

**REPORT OF THE PUBLIC PROTECTOR IN TERMS OF
SECTION 182(1)(b) OF THE CONSTITUTION OF THE
REPUBLIC OF SOUTH AFRICA, 1996 AND SECTIONS 8(1)
AND 8(2)(b)(i) OF THE PUBLIC PROTECTOR ACT, 1994**



**PUBLIC PROTECTOR
SOUTH AFRICA**

Report No: 31 of 2008/9

**REPORT ON A PRELIMINARY INVESTIGATION RELATING TO
ELECTRICITY LOAD SHEDDING IMPLEMENTED BY ESKOM
HOLDINGS LIMITED**

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Executive summary

- (i) The Office of the Public Protector conducted a preliminary investigation, on own initiative, into incidents of electricity shortages and power outages due to load shedding by Eskom, that affected the large parts of South Africa from November 2007 to January 2008.
- (ii) Shortly after the preliminary investigation commenced, the National Government informed the public of the causes of the electricity shortages and the measures taken to resolve the crisis.
- (iii) The National Energy Regulator of South Africa (NERSA) also investigated the matter concerned and issued a detailed report in May 2008.
- (iv) The following observations and conclusions were made from the preliminary investigation:
 - (a) It was noted that the former President, the former Deputy President and the Minister of Minerals and Energy acknowledged that there was a delay on the part of the Government to improve Eskom's power generating capacity in time and that a public apology was offered in this regard for the inconveniences caused by the load shedding referred to in this report.
 - (b) The causes of the electricity load shedding by Eskom have been comprehensively addressed by the National Government in terms of action plans, electricity saving initiatives and the allocation of funding for capital expansion programmes;

- (c) The investigation conducted by NERSA into the national electricity supply shortage and load shedding comprehensively considered its causes, impact, the challenges and solutions;
 - (d) As the custodian and enforcement agent of the regulatory framework provided for by the Electricity Regulation Act, 2006, it is within the powers and mandate of NERSA to ensure that the recommendations made in its report on the said investigation are implemented and that Eskom complies with the conditions of its licence and the relevant provisions of the Act; and
 - (e) The Power Conservation Programme developed by the National Electricity Response Team should go a long way in accelerating the achievement of energy savings, once it is finalized and implemented.
- (v) The Public Protector recommended that the Speaker of the National Assembly takes steps to ensure that the relevant Parliamentary Portfolio Committee(s) monitor and report on the timeous and effective implementation of the recommendations made by NERSA in its Report of 12 May 2008.

REPORT ON A PRELIMINARY INVESTIGATION RELATING TO ELECTRICITY LOAD SHEDDING IMPLEMENTED BY ESKOM HOLDINGS LIMITED

1. INTRODUCTION

1.1 This report is submitted to:

The National Assembly;

The Minister of Minerals and Energy;

The Minister of Public Enterprises;

The Board of Directors of Eskom Holdings Limited; and

The National Energy Regulator of South Africa

in terms of the provisions of section 182(1)(b) of the Constitution of the Republic of South Africa, 1996 (the Constitution) and sections 8(1) and 8(2)(b)(i) of the Public Protector Act, 1994 (the Public Protector Act).

1.2 It relates to a preliminary investigation in connection with incidents of electricity load shedding by Eskom Holdings Limited (Eskom) that occurred during the period November 2007 to January 2008.

2. BACKGROUND

- 2.1 During the period November 2007 to January 2008, large parts of South Africa were subjected to electricity shortages and power outages due to load shedding by Eskom.
- 2.2 The incidents of load shedding had a severe impact on the affected communities. It caused substantial financial losses to many business operations, affected traffic, industry, hospitals, schools, and the civil service and resulted in anxiety and discomfort for thousands of South Africans.
- 2.3 Businesses and members of the public affected by the electricity shortages responded by blaming Eskom and the Government for not ensuring that the supply of electricity was sufficient and uninterrupted. Load shedding and its impact became a topical issue. By the end of January 2008, the shortages in electricity supply resulted in the temporary closing down of some major mining operations in South Africa.

