

Dr Mzubanzi Tyobeka
Chief Executive Officer
National Nuclear Regulator
PO Box 7106
CENTURION
0046

Eskom reference: K-26391-E

Dear Dr Tyobeka

APPLICATION FOR A NUCLEAR INSTALLATION LICENCE (NIL) TO SITE, CONSTRUCT, OPERATE AND DECOMMISSION A TRANSIENT INTERIM STORAGE FACILITY (TISF) AT THE KOEBERG NUCLEAR POWER STATION (KNPS)

In accordance with the NNR Directive k10001429N, Eskom is applying for a NIL for a TISF located at the Koeberg Nuclear Power Station site in accordance with section 21 of the National Nuclear Regulator Act, 1999 (Act No. 47 of 1999).

In conformance with Government Notice No.1219 of 21 December 2007, regulations in terms of section 47, read with sections 21 and 22 of the National Nuclear Regulator Act, 1999 (Act No. 47 of 1999), on the format for the application for a nuclear installation licence the required information is provided in section 1 below.

Eskom is continuing with regulatory engagements on the processes and conditions with this TISF NIL application associated with siting, construction, operation and decommissioning of the TISF for the storage of used nuclear fuel in dry storage casks and six used original steam generators (OSGs) on the existing licensed Koeberg Nuclear Power Station site.

As per the environmental assessment, the TISF is intended to store both used nuclear fuel in dry casks and the OSGs. The Implementation schedule of the TISF will be to store the OSGs first and thereafter the used nuclear fuel in dry storage casks. Therefore, the safety case submission for the used nuclear fuel in dry storage casks for storage at the TISF will occur sometime after the submission of the safety case for OSG storage.

SECTION 1

APPLICATION FOR A NUCLEAR INSTALLATION LICENCE TO SITE, CONSTRUCT, OPERATE AND DECOMMISSION A TRANSIENT INTERIM STORAGE FACILITY AT THE KOEBERG NUCLEAR POWER STATION

Regulation 4(1): An indication of whether the application is made for a nuclear installation licence or a certificate of registration or exemption

The application is for a nuclear installation licence.

Regulation 4(2): The full name of the applicant

The applicant is Eskom Holdings SOC Ltd, Registration No. 2002/015527/06/30

Regulation 4(3): If the applicant is a juristic person, a certified copy of the certificate of incorporation or founding document or any other establishing document and physical address of its head office or its *domicilium citandi et executandi*

Physical address of Head Office:

Eskom Holdings SOC Ltd
Megawatt Park
Maxwell Drive
Sunninghill
Sandton
2157

A certified copies of the Memorandum of Incorporation, Eskom's delegation of authority, Eskom's board charter are attached as Appendix 1, Appendix 2, and Appendix 3 respectively. A copy of the Notice of registered office and postal address of the company is also attached as Appendix 4.

Regulation 4(4): If the applicant is a natural person, his or her identification number and date of birth

Not applicable

Regulation 4(5): The physical address of the proposed nuclear installation or where the proposed action(s) will be carried out

Koeberg Nuclear Power Station
Farm Duynefontyn 1552 - (this is the consolidation of Farm Duynefontyn 34 and Farm 1375)
Melkbosstrand
7441

Proof of address, Eskom reference K-21899-E Licence Change Request Application LCR 1834 consolidating Farm 34 and Farm 1375 into one new Farm called Farm Duynefontyn no 1552.

Regulation 4(6): The postal address of the applicant

For the purposes of this application, all correspondence should be addressed to:

Mr André de Ruyter
Group Chief Executive
Eskom Holdings SOC Ltd
PO Box 1091
JOHANNESBURG
2000

SECTION 1 (Continued)

APPLICATION FOR A NUCLEAR INSTALLATION LICENCE TO SITE, CONSTRUCT, OPERATE AND DECOMMISSION A TRANSIENT INTERIM STORAGE FACILITY AT THE KOEBERG NUCLEAR POWER STATION

Regulation 4(7): A description of the nuclear installation or nature of the proposed action(s) and any other relevant information which may be required by the Chief Executive Officer

Regulation 4(7a): A description of the nuclear installation for temporary storage of six OSGs and used nuclear fuel dry storage casks (used fuel)

The TISF is an area of approximately 12 800 m² within the KNPS Owner Controlled Area and will remain operational until about 10 years after the end of the commercial operation of the KNPS. The TISF NIL application is primarily first for the 6 OSGs which will be housed horizontally in a concrete mausoleum building of approximately 26m x 55m referred to as the OSGISF (OSG interim storage facility) and is located within the TISF boundary. This is in-line with European and Korean practices.

