

'Horror list' of problems at Pelindaba

November 30 2007 at 09:10AM

By Natasha Joseph

The National Nuclear Regulator is battling to keep employees, has fallen behind on equity targets, and risks its requests for increased funding being turned down by the Treasury because of its "extremely problematic" underspending.

Its report for 2006/07 - described by the Coalition Against Nuclear Energy as "horror reading" - also highlighted security at nuclear facilities as "a major concern".

The regulator was "generally happy with security arrangements", but said a recent armed attack at Pelindaba, west of Pretoria, was "very worrying", said the report, presented by the regulator's chief executive, Maurice Magugumela, to the portfolio committee on minerals and energy.

The regulator ended its financial year with an operating surplus of R18,8-million, largely because of vacancies. Magugumela said the vacancy rate was "around 15 percent to 17 percent".

A security officer at Pelindaba was wounded when four armed men stormed into the control room on November 8.

It later emerged that another group of armed men had tried to enter Pelindaba at the same time, but had fled when spotted by guards.

Three people were arrested the following week.

According to the minutes of the portfolio committee's meeting on November 21, Magugumela told MPs that Pelindaba's fence had been penetrated although it was "electrified and alarmed" and the alarm or camera system "should have picked up the interference".

In a summary of the meeting published by the parliamentary monitoring group, Magugumela acknowledged that this was "a high number" and "unacceptable".

Eleven employees had left the regulator during the year and only 10 had come into the organisation, he said.

The regulator had increased its salaries to be "more competitive". Keeping employees was "crucial" because when staff left it was "almost impossible to recruit someone of a similar calibre".

Turning to equity targets, Magugumela said women accounted for 33 percent of the staff and black men and women 60 percent.

"Much needs to be done about ... performance in appointing previously disadvantaged individuals," he said in the summary.

Dominique Gilbert, acting national co-ordinator of the Coalition Against Nuclear Energy, described the regulator's annual report as "horror reading".

The report "boils down to ... the (regulator) admitting it is completely understaffed and overwhelmed by the prospect of handling the government's proposed nuclear energy plan", Gilbert said.

"There is no obvious way for how it is going to cope (with the proposed plan). Reading through the minutes and the report, it's almost like a cry for respite."

It was to Magugumela's "credit" that he had been "honest about the challenges" in the portfolio committee meeting.

"That (the regulator) has come out and said things aren't so rosy is quite remarkable," Gilbert said.

It was a matter of "huge concern" how the regulator would cope with "under skilled people (working with) something as critical and potentially deadly as nuclear installations".

Magugumela was in a National Nuclear Regulator meeting on Thursday and not available to respond to questions. His assistant said only Magugumela was authorised to talk to journalists.

Repeated attempts to contact the Department of Minerals and Energy yielded no comment, and the SA Nuclear Energy Corporation did not respond to requests for comment by deadline.

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Skills woe hits nuke watchdog

Nov 21 2007

Michael Hamlyn

Cape Town - Members of Parliament heard on Wednesday that the National Nuclear Regulator (NNR) has been unable to fulfil a number of its strategic objectives because of a shortage of staff and of skills.

Maurice Magugumela, the regulator's chief executive, told the minerals and energy portfolio committee that because of a flood of new applications for prospecting licences for uranium mining, the NNR failed to achieve its target of delivering safety assessments within three months of submission. Instead of 90 days, safety assessments have taken 128 days.

The regulator was also still facing a major challenge, he said, over doses of radiation above the recommended safety level still being received by people working in uranium mines.

He said the dose limit of 50 millisieverts per year was exceeded twice during the year in one mine. "The mine's operation was stopped," he said, "until corrective actions were taken."

However though he said one over-exposure was one too many, the numbers had been gradually reducing. Last year there were eight such incidents.

So far as internal business processes were concerned, only four out of five targets were achieved. Only half of planned milestones on the road to improving business and regulatory practices were achieved.