3. THE DECISION TO INVESTIGATE

- 3.1 Due to the public outcry in response to the load shedding, it was decided to conduct an own initiative preliminary investigation, in terms of section 7(1)(a) of the Public Protector Act, 1994¹ into the following:
- 3.1.1 The reasons for the load shedding;
- 3.1.2 The measures that were put in place by Eskom to attend to the problem causing the need to shed the electricity load;

¹ See paragraph 4 below

- 3.1.3 The expected duration of the load shedding practice;
 - 3.1.4 The steps that had been taken by Eskom to address the reasons for the load shedding and the time frames within which the problem(s) would be resolved;
 - 3.1.5 The steps taken by Eskom to prevent a recurrence of load shedding;
 - 3.1.6 What steps Eskom intended taking to compensate those that have suffered damages and/or inconvenience as a result of the load shedding;
 - 3.1.7 The steps taken by Eskom to ensure that emergency centres, such as hospitals and police stations were not affected by the load shedding;
 - 3.1.8 What was being done to prevent load shedding from causing serious traffic accidents as a result of traffic lights not working; and
 - 3.1.9 The steps taken by Eskom to inform the public of the matters referred to above.
- 3.2 Media reports on the own initiative investigation resulted in a number of complaints relating to load shedding and its impact being lodged with the Office of the Public Protector.

4. THE POWERS AND JURISDICTION OF THE PUBLIC PROTECTOR TO INVESTIGATE THE OPERATIONS AND AFFAIRS OF ESKOM

- 4.1 Section 182(1) of the Constitution provides that the Public Protector has the power, as regulated by national legislation to:

- 4.1.1 Investigate any conduct in state affairs, or in the public administration in any sphere of government, that is alleged or suspected to be improper or to result in any impropriety or prejudice;
- 4.1.2 Report on that conduct; and
- 4.1.3 Take appropriate remedial action.
- 4.2 In terms of section 182(2), the Public Protector has additional powers, as prescribed by national legislation.
- 4.3 Section 6(5)(a) and (d) of the Public Protector Act, 1994 provides that the Public Protector shall, "*on his or her own initiative or on receipt of a complaint be competent to investigate any alleged-*
 - (a) *maladministration in connection with the affairs of any institution in which the State is the majority or controlling shareholder or of any public entity as defined in section 1 of the Public Finance Management Act, 1999;*
 - (d) *act or omission by a person in the employ of an institution or entity contemplated in paragraph (a), which results in unlawful or improper prejudice to any other person."*
- 4.4 A preliminary investigation to determine the merits of information of maladministration or improper conduct that came to the attention of the Public Protector and the manner in which the matter concerned should be dealt with, may be conducted on his/her own initiative, by virtue of the provisions of section 7(1)(a) of the Public Protector Act.

4.5 “*Public entity*” is defined by section 1 of the Public Finance Management Act, 1999 (PFMA) as a national or provincial public entity.

4.6 The definition of a “*national public entity*” includes:

“a board, commission, company, corporation, fund or other entity which is-

(i) established in terms of national legislation;

(ii) fully or substantially funded either from the National Revenue Fund, or by way of a tax, levy or other money imposed in terms of national legislation; and

(iii) accountable to Parliament.

4.7 Eskom is listed as a Major Public Entity in Schedule 2 to the PFMA.

4.8 The Public Protector therefore has the power to conduct a preliminary investigation, on own initiative, into any suspected or alleged maladministration in connection with the affairs of Eskom or into any conduct by persons employed by Eskom that results in improper prejudice to any other person.

5. THE INVESTIGATION

The investigation was conducted in terms of sections 6 and 7 of the Public Protector Act. It comprised:

5.1 Consideration of the relevant media reports and the complaints received in connection with load shedding;

5.2 Correspondence with the Chief Executive of Eskom;

- 5.3 Consideration of the reports and other documents submitted by Eskom;
- 5.4 Consideration of the *National Response to South Africa's Electricity Shortage* issued by the National Government in January 2008;
- 5.5 Consideration of the *REPORT ON AN INQUIRY INTO THE NATIONAL ELECTRICITY SUPPLY SHORTAGE AND LOAD SHEDDING*, issued by the National Energy Regulator of South Africa (NERSA) on 12 May 2008;
- 5.6 Correspondence with the Chairperson and Chief Executive Officer of NERSA;
- 5.7 Consideration of a media statement issued by the Presidency on 2 December 2008 in connection with the launching of the Summer Energy Efficiency Campaign; and
- 5.8 Consideration of a Consultation Paper on the Power Conservation Programme Rules, published by NERSA in December 2008.

