

ESKOM

Response to Greenpeace PAIA Request Dated: October 2012



Contents

1 Waste management: Any records relating to the management of nuclear spent fuel at the Koeberg nuclear site, including but not limited to:

1.1 Regulations, procedures, policies or plans regarding management of the spent fuel;

- *Currently the management of spent fuel (or more correctly “used fuel”) is performed and monitored in accordance with the Koeberg operating licence received from the NNR under the National Nuclear Regulator (NNR) Act, the Nuclear Energy Act and Koeberg licence.*

NNR Act.pdf NEA, 46 of 1999.pdf NIL-01 Var. 17
(November 2008) k11

- *The final disposal of used fuel will be governed by the National Policy and Strategy for the Management of Radioactive Waste Management in South Africa (2005) and the National Radioactive Waste Disposal Institute Act. The formation of the National Radioactive Waste Disposal Institute is still not finalised.*

radwaste_policy Act No. 53 of
2005.pdf 2008.pdf

1.2 Contingency plans in the event of a nuclear accident;

With used nuclear fuel, the concerns are cooling of the fuel, maintaining a sub-critical configuration and providing shielding against ionizing radiation. At Koeberg, a limited number of used fuel assemblies are stored in metal casks, whilst the majority is stored in the fuel pools.

- *In the case of casks, cooling, sub-criticality and shielding is ensured through the design of the casks. Only fuel with low initial enrichment levels, that was cooled for more than 10 years in the fuel pools, have been loaded into the casks.*
- *In the fuel pools, sub-criticality is maintained through design and by ensuring a minimum boron concentration in the fuel pool water. Cooling is ensured through heat exchangers, with additional equipment on standby, if needed. Shielding against radiation is provided by design and by the water covering the fuel.*

1.3 The amount of spent fuel being generated;

- *Koeberg currently generates about 56 used fuel assemblies per unit, every 17 to 18 months.*

1.4 The amount of spent fuel being stored in pools

- 1901 Spent fuel assemblies are currently stored in the two fuel pools (unit 1 – 961 and unit 2 - 940).

1.5 The amount of spent fuel being stored in dry storage;

- 112 used fuel assemblies are currently stored in four dry storage casks.

1.6 The budget for used fuel management for the past 3 financial years:

- Eskom's annual report shows expenditure on decommissioning provision for both fuel and plant. At this stage all used fuel is stored in the fuel pools or casks on site. (<http://www.eskom.co.za/c/84/annual-report/>)

1.7 Expenditure / audit report on used fuel management in the past 3 financial years:

- The Eskom annual report reflects the external auditors report for each financial year (<http://www.eskom.co.za/c/84/annual-report/>)

1.8 Any research, plans, or similar documents in relation to managing spent fuel by dry storage, rather than pools.

- Eskom embarked on a program to investigate and implement dry storage on Koeberg site until a centralized storage facility is available. It is however refused in terms of Section 44(2)(c) as it is a preliminary working document.

2 Plans, Offers, Research, Reports Relating To The Import Or Export Of Spent Fuel. Any records relating to the management of nuclear waste generated at the Koeberg nuclear site, including, but not limited to:

To date no used fuel has been transported from the Koeberg site. Affidavit in this regard will be provided if required.

Offers to process the used fuel have been received; none of which have been accepted. The offers are considered commercially sensitive and cannot be disclosed (PAIA section 36(1)(c)).

2.1 The amount of nuclear waste being generated;

- Eskom's annual report reflects the amount of used fuel, low level and intermediate radioactive waste generated for the past 10 years. See statistic tables on pages 324 to 325 (<http://www.eskom.co.za/c/84/annual-report/>)

2.2 Regulations, procedures, policies or plans regarding the transfer of waste to Vaalputs national radioactive waste disposal facility

- To date no used fuel is stored at the Vaalputs facility as this site is not licenced to accept used fuel. The Vaalputs facility is licenced to accept intermediate and low level radioactive waste (As per the Nuclear Energy Act and the NNR Act. This licence dictates what waste they are allowed to accept.

2.3 Budget for the transfer of waste to Vaalputs national radioactive waste disposal facility for the past 3 financial years;

- To date no costs have been incurred for the transport of used fuel. The actual costs of transporting the low and intermediate level radioactive waste to Vaalputs is not provided as this considered confidential commercial information belonging to third parties.

2.4 Expenditure/audit reports for the transfer of waste to Vaalputs national radioactive waste disposal facility for the past 3 financial years.

- *The Eskom annual report reflects the auditor's report for each financial year*

3 EIA: Any records related to the environmental impact assessment for the proposed nuclear sites for nuclear one

This part of the request are dealt with on our website <http://www.eskom.co.za/c/article/401/nuclear-1/>

4 Engagement with NNR: Any Records Relating To The Proposed Nuclear Sites For Nuclear One, Including, But Not Limited To:

4.1 Minutes of any meetings between Eskom and the National Nuclear Regulator;

- *Refused in terms of Section 44 (1)(a)(ii) and Section 44(1)(b) (1).*

Note: *To date Eskom has not applied for any form of nuclear licence with the NNR for any new nuclear power station.*

4.2 Proposals or plans for the establishment of a nuclear plants;

- *Requestor referred to Integrated Resource Plan 2010 as published and communicated by the Government as per the recent Cabinet endorsement that Eskom will own and operated nuclear plants in SA, but is still unclear as to the procurement process.*

4.3 Any budget or proposed budget in relation the establishment of a nuclear plant at the site(s).

- *No budget currently exists in the current Eskom financial planning window for the building (establishment) of New Nuclear Plants.*