Only six out of the 11 institutional agreements with other government bodies were completed, because Magugumela said, although the NNR founding law required coordination with other bodies, the other bodies' laws did not.

However though they were not compelled to cooperate with the regulator they had generally seen the wisdom of doing so, and since the end of the financial year 10 out of the 11 exercises had been completed.

Peer review of the adequacy of the regulator's emergency preparedness was not done, but now regulators from both Finland and France had agreed to review South Africa's preparations.

"We had a human resources department that was operating at a sub-optimal level," Magugumela told members. As a result the HR department also missed its targets for implementing new policies and practices.

I-Net Bridge

HERE IS AN OUTLINE OF A FEW OTHER "HIGHLIGHTS" FROM THE NNR's REPORT in 2007:

1. The NNR describes (to its rare credit) how it suspended the licensing process in 2006 of the PBMR after discovering improprieties in the ESKOM and the PBMR Company “in respect of Manufacturing of Components Important to Safety by PBMR”. Oddly this fact remains hidden in every publicised debate by the nuclear industry.

2. Although this report indicates the NNR is still waiting for the safety report of the intended nuclear fuel plant at Pelindaba, Necsa is on record as admitting it has begun “experimenting” and manufacturing these nuclear pebbles destined for the PBMR (which license has also been suspended).

3. How it had worked with Necsa for sometime now to address security issues of concern (i.e. despite their concerted efforts there was a massive breach of security at Pelindaba where a specific computer and the ops room control panel were targeted). Obviously they failed. Necsa’s briefing to Parliament went a long way also to discuss how it was dealing with security issues and also went on to mention it does not have sufficient funding for maintenance.

4. 53 “contaminated sites” are mentioned in the report but there exists no details and certainly no public knowledge of these.

5. The NNR is “discontinuing” the proposed rehabilitation of four sites in the Karoo left “contaminated ...with radiological hazard to members of public and to future generations” since the late 1970s and early 1980s because the DME has issued uranium prospecting permits to new companies.

6. They only now declared for the first time research they’re doing into nuclear insurances and third party liabilities – these barely exist currently. The Pelindaba Working Group has a year-long email spat with NECSA CEO Rob Adam requesting info on liabilities which he has referred to his lawyers, the PAIA – you name it – but never answering the question.

7. Several mines have been closed for nuking workers and not compliance (their figures are shameful in that while they claim a reduction of nuked worker figures, they fail to mention that the years during which they show a decline, uranium mining had virtually stopped. Besides which news stories reveal greater figures than theirs. During the late 1990s when most believed government might back off nuclear aspirations, official figures revealed thousands of miners had been nuked.)

8. The impounding of a uranium carrying ship that docked without authorisation in Durban – news to the world!

9. Alarming statistics of radioactive waste piling up at Pelindaba & Koeberg (where it is also being poured into the Atlantic Ocean. Similar details are conspicuously missing from their report on Pelindaba where Necsa is known to pour radioactive waste into the Crocodile River).

10. Inadequate compliance with maintenance procedures and “operating technical specifications” at Koeberg.

11. Incompetency and “sufficiency” of Eskom’s workforce to work safely.

12. Nuclear “incidents & accidents” are not detailed and reported as “satisfactory”.

13. Mention is made of “suspected loss of a small quantity” of Highly Enriched Uranium at a building at Pelindaba where activities were suspended and a reactor was forced to shut down “until conditions for return to power were met”.

There is more...

Going through the details in the report and minutes, one forms the mental image of the nuclear sector as a power-guzzling-monster-gone-mad.

It should be national news that even the NNR, aligned as it is to its masters – Necsa, Eskom & the DME – is couching a cry for help in a relatively honest report, albeit with the usual conciliatory conclusions.

One has to ask how on God’s earth can anyone justify a nuclear and uranium mining future in this country under these circumstances?