6. THE INTEREST OF THE SOUTH AFRICAN HUMAN RIGHTS COMMISSION IN THE INVESTIGATION

- 6.1 Shortly after it was announced that the Office of the Public Protector was conducting an investigation into the occurrences of load shedding by Eskom, the Chairperson of the South African Human Rights Commission (SAHRC) indicated that the Commission was also concerned about the matter and suggested that an investigation should also consider the following issues:
 - 6.1.1 The access of the general public to accurate information relating to load shedding and electricity shortages to ensure that the challenges it caused could be managed, especially by disadvantaged groups, the elderly and disabled persons;

- 6.1.2 The engagement of Eskom with vulnerable consumers, such as hospitals and other care facilities;
- 6.1.3 The impact of load shedding on socio-economic rights of those affected by it; and
- 6.1.4 Equitable load shedding across all areas.

7. ESKOM'S RESPONSE TO THE INVESTIGATION

- 7.1 The Chief Executive, Mr J Maroga, and the Company Secretary of Eskom, Mr M Adam, provided comprehensive and timeous responses to all the inquiries made during the investigation.
- 7.2 As far as the steps taken to ensure that emergency centres, such as hospitals and police stations were not affected by load shedding, Mr Maroga explained that:

"The design of the network is such that individual customers, like hospitals within a particular area, cannot be switched on or off selectively as such customers are part of a broader network. However, Eskom has assisted by inspecting the back-up generation equipment and provided advice, where requested. Eskom also interacts with the Metro Disaster Management Structures to ensure that risks of interruptions are communicated and mitigated where possible.

The predictability of pre-emptive load curtailment may also assist by providing predictability so that hospitals could better plan their activities."

- 7.3 Mr Maroga further explained that the management of traffic is the responsibility of local and provincial governments. Eskom was at the

time of the load shedding informing local authorities of the scheduled times for outages. He also indicated that government was committed to convert all traffic lights to solar power to mitigate the impact of electricity shortages.

- 7.4 The explanation provided by Eskom in connection with the reasons for load shedding and the steps taken to address the challenges in this regard are referred to in the references to the reaction of the Government to the crisis and the NERSA Report, below².

8. THE RESPONSE OF THE NATIONAL GOVERNMENT TO THE ELECTRICITY SHORTAGE

- 8.1 On 25 January 2008, the National Government issued its public response to the electricity shortage.
- 8.2 From the response it appeared that South Africa has experienced a significant level of growth in electricity consumption in the past years. The demand for almost every week in 2007 was, for example, significantly higher than that of 2006.
- 8.3 Historically, South Africa enjoyed a large reserve margin in respect of the supply of electricity, even at peak demand periods. The reserve margin however, declined over the recent past due to economic growth and the associated demand for electricity.
- 8.4 The targeted reserve margin is a minimum of 15%. This allows time for maintenance and operation at levels that do not stress equipment. The said decline in the reserve margin limited opportunities for

² See paragraphs 8 and 13 below

maintenance and necessitated running equipment at optimum levels. This resulted in equipment failures that caused unplanned outages.

8.5 During the week of 14 January 2008, for example, the electricity network experienced a shortage of 5000 MW due to:

8.5.1 Boiler tube leaks/failure;

8.5.2 Various smaller equipment failures;

8.5.3 Generator output reductions due to poor coal quality; and

8.5.4 Problems experienced with coal supply to power stations.

8.6 The electricity generating infra-structure is inadequate to supply the increasing demand and has to be improved significantly.

8.7 Load shedding is the last resort to prevent a national electricity system blackout. The fact that it was necessary to implement load shedding was indicative of the seriousness of the electricity shortage situation that required urgent intervention.

8.8 Government's response further indicated that new guidelines for load shedding situations were being developed to ensure that safety, health and learning institutions and key national points are protected.

8.9 The Government declared the shortage of electricity as a national emergency and initiated the *National Electricity Emergency Programme*.

