLIGHTS

- The NNR participated in the development and implementation of the nuclear security action plan for the FIFA Soccer World Cup held in South Africa. This entailed providing expertise in radiological monitoring, instrument methodology and spectral analysis, and emergency planning and response measures in the event of nuclear fallout or dispersal of radiological material. This project was hailed as a huge international success story.
- Progress in efforts to build stakeholder confidence in South Africa's nuclear safety regime by conducting a regulatory emergency exercise to test the effectiveness of Koeberg Nuclear Power Station's emergency preparedness and response arrangements. The results of this exercise reflect that Koeberg has adequate emergency preparedness measures in place in case of a nuclear accident. A few corrective measures were proposed to further strengthen the measures.
- Promoted openness and transparency through the facilitation of knowledge sharing platforms, such as the technical symposia convened in conjunction with the International Commission on Radiation Protection (ICRP) for South African stakeholders. The symposia were held in Cape Town and Gauteng. Stakeholders represented were authorisation holders, academia, government, media, civil society and public safety and information forums.
- Conducted self-assessment through participation in the IAEA-initiated project titled RAF/9/038 'Promoting self-assessment of regulatory infrastructures for safety and networking of regulatory bodies in Africa'. The primary objective of this project was to develop and sustain national regulatory infrastructures for nuclear and radiation safety on the African continent. The NNR and the Directorate Radiation Control (RADCON) in the Department of Health (DoH) participated in this project. An implementation plan has been finalised to address the key strategic gaps identified during this project.

SAFETY INDEX

A number of authorisation holders and facilities continued to maintain a safe operating record. There were no incidents of undue or excessive exposure of workers, the public and the environment to harmful effects of radiation. However, we have put a constant watch on the special case mines that have reflected some raised radiation levels. The NNR issued certain directives to these mines such as institution of engineering controls, temporary closure of certain shafts and related interventions to protect workers. The Wonderfontein spruit contamination issue and its effects on the public and the environment continued to pose certain regulatory challenges. To this end, the NNR recommended to the local municipality to relocate Tudor Shaft informal settlement residents due to a concern that they might be exposed to raised levels of radiation given the tailings upon which the settlement is built. This recommendation was favourably received, resulting in the entire settlement being relocated to another site. On the other hand, the NNR continued to coordinate and lead



the steering committee consisting of government agencies, departments and civil society to provide a comprehensive strategy for the rehabilitation of Wonderfonteinspruit.

CHALLENGES

The NNR has faced a few challenges during the period under review, including:

- Reduction in operating revenue and government grant
- Legislation that requires urgent attention to strengthen the Regulator's enforcement mandate
- Regulating special case mines
- Remediation of legacy sites such as the Wonderfonteinspruit catchment area.

In addressing these challenges, the NNR has made proposals to National Treasury (NT) on its financial sustainability, while developing a comprehensive funding model for the future. The Board of Directors also approved amendments to legislation giving powers to the Regulator for enforcement of its mandate. An ongoing monitoring programme has been put in place to address the special case mines as well as focusing on the remediation of the Wonderfonteinspruit catchment area.

GEARING UP FOR THE FUTURE

The year 2010 was a challenging one for the NNR, especially given the organisational restructuring, against which it can benchmark its future performance. During the past 12 months, we have undertaken a thorough evaluation of the organisation and as we undertake a review of this period, we note a new direction supported by a revitalised organisational structure, which is gearing up to respond appropriately to meeting the demands and requirements of a constantly changing external environment.

Driven by international, political, economic and social trends as well as environmental and information trends that will shape the future of nuclear safety regulation, the NNR has reaffirmed its commitment towards playing a pivotal role in the nuclear industry in South Africa. Currently, the NNR occupies a unique position in the nuclear industry in South Africa, synthesising the reliability of an old brand energised by the vitality of a rapidly transforming global nuclear industry. All these changes mark the emergence of a new era. Whilst the nuclear sector is currently crafting its changes, there are also organisational changes at the NNR. We will have to adjust to and learn to work in a new environment. Our fundamental goal is to pursue excellence. We inspire ourselves to be challenged and excited as we navigate the changes in our sector and in our organisation.

The new management structure serves to drive a new integrated NNR focus – and a desire to maximise stakeholder value management. The goal is to build a leanly managed regulator with administration and support services provided from a central core, to support the efficient delivery of key mandatory obligations of the NNR.

Crucial factors underwriting success are trust and confidence – a general acceptance by government, authorisation holders, the public and other stakeholders of the quality of NNR's work and its integrity. We are starting to build bridges with society through initiatives to support and create informed awareness of nuclear and radiation safety.



PART A: GENERAL
CHIEF EXECUTIVE OFFICER'S REPORT

Serving our stakeholders, investing in our people, delivering excellent services to our authorisation holders, being professional, working in teams, guarding against arrogance, respecting each other, upholding highest levels of integrity - these are the core values espoused by the NNR.

The NNR places great emphasis on its corporate responsibilities and, as such, devotes serious attention to people development and skills enhancement as well as ensures that issues such as employment equity and empowerment sit high on the agenda.

When it comes to regulating safety in the nuclear industry, delivering on the brand promise is not just about doing the right things right, it's also about knowing what to do when things go wrong. Our approach is to take lessons from the global environment and collaborate to ensure that we deliver effectively on our brand promise.

Our message to South Africans is clear - *'Safety First, Safety Always'*. The NNR's commitments are anchored in effective nuclear safety regulation and its top priority is to promote a safety orientated culture in the South African nuclear industry. We maintain a questioning attitude by constantly challenging the status quo and leaving nothing to chance when it comes to monitoring safety to protect workers, South Africans and the environment, and to respect South Africa's international commitments on the peaceful use of nuclear energy.

APPRECIATION

Our stakeholders have displayed increasing support over this year and I thank them for their trust, patience and loyalty. We have started to deliver on our plans for the NNR and we have much to do, but I am confident that we are in a much better shape for the future, even in these volatile conditions.

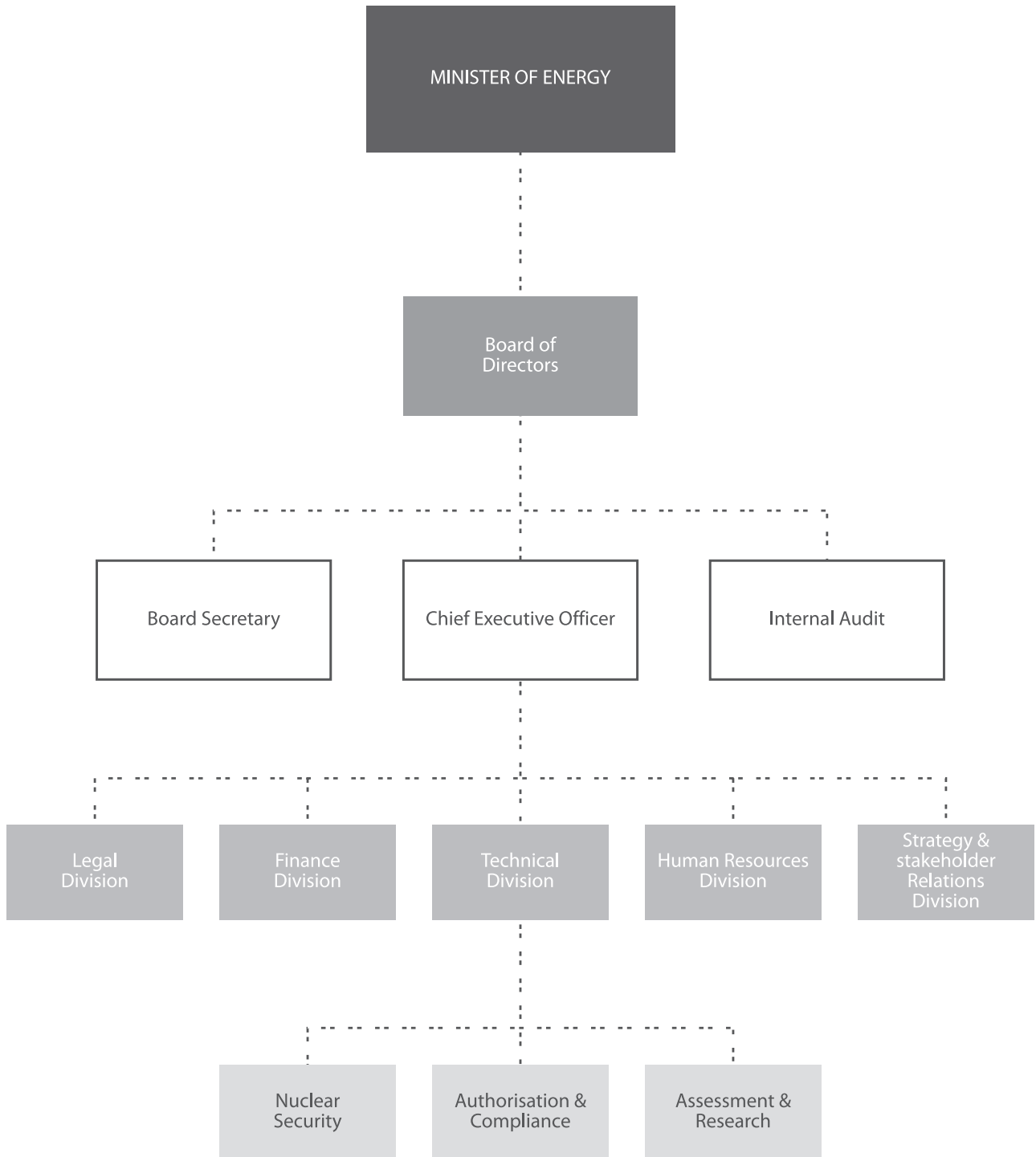
I wish to sincerely thank the Minister of Energy, the Board Chairperson and the Board of Directors of the NNR for their guidance and unwavering support over the past year. To the staff, you are the 'heartbeat' of the NNR and your collective efforts during the year under review have produced these results – *thank you!*

A handwritten signature in black ink, appearing to read 'Adv BM Mkhize', with a large, stylized initial 'B'.

Adv BM Mkhize
Chief Executive Officer
2011



PART A: GENERAL
ORGANISATIONAL STRUCTURE







NATIONAL NUCLEAR REGULATOR

PART B: PERFORMANCE



7. PERFORMANCE INDICATORS

7.1 PERFORMANCE

The NNR uses a balanced scorecard methodology to develop and monitor the implementation of its strategy. Strategic goals have been set in the following four areas:

- customer and stakeholders,
- financial,
- internal business processes, and
- learning and growth.

The NNR's strategic plan and its detailed achievements during the period under review are outlined in the table below.

The NNR balanced scorecard reflects strategic goals, initiatives, measures of success and targets. A commentary is provided about the progress of each strategic initiative.

The system for monitoring performance is classified according to the level of results achieved for each strategic output. The results are colour-coded to facilitate communication:

Achieved	Planned tasks have been completed and approved
Largely achieved	Planned tasks achieved above 80%
Not achieved	Planned tasks were not fully achieved - the percentage achievement is reflected in the 'comments' column
Not applicable	Tasks were not due in the reporting period under review.

The NNR achieved 55% of its planned strategic initiatives during 2010/11. The areas of underperformance were primarily due to capacity constraints.

Performance measuring

STATUS	WEIGHTING FOR THE YEAR	MAXIMUM POSSIBLE SCORE FOR YEAR	ACTUAL SCORE FOR YEAR
Customer and Stakeholders	55%	55	27.5
Financial	5%	5	2.5
Internal Business process	25%	25	25
Learning and growth	15%	15	5
TOTAL	100%	100	60
60 of 100 goals achieved			
TOTAL % FOR YEAR			60%



PART B: PROGRAMME PERFORMANCE
PERFORMANCE

No.	Strategic programme	Measures	Target 2010/11	Actual
1 Optimise regulatory framework				
1.1	Document, benchmark and implement regulatory requirements, bases, guidelines, assessment, compliance assurance and enforcement processes	Publication of NNR licensing manuals	September 2010	Work in progress - will be finalised in the new financial year. Delays caused by focus on the self-assessment process meant to create a basis for the review of all manuals
		Submission of proposed amendments to NNR Act to Executive Authority	December 2010	Amendments reviewed by the Board for submission to the minister
		Reports from regulatory emergency preparedness and response exercises	January 2011	Report submitted as scheduled
		Submission to IAEA of self-assessment report on the South African regulatory system	March 2011	Report submitted as scheduled
		Total number of compliance assurance inspections per year	56	45 Koeberg Nuclear Power Station (KNPS)
			340	260 regulation of natural sources (RENS)
204	202 nuclear technology and waste products (NTWP)			
1.2	Strengthen regulatory oversight of nuclear security	Approved NNR nuclear security regulatory framework	March 2011	Framework not approved
1.3	Strengthen NNR regulatory and analytical verification capability	Established independent analytical verification capability	March 2011	Independent verification capability not established. Two laboratory operators approached and negotiations at an advanced stage to conclude agreements on siting and operation of NNR laboratory capacity requirements
2 Improve stakeholder relationships				
2.1	Stakeholder engagement strategy	Reports from stakeholder engagement with non-governmental organisations (NGOs)	4	Completed
		Public education and awareness campaign	March 2011	Pamphlets developed for Tudor Shaft informal settlement, but not distributed. Meetings have been scheduled in the new financial year for public awareness campaigns with local community structures
2.2	Fulfil international obligations	Reports from IAEA Safety Standards Committee and FNRBA meetings; NUSCC (2), WASSC (2), TRANSSC (2), RASSC (2), CSS (2) and FNRBA (3)	13	Report submitted
3 Ensure financial viability and sustainability				
3.1	Review funding model	An approved funding model	March 2011	Draft model developed, to be finalised in the new financial year


PART B: PROGRAMME PERFORMANCE
PERFORMANCE

No.	Strategic programme	Measures	Target 2010/11	Actual
4	Create a high performance culture			
4.1	Define and implement service standards	Service performance standards indicators	10% deviation on 90 days	Less than 10% deviation
5	Promote good governance			
5.1	Maintaining governance structures	Timely reporting on corporate performance	4	Achieved
5.2	Findings of Auditor-General	Unqualified audit	March 2011	Achieved
6	Develop and maintain sound organisational infrastructure			
6.1	Develop and maintain sound organisational infrastructure	Improved security of NNR office buildings	March 2011	Achieved
		Sound ICT infrastructure	March 2011	Achieved
7	Appropriate deployment and management of talent and knowledge			
7.1	Talent management system	Staff development programme	December 2010	Each staff member on a personal development programme that needs to be integrated into a staff development programme
		Successors developed for crucial positions	March 2011	More than 80% completed. Successors identified and the final policy frameworks for implementation being finalised
7.2	Knowledge management system	Knowledge management initiatives implemented	September 2010	More than 80% completed. Knowledge management system developed for full commissioning in the new financial year



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8. OVERVIEW OF REGULATION OF NUCLEAR ACTIVITIES

The NNR monitors and enforces regulatory safety standards for the achievement of safe operating conditions, prevention of nuclear accidents and mitigation of nuclear accident consequences. To fulfil its mandate, the NNR advocates the development and maintenance of appropriate regulatory frameworks for enforcing regulatory radiation safety standards that are consistent with the recommendations of the International Commission on Radiation Protection (ICRP) and the IAEA.

The regulatory approach of the NNR considers both deterministic and probabilistic principles for the regulatory control and the assessment and verification of safety of the nuclear installations. The regulatory functions are commensurate with the radiation risks associated with a specific facility or activity. These include functions such as safety case reviews and assessments, authorisations, compliance assurance inspections, enforcement, drafting of regulatory documents and overseeing emergency planning and preparedness.

The NNR grants nuclear authorisations and exercises regulatory control related to safety over the siting, design, construction, operation, manufacture of component parts, and the decontamination, decommissioning and closure of nuclear installations; and vessels propelled by nuclear power or having radioactive material on board that is capable of causing nuclear damage.

The facilities and actions regulated by the NNR are diverse and include the operation of nuclear power reactors, research reactors, nuclear technology applications, radioactive waste management, mining and processing of radioactive ores, users of small quantities of radioactive material, transport of radioactive materials, vessels propelled by nuclear power or having radioactive material on board and any other actions capable of causing nuclear damage to which the NNR Act applies.

The NNR's regulatory process clearly considers present generations and believes that when considering radioactive waste management activities, future generations must also be considered. In carrying out its regulatory mandate, the NNR is required to establish the level of safety to be achieved and the standard of engineering and operation that will provide such a level of safety. In this regard, the fundamental principles adopted internationally for nuclear, radiation and waste safety are used as a basis for formulating standards, which are endorsed by the NNR.

The organisation responsible for the facility or activity to be carried out is required to provide a safety case to the NNR, demonstrating by analysis that the standards of safety will be met. Such safety assessments and all supporting information are subjected to detailed review by the NNR and, if deemed acceptable, conditions of licence are formulated that will ensure that facilities are properly constructed, commissioned, operated and decommissioned.

The NNR then engages in a series of compliance assurance activities to ensure, through a combination of inspection, audit and review, that the conditions of licence are effectively complied with and that they achieve the required level of safety.

Nuclear authorisation process

The applicant is required to apply to the NNR in a prescribed format, detailing the intended activities and demonstrating safety and compliance with the regulatory requirements.



PART B: PERFORMANCE

In line with the principle that the holder/applicant has primary responsibility for safety, the applicant is required to present a safety case in support of its application. The safety case must demonstrate compliance with the relevant (nuclear and radiological) safety criteria. The documentation submitted must address safety with respect to the design of any facilities concerned and safety in terms of constructing, commissioning, operating, maintaining and decommissioning. This enables the NNR to issue authorisations commensurate with the potential hazard posed by the facility or action. The NNR reviews the safety case to verify that the activity or design of a facility meets the relevant requirements and accepts or rejects the application accordingly.

The conditions of authorisation represent the framework within which the applicant or holder of nuclear authorisation is obliged to adhere to particular requirements of design, operation, maintenance and decommissioning. The conditions of authorisation also oblige the holder of the authorisation to demonstrate compliance through the submission of routine and non-routine reports.

Standard conditions included in a nuclear authorisation address:

- The description and configuration of the facility or authorised action,
- Requirements in respect of modifications to facilities;
- Operational requirements in the form of operating technical specifications, procedures or programmes as appropriate;
- Maintenance testing and inspection requirements;
- Operational radiation protection programmes;
- Radioactive waste management programmes;
- Emergency planning and preparedness requirements as appropriate;
- Physical security;
- Transport of radioactive material;
- Quality assurance, and
- Reporting.

The NNR Act makes provision for the granting of four categories of nuclear authorisation. These are;

- Nuclear installation licences (NILs);
- Nuclear vessel licences (NVLs);
- Certificates of registration (CORs), and
- Certificates of exemption (COEs).

Safety case review and assessment

The safety case is a collection of arguments and evidence in support of the safety of a facility or action. This normally includes the findings of a safety assessment and a statement of confidence in these findings. The safety case provided must identify and characterise all sources of radiation associated with the facility and all possible pathways of exposure of persons that may arise from such sources under normal operating conditions and under accident situations. The safety case must also take into account exposures that are likely to take place both now and in the future.



PART B: PERFORMANCE

The NNR undertakes an evaluation of the safety case submitted to ensure that the action or facility will be able to meet the prescribed regulatory requirements. From this evaluation, the NNR identifies conditions for inclusion in the nuclear authorisation.

Compliance assurance

The NNR conducts compliance assurance activities to determine the extent to which holders of nuclear authorisations comply with the relevant conditions, proportionate to the nature of authorisation issued and the risk posed by the facility or action. These activities typically involve a combination of audits, routine inspections and non-routine inspections, reviews of routine reports and reviews of occurrence reports.

Enforcement activities

Where non-compliance is identified, the NNR may initiate enforcement actions designed to respond appropriately to non-compliance with specified conditions and requirements. The enforcement actions may take the form of a written letter, penalties, curtailment of operations, suspension of authorisation, or, ultimately, withdrawal of authorisation. In all cases, the authorisation holder must:

- Remedy the non-compliance
- Perform a thorough investigation to an agreed timescale (in certain instances, the NNR performs its own investigation)
- Take all necessary measures to prevent recurrence.

As at the end of March 2011, the NNR was overseeing 1 NIL for Koeberg, 40 NILs for Necsa and 144 CORs for NORM facilities.

8.1 AUTHORISATION ACTIVITIES

The NNR scope for authorisations includes the issuing of NILs, CORs, COEs, authorisation change requests (ACRs) and NVLs.

During the year, the NNR received applications for changes to existing licenses and authorisations from current holders and new applications from existing and new holders.