This committee meeting is available on the Parliamentary Monitoring Group website: National Nuclear Regulator Annual Report 2006/07: briefing 21 Nov 2007

BEELD

Groenes eis ondersoek

Mar 25 2009

Elise Tempelhoff

Die departement van minerale en energie moet dadelik ’n taakspan aanstel om te kyk na die verdwyning van miljoene rand uit die Nasionale

Kernreguleerder (NKR) se bankrekening.

So het die Federasie vir ’n Volhoubare Omgewing (FVO) ’n nie-regeringsorganisasie (NRO) wat hom vir maatskaplike en omgewingsgeregtigheid beywer, gister die minister van minerale en energie gevra.

Die FVO het gister gesê me. Buyelwa Sonjica, minister van minerale en energie, moet die NKR se werksaamhede ondersoek omdat daar meer as R4,4 miljoen uit sy rekening weg is.

Beeld verneem verskeie senior personeel het intussen by die NKR geloop of is afgedank. Me. Mariette Liefferink, direkteur van die FVO, het gesê die vermiste geld is die belastingbetaler s'n en moet onder meer gebruik word om mense en die omgewing teen radioaktiewe besoedeling te beskerm.

Mnr. Phil Nkwashu, gewese NKR-woordvoerder, het hom intussen op die Kommissie vir Versoening, Bemiddeling en Arbitrasie (KVBA) beroep omdat mnr. Maurice Magugumela, die NKR se destydse hoofamptenaar, hom afgedank het.

Magugumela, wie se kontrak verlede jaar sou verval, maar glo vir die volgende drie jaar hernu is, is ook intussen afgedank.

Navrae na mnr. Sputnik Rantau, woordvoerder van die minister van minerale en energie, het niks opgelewer nie.

Mnr. Bheki Khumalo, woordvoerder van die departement, het gister gesê hy kon nog nie aandag gee aan Beeld se navraag (wat reeds drie dae gelede aan hom en Rantau gerig is) nie.

“Ons is besig met ’n Zuma-vergadering in Nkandla. Ons begin ’n R110 miljoen-projek hier. Ek het nog nie tyd gehad om my e-posse of SMS’e te lees nie.”

Toe Beeld Khumalo gister vir die vyfde keer bel, het hy geantwoord en gesê hy sou “gou die minister vra” of sy ’n ondersoek sal laat doen.

Hy het egter teen druktyd nog nie Beeld se navraag beantwoord nie.

Rantau het ook beloop om Beeld terug te bel met ’n antwoord, maar teen druktyd het hy ook nog niks laat weet nie.

Luidens NKR se jongste jaarverslag word R4,426 064 miljoen uit sy bankrekening vermis.

Die ouditeur-generaal het dit aan wanbesteding of “ ’n verlies weens misdaad” toegeskryf.

Liefferink het gesê die geld moet opgespoor word en as iemand vir die verdwyning daarvoor verantwoordelik is, moet hy of sy strafregtelik vervolgt word.

Nkwashu het gister bevestig hy het ’n skikking met die NKR bereik en volgehou hy is “onregverdig afgedank”.

Volgens hom het die debakel rondom die gekontameneerde Wonderfontein-spruit se rehabilitasie die NKR se “kaartehuis verlede jaar laat in duie stort”.

Following this report THE Federation for a Sustainable Environment CALLED UPON THE HONOURABLE MINISTER SONJICA TO INVESTIGATE THE FINDINGS in terms of the Report of the Auditor-General to Parliament on the Financial Statements and Performance Information of the National Nuclear Regulator for the year ended 31 March 2008 (2007/2008 Annual Report of the National Nuclear Regulator (page 70))

The Auditor-General found:

“Highlighting critically important matters presented or disclosed in the financial statements

Irregular or fruitless and wasteful expenditure as well as material losses through criminal conduct

As disclosed in note 19 to the financial statements, irregular expenditure to the amount of R4 426 064 was incurred.