8.10 The immediate action that needed to be taken was determined as:

- 8.10.1 Restoring a workable reserve margin;
 - 8.10.2 Alleviating the strain on the generation assets and the primary energy supply chain;
 - 8.10.3 Creating space for maintenance of generating equipment;
 - 8.10.4 Implementation of a power conservation programme; and
 - 8.10.5 Fast tracking of medium and long term supply initiatives.
- 8.11 As far as expanding the electricity generating capacity of Eskom is concerned, the Government's response stated that in terms of the relevant build programme, additional new load would be added to the system in 2008 and 2009, respectively. Although some capacity could be added to the electricity system in the short term, the required additional base load capacity was only scheduled to become available from 2012 onwards. In this regard it was stated that:
- "The risk of load shedding will remain high until at least 2013 if we do not take immediate actions to ameliorate the situation, especially during times of high levels of planned maintenance. Specific and immediate interventions are needed to minimize the risk of load shedding until the new peaking plant and base load electricity generating capacity being built comes online."*
- 8.12 Decommissioned plants would also be returned to service and renewable energy options, such as solar and wind power generation would be further explored.
- 8.13 In terms of the proposed Power Conservation Programme, quota allocations, penalties, and incentives would be instituted to ensure that

consumers save electricity. The benefits of the Programme were expected to be, *inter alia*, that:

8.13.1 The reserve margin would improve;

8.13.2 The need for load shedding would be greatly reduced;

8.13.3 Space for maintenance of equipment would be established; and

8.13.4 A positive impact on climate change due to reduced energy consumption would be achieved.

8.14 The Government also introduced an initiative to replace all incandescent lights with more efficient compact fluorescent lights, which would save an estimated 600 MW of electricity.

8.15 It was announced that in terms of the Solar Heating Programme, 1 million solar water heaters would be installed in households over the next three years.

8.16 In conclusion, Government stated:

"It is acknowledged that the current load shedding can be better managed. The (following) immediate interventions need to be implemented:

- *A multi stakeholder task team will be established to co-ordinate the implementation of this plan. It will also have responsibility to ensure effective communication of the plan and manage energy efficiency protocols. The team will be comprised of the following stakeholders: DME, DPE, Eskom and SALGA.*

- *The programme as presented will be led by senior officials in government and executives in Eskom and the Municipalities.*
- *Regulations that will ensure implementation of short term interventions.”*

8.17 The National Electricity Response Team (NERT) was established to drive the National Electricity Emergency Programme. NERT is led by the Department of Minerals and Energy and consists of the following 6 working groups:

8.17.1 Implementation and Coordination;

8.17.2 Funding of the Emergency Programme;

8.17.3 Communication;

8.17.4 Regulatory Frameworks and Tariffs;

8.17.5 Cogeneration and Markets; and

8.17.6 Economic Impact Analyses.

8.18 Eskom reports to a Joint Working Group meeting on the progress made, on a regular basis.

8.19 Prior to the establishment of NERT, the Government had formed the *Forum for Energy Executives*, comprising the Directors-General of the Departments of Minerals and Energy, Public Enterprises, Provincial and Local Government and Environmental Affairs and Tourism and the Chief Executive Officers of Eskom, the National Energy Regulator of

South Africa (NERSA), the National Nuclear Regulator, Central Energy Fund and EDI Holdings. The purpose of this Forum is to coordinate the efforts of Government to address policy issues and constraints relating to new generation capacity with a view to fast tracking the construction programme.

9. INVOLVEMENT OF MUNICIPALITIES

9.1 On 18 April 2008, it was announced that the Ministers of Public Enterprises and Minerals and Energy met with the Mayors and other representatives of municipalities, where it was agreed to establish a national task team to urgently mobilize the reductions required to minimise the need for load shedding and to achieve energy savings.

9.2 The Task Team comprising Chief Executives of the largest municipalities and the Chief Executive of Eskom, subsequently agreed to work together to achieve rapid energy savings "*favouring opportunities for load reduction versus load shedding*".

10. LOAD SHEDDING SUSPENDED

On 30 April 2008, Eskom issued a media statement indicating that due to electricity savings by municipalities and industry, load shedding would be suspended. It did however, warn that should the national electricity grid come under unexpected pressure, there may be occasions where brief periods of load shedding could be required.