These are detailed below:

8.1.1.1 Nuclear Energy Corporation of South Africa (Necsa)

(i) Approval of individual NILs for Necsa facilities

Following the reclassification of Necsa from one composite licence into different single facility licences, the NNR issued individual authorisations to each operating facility within Necsa to create direct accountability for compliance to safety standards at an operational level. During the financial year, the NNR issued individual NILs for the following Necsa facilities:



PART B: PERFORMANCE

Authorisation No.	Nuclear Facilities	Date Issued
NIL-10	Conversion plant complex	5 August 2010
NIL-11	Area 14 waste management complex	18 April 2011
NIL-16	Area 21 storage facility	11 May 2010
NIL-18	Area 16 complex	11 May 2010
NIL-19	Area 40 complex	5 August 2010
NIL-20	Area 27 de-heeling facility	11 May 2010
NIL-22	D-Building	6 August 2010
NIL-23	C-Building	12 May 2010
NIL-25	Building XB	11 May 2010
NIL-27	Building P-2800	11 May 2010
NIL-29	Area 26	5 August 2010
NIL-30	E-Building	5 August 2010
NIL-31	Dorbyl Camp	25 October 2010
NIL-32	X-Building	25 October 2010
NIL-33	Building P-1500	15 October 2010
NIL-34	YM vacuum workshop	5 August 2010
NIL-35	V-H Building laboratories	25 October 2010
NIL-36	P-1900 laboratories	5 August 2010
NIL-37	P-1600 laboratories	16 September 2010
NIL-38	Fuel development laboratories complex	16 September 2010
NIL-39	NTP radiochemicals complex	6 August 2010
NIL-40	Pelindaba Analytical Laboratories (PAL) in Building BEVA-E1	5 August 2010
NIL-41	Liquid effluent treatment facility complex	24 February 2011

A total of 23 NILs were issued during the reporting period, which concludes the 40 NILs agreed to be issued to the facilities on the Necsca site. The issued licences created a robust enforcement regime in which each entity can be held accountable for the maintenance of safety standards.

(ii) Application for new NIL for a dedicated isotope production reactor

On 23 August 2010, The NNR received an application from Necsca for an NIL for a dedicated isotope production reactor (DIPR) powered by low enriched uranium (LEU) standard plate-type fuel and with a maximum power output of 15 MW (t). The DIPR will be installed in newly constructed buildings at Necsca close to existing isotope production facilities. The NNR is reviewing the application through its authorisation processes.

(iii) Research and development on radioactive material

Necsca submitted an ACR to establish a laboratory at Pelindaba to develop and demonstrate the Klydon aerodynamic separation process (ASPD) for uranium enrichment. Based on the safety assessment report and basic design package, The NNR has granted permission to build the facility.

**(iv) Revision 1 of NIL-41 for liquid effluent treatment facility complex**

Following approval of an authorisation request for phase 2 decommissioning of the molybdenum transfer station in the decontamination hall, the NNR issued revision 1 of NIL-41 for the liquid effluent treatment facility complex. This revision reflects revised authorised actions and specified NNR requirements and resulted from the issue of individual licences for Necsa facilities.

(v) Upgrade of the neutron radiography facility at Safari-1

On 19 November 2010, the NNR received a licensing strategy to upgrade to international standards the existing neutron radiography facility at beam port 2 of the Safari-1 material test reactor. The strategy is being reviewed.

(vi) Safari-1 safety assessment report improvement programme

Following the NNR's 2003 review of the Safari-1 safety assessment report (SAR) by the NNR in 2003 it was agreed that it would be improved and resubmitted to the NNR. The NNR received 18 of the 21 chapters by December 2010 and is currently reviewing them.

(vii) LEU fuel and target plate manufacturing facility

Necsa is authorised to manufacture fuel and target plates for the Safari-1 material test reactor using high enriched uranium (HEU) and LEU. Necsa submitted an ACR for the construction and cold commission of an LEU fuel and target plate manufacturing facility, including a licensing strategy and an action plan, siting justification and a safety case specification. The submission was reviewed in accordance with the authorisation procedure.

(viii) Vaalputs: application for a waiver on the waste acceptance criteria

Radioactive waste may be accepted for disposal at Vaalputs only if it complies with the waste acceptance criteria (WAC). These criteria are derived from Vaalputs' post closure radiological safety assessment and probabilistic safety assessment report.

Necsa applied for:

- * A waiver to the approved WAC requesting approval to receive and dispose of waste packages with a surface dose rate in excess of 2 mSv/h and not exceeding 10mSv/h as specified by the WAC. The waste transported to Vaalputs has also to comply with International Atomic Energy Agency (IAEA) regulations for the safe transport of radioactive material, which allow transport of waste packages with surface contact dose rates in excess of 2 mSv/h but less than 10 mSv/h. NNR approved the move, as it was satisfied that it did not pose any safety threat.
- * A waiver to accept waste in 100 litre waste containers as standard type waste packages. NNR approved the move, as it was satisfied that it did not pose any safety threat.



PART B: PERFORMANCE

(ix) Validation and revalidation of transport packages

In accordance with Section 7 of the NNR Act, NNR is the competent authority in South Africa in terms of IAEA regulation. During the financial year, NNR reviewed and revalidated the package design approval certificate for the following transport container used by Necsa:

Certificate number	Transport package name	Effective date	Expiry date
ZA NNR/313/B(U) F-96 (revision 5)	CERCA container	15 October 2010	31 August 2013
ZA/NNR 1003/B(U)-96	1003 cobalt transport flask	24 February 2011	23 February 2016

8.1.1.2 NORM Facilities

During the reporting period, the Regulation of Natural Sources department (RENS) received five applications for CORs and certificates of exemption (COEs).

CERTIFICATE OF REGISTRATION (COR)	CERTIFICATE OF EXEMPTION (COE)
1 mining and processing of mineral sands application	* Kalahari GoldRidge Mining Company Limited-exemption of radioactive material * Glencore South Africa (PTY) Ltd-exemption of cathodes
2 small users laboratories applications	see above

NNR also received a notification letter for surrendering of a nuclear authorisation (COR-32).

8.1.1.3 Nuclear vessels

An NVL was issued to Eskom for the *CEC Accord* vessel in July 2010 for transport of nuclear fuel to Koeberg. No incidents occurred with this vessel and the transportation was managed according to the licence conditions.

The NNR received an application on 9 September 2010 for an NVL to dock in Cape Town harbour. The cargo vessel would be carrying Class 7 radioactive material destined for overseas. All technical submissions were subjected to a technical review and accepted by NNR.



9. COMPLIANCE ASSURANCE AND ENFORCEMENTS

The NNR Act stipulates that NNR should conduct compliance assurance activities to ensure that authorisation holders adhere to their licence conditions.

9.1 INSPECTIONS

9.1.1 Necsa

Some 202 of the 204 planned compliance inspections were conducted during the financial year.

In general the inspections showed satisfactory compliance.

Six unplanned compliance inspections were conducted during the financial year as follows:

* A survey was conducted on the U-plant to verify the results of the radiological surveillance report submitted by Necsa, prior to the decommissioning of the facility. The NNR survey confirmed the results of the Necsa report.

1. * On 10 May 2010, Necsa reported a bomb threat against the radiochemical facility. It was a hoax and the perpetrator was charged with a criminal offence.
* A nuclear event was reported when iodine release from P-1701 stack triggered radiation alarms. After investigation, NNR confirmed that Necsa had not exceeded regulatory limits and that the event did not pose any risk to the public.
2. * Inspection of Area 21 where concrete waste drums were found to have deteriorated. A nuclear event was subsequently registered.
3. * Verification of compliance with NNR requirements for the transportation of LEU fuel and target plates from OR Tambo International Airport to Pelindaba.
4. * Verification of compliance with NNR requirements for unloading containers carrying LEU fuel and for exempted packages containing LEU target plates.

9.1.2 KNPS

No cases of non-compliance with licence conditions were identified during 45 of the 56 planned compliance inspections that were conducted during the financial year.

9.1.3 NORM FACILITIES

Of the planned 340 compliance assurance inspections at facilities handling NORM, 260 inspections were conducted at randomly selected authorised sites.

The average compliance index for all holders was 65%. The 35% non-compliance issues were addressed through regulatory instructions to the holders.



9.2 AUDITS

9.2.1 Necsa

Four audits were conducted during the financial year – at applied chemistry (V-H Building), Uchem (Building P2700), Safari-1 research reactor (Building P1800) and Necsa Emergency Services. In all cases, Necsa was required to submit an action plan to address the findings and observations.

The audits raised the following findings and observations:

Applied chemistry

Four findings were made relating to unavailability of field analysis reports for liquid effluent discharges, evidence of appointment of the radiation protection officer (RPO), outdated list of personnel in the assembly point and no evidence of written appointment of the RPO to deal with radioactive sources to support the nuclear facilities management (NFM). Two observations were made about poor housekeeping and outdated signposts.

A. Uchem

Four findings were made relating to the updating of the inspection, measuring and test equipment (IMTE) database, suitably qualified and experience person (SQEP) authorisations not in place due to task lists not completed, incomplete dose reports submitted to the NFM by the RPO, and appointment of the RPO to be the responsible person for sources approved by the RPS and not the NFM.

B. Safari-1:

Three findings were made relating to failure of one of the radiation workers to attend his workers' requalification course, an unlocked radioactive source storage facility and non-compliance with the revision date of some documents.

Four observations were made relating to the management review report for 2009/10 not signed after eight months, the lack of an induction process for new members, non-availability of some assessment reports, poor housekeeping in the radioactive source storage facility and lack of details on a radiation protection clearance card.

Emergency Services

Four findings were made relating to the outdated document 'Quality plan on radioanalytical services during an emergency at Necsa', unavailability of a specific electronic personal dosimeter (EPD), no record of filing of certain documents, no record of the appointment letter for the assistant radiation protection controller (ARPC).

Observations related to an incomplete training manual for building heads, and muster coordinator and radiological orientation training for intervening organisations limited to Madibeng District Municipality.



9.2.2 NORM facilities

All seven audits planned for the financial year were conducted at identified facilities to verify the effectiveness of the established quality management system (QMS) and compliance with the document NNR RD-005 on quality management requirement for activities involving radioactive material: mining and minerals processing. The average audit compliance index was 60% and reports were completed within the agreed timeframes.

10. OCCUPATIONAL EXPOSURE

10.1 Necsca

Necsca complied with the dose limitation system for individual exposed workers over the calendar year January to December 2010. The maximum cumulative dose accrued for an individual during the calendar year was 13.4mSv and the total collective dose for the 688 radiation workers was 0.6903 person-sievert.

Exposure type	Dose for January to December 2010
Maximum dose (mSv)	13.4
Average dose (mSv)	0.80
Total collective dose (person-sievert)	0.6903

10.2 KNPS

The occupational exposure for the workforce for calendar year 2010 was as follows:

Exposure type	Dose for January to December 2010
Maximum dose (mSv)	8.344
Average dose (mSv/person)	0.3912

The maximum and average doses are acceptable considering the regulatory limits of 20mSv and the ALARA (as low as reasonably achievable) target of 4mSv respectively.

10.2.1 Radiation contamination incident

On Sunday 12 September 2010, during maintenance in the containment building of Unit 1, a radiation contamination incident occurred. The airborne contamination was caused by the flow of air through the primary circuit and through the protective steam generator tenting when the power supply to the portable ventilation unit was interrupted. Although the event created contamination below reporting levels, The NNR conducted an enquiry to determine if radiation workers were exposed to excessive radiation. Initial information indicated that approximately 91 radiation workers received doses of approximately 0.1 to 1mSv. The investigation covered the training and briefing of the workers, Eskom compliance with procedures relating to prevention of contamination and response to such events, verification of actual doses and nature of the contamination. The NNR directed Eskom to conduct a comprehensive investigation into the incident and submit a formal report, with corrective actions to prevent future recurrence. Nevertheless, the NNR concluded that Eskom did not violate any condition of the Koeberg NIL-01, as the dose levels were well within the regulatory limit of 50mSv per annum.



PART B: PERFORMANCE

10.3 NORM FACILITIES

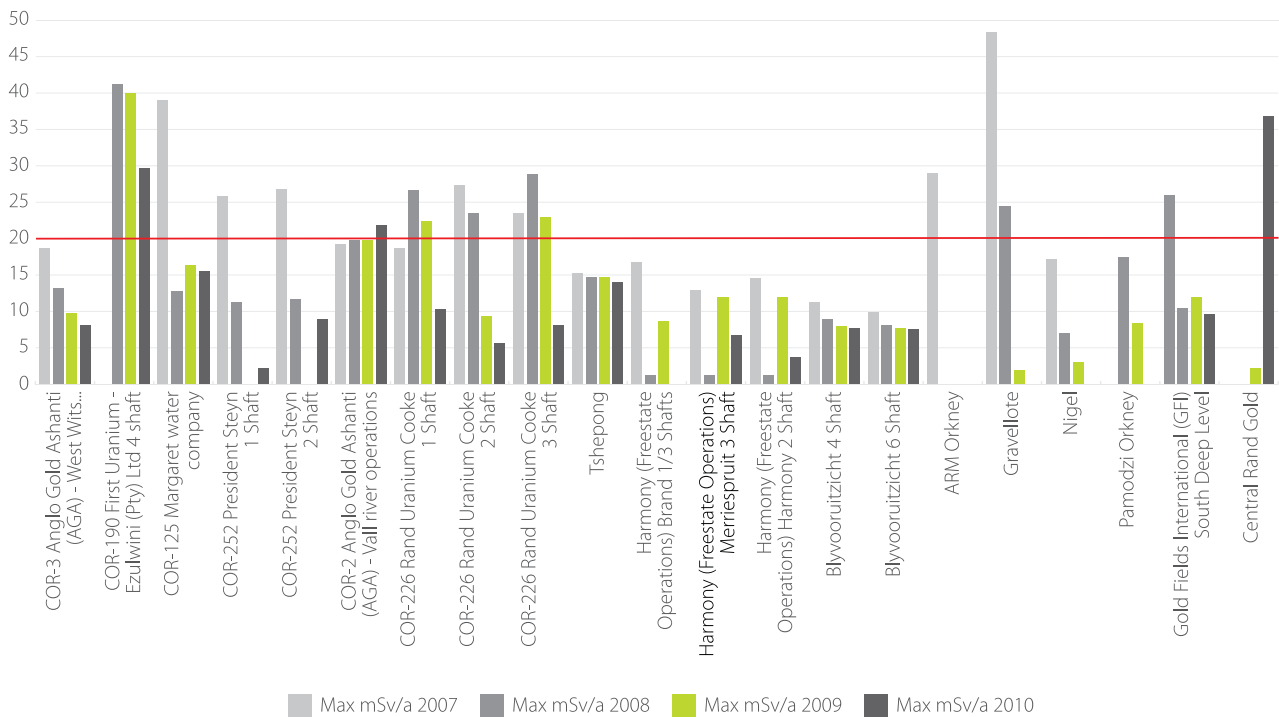
The NNR has identified 17 mining and mineral processing facilities with the potential to exceed the set regulatory limit of 20mSv/a if not closely monitored.. These facilities continue to implement appropriate corrective measures such as engineering and administrative controls to ensure that all dose levels are kept ALARA as part of the ongoing monitoring programme.

COR #	Holder	Max mSv/a 2007	Max mSv/a 2008	Max mSv/a 2009	Max mSv/a 2010	Controls implemented
COR-3	COR-3 Anglo Gold Ashanti (AGA) - West Wits Operations Tau Tona shaft	18.8	13.2	9.8	8.1	Declassified as SCM, COR3B143 engineering controls implemented
COR-190	COR-190 First Uranium - Ezulwini (Pty) Ltd 4 shaft		41.3	40.1	29.7	Engineering and administrative controls currently implemented
COR-215	COR-215 Margaret water company	39.16	12.9	16.4	15.5	Engineering and administrative controls currently implemented
COR-252	COR-252 President Steyn 1 shaft	25.9	11.2	0	2.1	Declassified as SCM
COR-252	COR-252 President Steyn 2 shaft	26.9	11.7	0	8.9	Declassified as SCM
COR-2	COR-2 Anglo Gold Ashanti (AGA) Vaal River operations	19.3	19.89	19.9	21.8	Engineering and administrative controls currently implemented
COR-226	COR-226 Rand Uranium Cooke 1 shaft	18.8	26.6	22.5	10.2	Engineering and administrative controls currently implemented
COR-226	COR-226 Rand Uranium Cooke 2 shaft	27.4	23.6	9.4	5.6	Engineering and administrative controls currently implemented
COR-226	COR-226 Rand Uranium Cooke 3 shaft	23.6	28.9	23	8	Engineering and administrative controls currently implemented
COR-5	Tshepong	15.3	14.7	14.7	14.1	Declassified as SCM COR5B0113 in September 2008
COR-37	Harmony (Freestate Operations) Brand 1/3 shafts	16.8	1.1	8.6	0	Shaft closed
COR-37	Harmony (Freestate Operations) Merriespruit 3 shaft	13	1.2	12	6.7	Shaft closed
COR-37	Harmony (Freestate Operations) Harmony 2 shaft	14.6	1.3	12	3.7	Shaft closed
COR-41	Blyvooruitzicht 4 shaft	11.24	8.84	7.87	7.64	Declassified as SCM COR41B0170 in May 2009
COR-41	Blyvooruitzicht 6 shaft	9.91	8.05	7.69	7.5	Declassified as SCM COR41B0170 in May 2009
COR-8	ARM Orkney	29	Sold to Pamodzi and now Harmony			Surrendered COR008A192 and now operating under COR-234
COR-11	Gravellote	48.5	24.5	1.85	Closed	Engineering and administrative controls implemented - mine closed in April 2009 COR11A0208



PART B: PERFORMANCE

COR #	Holder	Max mSv/a 2007	Max mSv/a 2008	Max mSv/a 2009	Max mSv/a 2010	Controls implemented
COR-52	Nigel	17.1	7	3	Aurora	All operations at the facility are closed
COR-234	Pamodzi Orkney		17.5	8.4	Aurora	Engineering controls led to dose reduction and shafts currently not operational
COR-18	Gold Fields International (GFI) South Deep Level	26	10.5	12	9.59	Engineering controls led to dose reduction
COR-232	Central Rand Gold			2.11	36.83	COR issued in 2008. Directive issued COR232B0016 and engineering controls being implemented



* Only operational special case mines are reflected in the table above. The others are under care and maintenance, which entails visual inspections to ascertain that skeleton staff is maintaining the facilities as stipulated by the NNR, or more comprehensive inspections where the situation warrants. See table below:

SCM holders not operational	COR number
Nigel Gold Mining Company (Pty)Ltd	COR-52
Gravelotte Mine Limited	COR-11
East Rand Proprietary Mines	COR-53
Consolidated Modderfontein Gold Mines	COR-51
The Grootvlei Gold Mine (Pty)	COR-47
Pamodzi Gold Mine (Orkney) (Pty)	COR-234
Harmony (Welkom operations)	COR-7





11. PUBLIC EXPOSURE

11.1 Necsa

In accordance with the conditions of licence and the regulations on safety standards and regulatory practices published as Regulation No R388 dated 28 April 2006, the public doses resulting from effluent discharges from the Necsa Pelindaba site must comply with the dose constraint of 0.25mSv per annum and the annual authorised discharge quantities (AADQs) for the site. Necsa demonstrated compliance with the AADQs and the projected public doses resulting from the liquid and gaseous effluent releases during the 2010 calendar year were 5.093 and 4.102 μ Sv respectively, which is a total projected public dose of 9.195 μ Sv.

Quarter	Liquid Pathway dose in μ Sv/a	Gaseous Pathway dose in μ Sv/a	Total projected dose in μ Sv/a
1	0.997	0.942	1.939
2	1.132	1.324	2.456
3	1.719	1.260	2.979
4	1.245	0.576	1.821
Total for the calendar year (January – December 2010)	5.093	4.102	9.195

11.2 KNPS

The maximum public dose for 2010 was determined to be 0.003543mSv, which is considered satisfactory given the NNR regulatory limit of 0.250mSv per annum for Koeberg.

The effluent discharges for key radionuclides for 2010 are given in the table below. These comply with AADQs), which are established to ensure compliance with the public dose limit referred to above.

Percentage of AADQ in effluent discharged during calendar year 2010.

Liquid transport pathway		Atmospheric transport pathway	
Radionuclide	% of quarterly AADQ	Radionuclide	% of quarterly AADQ
Ag-110m	27.75	Co-58	3.43
Co-57	31.14	Co-60	3.32
Co-58	8.18	I-132	12.21
Co-60	13.12	I-133	11.89
H-3	5.36	I-134	16.88
I-133	5.68	I-135	5.11
Mn-54	4.00	Xe-133m	0.59
Zr-95	1.92	Xe-135	1.46



11.3 NORM

The scheduled public safety assessments (PSAs) were submitted and reviewed by the NNR for adequacy and implementation during the period under review. Holders of authorisations demonstrated that the doses from authorised facilities did not exceed the regulatory limit of 1mSv/a or, more importantly, the dose constraint of 0.25mSv/a. The PSAs reveal an improvement in the implementation of the radiation protection programme by authorisation holders.

12. RADIOACTIVE WASTE RECEIVED AND STORED

12.1 Necsca

Pelstore is the centralised storage facility for radioactive waste on the Pelindaba site and occupies a decommissioned building re-used for this purpose.

During the 2010/11 financial year, solid waste operations received 2 425 radioactive waste containers as detailed in the table below:

Waste type	Waste container	Q1	Q2	Q3	Q4	Total
Medical waste	100ℓ	-	-	8	-	8
Medical waste	160ℓ	-	8	6	-	14
Solidified waste	100ℓ	174	59	95	200	528
Safeguards enriched	200ℓ	-	-	-	-	-
Compressible waste	160ℓ	379	436	343	265	1423
Non-compressible waste	160ℓ	-	-	-	-	-
Non-compressible waste	100ℓ	-	-	-	-	-
Non-compressible waste	210ℓ	5	66	135	81	287
Concrete drums	4ton	82	-	15	68	165
Total		640	569	602	614	2425

12.2 Necsca VAALPUTS

No radioactive waste was shipped from Koeberg to Vaalputs during the financial year.