- *The NNR entered into finance lease contracts for periods in excess of that authorized by National Treasury and incurred expenditure amounting to R910 411.*
- *The NNR did not comply with the requirements of the Preferential Procurement Policy Framework Act, 2005 and the thresholds specified in the Practice Notes issued by National Treasury, amount to R3 515 653.”*

According to Dr Jim Harris of the Free Market Foundation of South Africa (2006):

Government doesn't need unfunded in-house nuclear waste cleanup liabilities. Among auditor-general Shauket Fakie's regular annual qualifications or rejections of the accounts of most government departments, one stands out as glowingly as a radioactive waste dump. The Nuclear Energy Corporation of SA (Necsa) hasn't made provision to fund necessary decontamination and decommissioning of 'certain strategic plants and national facilities after shutdown'. Last year Necsa had total liabilities exceeding its assets by R100m and it made a net loss of R3.2m, but that's small beer. It mainly depends on government grants and got R257m in 2005-06. Fakie says the ongoing process of estimating future liabilities is expected to forecast a material amount in relation to the business of the corporation, but radioactive waste management policy and strategy aren't being fully implemented and the liability can't be properly estimated. It's one thing for closing mines to declare bankruptcy and leave clean-up funding to taxpayers, which has already scuppered applications by many potential new mining ventures within the US. It's quite another when the sovereign state cleaner-upper of last resort may have to clean up after itself as well. Government should certainly get shot of its own unfunded industrial liabilities. Otherwise how will it pay future civil-service pensions out of future tax revenue streams? (BD 29.9)

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Nuclear lawyers highlight potential pitfalls

<http://www.miningweekly.co.za/min/news/thisweek/?show=102291>

With South Africa apparently committed to increasing its use of nuclear power as an energy source, the rarely thought about but very important issue of nuclear liability (in the event of an accident) is now beginning to come to the fore in this country.

“With regard to financial liability for the nuclear industry, there is an international problem,” reports National Nuclear Regulator (NNR) senior legal adviser Rodney Elk.

Prescription period

“Worldwide, the prescription period – that is, the period in which a claim can be made against a company or institution – for the nuclear sector is 30 years; but the longest period you can get liability insurance (financial security, obtained by insurance or guarantee) is ten years,” he explains.

That is, claims can be lodged for up to 30 years after an accident or incident, but insurance cover to pay such claims only runs for ten years after the event.

This is, however, less serious in reality than it would seem to be at first glance.

“The majority of claims will be made in the first ten years, because damage to property and the environment will manifest itself immediately, and most claims relating to nuclear damage to people will also be made reasonably early – only claims caused by latent cancers will surface after ten years,” he elucidates.

“We are satisfied that the nuclear operators in South Africa will have the means to meet any claims,” assures Elk.

“But this is an issue that has to be raised and discussed, which is currently being done at an international level,” he stresses.

Two options are on the table, internationally: the operator remains responsible for the liability; or the State assumes liability for any amount claimed beyond the ten-year insurance-cover period.

Some, at least, of South Africa’s small cadre of nuclear lawyers believe that this issue would be settled definitively if this country adhered to an international treaty called the Convention on Supplementary Compensation for Nuclear Damage (CSC).

The US Senate recently approved US accession to the CSC, and most of the rest of the world is expected to follow suit. The CSC provides for liability cover by the member states – the parties to the convention agree to jointly fund any further damages, according to a formula contained in the convention.

Another issue of concern to local nuclear lawyers is that of legal liability.

The South Africa State Law Adviser has given an opinion which says that the site on which a nuclear installation is located is not part of that nuclear installation.

This has significant legal and bureaucratic consequences.

Nuclear installation

Thus, radioactive material – say a nuclear isotope – which would, outside a nuclear installation, be classified as a Group IV Hazardous Substance, would not be so classified inside a nuclear installation.

Now, South Africa’s Safari-1 nuclear research reactor manufactures radio isotopes for nuclear medicine.