11. THE COST OF ESKOM'S CAPITAL EXPANSION PROGRAMME AND THE FINANCIAL CONTRIBUTION BY THE GOVERNMENT

11.1 In his budget speech presented to Parliament on 20 February 2008, Mr T Manuel MP, the Minister of Finance, referred to the cost involved in the capital expansion programme that would enable Eskom to supply in the long term demand for electricity:

"Over the next five years Eskom's capital expansion plans will amount to R343 billion, with about 73 percent earmarked for power generation projects. The return-to-service of previously mothballed power-stations, Camden, Grootvlei and Komati, will add a combined 3 677 MW of generating capacity by 2011 and other smaller projects will produce about 2 000 MW. Two major new coal-fired plants, Medupi in Lephalale and Bravo near Witbank, will each cost in excess of R80 billion and produce about 4 500 MW each. To improve transmission capacity, Eskom is strengthening the Cape grid, and building new lines from Majuba to KwaZulu-Natal. "

11.2 Mr Manuel emphasized the fact that although Eskom is a corporation owned by the State, the underlying principle throughout its history has been that electricity consumers should bear the costs of its supply, with capital financed through retained earnings and debt on market related terms. He explained that public expenditure on electrification has been explicitly targeted at subsidizing the extension of supply to low-income consumers and not at providing finance for the utility itself.

11.3 He continued:

"Now that Eskom once again has a major investment programme to finance, its capital should again mainly be raised through debt, and paid for by users over the course of time through appropriately structured tariffs.

However, Eskom's tariffs were steadily reduced in real terms during the 1980s and 1990s, so that electricity prices in South Africa are now far lower than in any other comparable country, and well below full economic cost. The tariff structure is now too low to support the required borrowing.

Over the next few years, while new power stations are being built and tariffs are steadily increased and revised to encourage efficient electricity use, Eskom's balance sheet will be under some stress. It is therefore proposed that up to R60 billion should be provided to support the financing of Eskom's investment programme, on terms structured to assist in meeting cashflow requirements. Madam Speaker, the House should record and the nation needs to know that this is not a grant. The return on an investment in power generation is very long term, and the repayment of debt must be similarly deferred. But we would not be supporting these investments if we were not confident that they are economically and financially viable.

The amount of R60 billion will be required over the next five years, and we anticipate that about R20 billion will be drawn over the MTEF period ahead. This is provided for in the contingency reserve.

We are also setting aside R2 billion over the next three years to support programmes aimed at encouraging more efficient use of electricity, generation from renewable sources, installation of electricity-saving devices and co-generation projects. Intensive work over the next few months is needed to give content to these proposals, so that allocations for this year can be included in an Adjustments Appropriation."

12. THE ELECTRICITY REGULATION ACT, 2006

12.1 The objects of the Electricity Regulation Act, 2006 (the Act) are, *inter alia* to:

12.1.1 Ensure that the interests and needs of present and future electricity consumers and end users are safeguarded and met, having regard to the governance, efficiency, effectiveness and long-term sustainability of the electricity supply industry within the broader context of economic energy regulation in the Republic of South Africa³;

12.1.2 Facilitate universal access to energy⁴;

12.1.3 Promote the use of diverse energy sources and energy efficiency⁵; and

12.1.4 Facilitate a fair balance between the interests of customers and end users, licencees and investors in the electricity supply industry and the public⁶.

12.2 In terms of section 3, NERSA is the custodian and enforcer of the regulatory framework provided for by the Act.

12.3 Section 4 of the Act provides that NERSA must consider and may issue licences for the operation of electricity transmission and distribution facilities, the import and export of electricity and trading.

³ Section 2(b)

⁴ Section 2(d)

⁵ Section 2(e)

⁶ Section 2(g)

12.4 NERSA must also regulate prices and tariffs, issue rules designed to implement the national Government's Electricity Policy Framework, the integrated resource plan and the Act. Furthermore, it is empowered to enforce performance and compliance and to take appropriate steps in the case of non-performance⁷.

12.5 Section 4(b) of the Act provides that NERSA may:

12.5.1 Mediate disputes between generators, transmitters, distributors, customers or end users;

12.5.2 Undertake investigations and inquiries into the activities of licencees;
or

12.5.3 Perform any other act incidental to its functions.

12.6 NERSA may, in terms of section 15, make any licence subject to a number of conditions, including (but not limited to):

12.6.1 The setting and meeting of performance improvement targets;

12.6.2 The quality of electricity supply and service;

12.6.3 The undertaking of customer or end user education programmes; and

12.6.4 The need to maintain facilities in a fully operational condition.

12.7 Section 19 provides that if it is alleged that a licencee (such as Eskom) has contravened or failed to comply with a licence condition or any

⁷ Section 4(a)

provision of the Act, NERSA may sit as a tribunal to decide on the allegation. If it is found that the allegation is correct, it may impose a penalty of 10% of the annual turnover of the licensee or R 2 million (whichever is the higher amount) per day, commencing the day of receipt of the notice of compliance.