13. ENFORCEMENT ACTIONS FOR REPORTED NUCLEAR EVENTS

13.1 Necsca

With effect from June 2010, NTWP employed a system of safety indicators to evaluate and grade all reportable nuclear events related to nuclear facilities on the Necsca Pelindaba site and at Vaalputs. Regulatory concerns in Safety case, process implementation and operator organisation are colour coded ranked according to severity.

Colour code	Level of safety concern	Description	Response
Red	Intolerable	Violation of fundamental safety requirements or principles (dose, risk, defence-in-depth etc). Unacceptable level of safety, or inability to demonstrate level of safety.	Immediate action required to curtail operation, or correct problem. Legal action subject to enforcement policy.
Orange	High	High level of safety concern. Degraded level of safety.	Urgent corrective action required. Regulatory letter to holder. Possible legal action if linked with non-compliance to conditions of authorisation.
Yellow	Medium	Significant safety concern or trend.	Specific concerns to be reported to holder at quarterly licensing interface or by correspondence. Corrective action required in medium- to long-term.
Blue	Low	Observations or findings at very low level.	Record on database. Need for further monitoring by the NNR, and report to holder collectively at quarterly meeting.
Green	Acceptable	No significant findings.	No regulatory action.

Using the above classification scheme the nuclear events reported by Necsca during the year are summarised below:

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Event no	Plant/area	Description	Safety indicator classification			Comment
			Safety case	Process implementation	Operator organisation	
1389	Safety, Health, Environmental and Quality Management department (SHEQD)	A SHEQ audit conducted at SHEQ department found non-compliance relating to personnel status of a radiation worker had elapsed on 18 March 2010 and there was no programme specifying requirements for external/internal dosimetry and instrumentation (eg WBLC)				The NNR has accepted Necsa's corrective actions and is monitoring implementation of corrective actions stated in the Necsa investigation report.
52	Calibration services	An employee has been working in calibration services without TLD as he had not been registered as a radiation worker.				The NNR has accepted Necsa's corrective actions and is monitoring implementation of corrective actions stated in the Necsa investigation report.
NIL41-OCC-0001	LEMS – P2400	A radiological survey conducted at the K1 and P2400 perimeter fences indicated that radiation levels exceeded white radiation area criterion.				The NNR found the corrective actions in their investigation report acceptable will monitor their implementation.
1378	NTP P-1701	Audit conducted by NNR recorded three findings against the radiochemical facility at P-1701				Necsa was required to register a nuclear event following the NNR audit.
1379	NTP P-1701	Notification was received from the facility RPO that the hydrogen sensor in the facility basement underneath Cell 11 had failed				The NNR accepted Necsa's corrective actions and is monitoring implementation.
1380	RadioAnalysis	An unusual odour detected in the C-wing of Building P-1600 was traced to the sump on the eastern side of the basement of the building and was suspected to be caused by an organic chemical in the water.				No regulatory action required.





Event no	Plant/area	Description	Safety indicator classification			Comment
			Safety case	Process implementation	Operator organisation	
NIL16-OCC001	PDOV-A14	NTP concrete drums accepted at PDO storage facilities did not conform to PDO waste acceptance criteria.				<p>Necsa was required to provide NNR with:</p> <ul style="list-style-type: none"> The design specification for all concrete containers received or to be received by predisposal operations, approved by an SQEP; Proof that all concrete containers already received were manufactured to said design specifications; Results from all tests to show compliance of concrete containers to the IAEA transport regulations; Justification of why NLM received the containers in question without receiving their necessary data packs; Details of remediation actions for all non-compliant containers to assure compliance with waste acceptance requirements, and Evidence that suitable procedures and equipment are in place to ensure that waste packages are not damaged while in the care of predisposal operations.
VP028	Vaalputs	Non-compliance with NL28 found during NNR audit				<p>Necsa was required to register a nuclear event following the NNR audit. This was a low significance issue relating to the management system.</p>
VP028	Vaalputs	Non-compliance with NL28 found during NNR audit				<p>Necsa was required to register a nuclear event following the NNR audit. This was a low significance issue relating to the management system.</p>
1381	NTP P-1701	A truck loaded with a Daleen container containing uranium plates arrived at the basement area of P-1701. The container was taken to the red area and the uranium plates loaded into the cell. It was cleared in the red area and reloaded onto the truck, which then left the controlled basement area without RPO clearance.				<p>The NNR accepted Necsa's corrective actions and is monitoring implementation.</p>



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Event no	Plant/area	Description	Safety indicator classification			Comment
			Safety case	Process implementation	Operator organisation	
1382	NTP P-1701	Iodine-131 release through the stack is a recurring event. Notification was received from RadioAnalysis that NTP had exceeded the daily investigation limit of $1,9 \times 10^9$ Bq for 4 – 5 July 2010. The release for the period was $2,058 \times 10^9$ Bq.				The NNR confirmed that the monthly investigation limits was not exceeded.
1384	NTP P-1701	Forty waste drums were transported to Area 24 for storage. Surface dose-rate measurements were taken by NLM personnel and were above the accepted level on two drums, which were then returned to NTP for safekeeping.				No immediate regulatory action required
1385	Decommissioning services	Contaminated pallets were found on the concrete slab west of the entrance of Area 40. The pallets were illegally dumped by unknown persons. The area was barricaded and arrangements were made to remove the pallets to a controlled area.				The NNR accepted Necsas corrective actions and is monitoring implementation.
NILO2-0009	Safari-1	According to document RR-SPE-00001, Rev 4, Section 6.3, 'Continuous monitoring system', the noble gas monitor results shell is checked once a month to verify compliance with limits. The results for May and June 2010 were not included in the quarterly report for April to June 2010.				Necsa was required to register a nuclear event following the NNR inspection. The results were made available and the matter is now resolved.





13.2 KNPS

In December 2010, Eskom identified evidence of leaking fuel in Koeberg unit 1 above normal levels. Koeberg operating technical specifications, which are licence binding, dictate activity levels in the primary circuit above which the unit has to be shut down within a certain time.

The unit was shut down on 19 December 2010, fuel was unloaded and the fuel assemblies were analysed one by one through a 'sipping' process to find the leak. An ultrasonic inspection revealed one fuel pin in one fuel assembly as the leaker and a photographic process found indications on the pin that could have resulted in leakage. The cause of the leakage was deemed to be fretting caused by small shavings on the surface as the pins are pulled through the grids during assembly.

The affected pin was replaced with a dummy stainless steel pin and the assembly was reloaded for use as normal.

Three other fuel assemblies – although not leakers - were replaced due to damage on the grids that hold the pins in place in the fuel assemblies. This necessitated a reanalysis of the core for this cycle.

NNR monitored the entire process, reviewing and approving a temporary alteration for fuel inspection and repair, and assessing the revised core reload safety analysis and approving core reload for a return to power in mid-January 2011. The radioactive leaks were contained within the primary circuit and removed by the demineraliser (filtration) system with no increased risk to the public or workforce.

Although fuel leakage is not uncommon and has happened several times at Koeberg, this was the first time that it resulted in a unit being shut down.

Other causes of fuel leakage are leaking welds at the ends of the fuel pins, damage during fuel handling, or metallic debris circulating in the primary coolant system during operation. Although the fuel and primary circuit are inspected it is not always possible to detect problems before startup.

Eskom complied with all procedures, including those that are licence binding. These include operating technical specifications limiting activity levels in the system and fall-back times (time for shutdown) should these limits be exceeded, which are predetermined and enforced by NNR through Koeberg NIL-01.



13.3 NORM FACILITIES

The NNR issued directives to the mining and minerals processing facilities listed in the table below:

Ref number	Holder	Description of directive	Date	Current status
COR165B0012	Areva Lokisa	Removal of radiological footprints and loose radiological contamination in the scope of its nuclear authorisation.	13 May 2010	The holder has submitted a plan of action to address the requirements of the directive
COR96B0030	Donnee Engineering	Revoking or surrendering of a COR	6 August 2010	The holder has responded to the directive, but the requirements were not adhered to (only one page of the COR delivered to the NNR). The NNR inspector visited the holder, en-route from another inspection, but the holder was not available. Followup actions are underway
COR232B0016	Central Rand Gold	Implementation of proper engineering and administrative controls to reduce radiological exposure of workers	13 September 2010	The holder has started installation of engineering controls as per time schedule supplied to the NNR.
COR53B0116	East Rand Property Mine	Demolition of the gold plant without the appropriate regulatory approvals	15 September 2010	All work on site was suspended. A formal demolition programme will be submitted to the NNR for approval before demolition
COR47B00123	Grootvlei Mines (Pty) Limited	Non-compliance with condition 1.4.2 public safety assessment	25 January 2011	The mine is closed and in liquidation
COR41B00217	Blyvooruitzicht Gold Mining Company Limited	Non-compliance with condition 1.4.1 operational radiation protection programme	1 February 2011	The holder has provided the NNR with schedule of compliance
COR103B0030	Linbeck	Intention to revoke a COR	3 March 2010	The holder was directed to provide the NNR with details of corrective action by the end of March 2011 for a series of non-compliances identified during the inspections
COR190B0047	First Uranium -Ezulwini	Implementation of proper engineering and administrative controls to reduce radiological exposure of workers	16 April 2010	Ezulwini Mine continued to implement corrective measures such as engineering and administrative controls as per the NNR directive of the previous quarter.
COR165B0012	Areva Lokisa	Removal of radiological footprints and loose radiological contamination in the scope of its nuclear authorisation	13 May 2010	Areva submitted a plan of action to address the requirements of the NNR directive. The NNR will conduct a followup inspection in the next quarter



Ref number	Holder	Description of directive	Date	Current status
COR96B0030	Donnlee Engineering	Revoking or surrendering of a COR	6 August 2010	NNR will conduct a radiological survey of the site in the next quarter, as the holder has not adhered to the directive and was unavailable during a followup visit in the last quarter
N/A	Margaret Water Company (MWC)	To lodge an application for a nuclear authorisation	8 September 2010	Response to the directive was provided within the 60-days given by the NNR. The response was discussed with the Legal division and a followup meeting with MWC arranged for the next quarter.
COR232B0016	Central Rand Gold	Implementation of proper engineering and administrative controls to reduce radiological exposure of workers	13 September 2010	The holder has started installation of engineering controls as per time schedule supplied to the NNR. A followup inspection conducted by the NNR in the reporting period revealed that the programme of sealing control had started. Due to high spot measurements by NNR, a completion date of 15 December 2010 was imposed on the holder.

The implementation of corrective measures such as engineering and administrative controls generally resulted in significant reductions in radiation workers' exposures



14. REVIEWS AND ASSESSMENTS

14.1 Necsa

(i) Approval and validation of transport package design

In accordance with Section 7 of the NNR Act, NNR is the competent authority in terms of IAEA regulations for the safe transport of radioactive material. During the reporting period, NNR reviewed and recertified for five years the package design certificates for the following transport containers used by Necsa:

Certificate number	Transport package name	Expiry date	Comment/reason for review
ZA/NNR 1003/B(U)-96	1003 cobalt transport flask	23 February 2016	Certificate will expire
ZA/NNR 1003/B(U)-96	1003 cobalt transport flask	8 November 2010	Certificate will expire
ZA/NNR/313/B(U)F-96	TNBGC-1 transport cask	31 August 2013	Changes to original certificate by French authority

(ii) LEU fuel and target plate manufacturing facility

Following the initial receipt of an ACR for the construction and cold commission of a new LEU fuel and target plate manufacturing facility, NNR received a licensing strategy and action plan, siting justification and a safety case specification. These submissions have been commented on and Necsa's response is awaited.

The NNR also received the HSE basis of design for the facility, whose review by the NNR assessment group should be completed in the next reporting period.

(iii) Decommissioning of Area 14 oil basement

Phase 2 decommissioning of the Area 14 oil basement continues and scheduled compliance assurance inspections are being performed to verify compliance with NNR-approved activities. This phase of decommissioning is expected to be completed by September 2011.

(iii) Decommissioning of the uranium conversion plant

Following NNR approval in December 2009 of Phase 2 decommissioning of the uranium conversion plant, Necsa has been verifying its compliance with the licensing process. Decommissioning is expected to start in the next reporting period and to finish in April 2013.

(iv) Safari-1 SAR improvement programme

Following the NNR's review in 2001 of the Safari-1 safety assessment report (SAR), it was agreed that the report will be improved and resubmitted for review and approval. The NNR received the first revised chapters in June 2010 and approved the chapters affected by the conversion from HEU to LEU fuel assemblies.

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To date the NNR has received 13 of 21 chapters. The balance is expected by October 2011.

(v) Vaalputs post-closure radiological safety assessment

The NNR has commented on Necsa's Vaalputs post-closure radiological safety assessment, and further documents have been submitted for review.

(v) Vaalputs operational safety assessment

Necsa resubmitted the Vaalputs operational safety assessment revised according to NNR comments. The new document is being reviewed.

(vi) New dedicated isotope production reactor

NNR received a licensing strategy, site safety report specifications and project justification for the new DIPR. The submissions were reviewed by the NNR assessment group and responses forwarded to Necsa.

(vii) Nuclear fuel cycle facility

The Necsa nuclear fuel cycle (NFC) department submitted an NFC siting strategy and criteria for establishment document, which is currently being reviewed.

(viii) Upgrade of the neutron radiography facility at Safari-1

Necsa intends to upgrade the neutron radiography capabilities in the Safari-1 reactor to comply with modern international standards. Review of the licensing strategy, revised following NNR comments, will be completed early in the next reporting period.

(ix) Reinstatement of low active effluent release tank LA/6

Extensive maintenance was performed on low active effluent release tank LA/6, which forms part of the effluent management chain at the liquid effluent treatment facility (LETF) at Building P-2400. This maintenance included sealing of and erecting a roof over the tank. After reviewing the submissions,, the NNR approved the reinstatement of tank LA/6.

(x) Transport of Necsa low level waste to Vaalputs

After reviewing a safety assessment and transportation plan to transport Necsa low level waste (LLW) to Vaalputs, the NNR provided comments and, in this reporting period, approved LLW transportation to disposal at Vaalputs, subject to conditions.



14.2 KNPS

The NNR conducted the following major reviews and assessments during the financial year:

(i) Outage 118

An assessment of modification proposals scheduled for implementation on Unit 1 during outage 118, which began on 23 August 2010. The NNR rejected one modification proposal due to shortcomings in the safety justification and failure to demonstrate the safety benefit of the modification.

Due to unforeseen technical difficulties during installation, modification 06086 - installation of shredder in the TES compacting station - could not be implemented as per design. Eskom informed the NNR of the withdrawal of the modification from the outage scope and the plant was restored to its original configuration. The revised design will be submitted to the NNR later for approval before implementation.

(ii) Plant refuelling outage 218

The scope of modifications for outage 218, which began on 14 March 2010, are the same as for outage 118. Modification no 96074C – RCV cross connect - which affects both units finally has been approved, as outstanding issues related mainly to rules and procedures for usage of unit cross-connection have been addressed by Eskom.

(iii) Second safety reassessment

The second Koeberg safety reassessment project, which began in April 2008 following agreement between Eskom and the NNR, needs to be reviewed in terms of scope, deliverables and work management. Draft reports of 12 completed chapters have been submitted to NNR for initial assessment, but final submission of reports has been further delayed by additional independent reviews performed by Eskom and now is expected in the second quarter of 2011. The project outcome will be a report of 14 chapters, each concluding on the continued safe operation of the plant.

(iv) OTS Rev 7 and safety-related surveillance manual

Revision 7 of the operational technical specification (OTS) based on the French OTS for the CP-1 family of plants similar to Koeberg was submitted to the NNR.

The new OTS, consisting of eight chapters, was submitted to NNR for review and in-principle approval on 10 June 2010. A safety case was included, making reference to all supporting documents.

The safety-related surveillance manual is almost complete, with 42 of the 48 systems submitted for approval. To date, 34 systems have been assessed and approved.

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Eskom requested approval from NNR to load four Agora-A lead fuel assemblies in Unit 2 during outage 218. This followed the initiation of modification 08062 - introduction of 4,4% enriched Areva NP Agora lead used assemblies in Unit 2. Although the modification is registered for both Agora-A and Agora-H fuel, the current submission concerns only Agora-A. The NNR review is complete and formal approval to use the new fuel has been granted..

(vi) Koeberg long-term asset management – steam generator replacement and thermal power uprating

Eskom informed the NNR by letter K19821E dated 8 September 2010 of its proposed long-term asset management (LTAM) interventions at Koeberg, including thermal power uprate (TPU), steam generator replacement (SGR) and plant life extension (PLEX). TPU will involve a 10% increase in reactor thermal power, and SGR the replacement of six steam generators (three per unit), which are part of the primary circuit connected to the reactors via pipework. As agreed at the quarterly licensing and liaison meetings, Eskom arranged a workshop for 6-7 December 2010, at which it indicated that TPU and SGR would be an integrated project, with PLEX following later. An outline of the TPU-SGR project was presented, with timelines for major milestones. Subsequently, Eskom indicated that, while SGR was approved by its board, TPU approval is still pending, with approval given only for TPU safety studies.

The NNR prepared SD-0004, a strategy document for the TPU-SGR project, and is developing resource estimates for 2011-2015 and proposed licence fees. Manufacturing of the new steam generators could start as early as June 2011.

Eskom and the NNR held a licensing meeting in Cape Town on 2 March 2011 to discuss the NNR approach to licensing of the project and resources needed, and to identify focus area for discussion at future workshops. NNR presented its licensing strategy for the project and proposed the following focus areas:

- approach to SG storage or disposal;
- equipment classification;
- NNR oversight of manufacturing;
- accident analysis methodology;
- pressurised thermal shock;
- regulation on pressure vessels, and
- operating regime and procedures.

(vii) New build project

Eskom formally requested early engagement on the new build project, relating to specifications, vendor qualification, manufacturing, site safety analysis and review of the Thyspunt site safety report. A separate letter sought engagement on Thyspunt's seismic hazard assessment. Eskom has agreed to pay a fee for early engagement.

The NNR has prepared an estimate of project resources for early engagement and a strategy document, SD-0003, for licensing of new nuclear installations, which is similar to SD-0001 previously approved.

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Eskom indicated that it is prepared to pay early engagement fees with the NNR. The NNR has prepared an estimate based on the resources required for early engagement.

Eskom's provisional licensing schedules indicate timelines for safety assessment work as follows:

- familiarisation with potential designs (April 2011 – February 2012);
- Thyspunt site safety report (April 2011 - October 2012);
- requirements on new build and licensing framework (2011), and
- safety assessment new build (February 2012 – February 2014).

(viii) In-service inspection and IAEA SALTO mission

Koeberg recently entered the third ten-yearly interval of its in-service inspection (ISI) programme, which was initiated in 2007. This was also Eskom's first implementation of the ASME XI code with a risk-informed approach to inspections.

Having identified the need for external review of the ISI, NNR requested that an IAEA safety assessment of long-term operation (SALTO) take place in the first quarter of 2011. IAEA responded positively and undertook a preparatory visit from 24 to 26 November 2010.

The mission's TOR were discussed and finalised, and its scope agreed as follows:

- risk Informed (RI) ISI methodology for Koeberg NPP;
- application of RI ISI to Koeberg NPP programme, and
- assessment and management of stress-corrosion in RI ISI, implication of ASME XI (American Society of Mechanical Engineers) and ENIQ (European Network for Inspection and Qualification).

The IAEA SALTO mission took place from 14 to 18 March 2011 and involved three IAEA experts with NNR staff performing the review of RI ISI at Koeberg, interviewing staff and performing a visual inspection of ISI facilities.

The SALTO team's observations and recommendations were presented to and discussed with NNR and Eskom management and staff. Eskom will address issues and implement recommendations contained in the final report, which will be available during 2011.

(ix) Emergency planning technical basis

The NNR is reviewing against international benchmarks an Eskom application to reduce the emergency planning radii on the basis of modifications performed over recent years that have reduced public risk posed by the plant.

(x) Plant assessment following incident in Japan

NNR monitored the situation at Fukushima Daiichi plant caused by the earthquake and tsunami off the east coast of Japan, and proposals to reassess nuclear plants in elsewhere. The NNR is developing requirements for Eskom to reassess Koeberg in



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terms of seismic activity, flooding and loss of power supply. Eskom has started implementing the recommendations of the Institute of Nuclear Power Operators (INPO) to provide near-term assurance that nuclear power plants are in a high state of readiness to respond to both design basis and beyond design basis events.

(xi) Reactor operator licensing

The NNR used Eskom examiners for operator licensing ILT (initial licence training) 9 examinations from 21 to 25 February 2011 and requested assistance from the US-NRC (United States Nuclear Regulatory Commission). Three of the six reactor operator candidates and two of the three senior reactor operator candidates passed. Unsuccessful candidates may repeat the examination in terms of NNR requirements.

14.3 RESOURCE ALLOCATION FOR REVIEWS AND ASSESSMENTS

The volume of work in review and assessment for the Koeberg programme continued to stretch the NNR's limited capacity. Additionally, these limitations pose capacity challenges for special projects at Koeberg, such as:

- steam generator replacement and thermal power update;
- Koeberg spent fuel storage and fuel management strategy;
- new build early engagement;
- Koeberg second periodic review;
- new Koeberg operating technical specifications;
- emergency planning technical basis, and
- plant assessment following accident in Japan.

14.4 NORM FACILITIES

Of 429 technical submissions received from authorisation holders in the reporting period, 284 were reviewed for technical adequacy. The average time taken by the NNR to respond to the submissions was 82 days.

