GOVERNMENT NOTICES • GOEWERMENTSKENNISGEWINGS

DEPARTMENT OF ENERGY

NO. R. 1342 18 OCTOBER 2019

NATIONAL NUCLEAR REGULATOR ACT, 1999 (ACT NO. 47 OF 1999)

CATEGORISATION OF THE VARIOUS NUCLEAR INSTALLATIONS IN THE REPUBLIC, THE LEVEL OF FINANCIAL SECURITY TO BE PROVIDED BY HOLDERS OF NUCLEAR INSTALLATION LICENCES IN RESPECT OF EACH CATEGORY OF NUCLEAR INSTALLATION AND THE MANNER IN WHICH THAT FINANCIAL SECURITY IS TO BE PROVIDED

Under the powers vested in me by section 29(1) and (2) of the National Nuclear Regulator Act, 1999 (Act No. 47 of 1999), I, Samson Gwede Mantashe, the Minister of Mineral Resources and Energy, on the recommendation of the Board of Directors of the National Nuclear Regulator and in consultation with the Minister of Finance, hereby substitute the categorisations and determinations issued under Government Notice No. 581 of 7 May 2004, for the categorisations and determinations in the Schedule.

SAMSON GWEDE MANTASHE, MP

Minister of Mineral Resources and Energy

Date: 23/09/2019

SCHEDULE

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1. Purpose

The purpose of this Notice is to-

- (a) categorise the various nuclear installations in the Republic, based on the potential consequences of a nuclear accident;
- (b) determine the level of financial security to be provided by holders of nuclear installation licences in respect of those categories; and
- (c) determine the manner in which that financial security is to be provided.

2. Definitions

In this Notice, a word or expression to which a meaning has been assigned in the National Nuclear Regulator Act, 1999 (Act No. 47 of 1999), bears the meaning so assigned and, unless the context otherwise indicates-

"nuclear fuel" means nuclear fuel as defined in section 1 of the Nuclear Energy Act, 1999 (Act No. 46 of 1999);

"Special Drawing Right or SDR" means the unit of account defined by the International Monetary Fund and used by it for its own operations and transactions;

"special nuclear material" means any material declared under section 2(c) of the Nuclear Energy Act, 1999 to be special nuclear material;

"used fuel" means nuclear fuel removed from a reactor following irradiation, which is no longer usable in its present form because of depletion of fissile material, poison build-up or radiation damage.

3. Categorisation of nuclear installations

- (1) Nuclear installations in the Republic of South Africa are categorised, based on the potential consequences of a nuclear accident, in accordance with the following scheme:
 - (a) Category 1
 - (i) Any nuclear reactor, other than one intended as a means to power any sea or air transport, with a thermal power level greater than 100 MW.

- (ii) Any nuclear installation designed or adapted for or which may involve the carrying out of any process involving nuclear fuel or the reprocessing of nuclear fuel or used fuel for a reactor referred to in sub-item (i).
- (iii) Any nuclear installation where used fuel can be permanently disposed of or is stored containing more than the equivalent of a 3000 MW(th) reactor core.

(b) Category 2

- (i) Any nuclear reactor, other than one intended as a means to power any sea or air transport, with thermal power levels greater than 2 MW and less than 100 MW.
- (ii) Any nuclear installation designed or adapted for or which may involve the carrying out of any process involving processing or reprocessing of nuclear fuel, used fuel for a reactor referred to in sub-item (i) or irradiated special nuclear material.
- (iii) Any nuclear installation where used fuel can be permanently disposed of or is stored containing between the equivalent of a 10 to a 3000 MW(th) reactor core.

(c) Category 3

Any other nuclear installation not mentioned in Category 1 or 2.

(2) Based on the above categorisation scheme the nuclear installations in the Republic of South Africa are categorised as follows:

Category	Nuclear Installation
Category 1	Koeberg Nuclear Power Station
Category 2	The following nuclear installations on the Necsa Pelindaba site- • SAFARI-1 Research Reactor; • P2700 Complex (UCHEM); • ELPROD in Building P2500; and • NTP Radiochemicals Complex (Hot Cell Complex).
Category 3	Vaalputs National Radioactive Waste Disposal Facility

The following nuclear installations on the Necsa Pelindaba site-

- Thabana Complex
- HEU Vault
- A-8 Decontamination Facility
- Building A-West Drum Store
- UMET in Building P2600
- Conversion Plant Complex
- Area 14 Waste Management Complex
- Quarantine Storage Facility
- V-YB Pelindaba East Bus Shed Complex;
- Pelindaba East Evaporation Ponds Complex
- Oil Purification Facility
- Area 21 Storage Facility
- Beva K3 Storage Complex
- Area 16 Complex
- Area 40 Complex
- Area 27 De-Heeling Facility
- J-Building;
- D-Building;
- C-Building
- Building P2900
- Building XB
- Beva Evaporation Ponds
- Building P-2800
- Area 26
- E-Building
- Dorbyl Camp
- X-Building
- Building P-1500
- YM Vacuum Workshop
- V-H Building Laboratories
- P-1900 Laboratories
- P-1600 Laboratories
- Fuel Development Laboratories Complex
- Pelindaba Analytical Laboratories (PAL) in Building BEVA- El
- Liquid Effluent Treatment facility
- B-1 Building Basement

4. Level of financial security to be provided

- (1) The level of financial security to be provided by holders of nuclear installation licences in respect of each of the categories mentioned in paragraph 3 is determined to be-
 - (a) Category 1: The equivalent of 367 million SDRs.
 - (b) Category 2: The equivalent of 44 million SDRs
 - (c) Category 3: The equivalent of 6 million SDRs.

5. Manner in which financial security is to be provided

- (1) Financial security must be provided by way of-
 - (a) an insurance policy issued by a duly registered insurance company and acceptable to the Board of the Regulator; or
 - (b) a monetary guarantee issued by a duly registered bank and acceptable to the Board of the Regulator.
- (2) A nuclear authorisation holder must annually review the financial security provided against the level of financial security to be provided in terms of paragraph 4(1).
- (3) The exchange rate used in the determination of the level of financial security must be the yearly average exchange rate at 31 December, as determined by the International Monetary Fund, for the year under review.
- (4) Where the level of financial security has been devalued, the level of financial security must be updated to match the value specified in subparagraph (3).
- (5) The nuclear authorisation holder must annually, by 31 March, submit proof to the Regulator of the review and the financial security provided.

6. Financial security in respect of more than one nuclear installation licence

- (1) A holder of more than one nuclear installation licence relating to installations situated on a single site may provide financial security for nuclear damage at the level of the nuclear installations in the highest category.
- (2) Such financial security must cover all nuclear installations on the site.

7. General

- (1) Government Notice No.581 of 7 May 2004 is repealed.
- (2) This Notice will come into operation on 1 April 2020.