12.8 The powers and duties of a licensee are provided for by section 22. Subsection 5 provides that:

"A licensee may not reduce or terminate the supply of electricity to a customer unless:

- (a) the customer is insolvent;*
- (b) the customer has failed to honour, or refuses to enter into, an agreement for the supply of electricity; or*
- (c) the customer has contravened the payment conditions of that licensee."*

12.9 The provisions of section 26 of the Act deal with the liability of the licensee for damage or injury. It provides as follows:

"In any civil proceedings against a licensee arising out of damage or injury caused by induction or electrolysis or in any other manner by means of electricity generated, transmitted or distributed by a licensee, such damage or injury is deemed to have been caused by the negligence of the licensee, unless there is credible evidence to the contrary."

13. THE NERSA REPORT ON AN INQUIRY INTO THE NATIONAL ELECTRICITY SUPPLY SHORTAGE AND LOAD SHEDDING

13.1 On 12 May 2008, NERSA issued its *REPORT ON AN INQUIRY INTO THE NATIONAL ELECTRICITY SUPPLY SHORTAGE AND LOAD SHEDDING*.

13.2 The inquiry was conducted in terms of section 4(b) of the Act (see paragraph 12.5 above). Its purpose was to inform NERSA of the reasons for the current electricity supply shortage resulting in the national load shedding of electricity and to recommend measures to be adopted to mitigate against the shortage and to reduce the adverse impact thereof. The inquiry focused on the events of load shedding during the period 1 November 2007 to 31 January 2008. Eskom's response to the findings contained in the draft report on the inquiry was taken into consideration in the final analysis.

13.3 It was found that the electricity load losses that resulted in load shedding by Eskom was the result of low coal stockpile levels and high rainfall, which resulted in coal handling problems at the mines and combustion problems at the power stations, preventing generating units from running at their maximum output. Furthermore, a large number of unplanned generator trips and high planned maintenance provided Eskom with no other realistic alternative but to shed the load.

13.4 The main findings and conclusions of the Report include that⁸:

13.4.1 Previous load forecasts anticipated the current growth rate of electricity demand. The implementation of measures to provide for the growth was however, inadequate and slow. In particular, there were delays in

⁸ See from page 38 of the Report

returning the mothballed generation plants to service and the implementation of energy efficiency and demand management initiatives failed to comply with set targets;

13.4.2 Eskom's maintenance strategy resulted in the reduction of generation plant availability to below the 90% target, as was agreed with NERSA;

13.4.3 Eskom's new build programme of power generation facilities was delayed by at least a year due to, *inter alia*, delays in the completion of environmental impact studies, the acquisition of land, the finalizing of coal contracts, obtaining water licences for the new coal-fired power stations and a shortage of civil contracting capacity;

13.4.4 High unplanned maintenance and load losses combined with the usual high planned maintenance of generating units resulted in reduced generating capacity being available;

13.4.5 Coal stockpiles were allowed to decline to unacceptably low levels after August 2007 and there was a reluctance to obtain supplementary coal due to its high cost and its impact on Eskom's financial position;

13.4.6 Poor coal quality, wet coal and low stockpile levels contributed to the unplanned generation plant outages and load losses;

13.4.7 Low coal stockpile levels could be attributed to poor planning by Eskom;

13.4.8 Eskom used all available emergency resources, such as operating the coal-fired generation at emergency levels, obtaining assistance from customers, invoking the conditions of interruptible load contracts and operating gas turbines before resorting to load shedding;

13.4.9 The exporting of electricity to neighbouring countries during the load shedding period exceeded Eskom's firm contractual obligations;

13.4.10 Users of electricity were caught unaware of the electricity shortage and the implementation of load shedding due to a lack of communication;

13.4.11 The current regulations, procedures, licence conditions and industry codes do not make provision for long periods of supply-demand imbalance; and

13.4.12 The National Electricity Emergency Programme is addressing the electricity supply shortage with the support of industry.