15. EMERGENCY PREPAREDNESS AND RESPONSE

One of the primary objects of the NNR is to ensure that provisions for nuclear emergency planning are in place. In accordance with the NNR Act, where the possibility exists of a nuclear accident affecting the public, the holder of an NIL must enter into an agreement with the relevant municipality and provincial authorities to establish an emergency plan for the nuclear installation. Such an emergency plan must be approved by the NNR and periodically tested to ensure effectiveness.

15.1 Necsa

During the reporting period, the NNR participated in the following meetings with Necsa:

- Two Emergency Planning Committee (NEPC) meetings
- One Emergency Planning Steering Committee (EPSOC) meeting.



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Necsa continued to conduct emergency exercises and drills to test the response of its emergency functionaries and assist off-site functionaries such as the South African Police Service (SAPS). The NNR participated as an observer to some of these drills and will oversee the implementation of corrective actions and recommendations based on the findings.

The NNR is satisfied with the current level of emergency preparedness at Necsa.

15.2 KNPS

The NNR conducted a regulatory exercise on 30 November 2010 to test the effectiveness of the integrated Koeberg nuclear emergency plan, the main purpose being to test the on-site and off-site intermediaries during a simulated nuclear accident. The key focus areas during for this exercise were;

- Activation and notification of relevant Eskom personnel and off-site organisations
- Communication between on-site and off-site organisations (new software)
- Communication with international organisations regarding request for assistance
- Liaison and coordination among national, provincial and local governments for the implementation of decision-making and protective actions
- Availability of required facilities and equipment
- Implementation of protective actions to protect public
- Activation, availability and operation of mass care centres.

Based on the overall results, it was concluded that, although areas for minor improvements were identified, the NNR is satisfied that Koeberg's integrated nuclear emergency plan can be effectively implemented to ensure for the protection of persons, property and environment against nuclear damage.

15.2.1 Harmonisation policy of emergency preparedness and response

A strategic plan was developed to implement a harmonised policy on emergency preparedness across facilities regulated by NNR. Ten of the 14 deliverables of the harmonisation policy of emergency preparedness and response have been achieved, leaving the need for:

- an approved emergency plan at other nuclear facilities;
- a procedure for NNR to attend holder internal exercises;
- a regulatory emergency exercise grading system for findings, and
- the final report (end of project)

15.2.2 French Nuclear Safety Authority peer review

The French Nuclear Safety Authority (ASN) conducted a peer review of the NNR emergency preparedness and response processes. Of the 12 deliverables planned for 2010/11, eight were achieved, leaving the following, which relate to the NNR emergency control centre (ECC):



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- finalisation of ECC standby shift roster currently drafted and circulated for discussion;
- testing ECC response, and
- developing a scenario to test ECC response.

16. STANDARDS AND REGULATORY RESEARCH PROGRAMME

16.1 DEVELOPMENT OF REGULATIONS AND STANDARDS

Draft regulations on monitoring and control of developments in the vicinity of Koeberg, were published by the DoE on 29 October 2010.

The Self Assessment Tool (SAT) performed on the technical division, with the regulatory framework project, identified a number of gaps in regulatory standards and practices. Corrective action will be taken in the next financial year.

The NNR continued with development of the following regulatory documents as part of the operational plan but, in the absence of the review of the regulatory philosophy and the structure/hierarchy of the regulatory standards:

Type	Description	Status
Regulatory guidance (RG)	RG-0001: Review and update of LG-1032 for mining and mineral processing	A preliminary draft of the RG is available, but internal finalisation of the document has been delayed due to the extended sick leave of NNR specialist.
RG	AADQs: an RG on AADQs for authorised actions	The development of the RG has been reprioritised due to the extended sick leave of NNR specialist.
Position paper	A regulatory framework and position for the manufacturing of long lead items	A draft position paper has been finalised internally and circulated for external review.
Position paper	Environmental protection: regulatory policy and framework for the radiological protection of the environment	A draft Position Paper has been finalized internally and will be circulated for external review.
Position paper	Types of authorisations for nuclear installations	The development of the document is not in the current operational plan, but is being progressed to document the various options available to applications for authorisations for nuclear installations.

16.2 REGULATORY RESEARCH

The updated research plan has been reviewed and approved, and is being implemented. It prioritises the following research initiatives in the light of limited resources and other departmental priorities:



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Type	Description	Status
Financial liability	Determination of appropriate levels of financial provisioning for nuclear damage from nuclear installations	The contract with Stellenbosch University to collect data around Koeberg has been terminated. The current project priorities are: <ul style="list-style-type: none"> • finalise draft methodology report and circulate for external comment; • finalise TOR for new contract on data acquisition; • establish internal capacity to perform evaluations in accordance with the agreed methodology, and • Acquire software to manage data.
Depleted uranium	Review of current uses of depleted uranium in South Africa and determination of actions that require authorisation	Discussions have been held with Necsa and DoE on the usage of depleted uranium in the country and a Necsa depleted uranium facility was visited to understand the possible hazards. An official list of depleted uranium users was received from DoE. A literature survey has been completed and a report is being drafted on current usage and implications for regulatory control.
Unauthorised actions	Investigation of actions to be authorised for all facilities with a potential for NORM-associated exposures with special focus on oil and gas industry. The focus will be on current practices, rather than development of new production methods such as fracturing.	Discussions were held with PetroSA and Sapref and plans are being put in place to perform screening evaluations at the facilities to determine potential radiation hazards.
Indoor radon	NNR position on intervention for indoor radon	A position paper is being finalised detailing proposed reference levels, international practice, perspective and recommended approach on indoor radon, the NNR position on the management of indoor radon now and in the future, and possible interventions. The NNR position will be shared with relevant government departments.
Independent verification documentation	Development and implementation of independent verification processes and procedures	The sampling procedure for soil and water will be completed in April 2011 and the environmental verification plan for 2011-12 will include the required analysis, pathway and interpretation criteria.
Wonderfonteinspruit catchment area (WCA)	A database will be populated with the current radiological status of the WCA and a programme to prioritise and characterise the WCA will be developed.	A steering committee has been formed to characterise the WCA with a view to determining appropriate regulatory and rehabilitation interventions.

17. DECOMMISSIONING

PBMR PROJECT CLOSE-OUT

On 12 August 2010, Eskom withdrew the licence application submitted in July 2001 for the 110 MWe class of PBMR electricity generating plant and terminated the NNR/Eskom memorandum of agreement (MOA) dated 3 March 2005.

The technical support organisations (TSOs) concluded all activities relating to the project in October 2010 as per the contracts. Codes and models developed by the TSOs, and documents and databases were successfully transferred to NNR to be archived.



The material close-out report was finalised, detailing the status of the manufacturing documentation and products. This report, read with the NNR summary progress report on the PBMR DPP process 2009-2010, provides the general status of the PBMR licensing process.

18. INTERNATIONAL RELATIONS AND COOPERATION

The NNR fulfils its regulatory mandate by, *inter alia*, adhering to international best practices and by active international collaboration. During the period under review, NNR actively maintained its participation in international forums to enhance its regulatory practices.

18.1 IAEA

NNR participates in the IAEA safety standards committees, working groups and technical committee meetings, to contribute towards the maintenance and enhancement of safety standards. The Regulator is also represented on the IAEA's International Nuclear Safety Advisory Group (INSAG).

During the year, NNR staff attended meetings of the following structures at IAEA headquarters in Vienna:

- Nuclear Safety Standards Committee (NUSSC);
- Radiation Safety Standards Committee (RASSC);
- Waste Safety Standards Committee (WASSC);
- Transport Safety Standards Committee (TRANSSC);
- Commission on Safety Standards (CSS), and
- The International Nuclear Event Scale (INES).

IAEA standards in regulatory requirements, and its guidance documents, have served as a reference and benchmark for South African nuclear safety and radiation protection. Furthermore, IAEA material is consulted in the development of standards and regulations, and when dealing with issues for which there is no established South African standard.

IAEA safety standards, and the current basic safety standards in particular, were used as references in the development of the South African regulations on safety standards and regulatory practices established in terms of the NNR Act.

18.2 IAEA GENERAL CONFERENCE

The IAEA general conference is an important annual event, during which international regulatory matters are discussed and agreed upon. In addition, the conference agrees on the agency's work for the year ahead. This was the 54th IAEA conference and was held in Vienna in September 2010.

NNR participated as part of the South African delegation led by the Minister of Energy, and gleaned useful information to strengthen its regulatory frameworks.



18.3 IAEA CONVENTION ON NUCLEAR SAFETY

The NNR compiled the fifth national report on the Convention on Nuclear Safety (CNS) and submitted this to the IAEA, prior to its presentation in the next financial year.

As part of the peer review process of the IAEA CNS, NNR received 41 questions on the report from other contracting parties to the CNS and, with input from Eskom and DoE, provided detailed answers, which were uploaded on the IAEA CNS website before the 18 March 2011 deadline.

The NNR reviewed the national reports of other contracting parties and posted 70 questions, all of which have been answered.

18.4 IAEA FELLOWS

NNR hosted four candidates from Botswana, Kenya and Sudan on IAEA technical training fellowships. This forms part of its commitment to developing regulatory capacity for the continent.

18.5 IAEA PROJECT RAF 09/038 - SELF ASSESSMENT

The national project plan for the country self-assessment under IAEA project RAF 09/038 was finalised and accepted by IAEA.

In March 2011, NNR participated in the third IAEA meeting on promoting self-assessment, held in Mali.

18.6 IAEA INTERNATIONAL MEETINGS

The Regulator participated in the following international meetings:

- IAEA consultants meeting in Vienna from 3-7 May 2010 to review and further develop an IAEA document on emergency preparedness considerations in member states embarking on nuclear power;
- IAEA Regulatory Coordination Forum and international conference on operational safety of NPPs and fuel cycle facilities, Vienna, 21-24 June 2010;
- 20th meeting of Transport Safety Standards Committee (TRANSSC) of the IAEA, Vienna, 14-18 June 2010;
- Radiation Safety Standards Committee (RASSC), Vienna, 21-25 June 2010;
- Waste Safety Standards Committee (WASSC), Vienna, 28 June - 2 July 2010;
- Nuclear Safety Standards Committee (NUSSC), Vienna, 28 June - 2 July 2010;
- IAEA general conference, 21-25 September 2010. Discussions initiated with Chinese Regulator on a possible bilateral agreement;
- IAEA technical meeting on use of safety assessment methodology during decommissioning of facilities handling radioactive material, Vienna, 27 November - 3 December 2010;
- IAEA workshop on stakeholder relations in waste disposal facility, USA, 6-10 December 2010, and Regulations for uranium mining and milling for all IAEA member states, Vienna, 6-10 December 2010.



18.7 INTERNATIONAL COMMISSION ON RADIOLOGICAL PROTECTION

During the year, NNR hosted the International Commission on Radiological Protection (ICRP) main commission meeting. Subsequently, NNR and ICRP members convened two technical stakeholder symposia, in Cape Town and Gauteng. Delegates included authorisation holders, academics, media, and civil society representatives from Koeberg Alert Alliance, Earth life Africa, Greenpeace and the Federation for a Sustainable Environment. Chairpersons and deputy chairpersons of public safety information forums were also invited.

18.8 BILATERAL RELATIONS WITH OTHER REGULATORS

18.8.1 CHINESE REGULATOR

In September 2010, NNR held a bilateral meeting with the Chinese Regulator to explore the possibility of entering into a bilateral agreement. Parties will exchange documentation and facilitate another meeting.

18.9 MULTILATERAL MEETINGS

18.9.1 FORUM OF NUCLEAR REGULATORY BODIES IN AFRICA

NNR continues to play a key role in the Forum of Nuclear Regulatory Bodies in Africa (FNRBA), which allows African nuclear regulators share best practices.

NNR hosted a SADC/FNRBA meeting in Cape Town from 30 November – 3 December 2010, and attended a SADC/FNRBA meeting in Zimbabwe during February 2011, and the third meeting of the third plenary of the FNRBA in Mali. Working group meetings were scheduled for May 2011 in Egypt.

18.9.2 NETWORK OF REGULATORS OF COUNTRIES WITH SMALL NUCLEAR PROGRAMMES

The Network of Regulators of Countries with Small Nuclear Programmes (NERS) is an international network of nuclear regulators and inspectors dedicated to the free exchange of nuclear regulatory information and its dissemination. NERS is a forward looking independent organisation, facilitating communication between regulators of countries with small nuclear programmes, which have common problems and needs.

The NNR hosted the NERS meeting in Cape Town from 14-16 February 2011, attended by representatives from Pakistan, Switzerland, Holland, Hungary and Finland. Delegates exchanged technical information on different experiences in licensing nuclear power plants.

18.10 BILATERAL AND MULTILATERAL INTERNATIONAL MEETINGS, TRAINING AND CONFERENCES

To build internal capacity and develop close relations with international counterparts, NNR participated in the following international bilateral and multilateral meetings, conference and training workshops during the financial year:



PART B: PERFORMANCE

DATE AND LOCATION	EVENT
Nairobi, Kenya, 24-28 May 2010	Second coordination meeting on self assessment of regulatory infrastructures and networking of regulatory bodies in Africa,
Washington, USA, September 2010	Training on CSARP workshop as part of bilateral exchange
Paris, France, 26-29 October 2010	Digital Control and Instrumentation Working Group – MDEP
Nairobi, Kenya, 26-29 October 2010	Regional Workshop on the Revision of BSS
Vienna Austria, 11-18 October 2010	Technical meeting on remediation of legacy site in central Asia
Vina Del Mar, Chile, 22-26 October 2010	International conference on mine closure
London, United Kingdom, 20–25 February 2011	Foundations of physical protection at facilities holding nuclear or radioactive materials
Brussels, Belgium, 9-14 February 2011	Executive committee meeting of the International Youth Nuclear Congress (IYNC)
Korea, 24-28 January 2011	Korean Institute of Nuclear Safety (KINS) to present the NNR regulatory framework, process and procedures for the licensing of the PBMR.





19. STAKEHOLDER ENGAGEMENT

19.1 CIVIL SOCIETY ORGANISATIONS

A key deliverable of a nuclear regulatory body is to build public confidence by, among other things, providing information about the safety of nuclear facilities and other matters relating to radiation safety.

The NNR held meetings with representatives of the following NGOs during the year to establish communication channels; Earth life Africa Johannesburg, Koeberg Alert Alliance, Pelindaba Workers Group, Coalition Against Nuclear Energy (CANE), Thyspunt Alliance Group, Institute for Security Studies and the Federation for a Sustainable Environment, and also participated in one meeting of the Energy Caucus Conference.

An additional meeting was held with representatives from academia and civil Society to provide feedback on NNR's progress at Tudor Shaft informal settlement and on the WCA project.

On NNR advice, the municipality of Mogale City relocated some Tudor Shaft residents, because of environment high radiation levels as a result of contamination from tailings dams and water sources. NNR developed pamphlets to educate the public about the potential hazards of radiation.

The Regulator attended a public participation event hosted in Atteridgeville by the Minister of Energy on the role of nuclear energy in South Africa.

19.2 COOPERATIVE GOVERNANCE AGREEMENTS

In accordance with Section 6 of the NNR Act, NNR is required to enter into cooperative agreements with other organs of state with overlapping functions or responsibilities, the purpose being to:

- ensure effective monitoring and control of nuclear hazards;
- coordinate and minimise duplication of procedures for these activities, and
- promote consistency in activities.

NNR has 11 cooperative agreements with its counterparts and meetings are held regularly.

During this financial year, the first joint coordinating committee (JCC) meeting was held with the Railway Safety Regulator, Civil Aviation Authority, Road Traffic Management Corporation and South African Maritime Safety Authority.

Another JCC Meeting was held with DOH (RADCON) and the Department of Mineral Resources.



19.3 MEDIA

The media were engaged on various topics, including the emergency exercise at Koeberg, exposure of workers at Koeberg during a refuelling outage on 11-12 September, radiological issues relating to Tudor Shaft and the Fukushima nuclear incident.

19.4 PARLIAMENTARY RELATIONS

The NNR responded to parliamentary questions on the nature and cost of work performed by a marketing company reviewing the NNR brand, a stakeholder satisfaction survey, the costs of producing the annual report, funding of the National Youth Development Agency (NYDA), suspension of staff with pay, sponsored tickets for the ICC Cricket World Cup and the Fukushima incident.

Further, a presentation was made to the Parliament Portfolio Committee on the relocation of Tudor Shaft residents and NNR was involved in Thyspunt public participation campaigns organised by the PPC.

19.5 PUBLIC SAFETY INFORMATION FORUMS

In accordance with the provisions contained in Government Notice No 299, dated 12 March 2004, and Section 26 (4) of the NNR Act, public safety information forums (PSIFs) are held quarterly by Eskom on KNPS and by; Necsa on Pelindaba and Vaalputs.

PSIFs provide information to residents on the emergency plan has been established in terms of Section 38 (1) of the Nuclear Safety Act and on radiation safety matters. In addition, the holder of an NIL must provide information to the forums on nuclear and radiation safety matters, including nuclear incidents or accidents.

Four meetings were held at Koeberg and Necsa during the 2010/11 period and two meetings at Vaalputs. NNR attended and made presentations when required.

In accordance with Section 4 of the updated Regulations No 968 dated 12 September 2008, the NNR board must select and appoint the forum chairpersons and deputy chairpersons. Accordingly, nomination invitations were published in December 2010 and February 2011 in Table Talk, Die Burger (Table View) and Weskus Nuus newspapers (for Koeberg) and in Kormorant and Britspos newspapers (Pelindaba).

19.6 STAKEHOLDER SATISFACTION SURVEY

A stakeholder satisfaction survey was initially conducted in 2004, followed by studies in 2007 and 2010.

The research combined in-depth interviews with key stakeholders and face-to-face or telephonic semi-structured interviews with stakeholders from:

**PART B: PERFORMANCE**

- government (national, provincial, municipal and government bodies);
- authorisation holders (Eskom, Necca, mines and minerals processing facilities, waste and scrapmetal dealers);
- unions, PSIFs, public interest groups and technical service providers;
- academics from the international nuclear sector, and
- media.

In total, 135 interviews were conducted with stakeholders, 15 in-depth interviews, including five with media representatives specialising in articles on nuclear issues, and 120 semi-structured interviews.

The stakeholder satisfaction index for 2010 was 65 points, on a par with the 2007 results and one point up on 2004. Excluding the public interest group sector, the index would be 67 points, two points up on the previous study.

The results reflect a reasonably high level of satisfaction across stakeholder groups, which indicates consistent delivery on mandate. The government's rating for 2010 was the highest ever, with an overall index of 72 points against 68 in 2007 and 61 in 2004. Only the international sector was higher, on 84 points. Unions and forums came in at 70 and 71 points respectively.

The NNR's performance in protecting the public, workers and the environment, and interaction with NNR staff were rated joint highest, at 68 points. Almost all stakeholder groups, barring the public interest sector, rated these elements highly.

Pulling down the results are perceptions of the NNR's interaction and communication with the public, which was rated at 57 points, the lowest score across all stakeholder groups, NGOs allocated 25 points, 18 points down on the 43 points of 2007, which, in turn, was down from 65 points in 2004. The NNR is addressing this aspect.



NATIONAL NUCLEAR REGULATOR

PART C:
HUMAN RESOURCES



20. HUMAN CAPITAL

20.1 DIVERSE WORKFORCE

The NNR strives continuously to develop a diverse workforce, which exemplifies the talents of South Africa's people.

The total staff complement at year-end was 94,67% of whom were technical staff. Among these are five technical inspectors employed in NTWP, eight inspectors at NORM/RENS and three inspectors at KNPS.

The NNR maintains a high standard in the training of regulatory employees with an attrition rate for this category of 4%. Efforts to ensure a continued supply of employees with the right competencies in the technical department have resulted in bursars being funded to qualify as scientists.

At the beginning of the financial year under review, Eskom withdrew the application of the PBMR programme licence, reducing future licence fees by R20 million a year. The eight people employed in the PBMR programme were redeployed from 1 July 2010 based on their qualifications and experience.

20.2 TRAINING AND DEVELOPMENT

The NNR encourages a culture of lifelong learning and made available R1,5 million during the year to assist employees to develop their potential through studies in professional disciplines with tertiary institutions and to enhance operational skills through accredited training programmes.

A skills audit of departmental and individual competencies indicated a need to increase proficiency levels of existing knowledge and skills bases, rather than developing new competencies. The attitudinal competency category requires the most focus. The outcomes will be integrated into the workplace skills plan.

In addition, a human resource capacity/skills analysis was conducted to determine the current skills and competencies in the technical division, identify skills gaps and analyse the deployment and use of existing resources. The analysis indicated a shortage of advanced technical skills.

20.3 RECRUITMENT AND TERMINATIONS

The NNR had nine funded vacancies at the beginning of the financial year and five appointments were made, all black appointees, three female. There were four resignations and one retirement.

20.4 RELATIONSHIP MANAGEMENT

Employees are collectively represented by one trade union, the National Education Health and Allied Workers Union (Nehawu). In 2010, the Minister appointed an independent commissioner to investigate allegations raised by Nehawu concerning internal conflicts between management and staff, organisational leadership, transformation and corporate governance. The Minister received an interim report and raised further issues for attention. In the year under review, a new



PART C: HUMAN RESOURCES

recognition agreement was signed between the NNR and Nehawu to regulate and normalise industrial relations. Collective bargaining has taken place in a positive climate which fosters open engagement between labour and management. There was also a separation of management from the bargaining unit.