Under the current opinion, these radio isotopes have one legal status inside the building housing Safari-1, and a completely different one immediately they are taken out of that building for transport to the medical facilities that use them.

Indeed, such a radio isotope’s legal status can change twice if it is taken from one building in a nuclear

complex, across a square or lawn, to another building in the same complex – it moves from installation to site to installation, all within a few minutes.

This has an impact on the liability regime applicable to the material in the event of an accident.

Radioactive material

Radioactive material in nuclear installations is subject to strict liability – one does not have to prove negligence or incompetence to succeed in a claim against nuclear operators in the event of nuclear damage.

That selfsame radioactive material, once outside nuclear installations, even if still on a nuclear site, is suddenly not subject to strict liability, and, in the event of nuclear damage, negligence has to be proven to succeed in a claim.

Moreover, if a nuclear site is not part of a nuclear installation, who is responsible for regulating and inspecting the site? This is done by the NNR, but if the NNR regulates and inspects the site as well as the installation, surely all radioactive material on both the site and the installation should be under the same regulatory framework? It currently seems that the best exit from this bizarre situation would be to get the courts to make a determination on the issue.

NOTE: A RECENT PRESENTATION BY RODNEY ELK ON THE SHORTCOMINGS AND PROBLEMS ASSOCIATED WITH THE NATIONAL NUCLEAR REGULATOR ACT HAS BEEN REQUESTED BUT WITHHELD FROM THE PUBLIC

Nuclear regulator admits that it has a security crisis

Herald Correspondent in CAPE TOWN

THE National Nuclear Regulator (NNR) is battling to retain employees, has fallen behind on equity targets, and risks having future requests for increased funding from the national treasury turned down because of “extremely problematic” underspending.

According to the NNR’s annual report for 2006/07 presented by the organisation’s chief executive Maurice Magugumela to the minerals and energy portfolio committee, security at nuclear facilities was also highlighted as “a major concern”.

The organisation was “generally happy with security arrangements”, but described an armed attack on Pelindaba west of Pretoria as “very worrying”.

The organisation ended its financial year with an operating surplus of R18,8-million, largely because of unfilled vacancies. Magugumela said the company’s vacancy rate was “currently at around 15% to 17%”.

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In a summary of the meeting published by the Parliamentary Monitoring Group, Magugumela acknowledged that this was "a high number" and was "unacceptable".

Eleven employees had left the company during the year under scrutiny, said Magugumela, and only 10 had come into the organisation.

NATIONAL NUCLEAR REGULATOR
STRATEGY PLAN AND BUDGET FOR 2009 /2012

EXERPTS:

3. Stakeholder survey outcomes (PG 12) – *these weren't necessary we've been contacting them with our concerns and questions for years to no avail*

Based on the results of the stakeholder survey conducted in 2007/2008 financial year, the NNR identified that there is a need to create an environment where the NNR is recognised as the credible custodian of public health and safety with regard to nuclear, radioactive materials and nuclear technology applications as part of the implementation of the stakeholder management plan.

The report also indicated that there is an increased public need for information and pressure for greater stakeholder involvement in decision-making will inevitably increase the interest and concerns of the public with regards to nuclear safety and public health.

Stakeholder Management and regionalization (PG 45)

The stakeholder survey conducted in 2007/08 financial year indicated that there is a need to increase publicity regarding nuclear safety and public health and credibility public confidence

(PG 12&13) – *recognition of what civil society has been saying:*

These changes in the nuclear landscape pose the following significant implications:

- The need for stronger regulation and legislation
- The need to review and update the NNR regulatory standards, policies and practices to ensure that they are effective and efficient to deal with the envisaged scope of work
- The need to adequately staff the NNR to respond to the envisaged changes in the nuclear landscape. These

(PG 12)

2. Population development around nuclear installations – *they admit this is a problem in this report but when asked to comment to the public say there is no cause for concern*

There is increasing population growth developments surrounding certain nuclear installations like Koeberg Nuclear Power Station and Necca. This poses a threat on the ability for the nuclear facilities to ensure the effective implementation of any nuclear emergency plan to ensure the safety of the public and the viability of the emergency plans.