13.5 The Report stated that further investigation is required into a number of related issues, such as:

13.5.1 Whether some of the findings contained in the Report constitute a breach of legislation or licence conditions;

13.5.2 The legal implications of load curtailment without agreement from customers;

13.5.3 Primary energy procurement and coal management by Eskom; and

13.5.4 The availability, adequacy and optimum utilization of Eskom's generation plant in an emergency.

13.6 The Report made comprehensive recommendations in respect of, *inter alia*:

13.6.1 The prevention of load shedding;

13.6.2 Coordination and communication by Eskom with NERSA, its customers and electricity consumers on electricity distribution and supply challenges;

13.6.3 Electricity supply-demand balance;

13.6.4 Effective and efficient procurement of coal;

13.6.5 Plant maintenance;

13.6.6 Legislation and licence conditions;

13.6.7 The National Electricity Emergency Programme;

13.6.8 Eskom's Recovery Plan; and

13.6.9 New electricity tariff structures.

13.7 A number of key policy recommendations were also made, including that the National Electricity Emergency Programme should be coordinated and led by a centralized high-level government unit with authority to take action.

14. ESKOM'S RESPONSE TO THE NERSA REPORT

14.1 On 21 May 2008, Eskom issued a public statement in which it welcomed the NERSA Report. The Chief Executive however, indicated that the Report was silent on the policy and regulatory issues that impacted on the reserve margin and the late start in the build programme, and on the impact of the low tariffs on attracting investments by independent power producers and co-generators.

- 14.2 Eskom also stated its disagreement with some of the findings contained in the Report, as follows:

“The statement that ‘there was also an element of complacency on the side of Eskom management in not replenishing coal stockpile in good times’ is not correct. Stockpile levels were regularly monitored and corrective actions were planned and re-planned. The situation was exacerbated by the coal producers’ focus on export, resulting in their contractual deliveries being on the lower limit of the contractual specifications.

Eskom disagrees with the emerging view that the declining coal stock pile was due to financial consideration over security of supply. Over the past two financial years, Eskom spent significantly more (R 2 billion in 2006/7 and R 5 billion in 2007/8) on coal than was allowed by the Regulator. This year we anticipate spending R 6 billion more on coal.”

- 14.3 Eskom indicated that it will continue to co-operate with NERSA on all the outstanding matters and that it will engage NERSA on the findings that it disagrees with.

15. FOLLOWING UP ON THE NERSA REPORT

- 15.1 After having studied the NERSA Report, the Chairperson of NERSA was informed that the Public Protector was satisfied that the concerns relating to the occurrence and impact of load shedding that gave rise to the own initiative investigation, fall within the mandate of NERSA to deal with.

- 15.2 The view was also expressed that the recommendations made in the NERSA Report addressed the concerns raised in respect of the effect of load shedding on the country as a whole and on the rights of individual members of the public. The Chairperson of the SAHRC was advised accordingly.
- 15.3 Although it was, for the reasons stated above and in order not to duplicate efforts and the associated costs, decided not to continue with the investigation referred to in paragraph 3 above, NERSA was requested to indicate the current status of its further investigations and to advise on how it will ensure that the recommendations made in the NERSA Report, are implemented.
- 15.4 On 22 September 2008, the Chief Executive Officer of NERSA advised that:

"NERSA is currently busy with the implementation of the decisions of the Energy Regulator including the further investigations that were identified in the report on the inquiry into the national electricity supply shortage and load shedding. We plan to have the investigative work completed by the end of the 2008/9 financial year."

16. THE SUMMER ENERGY EFFICIENCY CAMPAIGN

- 16.1 On 2 December 2008, Deputy President Mbete launched the Summer Energy Efficiency Campaign focusing on educating, empowering, uniting and mobilizing the nation to be energy conscious. At this event she stated, *inter alia*, that:

"We have heard from major stakeholders about their commitments to addressing the current national electricity emergency with the sense of urgency that it deserves. All of us now realise that we must act

together to reduce our unnecessary and inefficient use of energy. All stakeholders recognized that electricity and energy in general is indeed the lifeblood of our society and our economy. All stakeholders are at one that there is a need to see real action to take those commitments forward, based on the recognition that each one of us must act collectively and individually to manage the electricity situation."