20.5 ORGANISATIONAL DEVELOPMENT

The NNR launched a culture reshaping project to redefine the values to the extent that employees will own them, live them and keep them alive. Aims were to create a platform for employees to discuss the organisational culture, and to co-create the values and commit to them so that all employees hold each other accountable. A values and leadership charter was developed and approved.

Historically, staff members were not recognised for their loyalty and service over the years. Now, NNR has a service recognition award programme to show appreciation for services rendered. During the year under review, 30 employees were recognised for service periods ranging from 10 to 30 years. This recognition will be reflected through a positive work environment and increased morale.

20.6 OCCUPATIONAL HEALTH AND SAFETY

A steering committee was formed to address occupational health and safety issues and new committee representatives were appointed during the year. Training was provided to all representatives and meetings were conducted to plan and implement the system.

The Occupational Health and Safety Committee conducted an unplanned emergency evacuation drill in accordance with the Occupational Health and Safety Act. Lessons learnt were documented and discussed with the CEO.

20.7 EMPLOYMENT EQUITY

Employment equity remains a business imperative to ensure that the workplace profile is aligned to national demographics. In the year under review, the percentage of black, Asian and coloured employees was 70%, against a target of 75%. In this traditionally male-dominated environment, female representation at year end was 30%, compared to the 39% of the previous year. People with disabilities make up 2% of the workforce, which is on target.



Employment equity profile

	Male				Female				Total	Current		3 year target	
	African	Coloured	Asian	White	African	Coloured	Asian	White		% Black	% Female	% Black	% Female
Senior/Top Management	3	1	0	1	2	0	0	0	7	86%	29%	86%	29%
Managers	2	2	2	2	3	0	0	1	12	75%	25%	70%	30%
Professionals/Specialists	21	6	1	17	15	0	1	5	66	67%	24%	78%	40%
Administration/Semi-skilled staff	1	0	0	0	8	1	0	4	14	71%	64%	65%	78%
Total	27	9	3	20	28	1	1	10	99*	70%	30%	75%	45%
Employees with disabilities	1				1				2	2%		2%	

The total number of Employees accounts for appointments and terminations.



NATIONAL NUCLEAR REGULATOR

PART D:

ANNUAL FINANCIAL STATEMENTS

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21. ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2011

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21.1 DIRECTORS' RESPONSIBILITY AND APPROVAL

The Directors are required to maintain adequate accounting records and are responsible for the content and integrity of the annual financial statements and related financial information included in this report. It is their responsibility to ensure that the annual financial statements fairly present the state of affairs of the entity as at the end of the financial year and the results of its operations and cash flows for the period then ended, in conformity with the Generally Recognised Accounting Practice.

The annual financial statements are prepared in accordance with Generally Recognised Accounting Practice and are based upon appropriate accounting policies consistently applied and supported by reasonable and prudent judgments and estimates.

The Directors acknowledge that they are ultimately responsible for the system of internal financial control established by the entity and place considerable importance on maintaining a strong control environment. To enable the Directors to meet these responsibilities, the Board of Directors sets standards for internal control aimed at reducing the risk of error or loss in a cost effective manner. The standards include the proper delegation of responsibilities within a clearly defined framework, effective accounting procedures and adequate segregation of duties to ensure an acceptable level of risk. These controls are monitored throughout the entity and all employees are required to maintain the highest ethical standards in ensuring the entity's mandate is executed in a manner that in all reasonable circumstances is above reproach. The focus of risk management in the entity is on identifying, assessing, managing and monitoring all known forms of risk across the entity. While operating risk cannot be fully eliminated, the entity endeavours to minimize it by ensuring that appropriate infrastructure, controls, systems and ethical behaviour are applied and managed within predetermined procedures and constraints.

The Directors are of the opinion, based on the information and explanations given by management that the system of internal control provides reasonable assurance that the financial records may be relied on for the preparation of the annual financial statements. However, any system of internal financial control can provide only reasonable, and not absolute, assurance against material misstatement or loss.

The Directors have reviewed the cash flow forecast for the year to 31 March 2012 and, in the light of this review and the current financial position, they are satisfied that the entity has access to adequate resources to continue in operational existence for the foreseeable future.

The external auditors are responsible for independently reviewing and expressing an independent opinion on the entity's annual financial statements. The annual financial statements have been examined by the external auditors and their report is presented on page 72.

The annual financial statements set out on pages 82 to 112, which have been prepared on the going concern basis, were approved by the Board of Directors on 26 July 2011 and are signed on its behalf by:

Dr T Cohen
Chairperson
Centurion
26 July 2011

Adv BM Mkhize
Chief Executive Officer



REPORT OF THE AUDITOR-GENERAL TO PARLIAMENT ON THE NATIONAL NUCLEAR REGULATOR

REPORT ON THE FINANCIAL STATEMENTS

Introduction

I have audited the accompanying financial statements of the National Nuclear Regulator, which comprise the statement of financial position as at 31 March 2011, and the statement of comprehensive income, statement of changes in equity and statement of cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information, as set out on pages 82 to 112.

Accounting authority's responsibility for the financial statements

The accounting authority is responsible for the preparation and fair presentation of these financial statements in accordance with South African Standards of Generally Recognised Accounting Practice (SA Standards of GRAP) and the requirements of the Public Finance Management Act of South Africa, 1999 (Act No. 1 of 1999) (PFMA), and for such internal control as management determines necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor-General's responsibility

As required by Section 188 of the Constitution of the Republic of South Africa, 1996 (Act No. 108 of 1996) and Section 4 of the Public Audit Act of South Africa, 2004 (Act No. 25 of 2004) (PAA), my responsibility is to express an opinion on these financial statements based on my audit.

I conducted my audit in accordance with International Standards on Auditing and General Notice 1111 of 2010, issued in *Government Gazette 33872 of 15 December 2010*. Those standards require that I comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my audit opinion.



OPINION

In my opinion, the financial statements present fairly, in all material respects, the financial position of the National Nuclear Regulator as at 31 March 2011, and its financial performance and cash flows for the year then ended in accordance with the SA Standards of GRAP and the requirements of the PFMA.

Emphasis of matter

I draw attention to the matter below. My opinion is not modified in respect of this matter:

Restatement of corresponding figures.

As disclosed in note 25 to the financial statements, the corresponding figures for 2010 have been restated as a result of an error discovered during 31 March 2011 in the financial statements of the National Nuclear Regulator at, 31 March 2011.

REPORT ON OTHER LEGAL AND REGULATORY REQUIREMENTS

In accordance with the PAA and in terms of General Notice 1111 of 2010, issued in *Government Gazette 33872 of 15 December 2010*, I include below my findings on the annual performance report and material non-compliance with laws and regulations applicable to the public entity.

PREDETERMINED OBJECTIVES

Usefulness of information

The reported performance information was deficient in respect of the following criteria:

- Consistency: Objectives, indicators and targets are consistent between planning and reporting documents.
- Relevance: A clear and logical link exists between the objectives, outcomes, outputs, indicators and performance targets.
- Measurability: Indicators are well-defined and verifiable, and targets are specific, measurable and time-bound.

The following audit findings relate to the above criteria:

Measurability

- Planned and reported indicators are not well defined

For the selected objectives, 50% of the planned and reported indicators were not clear, as unambiguous data definitions were not available to allow for data to be collected consistently.

- Planned and reported indicators are not verifiable



PART D: ANNUAL FINANCIAL STATEMENTS
REPORT FROM THE AUDITOR-GENERAL

For the selected objectives valid performance management processes and systems that produce actual performance against the planned indicators do not exist for 38% of the indicators.

Consistency

- Reported objectives, indicators, targets are not complete when compared with the planned objectives, indicators and targets

The actual achievements with regard to 33% of the planned objectives, 42% of the planned indicators and 42% of the planned targets specified in the strategic plan for the year under review were not included in the report on predetermined objectives submitted for audit purposes.

- Changes, including reasons for and approval thereof, to planned objectives are not disclosed in the report on predetermined objectives

Changes to 33% of the objectives, outputs, measures, indicators and targets of the approved strategic plan for the year under review, were not disclosed and explained as required in terms of the relevant National Treasury preparation guide.

- Changes to planned objectives, indicators and targets are not approved

Changes to the objectives, outputs, measures, indicators and targets of the approved strategic plan for the year under review were not approved subsequent to the strategic planning process.

Compliance with laws and regulations

Annual financial statements, performance and annual report

The financial statements submitted for audit did not comply with Section 55(1)(c)(i) of the PFMA. Material misstatements were identified during the audit, these were corrected by management.

Expenditure management

The accounting authority did not take effective and appropriate steps to prevent and detect irregular and fruitless and wasteful as per the requirements of Section 51(1)(b) of the PFMA.

INTERNAL CONTROL

In accordance with the PAA and in terms of General Notice 1111 of 2010, issued in *Government Gazette 33872 of 15 December 2010*, I considered internal control relevant to my audit, but not for the purpose of expressing an opinion on the effectiveness of internal control. The matters reported below are limited to the significant deficiencies that resulted in the findings on the annual performance report and the findings on compliance with laws and regulations included in this report.



PART D: ANNUAL FINANCIAL STATEMENTS
REPORT FROM THE AUDITOR-GENERAL

Leadership

The leadership of the public entity has not exercised oversight responsibility regarding financial and performance reporting and compliance.

Financial and performance management

The leadership of the entity has not implemented proper record keeping in a timely manner to ensure that complete, relevant and accurate information is accessible and available to support financial and performance reporting.

There is inadequate review and monitoring of and reporting on compliance with applicable laws and regulations.

Pretoria

31 July 2011





It is with pleasure that we present this report for the financial year ended 31 March 2011.

AUDIT AND RISK MANAGEMENT COMMITTEE MEMBERS AND ATTENDANCE

The Audit and Risk Management Committee comprises the members listed on pages 12 of the annual report, and is required to meet three times per annum, as per its approved terms of reference. During the period under review, the Committee met more than three times. The committee members' meeting attendance is disclosed on page 10 of the annual report.

RESPONSIBILITIES OF THE AUDIT AND RISK MANAGEMENT COMMITTEE

The Committee adopted appropriate formal terms of reference in its charter, which are in line with the requirements of Section 51(1)(a) of the Public Finance Management Act (Act 1 of 1999), and Treasury Regulation 27.1. The committee also conducted its affairs in compliance with the Charter. The Charter was reviewed and approved by the Board of Directors. The Committee's main duties and activities during the period under review may be summarised as follows:

EFFECTIVENESS OF INTERNAL CONTROL

The system of internal control, applied by the NNR in terms of financial and risk management, proved to be effective, efficient and transparent.

In line with the PFMA and King II Report on Corporate Governance requirements, Internal Audit provided the Audit Committee and Management with the assurance that the internal controls were appropriate and effective. This was achieved by means of the risk management process, as well as by the identification of corrective actions and the suggested enhancement of both controls and processes. From information gathered from reports received from the Auditor-General of South Africa, it was noted that no matters had been reported, indicating any material deficiencies in the system of internal control, and no major deviations either. Accordingly the Committee is in the position to report that, for the period under review, the system of internal control over financial reporting was reasonable, efficient and effective.

EVALUATION OF FINANCIAL STATEMENTS

The Committee has:

- Reviewed and discussed the audited annual financial statements to be included in the annual report with the Auditor-General of South Africa, as well as the Accounting Authority.
- Reviewed the Auditor-General of South Africa's audit and management report, as well as Management's response to the report.
- Reviewed changes in accounting policies and practices.
- Reviewed significant adjustments resulting from the audit.

The Committee concurs with, and accepts, the Auditor-General of South Africa's report on the annual financial statements, and is of the opinion that the audited financial statements should be accepted, read together with the report of the Auditor-General of South Africa.



INTERNAL AUDIT

During the period under review, the NNR had a head of internal audit who was assisted by an outsourced audit firm. The Committee confirmed the internal auditors' programme of work and reviewed the reports. The head of internal audit had direct access to the chairpersons of both the Audit and Risk Management Committee and the Board of Directors. The Committee is satisfied with the controls improved in the affairs of the internal audit activity, in assisting to address the risks pertinent to the NNR.

RISK MANAGEMENT ARRANGEMENTS

The Committee reviewed the NNR's overall approach to risk management and control, as well as the risk management processes and practices, while specifically including:

- The results of the risk management workshops;
- Management strategies and initiative in managing the risks facing the NNR;
- Period and year-end reports on the status of risk management within the NNR;
- The report from the Chief Financial Officer on business risks, and her positive assurance with regard to operating controls and corporate policies, as well as the quarterly review of business risks and safeguards, and
- The review of the fraud prevention policy and other anti-fraud measures.

AUDITOR-GENERAL OF SOUTH AFRICA

The Committee reviewed the scope and results of the external audit and its effectiveness. The Committee also met with representatives from the Auditor-General of South Africa to ensure that there were no unresolved issues.

OTHER MATTERS

The organisation's code of conduct was reviewed, updated and implemented during the period under review. This code provided guidance to individuals on how to behave and conduct themselves in an ethical manner in the performance of NNR activities.

ASSESSMENT OF THE AUDIT AND RISK MANAGEMENT COMMITTEE

The Board of Directors evaluated the performance of the Committee and the Committee also conducted a self-assessment of its performance.

Mr T Mofokeng
Chairperson: Audit and Risk
Management Committee



The Directors have pleasure in submitting their report and the audited annual financial statements of the entity for the year ended 31 March 2011

INCORPORATION

The NNR is listed as a national public entity in Schedule 3 Part A of the Public Finance Management Act, (Act 1 of 1999, as amended). It was established in terms of Section 3 of the National Nuclear Regulator Act, (Act no 47 of 1999) to:

- a) Provide for the protection of persons, property and the environment against nuclear damage through the establishment of safety standards and regulatory practices;
- b) Exercise regulatory control related to safety over:
 - i) The siting, design, construction, operation, manufacture of component parts, and the decontamination, decommissioning and closure of nuclear installations, and
 - ii) Vessels propelled by nuclear power or having radioactive material on board that is capable of causing nuclear damage, through the granting of nuclear authorisations;
- c) Exercise regulatory control over other actions to which the Act applies, through the granting of nuclear authorisations;
- d) Provide assurance of compliance with the conditions of nuclear authorisations through the implementation of a system of compliance inspections;
- e) Fulfil national obligations in respect of international legal instruments concerning nuclear safety, and
- f) Ensure that provisions for nuclear emergency planning are in place.

The Board of Directors is the Accounting Authority in terms of the Public Finance Management Act.

NATURE OF THE BUSINESS

The NNR carries out effective regulatory control by developing and implementing regulatory standards and practices that are comparable to internationally accepted standards and practices. Quantitative and qualitative assessment techniques and safety assurance programmes are applied in an efficient and cost-effective manner.

In the course of implementing its mandate, the NNR maintained focus on its transformation objectives, which are captured in the NNR strategic plan. In this regard, the report on performance against objectives following reflects NNR performance relating to core business, alignment of internal processes to strategy, improvement of stakeholder relations, as well as training and capacity development, employment equity and preferential procurement.

FINANCIAL OVERVIEW

Total revenue is made up of authorisation fees, state grant as well as other income, and includes application fees for new operators. Total revenue increased by 1% (R1,1m) compared to the previous year. The minor increase is a combination of a significant decline of state grant by 16% and an increase in authorisation fees of 6%.



The effects of recession were felt in the industry resulting in a number of consolidations in the mining and mineral operations. This had negative impact on the revenue due to liquidations, surrenders, revocation and reclassification of certificate of registration from a higher category to a lower one.

Operating expenses increased by 7% (R7,5m) compared to the previous year. The major contributors are the reinstatement cost incurred at the old building on vacating, the new operating lease for the building, and provision made for restructuring cost.

RESTRUCTURING OF THE OPERATION

The NNR is being restructured to align its structure much more with the organisational strategy, improve efficiency and effectiveness, create a leaner structure and mitigate an escalating wage bill. The new structure will be implemented in the new financial year.

EVENTS AFTER THE REPORTING DATE

Post-retirement medical liability

As part of condition of service, the NNR committed itself to make medical aid contribution on behalf of its employees and their dependants after retirement. The actuarial value of the post-retirement medical liability at the end of March 2010 was R33,4m. This was, however, unfunded. The NNR did not have a plan asset to match this liability.

During the year, the NNR made a voluntary offer to members of the fund both active and retired. The offer consists of cash payout in three tranches and 100% guaranteed consumer price index (CPI) annuity for active and retired members respectively. The offer was accepted by the majority of members on 31 July 2010 and cash payout was made to active members. However, the payout of R17,2m, which is the full and final settlement of the liability for retired members who have accepted the offer, was made to Old Mutual on 13 April 2011.

Materiality and significance framework

For purposes of material [as per PFMA Sections 50(1) and 55(2)] and significant [as per PFMA Section 54(2)] the following framework of acceptable levels was agreed with the Executive Authority in consultation with the Auditor-General:

- Section 50(1) – Material facts to be disclosed to the Executive Authority are considered to be facts that may influence the decisions or actions of the stakeholders of the public entity.
- Section 55(2) – Disclosure of material losses in the annual financial statements will be for all losses through criminal conduct and any irregular expenditure and fruitless and wasteful expenditure that occurred during the year.
- Section 54(2) – The criteria to determine the level of significance were based on the guiding principles as set out in 'Practice note on applications under Section 54 of the PFMA no 1 of 1999 (as amended) by public entities' as published by National Treasury during 2006 subject to adjustments for any Section 54(4) exemptions.



Going concern

The annual financial statements have been prepared on the basis of accounting policies applicable to a going concern. This basis presumes that funds will be available to finance future operations and that the realisation of assets and settlement of liabilities, contingent obligations and commitments will occur in the ordinary course of business. The ability of the entity to continue as a going concern is dependent on a number of factors. The most significant of these is that the Department of Energy continue to provide funding for the ongoing operations of the entity.

The Directors have reviewed the forecast financial performance for the year ending 31 March 2012 as well as the longer term budget and, in light of this review and the current financial position, they are satisfied that the entity has access to adequate resources to continue in operational existence for the foreseeable future.

Directors' interest in contracts

All Directors have given general declarations of interest in terms of the code of conduct. These declarations indicate the nature of interest a director, spouse, partner or close family member holds in a company, including any directorship in a company classified as a related party to the NNR. No material contracts in which the Directors have an interest were entered into in the current financial year.

Directors

The Directors of the entity during the year and to the date of this report are as follows:

Name		Appointed	Reappointed	Resigned
Dr T Cohen	Independent Non-executive - Chairperson	1 December 2009		
Mr T Mofokeng	Independent Non-executive - Deputy Chairperson		1 December 2009	
Adv B Mkhize	Chief Executive Officer	15 February 2010		
Mr D Elbrecht	Independent Non-executive		1 December 2009	
Ms M Liefferink	Independent Non-executive	1 December 2009		
Mr N Lesufi	Independent Non-executive		1 December 2009	
Mr J Leaver	Independent Non-executive	1 December 2009		
Prof D van der Merwe	Independent Non-executive		1 December 2009	30 November 2010
Ms J Yawitch	Non-executive		1 December 2009	
Mr B Nemagovhani	Non-executive		1 December 2009	1 August 2010
Ms D Kgomo	Non-executive		1 December 2009	
Mr D Netshivhazwaulu	Non-executive	1 August 2010		
Dr T Motshudi	Independent Non-executive	15 February 2011		



Secretary

The secretary of the Board is Ms B Laka. Her address is as follows:

Official address:

Eco Glades Office Park
Eco Glades 2, Block 6
Witch Hazel Avenue
Highveld Ext 75
Eco Park
Centurion
0046

Postal address:

PO Box 7106
Centurion
0046

Auditors

The financial statements are subject to auditing by the Auditor-General of South Africa (AGSA) in terms of the provisions of Section 188 of the Constitution of the Republic of South Africa, 1996 (the Constitution), read with Section 20 of the Public Audit Act, 2004 (Act no 25 of 2004) (PAA).

Compliance with legislation

The Directors believe the entity has complied, in all material respects, with the provisions of the PFMA, NNR Act, (Act no 47 of 1999) and other applicable legislation during the period under review.