(PG 14)

1. The NNR Capacity Assessment – *evidently this scarcity of skills continues to this day and their new recruits have no experience!*

One of the more daunting challenges facing the NNR is the scarcity of experienced staff to carryout its mandate.....In summary, the NNR is currently experiencing capacity constraints, even before one factor's in the anticipated growth in the industry.

V. COMPLIANCE TO REGULATIONS (PG 32 & 32)

A. Submission to the Minister of the DME in respect of the Regulations and Notices under the NNR Act

In addition to the strategic commitments made in the NNR score cards, the NNR is expected to comply with requirements in respect of regulations under the NNR Act. The NNR must annually make submission under various regulations for approval by the Minister of Department of Minerals and Energy. The table below gives the requirements to be submitted annually in terms of the National Nuclear Regulator Act:

7(1)(j) Produce and submit to the Minister an annual public report on the health and safety related to workers, the public and the environment associated with all sites including, but not limited to, the prescribed contents. 30 August annually – *None of the reports to date adequately reflect worker illnesses as reported to civil society or takes into account growing health problems and deaths of surrounding populations.*

EXPENDITURE (PG 43 & 44)

The budget is broken down over a three year period into following line items:

	2009/10	2010/11	2011/12
	R 000	R 000	R 000
Personnel Expenses	74.220	83.869	94.772
Subsistence and travel	5.983	6.761	7.640
Expenditure General	24.177	27.320	30.872
Operational Expenses	11.049	12.089	12.767
Capital Expenditure	12.815	63.374	26.628

The operational budgets for 2010/11 and 2011/12 are both projected to increase by 13%. The projected capital expenditure for the three years, as presented in the 2009-12 MTEF include major infrastructure expenditure (such as construction of a new office building for the NNR and will be funded from the state grant as indicated in the overall budget attached in annexure 1.

However, these have not factored in, the full costs associated with the foreseen expansion of the nuclear programme in South Africa such as the Eskom new builds expansion programme , expansion of uranium mining and other nuclear technologies development ,as these will only become clear later in the next financial years. Provision has been made in the budget for resources to undertake preparatory work for this foreseen nuclear expansion programme.

The more detailed allocation of the budget is presented in annexure 1 below and can be broken down as follow in terms of the strategic objectives:

The allocation of the 2009-2010 budget will be as follows:

The core business will get 51%, which is R65,405,411. The core business is the primary strategic objective for NNR.

The secondary objectives are related to Internal Business which is allocated 31%, which is R39,756,230,

Stakeholder management is 10% which is R12,824,590 and Human Resource is 8%, which is R10,259,672.

Main cost drivers: (PG 44)

The main cost drivers are personnel cost which amount to R74,220,664 which is 58% of the total budget. The increase in personnel cost is due to increase in staff complements in line with the approved structure. The other reason is high inflation rate which is higher than indicative rate of 6% from National Treasury assume in the 2008-2009 budget.

The consulting fees are another major cost driver. This is due to complex diversity of nuclear industry and shortage of skills. It is 8% of the total budget.

Internal business process

The organization received a qualified audit opinion for the year ending 31 March 2008, due to the internal weakness in the internal controls and systems. This warranted a high allocation percentage of the budget to address all the weakness identified during the audit and strengthen the corporate service department, thus an allocation of 31 % of the total 2009-2010 budget to support the strategic objectives to develop and implement sound policies and adequate systems of internal control.

(PG 47) TABLE 1 NNR Budgeted Expenditure and Income FY 2009/10 – 2011/12
Expenditure

TRANSPORT (APPROVED 2008/9) R5,466,988 (PROPOSED 2009/10) R5,983,304
(FORECASE 2010/2011) R6,761,133 (FORECAST 2011/2012) R7,640,080