16.2 According to a statement issued by the Presidency relating to the launching of the said campaign, the National Government's initiatives pertaining to energy saving, with the assistance of the commercial sector, include an appliance labeling programme, the provision of R 300 million for energy efficient light bulbs for poor households' tax incentives for investment in energy efficient technology and a subsidy for the purchasing of solar water heaters.

16.3 It was also emphasized that savings are needed to permit maintenance of electricity plants, which usually takes place in January, when demand is relatively low. Without savings, there is a risk of rolling blackouts if maintenance takes more time than expected, or if there are any breakdowns.

17. NERSA'S CONSULTATION PAPER ON POWER CONSERVATION PROGRAMME RULES

17.1 In December 2008, NERSA published a Consultation Paper on Power Conservation Programme (PCP) Rules.

17.2 Referring to the limited solutions or mechanisms that can be put in place in the short term to improve the supply of electricity, the Consultation Paper makes it clear that only *"demand side activities can stabilize the situation and minimize the risk of disruptive load shedding."*

17.3 It is further stated that:

"In line with government's plan to ensure that an overall 10% reduction in energy consumption is achieved and sustained, the National Electricity Response Team has developed a Power Conservation Programme (PCP) as a medium term solution to the energy capacity shortage. The programme is designed to accelerate the achievement of energy savings through behaviour change and promoting the use of demand side management. The reduction in consumption will also provide Eskom with the breathing space necessary to address unplanned maintenance and possible slippages in the tight planned timeline for bringing new capacity onto the grid between 2008 and 2013."

17.4 The Consultation Paper refers to research carried out by Eskom and the Human Sciences Research Council that has shown that an equal 10% energy reduction across all power-utilising sectors is not optimal for the economy. A more favourable approach is to set differentiated targets for different sectors, taking into account their linkages with other sectors, their structural ability to reduce electricity consumption with minimal impact on production and their current levels of efficient electricity utilization.

17.5 Core to the said PCP strategy is a mandatory Energy Conservation Scheme and a strategy for managing new electricity connections and growth in consumption. This Scheme will, according to the Consultation Paper, be phased in to all targeted customers and will require of them to achieve energy saving targets linked to incentives and penalties, as regulated by the rules that are proposed.

17.6 It was noted that special attention is given in the proposed rules of the Scheme to *"Protected Electricity Supplies"*, which include essential

services, such as the South African Police, health establishments, water and sanitation services and public lighting and traffic lights. These special consumers may be exempted by NERSA from the application of the rules of the Scheme, under prescribed circumstances.

- 17.7 Stakeholders were invited to submit comments on the PCP Rules to NERSA by 23 January 2009.

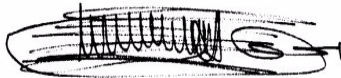
18. OBSERVATIONS AND CONCLUSIONS

- 18.1 It was noted that the former President, the former Deputy President and the Minister of Minerals and Energy acknowledged that there was a delay on the part of the Government to improve Eskom's power generating capacity in time and that a public apology was offered in this regard for the inconveniences caused by the load shedding referred to in this report.
- 18.2 The causes of the electricity load shedding by Eskom have been comprehensively addressed by the National Government in terms of action plans, electricity saving initiatives and the allocation of funding for capital expansion programmes;
- 18.3 The investigation conducted by NERSA into the national electricity supply shortage and load shedding comprehensively considered its causes, impact, the challenges and solutions;
- 18.4 As the custodian and enforcement agent of the regulatory framework provided for by the Electricity Regulation Act, 2006, it is within the powers and mandate of NERSA to ensure that the recommendations made in its report on the said investigation are implemented and that Eskom complies with the conditions of its licence and the relevant provisions of the Act;

18.5 The Power Conservation Programme developed by the National Electricity Response Team should go a long way in accelerating the achievement of energy savings, once it is finalized and implemented.

19. RECOMMENDATION

In terms of the provisions of section 182(1)(c) of the Constitution and section 6(4)(c)(ii) of the Public Protector Act, it is recommended that the Speaker of the National Assembly takes steps to ensure that the relevant Parliamentary Portfolio Committee(s) monitor and report on the timeous and effective implementation of the recommendations made by NERSA in its Report of 12 May 2008.



ADV M L MUSHWANA
PUBLIC PROTECTOR OF THE
REPUBLIC OF SOUTH AFRICA

Date: 18 February 2009

Assisted by: Adv C H Fourie
Head: Special Investigations
Office of the Public Protector