PART D: ANNUAL FINANCIAL STATEMENTS
STATEMENT OF FINANCIAL POSITION

As at 31 March 2011		2011	2010
	Notes	R	R
Assets			
Non-current assets		23,539,495	5,782,115
Property, plant and equipment	2	22,049,940	5,404,448
Intangible assets	3	1,489,555	377,667
Current assets		76,047,350	96,844,677
Trade and other receivables	4	12,228,794	2,787,090
Cash and cash equivalents	5	63,818,556	94,057,587
Assets held for sale and discontinued operations	2.1	743,498	-
		100,330,344	102,626,792
Equity and liabilities			
Reserves			
Accumulated surplus		41,475,157	39,138,062
Non-current liabilities		8,642,490	33,360,650
Retirement medical benefits	6	5,877,654	33,360,650
Other financial liability	18	2,366,465	-
Finance lease liability	14.2	398,371	-
Current liabilities		50,212,696	30,128,080
Finance lease liability	14.2	189,865	331,487
Trade and other payables	7	22,224,440	6,117,971
Provisions	8	7,633,411	5,678,622
Other financial liability	18	20,164,980	-
Deferred income	19	-	18,000,000
		100,330,344	102,626,792



PART D: ANNUAL FINANCIAL STATEMENTS
STATEMENT OF FINANCIAL PERFORMANCE

For the year ended 31 March 2011	Notes	2011 R	2010 R
Revenue	9	109,810,396	108,675,106
Expenditure		111,969,687	104,508,357
Employee expenses	10.1	74,083,213	74,750,909
Services fees	10.2	8,122,010	8,035,931
Depreciation, amortisation and write-offs	10.3	2,722,400	1,835,871
Operating leases	10.4	8,815,125	5,603,335
Administrative expenses	10.5	18,226,939	14,282,311
Operating surplus/(deficit)		(2,159,291)	4,166,749
Finance income	11	4,792,669	5,451,320
Finance Charge	12	(296,283)	(117,267)
Net surplus for the year		2,337,095	9,500,802



PART D: ANNUAL FINANCIAL STATEMENTS
STATEMENT OF CHANGES IN EQUITY

For the year ended 31 March 2011	Note	Accumulated surplus R	Total R
Balance at 31 March 2009		29,865,241	29,865,241
Surplus as restated		9,272,821	9,272,821
Surplus for the period as previously reported		9,500,802	9,500,802
Prior year errors	25	(227,981)	(227,981)
Balance at 31 March 2010		39,138,062	39,138,062
Surplus for the period		2,337,095	2,337,095
Balance at 31 March 2011		41,475,157	41,475,157



PART D: ANNUAL FINANCIAL STATEMENTS
STATEMENT OF CASH FLOW

For the year ended 31 March 2011		2011	2010
	Notes	R	R
Cash receipts		104,704,639	115,970,551
Authorisation holders		79,606,995	86,006,307
State Grant		19,954,000	23,793,000
Applicants		350,975	755,490
Interest received	11	4,792,669	5,415,754
Cash payments		(111,667,350)	(95,643,345)
Compensation of employees		74,077,130	74,750,909
Goods and services		37,886,503	20,987,761
Interest paid	12	(296,283)	(95,325)
Cash flow from operating activities	17	(6,962,711)	20,327,206
Cash flow from investing activities		(21,223,278)	(1,910,849)
Acquisition of property, plant and equipment	2	(19,741,510)	(1,683,468)
Acquisition of intangible assets	3	(1,481,768)	(227,381)
Cash flow from financing activities		(2,053,042)	(467,973)
Finance lease		(331,487)	(467,973)
Settlement of post-retirement medical liability		(1,721,555)	-
Net increase in cash and cash equivalents		(30,239,031)	17,948,384
Cash and cash equivalents at the beginning of the year		94,057,587	76,109,203
Cash and cash equivalents at the end of the year	5	63,818,556	94,057,587



The following are the principal accounting policies of the entity which are, in all material respects, consistent with those of the previous year.

1.1 BASIS OF PREPARATION

The annual financial statements are prepared under the historical cost basis, except where otherwise specified. The annual financial statements are prepared in accordance with the South African Standards of Generally Recognised Accounting Practice (SA Standards of GRAP) issued by the Accounting Standard Board, and in the manner required by the Public Finance Management Act, Act No.1 of 1999.

These annual financial statements are presented in South African Rands.

Assets and liabilities or income and expenditure will not be offset, unless it is required or permitted by a standard.

GRAP 1, Presentation of financial statements requires entities to provide information on its actual performance against the entity's approved budget. A reconciliation to ensure full compliance with GRAP1 is included as a disclosure note to the financial statements.

1.2 GOING CONCERN ASSUMPTION

The financial statements have been prepared on a going concern assumption and will continue in operation for the foreseeable future.

1.3 SIGNIFICANT ACCOUNTING JUDGMENTS AND ESTIMATES

In preparing the annual financial statements, management is required to make estimates and assumptions that affect the amounts represented in the annual financial statements and related disclosures. In addition management is required to exercise its judgment in the process of applying the NNR accounting policies. Use of available information and the application of judgment are inherent in the formation of estimates. Actual results in the future could differ from these estimates which may be material to the annual financial statements. Significant judgments include:

Post-employment medical care benefits

The costs and liabilities of the post-employment medical care benefits are determined using methods relying on actuarial estimates and assumptions. Details of the key assumptions are set out in note 6. Advice is taken from the independent actuaries relating to the appropriateness of the assumptions. Changes in the assumptions used may have a significant effect on the statement of comprehensive income and statement of financial position.



Provision for impairment of receivables

A provision for impairment of trade receivables is established when there is objective evidence that the NNR will not be able to collect all amounts due according to the original terms of receivables. The calculation of the amount to be provided for impairment of receivables requires the use of estimates and judgments note 3.

Annual evaluation of property, plant and equipment and intangibles

In order to review property, plant and equipment and intangibles for possible impairment, changes in useful life and changes in residual values at the end of each financial year in accordance with notes 2 and 3, reference is made to historical information and intended use of assets.

The preparation of financial statements requires the use of estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting periods. Although these estimates are based on management's best knowledge of current events and actions that the entity may undertake in the future, actual results may ultimately differ from those estimates.

The presentation of the results of operations, financial position and cash flows in the financial statements of the entity is dependent upon and is sensitive to the accounting policies, assumptions and estimates that are used as a basis for the preparation of these financial statements. Management has made certain judgments in the process of applying the entity's accounting policies.

1.4 REVENUE RECOGNITION

Revenue comprises of authorisation fees and revenue from special projects. Revenue arising from authorisation fees which are published in the Gazette by the Minister on an annual basis is recognised on an accrual basis in accordance with the substance of the relevant arrangement with the licensed holders. Revenue from special projects is recognised based on stages of completion method.

1.5 GOVERNMENT GRANTS

Government grants are recognised in profit and loss when there is reasonable assurance that they will be received and that the entity will comply with the conditions associated with the grant.

1.6 IRREGULAR, FRUITLESS AND WASTEFUL EXPENDITURE

Irregular expenditure means expenditure incurred in contravention of, or not in accordance with, a requirement of any applicable legislation, including the PFMA. Fruitless and Wasteful expenditure means expenditure that was made in vain and would have been avoided had reasonable care been exercised. All irregular, and fruitless and wasteful expenditure is charged against income in the period in which it is incurred.



1.7 FOREIGN CURRENCIES

Transactions in foreign currencies are accounted for at the rates of exchange ruling on the date of the transactions. Gains and losses arising from the settlement of such transactions are recognised in the income statement.

1.8 INTEREST RECEIVED

Interest is recognised on a time proportionate basis taking into account the principal amount outstanding and the effective interest rate.

1.9 PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment (owned and leased) is stated at historical cost less depreciation and adjustment for any impairments. Costs include costs incurred initially to acquire an item of property, plant and equipment and costs incurred subsequently to add to, replace part of, or service it if it is probable that future economic benefits associated with the replacement will flow to the NNR and the cost can be measured reliably. If a replacement cost is recognized in the carrying amount of an item of property, plant and equipment, the carrying amount of the replaced part is derecognised. Estimates are mainly based on historical information relating to use of the asset. Depreciation is calculated on the straight-line method to write off the cost, less residual value, of each asset over their estimated useful lives as follows:

Item	Useful life	
	2011	2010
Freehold land	Not depreciated	Not depreciated
Building	20	20
Furniture	10 -25	10 -25
Office equipment	5-25	5-25
Computer equipment	3-5	3-5
Scientific and Technical equipment	5	5
Capitalized leased asset	5	5
Motor Vehicle	5	5
Leasehold improvements	Over the lease period	Over the lease period

The depreciation charge for each period is recognized in surplus or deficit.

The assets' residual values, useful lives and depreciation methods are reviewed, and adjusted if appropriate, at each reporting date. An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount.

The gains or losses arising from derecognition of an item of property, plant and equipment is included in surplus or deficit when the item is derecognised. The gain or loss arising from derecognition of an item of property, plant and equipment is determined as the difference between the net disposal proceeds, if any, and the carrying amount of the item.



1.10 INTANGIBLE ASSET

Research and Development

Expenditure on research activities, undertaken with the prospect of gaining new scientific or technical knowledge and understanding is recognized in the Statement of Financial Performance as an expense in the period incurred.

Expenditure on development activities, whereby research findings are applied to a plan or design for the production of new or substantially improved products and processes is capitalized if the development costs can be measured reliably, the product or process is technically and commercially feasible, future economic benefits are probable, and the entity has sufficient resources to complete development, and to use or sell the asset. The expenditure capitalized includes the cost of materials, direct labour and an appropriate proportion of overheads. Capitalized development expenditure is stated at cost less accumulated amortization and impairment losses.

Computer software

Acquired computer software licences are capitalized on the basis of the costs incurred to acquire and bring to use the specific software. Estimates are mainly based on historical information relating to use of the asset and all residual values are nil.

Amortization is charged to the Statement of Financial Performance on a straight-line basis over the estimated useful lives of intangible assets unless.

Item	Useful life	
	2011	2010
Software	3 years	3 years

The gains or losses arising from derecognition of an item of intangible asset is included in surplus or deficit when the item is derecognised. The gain or loss arising from derecognition of an item of property, plant and equipment is determined as the difference between the net disposal proceeds, if any, and the carrying amount of the item.

1.11 SUBSEQUENT EXPENDITURE

Subsequent expenditure on item of property plant and equipment and intangible assets is capitalized only when it increases the future economic benefits embodied in the specific asset to which it relates. All other expenditure is recognized in the Statement of Financial Performance as an expense when incurred.

1.12 IMPAIRMENT OF NON-FINANCIAL ASSETS

Assets are assessed at the end of each reporting period for any indication that they may be impaired. If indications exist, the recoverable amount of the asset is estimated. An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs



to sell and value in use. The NNR assesses at each reporting date whether there is any indication that an impairment loss recognized in prior periods for assets may no longer exist or may have decreased. If any such indication exists, the recoverable amounts of those assets are estimated. The increased carrying amount of an asset attributable to a reversal of an impairment loss does not exceed the carrying amount that would have been determined had no impairment loss been recognized for the asset in prior years. A reversal of an impairment loss of assets carried at cost less accumulated depreciation or amortization is recognized immediately in Statement of Financial Performance.

1.13 ACCOUNTING FOR LEASES

A lease is classified as a finance lease if it transfers substantially all the risks and rewards incidental to ownership to the lessee. A lease is classified as an operating lease if it does not transfer substantially all the risks and rewards incidental to ownership to the lessee.

Finance leases – lessee

Finance leases are recognized as assets and liabilities in the statement of financial position at amounts equal to the fair value of the leased property or, if lower, the present value of the minimum lease payments. The corresponding liability to the lessor is included in the statement of financial position as a finance lease obligation.

The discount rate used in calculating the present value of the minimum lease payments is the interest rate implicit in the lease. The lease payments are apportioned between the finance charge and reduction of the outstanding liability. The finance charge is allocated to each period during the lease term so as to produce a constant periodic rate on the remaining balance of the liability.

Operating leases – lessee

Operating lease payments are recognised as an expense on a straight-line basis over the lease term. The difference between the amounts recognized as an expense and the contractual payments are recognized as an operating lease liability. This liability is not discounted. Any contingent rents are expensed in the period in which they are incurred.

1.14 FINANCIAL INSTRUMENTS

Recognition and initial measurement

All financial instruments are initially recognized at fair value, plus, in the case of financial assets and liabilities not at fair value through surplus or deficit, transaction costs that are directly attributable to the acquisition or issue. Financial instruments are recognized when the entity becomes a party to their contractual arrangements. All regular way transactions are accounted for on settlement date. Regular way purchases or sales are purchases or sales of financial assets that require delivery of assets within the period generally established by regulation or convention in the marketplace.



Derecognition

Financial assets are derecognised when the contractual rights to receive cash flows have been transferred or have expired or when substantially all the risks and rewards of ownership have passed. All other assets are derecognised on disposal or when no future economic benefits are expected from their use.

Financial liabilities are derecognised when the relevant obligation has either been discharged or cancelled or has expired.

Subsequent measurement

Subsequent to initial recognition, the entity classifies financial assets as 'at fair value through surplus or deficit', 'held-to-maturity investments', 'loans and receivables', or 'available-for-sale'.

Gains and losses

Gains or losses arising from changes in financial assets or financial liabilities carried at amortized cost are recognized in Statement of Financial Performance when the financial asset or financial liability is derecognised or impaired, and through the amortization process.

Financial assets

The NNR classifies its financial assets into one of the categories discussed below, depending on the purpose for which the asset was acquired. The NNR has not classified any of its financial assets as held to maturity, fair value through profit and loss or available for sale.

The accounting policy for each category is as follows:

Loans and receivables

These assets are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They arise principally through the provision of services to licensed holders. They are initially recognized at fair value plus transaction costs that are directly attributable to their acquisition or issue, and are subsequently carried at amortized cost less provision for impairment.

Impairment provisions are recognized when there is objective evidence (such as significant financial difficulties on the part of the counterparty or default or significant delay in payment) that the NNR will be unable to collect all of the amounts due under the terms receivable. For trade receivables, which are reported net of such provisions, are recorded in a separate allowance account with the loss being recognized within operational expenditure in the Statement of Financial Performance. On confirmation that the trade receivable will not be collectable, the gross carrying value of the asset is written off against the associated provision. The loans and receivables comprise trade and other receivables at reporting date.



Cash and cash equivalents

Cash and cash equivalents comprise cash on hand and other short term highly liquid investments that are readily convertible to a known amount of cash and are subject to an insignificant risk of changes in value. Cash and cash equivalents include cash on hand and deposits held at call.

Financial liabilities

Bank borrowings are initially recognized at fair value net of any transaction costs directly attributable to the issue of the instrument. Such interest-bearing liabilities are subsequently measured at amortized

cost using the effective interest rate method, which ensures that any interest expense over the period to repayment is at a constant rate on the balance of the liability carried in the statement of financial position. Trade payables are initially recognized at fair value and subsequently carried at amortized cost using the effective interest method.

1.15 EMPLOYEE BENEFITS

The NNR provides defined benefit plans for certain post-employment benefits. The entity's net obligation in respect of defined benefits is calculated by estimating the amount of future benefits earned in return for services rendered. The obligation and assets related to each of the post-retirement benefits are determined through an actuarial valuation. The actuarial valuation relies heavily on assumptions as disclosed in note 6. The assumptions determined by management make use of information obtained from the entity's employment agreements with staff and pensioners, market related returns on similar investments, and market related discount rates and other available information. The assumptions concerning the expected return on asset and expected change in liabilities are determined on a uniform basis, considering long-term historical returns and future estimates of returns and medical inflation expectations. In the event that further changes in assumptions are required, the future amounts of post-retirement benefits may be affected materially.

The overall expected rate of return on asset is determined based on the market prices prevailing at that date, applicable to the period over which the obligation is to be settled.

Post-employment benefits

The NNR provides defined benefit and defined contribution plans for the benefit of Employees. These plans are funded by the Employees and the entity, taking into account recommendations of the independent actuaries. The post-retirement medical liability is unfunded.

Defined contribution plans

The entity's funding of the defined contribution plans is charged to Employee expenses in the same year as the related service is provided.



Defined benefit plans

The entity provides defined benefit plans for retirement and post-retirement medical aid benefits to qualifying Employees. The entity's net obligation in respect of defined benefits is calculated separately for each plan by estimating the amount of future benefits earned in return for services rendered.

The amount recognised in the statement of financial position represents the present value of the defined benefit obligations, calculated by using the projected unit credit method, as adjusted for unrecognised actuarial gains and losses, unrecognised past service costs if any and reduced by the fair value of the related plan assets.

The amount of any surplus recognised and reflected as deferred expenses is limited to unrecognised actuarial losses and past service costs plus the present value of available refunds and reductions in future contributions to the plan. To the extent that there is uncertainty as to the entitlement to the surplus, no asset is recognised. No gain is recognised solely as a result of an actuarial loss or past service cost in the current period and no loss is recognised solely as a result of an actuarial gain or past service cost in the current period. The entity recognises actuarial gains and losses for all its defined plans in the period in which they occur.

Past service costs are recognised immediately to the extent that the benefits are vested, otherwise they are recognised on a straight-line basis over the average period the benefits become vested.

Short term Employee benefit

The cost of all short term Employee benefits is recognised during the period in which the Employee renders the related service. Provision for Employee's entitlement to annual leave represents a present obligation which NNR has to pay as a result of Employee's services provided to the reporting date. Annual leave is provided for over the period that the leave accrues.

1.16 PROVISIONS AND CONTINGENT LIABILITY

Management judgment is required when recognising and measuring provisions and when measuring contingent liabilities as set out in Notes 8 and 14 respectively. The probability that an outflow of economic resources will be required to settle the obligation must be assessed and a reliable estimate must be made of the amount of the obligation.

The entity is required to recognise provisions for claims arising from litigation when the occurrence of the claim is probable and the amount of the loss can be reasonably estimated. Liabilities provided for legal matters require judgments regarding projected outcomes and ranges of losses based on historical experience and recommendations of legal counsel. Litigation is however unpredictable and actual costs incurred could differ materially from those estimated at the reporting date.

1.17 RELATED PARTIES

Parties are considered to be related if one party has the ability to control the other party or to exercise significant influence or joint control over the other party in making financial and operating decisions.



1.18 COMPARATIVES

Comparative figures are restated in the event of a change in accounting policy or prior period error.

1.19 EVENTS AFTER REPORTING DATE

Recognised amounts in the Annual Financial Statements are adjusted to reflect events arising after the reporting date that provide evidence of conditions that existed at the reporting date. Events after the Statement of Financial Position that are indicative of conditions that arose after the reporting date are dealt with by way of a note.

1.20 PRESENTATION CURRENCY

All amounts have been presented in the currency of South African Rand which is the functional currency of the entity.

1.21 NEW STANDARDS AND INTERPRETATIONS

The NNR has chosen not to early adopt the following standards and interpretations, which have been published and are mandatory for the entity's accounting periods beginning on or after 01 April 2010 or later periods:

GRAP 18: Segment reporting - establishes principles for reporting financial information by segments. This standard is not expected to have any impact on the financial statement of the entity.

GRAP 21: Impairment of non-cash generating asset - prescribes the procedures that an entity applies to determine whether a non-cash-generating assets is impaired and to ensure that impairment losses are recognised. The standard also specifies when an entity would reverse an impairment loss and prescribes disclosure.

GRAP 23: Revenue from non exchange transaction - (Taxes and Transfers) - prescribes requirements for financial reporting of revenue arising from non-exchanged transactions, other than non-exchanged transactions that give rise to an entity combination. The Standard deals with issues that need to be considered in recognising and measuring revenue from non-exchange transactions, including the identification of contributions from owners. This standard is expected to have impact on the net surplus and net assets value is currently realised over the useful life of assets. GRAP 23 requires deferred grant to be realised once the entity satisfies the condition attached to the grant, e.g. once the building is fully constructed.

GRAP 25: Employee benefits - prescribe the accounting and disclosure for employee benefits. The Standard requires an entity to recognise a liability when an employee has provided service in an exchange for employee benefits to be paid in the future; and expense when the entity consumes the economic benefits or services potential arising from service provided by an employee in exchange for employee benefits.

GRAP 26: Impairment of cash generating assets - prescribe procedures that an entity applies to determine whether a cash generating asset is impaired and to ensure that impairment losses are recognised. The Standard also specifies when an entity should reverse impairment and prescribes disclosures. The entity will adopt the Standards, interpretations and amendments where applicable to the entity on their effective date.



GRAP 104: Financial instruments - prescribes recognition, measurement, presentation and disclosure requirements for financial instruments. Financial instruments are broadly defined as those contracts that results in a financial asset in one entity and a financial liability or residual interest in another entity. A key distinguishing factor between financial assets and financial liabilities and other assets and liabilities, is that they are settled in cash or by exchanging financial instruments rather than through the provision of goods or services.

GRAP 105: Transfer of functions between entities under common control - the objective of this Standard is to establish accounting principles for the acquirer and transferor in a transfer of functions between entities under common control. An acquirer and a transferor that prepares and presents financial statements under the accrual basis of accounting shall apply this Standard to a transaction or event that meets the definition of a transfer of functions

GRAP 106: Transfer of functions between entities not under common control - an entity that prepares and presents financial statements under the accrual basis of accounting shall apply this Standard to a transaction or other event that meets the definition of a transfer of functions. The entity will adopt the standards, interpretations and amendments where applicable to the entity on their effective date.

GRAP 107: Mergers - establish accounting principles for the combined entity and combining entities in a merger. A combined entity and combining entities that prepares and presents financial statements under the accrual basis of accounting shall apply this Standard to a transaction or event that meets the definition of a merger where no acquirer can be identified. This is not expected to affect the entity, it will however be adopted where applicable on the effective date.

Management expects that the adoption of the standards listed above will have no material impact on the annual financial statements in the period of initial application.



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2. PROPERTY, PLANT AND EQUIPMENT

	2011			2010		
	Cost R	Accumulated depreciation R	Carrying value R	Cost R	Accumulated Depreciation R	Carrying value R
Property, Plant and Equipment	26,060,085	4,010,146	22,049,940	10,024,278	4,619,830	5,404,448
Furniture	3,804,585	218,767	3,585,818	1,959,685	660,481	1,299,204
Office equipment	4,540,212	316,346	4,223,915	1,204,834	595,283	609,551
Computer equipment	7,715,523	2,119,307	5,596,216	3,416,655	1,560,484	1,856,171
Scientific and Technical equipment	2,536,061	827,917	1,708,144	1,384,456	553,684	830,772
Capitalised leased asset- Office equipment	618,170	42,340	575,830	1,420,300	1,116,930	303,370
Motor vehicle	210,848	20,259	190,589	210,848	5,047	205,801
Leasehold Improvement	6,207,136	326,600	5,880,536	-	-	-
Building	213,750	138,609	75,141	213,750	127,921	85,829
Freehold land	213,750	-	213,750	213,750	-	213,750

Fully depreciated assets with a cost of R2,338,270 were derecognised in the 2011 financial year. This has reduced both the cost price and accumulated depreciation of property, plant and equipment. There were additions during the financial year worth R19,741,510.