A secure perimeter fence, with controlled access, will surround the TISF.

At a later stage, via a Licence Change Request (LCR), the remaining space within the TISF will be used for dry storage of used fuel casks of approximately 40 to 60 casks in a modular manner on concrete pads. The TISF can accommodate approximately 160 casks after decommissioning of the OSGISF. An auxiliary building to house ancillary equipment for the used fuel casks will be constructed within the TISF operational area.

Regulation 4(7b): Location of the installation

The TISF is located on the West Coast, approximately 27 km north of the Cape Town CBD and 1.5 km north of the residential area of Duynfontein. KNPS is situated on the Farm Duynfontyn No. 1552 and the main access to KNPS is via the R27, which runs along the property's eastern boundary.

Regulation 4(7c): Site coordinates

The TISF site coordinates: X: (Longitude) +52841.01 and Y: (Latitude) +3727535.85

Regulation 4(7d): A map/diagram showing the boundaries of the site (i.e. all the areas) to be authorised, for surface operations.

A copy of the TISF site map containing the demarcated boundaries of the site is attached as Appendix 5.

Regulation 4(7e): Site safety report

The TISF NIL application progression will start with the submission of the OSGISF safety case as per the requirements of PP-0009 and at a later stage via a LCR, the used fuel storage casks safety case will follow.

Eskom will revise the Duynefontyn Site Safety Report to reflect the TISF for temporary storage of six OSGs and used nuclear fuel in accordance with a schedule to be agreed with the NNR.

SECTION 1 (Continued)

APPLICATION FOR A NUCLEAR INSTALLATION LICENCE TO SITE, CONSTRUCT, OPERATE AND DECOMMISSION A TRANSIENT INTERIM STORAGE FACILITY AT THE KOEBERG NUCLEAR POWER STATION

Regulation 4(7f): Safety case and safety analysis report

Eskom will submit a safety case as per PP-0009 for the OSG storage first according to a schedule to be agreed with the NNR. Only after the NIL is issued for the storage for OSGs within the TISF will the safety case development commence for the storage of used fuel. As a result, the used fuel storage safety case will be issued as a licence change request (LCR) to the NIL authorisation.

Eskom will revise the Koeberg safety analyses report to reflect the TISF for temporary storage of used nuclear fuel and six OSGs in accordance with a schedule to be agreed with the NNR

Regulation 4(7g): Approved Environmental Impact Assessment

The Department of Environmental Affairs has issued an Environmental Authorisation Reference No. 14/12/16/3/3/2/947/AM1 for the construction of a TISF for temporary storage of used nuclear fuel and amended the authorisation to include six OSGs at the Koeberg Nuclear Power Station listed in Appendix 6.

Regulation 4(7h): Payment of the non-refundable application fee

Eskom commits to pay the application fee in accordance with the applicable Government Notice in terms of section 28 of the National Nuclear Regulator Act, 1999 (Act No. 47 of 1999), on fees for nuclear authorisations.

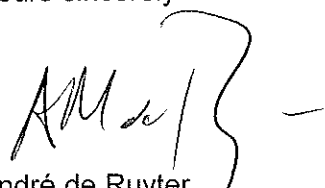
Regulation 4(8): a signature by the applicant or, in the case of a juristic person, the signature of a duly authorised person and a certified copy of that authorisation.

The Eskom Group Chief Executive is the duly authorised person and applicant on behalf of Eskom in accordance with the Memorandum of Incorporation, Delegation of Authority (DoA) and Board Charter.

This application supersedes the application made via letter K-25840-E of dated 24 October 2019.

Please address all correspondence and/or queries to Marc Maree, Acting Senior Manager (Nuclear Licensing) +27 21 550 4678

Yours sincerely



André de Ruyter
GROUP CHIEF EXECUTIVE

Date: 4/5/2020

SECTION 1 (Continued)

**APPLICATION FOR A NUCLEAR INSTALLATION LICENCE TO SITE, CONSTRUCT, OPERATE
AND DECOMMISSION A TRANSIENT INTERIM STORAGE FACILITY AT THE KOEBERG
NUCLEAR POWER STATION**

Attached:

Appendix 1: Memorandum of incorporation

Appendix 2: Eskom Delegation of authority

Appendix 3: Eskom board charter

Appendix 4: Notice of registered office and postal address

Appendix 5: Site map

Appendix 6: Environmental Authorisation and amendment