The carrying amounts of property, plant and equipment can be reconciled as follows:

	Carrying value at the beginning of the year	Additions	Depreciation	Impairment losses and write-offs	Assets held for sale	Carrying value at the end of the year
2011						
Furniture	1,299,204	3,135,669	(113,373)	-	(735,682)	3,585,818
Office equipment	609,551	3,829,737	(183,493)	(24,163)	(7,716)	4,223,916
Computer equipment	1,856,171	4,666,043	(905,691)	(20,207)	(100)	5,596,216
Scientific and Technical equipment	830,772	1,284,756	(407,384)	-	-	1,708,144
Capitalised leased asset -Office Equipment	303,370	618,169	(345,709)	-	-	575,830
Motor vehicle	205,801	-	(15,212)	-	-	190,589
Leasehold Improvement	-	6,207,136	(326,600)	-	-	5,880,536
Building	85,829	-	(10,688)	-	-	75,141
Freehold land	213,750	-	-	-	-	213,750
	5,404,448	19,741,510	(2,308,150)	(44,370)	(743,498)	22,049,940



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	Carrying value at the beginning of the year	Additions	Depreciation	Impairment losses and write-offs	Transfer in/ (out)	Carrying value at the end of the year
2010						
Furniture	930,211	496,164	(114,428)	(12,743)	-	1,299,204
Office equipment	325,067	362,231	(98,551)	(135)	20,939	609,551
Computer equipment	1,939,629	566,345	(627,654)	(1,210)	(20,939)	1,856,171
Scientific and Technical equipment	1,051,340	47,880	(268,448)	-	-	830,772
Capitalised leased asset- Office equipment	608,524	-	(305,154)	-	-	303,370
Motor vehicle	-	210,848	(5,047)	-	-	205,801
Building	96,517	-	(10,688)	-	-	85,829
Freehold land	213,750	-	-	-	-	213,750
	<u>5,165,038</u>	<u>1,683,468</u>	<u>(1,429,970)</u>	<u>(14,088)</u>	<u>-</u>	<u>5,404,448</u>

The Freehold land and building consist of office block situated on erf 3187 Melkbosch Strand in the Blaauwberg Municipality, Cape Division, Western Cape.

2.1 ASSETS HELD FOR SALE AND DISCONTINUED OPERATIONS

The NNR Board approved the disposal of identified items of property, plant and equipment on 28 January 2011. The carrying value of item of property, plant and equipment to be disposed are listed below.

	2011 R	2010 R
Furniture	735,682	-
Office equipment	7,716	-
Computer equipment	100	-
	<u>743,498</u>	<u>-</u>

3. INTANGIBLE ASSET

	2011			2010		
	Cost R	Accumulated Amortisation R	Book value R	Cost R	Accumulated Depreciation R	Book value R
Computer software	<u>1,873,466</u>	<u>(383,911)</u>	<u>1,489,555</u>	1,272,858	(895,191)	377,667

Fully amortised assets with a cost of R881,160 were derecognised in the 2011 financial year. This has reduced both the cost price and accumulated amortisation of intangible asset.

The carrying amounts of intangible assets can be reconciled as follows:



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	Carrying value at the beginning of the year	Additions	Amortisation	Impairment losses and write-offs	Carrying value at the end of the year
2011					
Computer software	377,667	1,481,768	(369,880)	-	1,489,555
2010					
Computer software	542,099	227,381	(391,813)	-	377,667

4. TRADE AND OTHER RECEIVABLES

	2011 R	2010 R
Trade receivables	11,791,321	2,701,307
Less: Provision for doubtful debts	(1,560,237)	(716,253)
Less: Fair value adjustment	(271,696)	(21,942)
Net trade receivables	9,959,388	1,963,112
Other receivables	2,269,406	823,978
	12,228,794	2,787,090

5. CASH AND CASH EQUIVALENT

Bank balance	22,787,708	55,251,847
Call Account	41,023,348	38,798,240
Petty cash	7,500	7,500
	63,818,556	94,057,587

6. EMPLOYEE BENEFIT

The NNR provides a benefit for all its permanent Employees through the National Nuclear Regulator Retirement Fund, membership of the fund is compulsory. The fund consists of both defined benefit and defined contribution fund. The fund is governed by the Pension Fund Act, 1956 (Act no.24 of 1956).

In addition, certain retired Employees receive medical aid benefits. The liabilities for all of the benefits are actuarially determined in accordance with accounting requirements each year. In addition, a statutory funding valuation for the retirement is performed at intervals not exceeding three years.

Number of employees at 31 March 2011 was 94 Employees (2010: 93)

Actuarial valuations were performed by qualified actuaries to determine the benefit obligation, plan asset and service costs for the pension and retirement funds for each of the financial periods presented.



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6.1 THE NATIONAL NUCLEAR REGULATORY RETIREMENT FUND

The latest actuarial valuation performed at 31 March 2011 indicates that the pension fund is in a surplus position of R8,374,000, after unrecognised gains. The recognition of the surplus is limited due to the application of the asset limitation criteria in IAS19 (revised).

The last statutory funding valuation of the fund performed in 31 March 2011, indicated that the fund is fully funded. The current contributions are based on that valuation.

As of 1 April 2009, the NNR Retirement Fund became a hybrid defined benefit and defined contribution plan. The existing Employees were given the option to either remain in the defined benefit plan or be transferred to the defined contribution plan. 75 members were transferred to the defined contribution plan. The defined plan was closed for all new Employees. New members joining the fund after 1 April 2009 could only belong to the defined contribution plan.

	2011	2010
	R	R

The funded status of the National Nuclear Regulator Fund is disclosed below.

Defined Benefit Plan

The net periodic retirement costs include the following components:

Service cost	610,000	785,000
Interest costs	3,860,000	3,614,000
Expected return on plan asset	(4,912,000)	(4,157,000)
Recognised actuarial (gain)/ loss	(1,083,000)	506,000
Net periodic retirement (benefit)/costs	(1,525,000)	748,000

Movement in liability

Opening balance	43,786,000	41,516,000
Amounts recognised in income statement	2,184,000	4,905,000
Current service cost	610,000	785,000
Interest cost	3,860,000	3,614,000
Actuarial loss	(2,286,000)	506,000
Benefit paid	(4,186,000)	(2,635,000)
Closing balance	41,784,000	43,786,000

Plan asset at fair value:

Opening balance	52,379,000	42,937,000
Expected return on plan asset	4,912,000	4,157,000
Benefit paid	(4,186,000)	(2,635,000)
Contributions	542,000	689,000
Actuarial gain	1,083,000	7,231,000
Closing balance	54,730,000	52,379,000



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	2011	2010
	R	R
Status of the Retirement Fund:		
Present value of funded obligation	(46,356,000)	(43,786,000)
Fair value of plan assets	54,730,000	52,379,000
Fund status	8,374,000	8,593,000
	8,374,000	(8,593,000)
Net liability	-	-
<i>Net liability limited as per IAS19 paragraph 58</i>		
Expected return on plan asset	4,912,000	4,157,000
Actuarial gain on plan asset	1,083,000	7,231,000
Actual return on plan asset	5,995,000	11,388,000
Funding levels	118.1%	119.6%
Principal actuarial assumptions were as follows:		
Discount rate %	9.20%	9.20%
Expected return on plan assets %	9.70%	9.70%
General inflation rate	6.30%	5.70%
Salary inflation rate %	7.30%	6.70%
Pension increase %	4.00%	4.00%
Valuation rate of interest and expected return on investment was determined in reference to the current market yield of government bond. The discount rate is based on the yield of R186 government bond.		
General inflation rate is based on the yield of R186 fixed interest government bond and the R197 index linked to government bond as at each valuation date.		
The fund portfolio consists of the following:		
Equity	70%	70%
Bond	30%	30%
The number of pensioners registered under the NNR Retirement Fund	5	6
The number of in-service Employees registered under the NNR Retirement Fund	33	34

a. Defined Contribution Fund

All new Employees and existing Employees that selected to be transferred to the defined contribution plan are members of the NNR Retirement Fund - defined contribution plan. The plan is administered by ABSA Consultants and Actuaries (Proprietary) Limited. The current contributions to the retirement fund amounted to R7,691, 878 (2010: R7,616,000).

6.2 POST-RETIREMENT MEDICAL BENEFIT

The NNR makes certain contributions to medical funds in respect of current and retired Employees. The expense in respect of current Employees' medical aid is disclosed in note 10.1. The NNR has terminated future post-retirement medical benefits in respect of Employees joining after 31 December 1995.



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The entity pays 100% of the membership subscriptions for staff members who had retired from the services of the NNR (the then Council of Nuclear Science) on or before 30 July 1990 and also for those staff members retiring from the services of the entity on or after 1 July 1990 who were in the continuous employment of the entity before 1 July 1990 to the date of retirement.

The NNR introduced a sliding scale for membership subscriptions for staff joining after 1 July 1990. Subsidy reduced stepwise from 100% each six months to a minimum of 60% for Employees that joined the NNR after 1 July 1990 and before 31 December 1995. Eligible Employees must be employed by NNR until retirement age to qualify for the post-retirement medical aid benefit. The most recent actuarial valuation of the benefit was performed as at 31 March 2009.

The obligation is unfunded*.

Movement in liability

	2011	2010
	R	R
Opening balance	33,360,650	29,897,654
Amounts recognised in profit and loss	(1,704,000)	4,878,000
Current service cost	401,000	369,000
Interest cost	2,668,000	2,539,000
Actuarial (gain)/ loss	(4,773,000)	1,970,000
Benefit payments	(1,523,996)	(1,415,004)
Settlement	(24,255,000)	-
Closing balance	5,877,654	33,360,650
Present value of unfunded obligation	5,877,654	33,360,650

Principal actuarial assumptions were as follows:

Discount rate %	9.25%	9.25%
Medical inflation rate %	8.25%	8.25%
Number of members in active employment	19	19
Number of pensioners	34	34
Average retirement age	60	60
Proportion continuing membership at retirement	100%	100%
Proportion of retiring members who are married	90%	90%
Age of spouse	In-service members: husbands 3 years older than wives Retired members: actual age	In-service members: husbands 3 years older than wives Retired members: actual age
Mortality of in-service members	Males: SA8590L (Ult) Females: 55% of SA8590L(Ult)	Males: SA8590L (Ult) Females: 55% of SA8590L(Ult)
Mortality of continuation members	Males: SA8590L(Ult) Females: 55% of SA8590L(Ult)	Males: SA8590L(Ult) Females: 55% of SA8590L(Ult)

No explicit assumption was made about additional mortality or health care costs due to AIDS.



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7. TRADE AND OTHER PAYABLES

	2011 R	2010 R
Trade payables	3,544,722	4,385,163
Less: Fair value adjustment	(85,105)	(35,566)
Accruals	3,459,617	4,349,597
Other payables	764,806	1,768,374
Special grant	18,000,000	-
	22,224,440	6,117,971

8. PROVISIONS

	2011 R				2010 R		
	Annual leave	*Bonus	Restructuring @	Total	Annual leave	Bonus	Total
Opening balance	4,784,704	893,918	-	5,678,622	3,332,551	702,567	4,035,118
Charge to employee cost	4,888,922	802,604	1,941,885	7,633,411	2,040,323	4,329,420	6,369,743
Utilisation of provision	(4,784,704)	(893,918)	-	(5,678,622)	(588,170)	(4,138,069)	(4,726,239)
Closing balance	4,888,922	822,604	1,941,885	7,633,411	4,784,704	893,918	5,678,622

* This represents 13th cheque as per Employee salary structure.

@ The NNR is under going organisational restructuring. Employees whose positions are redundant and cannot be absorbed in the new structure will be offered Voluntary Severance Package of four weeks for every year worked or retrenchment package of three weeks for every year worked. Management made an estimate of the potential liability based on available information at year-end. These include affected number of employees, their total salary packages, number of years worked and the likelihood of not being absorbed in the new structure.

9. OPERATING INCOME

	2011 R	2010 R
Authorisation fees	89,505,421	84,126,616
Other income	350,975	755,490
	89,856,396	84,882,106
Government grant	19,954,000	23,793,000
	109,810,396	108,675,106



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10. OPERATING EXPENSES

	2011	2010
	R	R
10.1 Employee expenses	74,083,213	74,750,909
Employee expenses include:		
Salaries	60,236,545	55,015,678
Employer contribution to medical aid	2,362,300	1,898,133
Employer contribution to retirement fund – defined benefit	389,917	478,000
Employer contribution to retirement fund – defined contribution	5,187,083	4,650,425
Post-retirement retirement fund: defined benefit	(1,744,000)	7,920,000
Current service cost	610,000	785,000
Interest cost	3,860,000	3,614,000
Actuarial (gain)/loss	(1,083,000)	506,000
Expected return on plan asset	(4,912,000)	(4,157,000)
Reversal of prior-year un-recognised post-retirement benefit asset	(8,593,000)	(1,421,000)
Unrecognised post-employment benefit asset	8,374,000	8,593,000
Post-retirement medical benefit	(1,706,000)	4,878,000
Current service costs	401,000	369,000
Interest costs	2,668,000	2,539,000
Actuarial (gain)/loss	(4,775,000)	1,970,000
Restructuring costs	1,941,885	-
10.2 Service fees	8,122,010	8,035,931
Technical services	4,000,048	2,263,572
Services contracts	1,415,346	3,152,253
External audit	755,532	1,053,456
Current year	755,532	842,764
Prior year	-	210,691
Internal audit	1,434,739	900,855
Audit	1,434,739	801,486
Other	-	99,369
Legal fees	-	17,278
Non-executive directors-for services as directors	502,217	629,035
Independent Audit Committee Member	14,128	19,482
10.3 Depreciation, amortisation, write-offs and impairment	2,722,400	1,835,871
Deprecation on property, plant and equipment	2,308,150	1,429,970
Amortisation on intangible assets	369,880	391,813
Write-offs & impairment on property, plant and equipment	44,370	14,088



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	2011	2010
	R	R
10.4 Operating leases	8,815,125	5,603,335
Office building	8,742,284	5,385,623
Equipment	72,841	69,357
Vehicles	-	148,355
10.5 Administrative expenses	18,226,939	14,282,311
Repairs and maintenance	4,033,379	167,615
Training and development	1,571,445	1,854,531
Travelling	5,140,432	4,543,412
General expenses	7,481,683	7,716,753
11. Finance income	4,792,669	5,451,320
Interest received	4,707,564	5,415,754
Fair value adjustment on financial instrument	85,105	35,566
12. Finance Charges	296,283	117,267
Interest	24,587	95,324
Fair value adjustment on financial instrument	271,696	21,943

13. DIRECTORS EMOLUMENTS

2011	Fees	Performance Bonus	Retirement fund contribution	Other benefits	Total
Non-executive director					
Dr T Cohen - Chairperson	71,260	-	-	-	71,260
Mr T Mofokeng - Deputy Chairperson	105,889	-	-	-	105,889
Mr D Elbrecht	68,749	-	-	-	68,749
Ms M Liefferink	60,932	-	-	-	60,932
Mr N Lesufi	69,778	-	-	-	69,778
Mr J Leaver	71,572	-	-	-	71,572
Prof D van der Merwe***	54,037	-	-	-	54,037
	502,217	-	-	-	502,217
Independent Audit Committee Member					
Ms E Thema*	14,128	-	-	-	14,128

* Ms Thema was appointed on 1 October 2010



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2011	Salary	Performance Bonus	Retirement fund contribution	Other benefits	Total
Executive director					
Adv BM Mkhize (CEO)#	1,493,545	-	144,410	-	1,637,955
Executive staff					
Ms RJ Magoele	1,232,542	-	102,583	32,645	1,367,770
Ms LG Mashishi	1,101,436	-	51,791	-	1,153,227
Mr JN Mwase*	1,208,494	-	162,765	23,938	1,395,197
Mr M Msebenzi**	1,332,381	-	129,653	20,851	1,482,885
	4,874,853	-	446,792	77,434	5,399,079

2010	Fees	Performance Bonus	Retirement fund contribution	Other benefits	Total
Non-executive director					
Prof M Hermanus - Chairperson*	89,829	-	-	-	89,829
Dr T Cohen - Chairperson**	19,962	-	-	-	19,962
Mr T Mofokeng - Deputy Chairperson***	88,573	-	-	-	88,573
Mr D Elbrecht***	75,107	-	-	-	75,107
Mr K Govender*	34,650	-	-	-	34,650
Ms M Liefverink**	19,800	-	-	-	19,800
Mr N Lesufi***	88,077	-	-	-	88,077
Mr J Leaver**	19,800	-	-	-	19,800
Ms T Mgoduso*	62,062	-	-	-	62,062
Mr B Ramahlo*	61,875	-	-	-	61,875
Prof D van der Merwe***	69,300	-	-	-	69,300
	629,035	-	-	-	629,035

Independent Audit Committee Member

Ms P Mzizi	19,482	-	-	-	19,482
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Legends

* Director term expired on 30 November 2009

** Director appointed from 1 December 2009

*** Director reappointed from 1 December 2009

2010	Salary	Performance Bonus	Retirement fund contribution	Other benefits	Total
Executive director					
Adv BM Mkhize (CEO) #	169,555	-	11,667	-	181,222
Mr G Clapison (Acting CEO) ##	1,142,749	54,028	132,107	31,505	1,360,389
	1,312,304	54,028	143,774	31,505	1,541,611



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Executive staff						
Ms RJ Moloto	1,168,181	-	97,088	29,323	1,294,501	
Ms LG Mashishi	1,035,569	36,350	49,016	-	1,120,935	
Mr M Msebenzi**	1,132,455	-	113,229	18,646	1,264,330	
Mr JN Mwase*	917,399	-	130,246	19,428	1,067,073	
	4,253,604	36,350	389,579	67,397	4,746,839	

Legends

Adv BM Mkhize was appointed CEO from 15 February 2010

Mr. G Clapison term expired as Acting CEO from 15 February 2010

* Mr. JN Mwase was appointed on 1 June 2009

** Mr. M Msebenzi was appointed on 1 May 2009

14. COMMITMENT

14.1 Operating lease

	Total	Up to 1 year	2 to 3 years
2011			
Building	53,258,945	9,692,153	43,566,792
Equipment	57,750	57,750	-
	53,316,695	9,749,903	43,566,792
2010			
Building	59,596,937	6,337,992	53,258,945
Equipment	110,264	52,514	57,750
	59,707,201	6,390,506	53,258,945

14.2 Finance lease

	Future minimum lease payments	Finance charges	Present value of minimum lease payments
2011			
Less than one year	141,614	47,757	189,371
Between 1-5 years	357,669	40,702	398,371
	499,283	88,459	587,742
2010			
Less than one year	348,160	16,673	331,487

Finance leases are in respect of photocopiers. Leases are classified as finance leases whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee. The average remaining term of photocopier finance leases is 34 months. The interest rate inherent in the leases is at the prime interest rate for the duration of the lease term. The effective interest rate contracted is approximately 8%. There are no restrictions as to the usage of the asset.



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14.3 Capital expenditure

	2011	2010
	R	R
Commitments against authorised capital expenditure	-	1,335,984
Authorised capital expenditure not yet contracted	-	2,302,117
Capital commitment authorised	-	3,638,101

The following capital commitments will be financed through the approved budget and the accumulated surplus provided the National Treasury approve NNR request to retain the surplus.

15. CONTINGENT LIABILITY

Surplus	2,337,095	9,272,821
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A contingent liability has arisen as a result of NNR having a surplus for the reporting period. The extent to which an outflow of funds will be required is dependent on the outcome of the application to retain the funds in terms of Section 53 (3) of the PFMA.

16. RELATED PARTIES

During the year under review, the NNR, in the ordinary course of its business, entered into various transactions with related parties which terms are no less favourable than with third parties.

Directors

Details of directors' emoluments are disclosed under **note 13**.

Transactions with Directors

All directors have given general declarations of interest in terms of Section 243 (3a) of the Companies Act. These declarations indicate that no member of the Board hold other directorships in South African entities with whom transactions are conducted by NNR in terms of a customer/supplier relationship.

Transactions with National Departments of Government

All National Departments of Government are regarded to be related parties in accordance with circular 4 of 2005: Guidance on the term "State controlled entities" in the context of IAS 24 (AC 126) - Related Parties, issued by the South African Institute of Chartered Accountants. No transactions are implicated by simply the nature of the existence of the relationship between entities. However, the following transactions were recorded relating to transactions with related parties as defined above:



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Name of related party	Nature of the transaction	2011	2010
Income			
Department of Energy	Grant	19,954,000	23,793,000
Eskom-Koeberg Power Station	Authorisation fees	37,275,599	34,527,996
Eskom	Special projects	4,330,548	12,563,694
Eskom - Pebble Modular Reactor	Authorisation fees	17,854,827	15,163,981
PBMR - Fuel Fabrication Plant	Authorisation fees	-	4,459,994
Necsa – Pelindaba	Authorisation fees	17,082,995	14,825,982
Necsa – Vaalputs	Authorisation fees	2,909,612	2,675,997
The SA Navy	Authorisation fees		291,966
Transnet Port Terminals	Authorisation fees	223,259	147,171
SAPS- Forensic Science Laboratory	Authorisation fees	17,990	15,912
South African Air Force	Authorisation fees	135,673	17,480
Expenses			
Eskom	Special projects	4,330,548	12,563,694
Telkom	Telephone	521,090	634,084
SARS	PAYE	18,864,815	17,811,402
Necsa	Sample analysis	974,686	204,314
Accounts receivables			
Eskom	Special projects	-	128,406
The SA Navy	Authorisation fees	-	291,966
Transnet Port Terminals	Authorisation fees	22,118	147,171
SAPS- Forensic Science Laboratory	Authorisation fees	-	15,912
South African Air Force	Authorisation fees	-	17,480
Eskom-Koeberg Power Station	Authorisation fees	6,212,600	-



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17. RECONCILIATION OF SURPLUS FOR THE YEAR TO CASH GENERATED FROM OPERATIONS

	2011	2010
	R	R
Operating (deficit)/surplus for the year	2,337,095	9,500,802
Non-cash items	7,733,874	12,319,635
Depreciations	2,308,150	1,429,970
Amortizations	369,880	391,813
Write-offs and impairment on property, plant and equipment	44,370	14,088
Increase in provision for leave pay and bonuses	5,691,526	6,369,742
Provision for restructuring	1,941,885	-
Provision for doubtful debt	1,295,907	651,026
(Increase)/ Decrease in provision for retirement medical benefit	(3,917,844)	3,462,996
Working capital changes	(17,033,680)	(1,493,231)
Decrease/(Increase) in accounts receivables	(9,441,704)	2,635,179
Decrease in provision for leave and bonus	(5,698,428)	(4,739,863)
Increase/(Decrease) in accounts payables	(1,893,548)	611,453
	(6,962,711)	20,327,206

18. FINANCIAL INSTRUMENTS

Financial instruments consist of cash and cash equivalents, trade and other receivables, and trade and other payables.

18.1 CREDIT RISK

Financial assets, which potentially subject the NNR to concentrations of credit risk, consist principally of cash and trade receivables. Trade receivables are presented net of the allowance for doubtful debts. Credit risk with respect to trade receivables is limited owing to the large number of license holders being dispersed across different industries. Accordingly the NNR has no significant concentration of credit risk.

The carrying amounts of financial assets included in the Statement of Financial Position represent the exposure of the NNR to credit risk in relation to those assets.

Trade and other receivables are managed by applying policies and procedures.

The NNR does not have exposure to any single individual license holder or counter party.

18.2 INTEREST RATE RISK

The level of exposure to interest rate fluctuation is very low as NNR does not have debt. The interest on assets is also very limited.



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18.3 FAIR VALUE OF FINANCIAL INSTRUMENT

At 31 March 2011 the carrying amounts of cash, accounts receivable and accounts payable approximated their fair values due to the short-term maturities of these assets and liabilities. The net fair value of the assets and liabilities of the NNR are stated below:

	2011	2010
	R	R
Assets		
Cash and cash equivalent	63,818,556	94,057,587
Trade and other receivables	12,228,794	2,787,090
Liabilities		
Trade and other payables	22,224,940	6,117,971
Deferred income	-	18,000,000
Other financial liability- long term	2,366,465	-
Other financial liability- long term	20,164,980	-

19. DEFERRED INCOME

Nature and extent of Government Grant

The Department of Energy has approved the allocation of the funds towards the establishment of a laboratory.

Unfulfilled conditions in terms of the Grant

Government grant received	-	18,000,000
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20. SPECIAL PROJECT

In terms of Section 5(b)(i) of the NNR Act, (Act No 47 of 1999) the Regulator should exercise regulatory control related to safety over the siting, design, construction, operation, manufacture of component parts, and decontamination, decommissioning and closure of nuclear installations. In compliance with the afore going during the financial year the NNR had an arrangement with Eskom, the applicant for the Pebble Bed Modular Reactor nuclear installation licence, for certain fees, disbursements and expenses necessarily incurred and not provided for in the licence application fee as contemplated in Section 28 of the National Nuclear Regulator Act project. The full income and expenditure associated with the project has been:

Fees received from Eskom	3,798,990	12,563,694
Fees paid for the project to consultants	(3,798,990)	(12,563,694)
	-	-



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21. IRREGULAR EXPENDITURE AND WASTEFUL EXPENDITURE

21.1 RECONCILIATION OF IRREGULAR EXPENDITURE

Opening balance	6,744,582	3,543,388
Add: Current year irregular expenditure	21,493,004	3,372,194
Less: Amounts condoned	(6,744,582)	(171,000)
Irregular Expenditure awaiting condonation	21,493,004	6,744,582

21.2 RECONCILIATION OF WASTEFUL EXPENDITURE

Opening balance	-	-
Add: Current year wasteful expenditure	839,206	-
Less: Amounts condoned	(837,962)	-

Irregular Expenditure awaiting condonation	1,244	-
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Incident	Disciplinary Action or steps taken	R
Payment of rental for rental for two offices due to delay in completing installations in the new offices	The expenditure was condoned by the Board in October 2010 and the expenditure will be reported to National Treasury in terms of TR 9.1.2 as required by the PFMA.	837,962
Interest and penalties on late payments for the current and prior year	No disciplinary action was taken and the expenditure will be reported to National Treasury in terms of TR 9.1.2 as required by the PFMA.	1,244

22. TAXATION

The entity is exempted from income tax as more than 80% of the expenditure is defrayed from funds voted by Parliament. The entity also is exempted from Value Added Tax (VAT) on grant received and authorisation fees as they comprises, funds voted by Parliament. As a result, any Vat paid the entity is also non-refundable from SARS.

23. EVENTS AFTER REPORTING DATE

Post-retirement medical liability

As part of condition of services, the NNR committed itself to make medical aid contribution on behalf of its employees and their dependants after retirement. This post-retirement medical liability at the end of March 2010 was R33.4m this was however not funded. The NNR did not have a plan asset to match this liability.



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During the year the NNR made a voluntary offer to the members of the fund both active and retired. The offer consists of cash payout in three tranches and 100% guaranteed CPI annuity for the active and retired members respectively. The offer was accepted by majority of members on 31 July 2010 and cash payout was made to the active members. However for active member the payout of R17.2m which is the full and final settlement of the liability for retired members that have accepted the offer was made to Old Mutual 13 April 2011.

24. BUDGET SURPLUS

Reconciliation of budget surplus/deficit with the surplus/deficit in the statement of financial performance

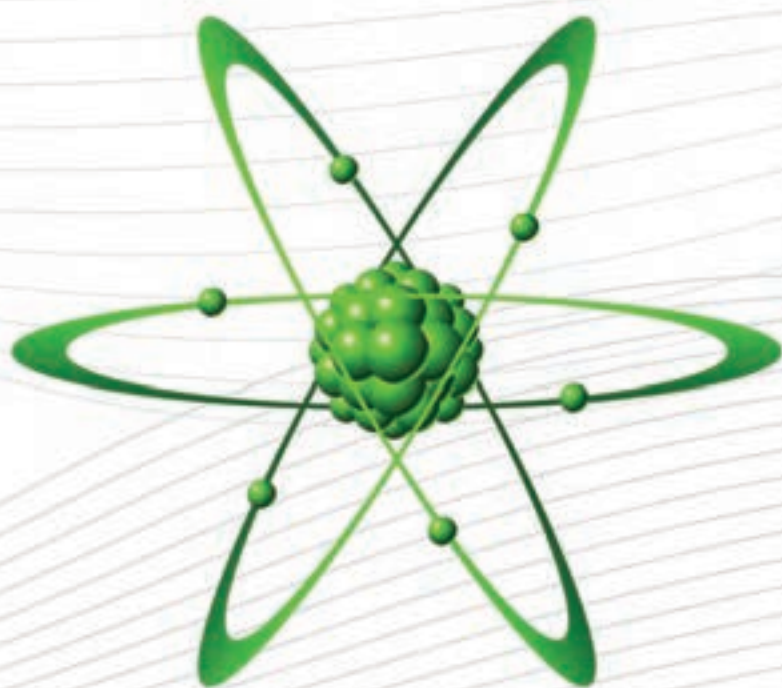
Net surplus for year as per statement of financial performance	2,733,095
Adjusted for:	4,226,057
Write-offs and impairment on property, plant and equipment	44,370
Increase in provision for leave pay and bonuses	5,691,526
Provision for restructuring	1,941,885
Provision for doubtful debt	1,295,907
(Increase)/ Decrease in provision for retirement medical benefit	(3,229,996)
Capital expenditure	(1,517,635)
Income variance against budget	652,263
Authorisation fees	1,583,907
Other income	(350,975)
Finance income	(580,669)
Expenditure variance against budget	(6,742,521)
Personnel costs	(11,710,982)
Professional services	(464,922)
Operating expenses	2,612,040
Administrative expenses	1,579,982
Other operating expenditure	1,241,361
Net Surplus/deficit as per budget	868,894

25. RE-STATEMENT OF CORRESPONDING FIGURES

During the current financial year the NNR corrected accounting errors. An amount of R245,595.00 relating to administrative expenses were incorrectly treated in the financial statements for the year ended 31 March 2011. The amount should have been treated as administrative expenses in the previous financial year ended 31 March 2010. In addition, an amount of R17,614.00 is as a result of a reversal of an accrued administrative expense which was erroneously raised in the prior year.

The closing balance on the Accumulated surplus as at 31 March 2011 is restated at R39,138,062.00. It was previously shown at R39,366,043. The difference of R227,981.00 is as result of the net effect of the above correcting transactions.

Administrative expenses	245,595
Less reversal of accrued administrative expenses	(17,614)
Net correcting error	227,981





22. ABBREVIATIONS/ACRONYMS

AADQ	Annual authorised discharge quantity
ACR	Authorisation change request
ALARA	As low as reasonably achievable
ARPC	Assistant radiation protection controller
ASDPL	Aerodynamic separation process
ASME	American Society of Mechanical Engineers
ASN	French Nuclear Regulatory Authority
CEO	Chief Executive Officer
CNS	Convention on Nuclear Safety
COE	Certificate of exemption
COM	Chamber of Mines
COR	Certificate of registration
CPI	Consumer price index
CSS	Commission on Safety Standards
DIPR	Dedicated isotope production reactor
ECC	Emergency control centre
EPD	Electronic personal dosimeter
DoE	Department of Energy
ENIQ	European Network for Inspection and Qualification
EPSOC	Emergency Planning, Steering and Oversight Committee
FNRBA	Forum of Nuclear Regulatory Bodies in Africa
GRAP	Generally Recognised Accounting Practice
HEU	Highly enriched uranium
IAEA	International Atomic Energy Agency
ICRP	International Commission on Radiation Protection
ICT	Information Communication and Technology
ILT	Initial licence training
INES	International Nuclear Event Scale
INPO	Institute of Nuclear Power OperatorsINSAG International Nuclear Safety Group (of the IAEA)
ISI	In-service inspection
IT	Information technology
JCC	Joint coordinating committee
KNPS	Koeberg Nuclear Power Station
LETF	Liquid effluent treatment facility
LEU	Low enriched uranium
LLM	Low level waste
LTAM	Long-term asset management
MDEP	Multinational Design Evaluation Programme
mSv	microSievert
mSv	milliSievert





ABBREVIATIONS/ACRONYMS

MWe	Megawatt electrical
Necsa	South African Nuclear Energy Corporation
Nehawu	National Education, Health and Allied Workers Union
NEPROC	Nuclear Emergency Preparedness Regulatory Oversight Committee
NERS	Network of Regulators of Countries with Small Nuclear Programmes
NGO	Non-governmental organisation
NIL	Nuclear installation licence
NNR	National Nuclear Regulator
NNR	Act National Nuclear Regulator Act
NORM	Naturally occurring radioactive material
NTWP	Nuclear technology and waste products
NUSSC	Nuclear Safety Standards Committee
NVL	Nuclear vessel licence
QMS	Quality management system
OTS	Operating technical specification
PBMR	Pebble Bed Modular Reactor
PFMA	Public Finance Management Act
PLEX	Plant life extension
PPC	Parliamentary Portfolio Committee
PSA	Public safety assessor
RASSC	Radiation Safety Standards Committee
RENS	Regulation of natural sources
RPO	Radiation protection officer
SALTO	Safety assessment of long-term operation
SAPS	South African Police Service
SARS	South African Revenue Service
SAT	Self-assessment tool
SGR	Steam generator replacement
SHEQ	Safety, health, environment and quality management
SHEQD	Safety, Health, Environment and Quality Management department
SQEP	Suitably qualified and experience person
TPU	Thermal power uprate
TRANSSC	Transport Safety Standards Committee
TSO	Technical support organisation
US-NRC	United States Nuclear Regulatory Commission
WAC	Waste acceptance criteria
WAASC	Waste Safety Standards Committee
WCA	Wonderfonteinspruit Catchment Area



23. GLOSSARY

Term	Definition
Action	<ul style="list-style-type: none"> • The use, possession, production, storage, enrichment, processing, reprocessing, conveying or disposal, or causing to be conveyed, of radioactive material. • Any action, the performance of which may result in persons accumulating a radiation dose resulting from exposure to ionising radiation • Any other action involving radioactive material.
Assessment	The process, and the result, of systematically analysing the hazards associated with sources and actions, and associated protection and safety measures, aimed at quantifying performance measures for comparison with criteria.
Becquerel (Bq)	The unit of radioactivity in nuclear transformations (or disintegrations) per second.
Clearance	Removal of radioactive materials or radioactive objects within actions authorised by a nuclear installation licence, nuclear vessel licence or certificate of registration from any further control by the Regulator.
Collective dose	An expression of the total radiation dose incurred by a population, defined as the product of the number of individuals exposed to a source and their average radiation dose. The collective dose is expressed in person-sievert (person.sv).
Critical group	A group of members of the public that is reasonably homogeneous with respect to its exposure to a given radiation source and given exposure pathway, and that is typical of individuals receiving the highest effective dose or equivalent dose (as applicable) by the given exposure pathway from the given source.
Decommissioning	Administrative and technical actions taken to allow the removal of all of the regulatory controls from a facility (except for a repository that is closed and not decommissioned).
Defence in depth	The application of more than a single protective measure for a given radiation or nuclear safety objective, so that the objective is achieved, even if one of the protective measures fails.
Discharge	A planned and controlled release of radioactive nuclides into the environment.
Disposal	The emplacement of radioactive waste in an approved, specified facility without the intention of retrieval. The term 'dispose of' has a corresponding meaning.
Disused sealed source	A radioactive source, comprising radioactive material, that is permanently sealed in a capsule or closely bonded and in a solid form (excluding reactor fuel elements), that is no longer used and is not intended to be used for the action for which an authorisation had been granted.
Dose	The amount of radiation received, where the use of a more specific term, such as 'effective dose' or 'equivalent dose' is not necessary for defining the quantity of interest.
Dose constraint	<p>A prospective and source-related restriction on the individual dose, arising from the predicted operation of the authorised action, which serves exclusively as a bound on the optimisation of radiation protection and nuclear safety:</p> <ul style="list-style-type: none"> • to limit the range of options considered in the optimisation process, and • to restrict the doses via all exposure pathways to the average member of the critical group, to ensure that the sum of the doses received by that individual from all controlled sources remains within the dose limit, and which, if found retrospectively to have been exceeded, should not be regarded as an infringement of regulatory requirements but rather as a call for the reassessment of the optimisation of radiation protection.
Dose limit	The value of the effective dose or equivalent dose to individuals from actions authorised by a nuclear installation licence, nuclear vessel licence or certificate of registration, which must not be exceeded.
Emergency planning	The process of developing and maintaining the capability to take action that will reduce the impact of an emergency on persons, property or the environment.
Emergency preparedness	The capability to promptly take action that will effectively reduce the impact of an emergency on persons, property or the environment.
Emergency response	The performance of action to reduce the impact of an emergency on persons, property or the environment.



GLOSSARY

Term	Definition
Environmental monitoring	The measurement of external dose rates, due to sources in the environment, and of radioactive nuclide concentrations in environmental media.
Exposure	The act or condition of being subject to irradiation.
Exposure pathways	A route by which radioactive material can reach or irradiate humans.
Inspector	The person appointed as such in terms of Section 41(1) of the NNR Act.
Minister	Minister of Energy.
Monitoring	The continuous or periodic measurement of radiological and other parameters, or the determination of the status of a system.
Nuclear accident	Any event or succession of events having the same origin and resulting in an unintended/unauthorised exposure to radiation or the release of radioactive material, which is capable of giving rise to an effective dose in excess of 1msv to the public offsite within a year, or in excess of 50msv to a worker onsite, essentially received at the time of the event.
Nuclear authorisation	A nuclear installation licence, nuclear vessel licence, certificate of registration or certificate of exemption.
Nuclear damage	Any injury to or the death or any sickness or disease of a person; or other damage, including any damage to or any loss of use of property or damage to the environment, which arises out of, or from, or is attributable to, the ionising radiation associated with a nuclear installation, nuclear vessel or action.
Nuclear incident	Any unintended event that is reasonably capable of giving rise to an effective dose equal to, or in excess of, 0.1msv to the public offsite received essentially at the time of the event, or the unintended spread of radioactive contamination or exposure to radiation, which could reasonably give rise to an effective dose in excess of 20msv to a worker onsite, received essentially at the time of the event, or significant failure of safety provisions.
Nuclear installation	A facility, installation, plant or structure, designed or adapted for, or which may involve the conducting of any process, other than the mining and processing of ore, within the nuclear fuel cycle, involving radioactive material, including, but not limited to: <ul style="list-style-type: none"> • a uranium or thorium refinement or conversion facility; • a uranium enrichment facility; • a nuclear fuel fabrication facility; • a nuclear reactor, including a nuclear fission reactor or any other facility intended to create nuclear fusion; • a spent nuclear fuel reprocessing facility; • a spent nuclear fuel storage facility; • an enriched uranium processing and storage facility; • a facility, specifically designed to handle, treat, condition, temporarily store or permanently dispose of any radioactive material, that is intended to be disposed of as waste material, or * any facility, installation, plant or structure, declared to be a nuclear installation, in terms of Section 2(3) of the NNR Act.
Nuclear safety	The achievement of safe operating conditions, the prevention of nuclear accidents or the limiting of nuclear accident consequences, resulting in the protection of workers, the public and the environment, against the potential harmful effects of ionising radiation or radioactive material.
Radiation protection	The protection of people from the effects of exposure to ionising radiation, and the means of achieving this.
Radiation protection monitor	A person, technically competent in radiation protection matters relevant to a given type of action, who is designated by the holder of a nuclear authorisation to perform radiation measurements.
Radiation protection officer	A person, technically competent in radiation protection matters relevant for a given type of action, who is designated by the holder of a nuclear authorisation to oversee the application of relevant requirements.
Radiation protection specialist	A person trained in radiation protection and other areas of specialisation necessary to be able to assess radiological conditions, to limit radiological consequences or to control doses.



GLOSSARY

Term	Definition
Radioactive material	Any substance consisting of, or containing any radioactive nuclide, whether natural or artificial, including, but not limited to, radioactive waste and spent nuclear fuel.
Radioactive nuclide	Any unstable atomic nucleus, which decays spontaneously with the accompanying emission of ionising radiation.
Radioactive waste	Any material, whatever its physical form, remaining from an action requiring a nuclear installation licence, nuclear vessel licence or certificate of registration, and for which no further use is foreseen, and which contains or is contaminated with radioactive material and does not comply with the requirements for clearance.
Radioactive waste acceptance criteria	The quantitative or qualitative criteria, specified by the operator and approved by the Regulator, for radioactive waste to be accepted by the operator of a repository for disposal, or by the operator of a storage facility for storage.
Risk	(Qualitatively expressed), the probability of a specified health effect occurring in a person or a group of persons, as a result of exposure to radiation or (quantitatively expressed), a multi-attribute quantity expressing hazard, danger or chance of harmful or injurious consequences associated with actual or potential exposure relating to quantities, such as the probability that specific deleterious consequences may arise, as well as the magnitude and character of such consequences.
Safety assessment	An analysis to evaluate the performance of an overall system and its impact, where the performance measure is radiological impact or some other global measure of impact on safety.
Safety case	A collection of arguments and evidence in support of the safety of a facility or action. This normally includes the findings of a safety assessment and a statement of confidence in these findings.
Safety culture	The assembly of characteristics and attitudes in organisations and individuals, which establishes that, as an overriding priority, protection and safety issues receive the attention warranted by their significance.
Source	Anything that may cause radiation exposure, such as by emitting ionising radiation or releasing radioactive substances or materials. A complex installation or multiple installations situated at one location or site may, as appropriate, be considered as a single source.



NATIONAL NUCLEAR REGULATOR

Company Secretary

Ms Bridget Laka

Tel: +27 12 674 7180

Fax: +27 12 663 5513

Email: blaka@nnr.co.za

Communications and Stakeholder Relations

Gino Moonsamy

Tel: +27 12 674 7111

Fax: 086 588 4450

Email: gmoonsamy@nnr.co.za



Physical Address

Eco Glades 2, Block G, Eco Glades Office Park
420 Witch Hazel Avenue
Highveld Ext 75
Eco Park
Centurion
0157

Postal Address

PO Box 7016
Centurion
0046
South Africa

Tel: (012) 674 7100

Email: enquiry@nnr.co.za

Website: www.nnr.co.za