



NUCLEAR INSTALLATION LICENCE NO. NIL - 01
(Variation 19)

In terms of section 21 of the National Nuclear Regulator Act (Act No. 47 of 1999)
Nuclear Licence No. NIL-1 (Variation 18), granted

to

ESKOM

for

the siting, construction, operation and decommissioning of the nuclear installation known as KOEBERG "A" NUCLEAR POWER STATION, situated on the site of Cape Farm No. 34, also known as Duynefontein, in the magisterial district of Malmesbury in the Western Cape,

is hereby varied

in terms of section 23 of the National Nuclear Regulator Act .

The conditions identified below or later revisions to these conditions as are approved by the National Nuclear Regulator, (hereinafter referred to as the Regulator) must be adhered to.

ISSUED at CENTURION on this 07th day of MARCH 2019.

Dr. Mzibanzi Tyobeka
CHIEF EXECUTIVE OFFICER
NATIONAL NUCLEAR REGULATOR

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LICENCE CONDITIONS

1.0 GENERAL

- 1.1 In these conditions any reference to an agreement, approval, directive, specification, notification, process or any formal communication between the Regulator and the licensee, and vice versa, shall be deemed to be a reference to a written document.
- 1.2 In these conditions any reference to processes and or procedures shall be deemed to be licensee processes and or procedures.
- 1.3 In these conditions any reference to Regulator accepted processes and or procedures shall be deemed to be licensee processes and or procedures that have been reviewed and approved by the Regulator.
- 1.4 The licensee must ensure that once accepted no alteration or amendment is made to the Regulator accepted processes and or procedures unless the Regulator has accepted the said alteration or amendment.
- 1.5 Where in these conditions, the Regulator requires any matter to be approved or to be carried out only with its consent or to be carried out as it directs, the Regulator may:
 - a) from time to time modify, revise or withdraw, either wholly or in part, any such approval, directive or consent;
 - b) approve, either wholly or in part, any modification or revision or any proposed modification or revision to any matter for the period being approved.
- 1.6 This variation of the licence is valid for the operation of the Koeberg Nuclear Power Station until 21 July 2024 unless:
 - a) amended for subsequent licensing stages including long term operation; or
 - b) varied, suspended or revoked.
- 1.7 A request for a change to a licence condition or to any document referred to in this Licence must be made in accordance with the requirements of LD-1079: "Requirements in Respect of Licence Change Requests to the National Nuclear Regulator".
- 1.8 Notwithstanding the provisions of the above conditions, the licensee must not permit any part of the plant to be modified or any procedure to be amended in any manner which would be contrary to the safety requirements of the Regulator.

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1.9 All documents referred to in this licence are the versions as directed by the Regulator.

1.10 The English text of the licence is the official text of the licence.

2.0 NUCLEAR INSTALLATION DESCRIPTION

2.1. The installation comprises of two three-loop pressurised water reactors (PWR), known as Unit 1 and Unit 2 with the following characteristics:

- a) A nuclear island consisting of two reactor buildings (each housing an Nuclear Steam Supply System), two fuel buildings, a nuclear auxiliary building common to both units, and connecting buildings,
- b) A shared turbine building housing two turbine generators and their auxiliaries,
- c) Five diesel generator buildings each housing one emergency diesel generator; two are assigned to each unit, and one can be assigned to either unit,
- d) A shared electrical building,
- e) One pumping station for the conventional island cooling water,
- f) One pumping station for the nuclear island cooling water,
- g) Two condensate polishing plants and a water treatment building,
- h) Miscellaneous buildings for auxiliary equipment,
- i) Workshops and service buildings,
- j) Low Level Waste and Cask Storage Buildings.

2.2. Each unit is designed for a gross fission power output of 2775 MW thermal.

3.0 DEMARCATION OF SITE

3.1 The licensee must maintain a plan of the site (hereinafter called the site plan) showing the location of the boundary of the site and every building, plant or facility on the site.

3.2 The licensee must demarcate the boundaries of the site by fences or other appropriate means and all such fences or other means used for this purpose must be properly maintained.

3.3 Prior to making any change to the site, which impacts or has the potential to impact on health, safety, or the environment as contemplated in the Act, the licensee must submit to the Regulator an amended site plan and schedule, for approval.

3.4 The licensee must not permit any activities on site that are not directly or indirectly necessary for the operation of the nuclear installation. Any

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development on the site must be place bound in compliance with the Development Plan for the region.

4.0 SCOPE OF ACTIONS THAT MAY BE UNDERTAKEN

The scope of activities undertaken under the authority of this Licence must be limited to the following:

- 4.1 Transport to and from site and the handling and storage on site of fuel assemblies and fuel pins, whether new, irradiated or dummy.
- 4.2 Loading of fuel assemblies into and the handling of such assemblies from the reactors of Units 1 and 2.
- 4.3 Movement of fuel into, out of or within either reactor core may take place only with the prior approval of the Regulator.
- 4.4 Operation of the reactors of Units 1 and 2 at any power level up to 2775 MW thermal.
- 4.5 Neither unit may be brought to criticality without written approval of the Regulator after:
 - a) Shut-down for refueling;
 - b) After Shut-down due to the actuation of an engineered safety system.
- 4.6 Processing of material comprising, containing or contaminated with radioactive material, other than that contained in irradiated fuel assemblies, by concentration and storage on site of solid wastes and by treatment and disposal, as normal operational discharges, of radioactive gaseous and liquid effluent.
- 4.7 Transport to and from site and the storage and use on site of radioactive material other than nuclear fuel as well as items contaminated with radioactive material.
- 4.8 The possession on site of any artificial radioactive nuclides, other than that contained in radioactive waste and spent nuclear fuel, and the use thereof by any competent party, subject to such provisions for the use and control of such radioactive material as are contained in this Licence.
- 4.9 Establishment and operation of an Environmental Surveillance Laboratory.
- 4.10 Storage, and transport on-site, of spent fuel in spent fuel dry storage casks in accordance with the directive "Storage, and Transport On-Site, of Spent Fuel in Spent Fuel Dry Storage Casks".

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4.11 Fuel assemblies must be stored in the fuel buildings of Units 1 and 2 in the following areas, manner and quantities in respect of each fuel building:

AREA	MANNER	QUANTITY
New fuel storage area	Dry	60 assemblies (maximum)
Spent fuel pool	Under water	1536 assemblies (maximum) provided that sufficient storage space is maintained in the spent fuel pool to permit complete unloading of the fuel in the reactor.

5.0 RADIOLOGICAL PROTECTION

- 5.1 Radiation doses to persons occupationally exposed to ionising radiation on the site, to other persons on the site and to members of the public, arising from operations at the site, discharge of effluent from the site and transport of any item or material from the site, must be in compliance with the system of dose limitation specified in RD-0022: "Radiation Dose Limitation at Koeberg Nuclear Power Station".
- 5.2 The licensee must implement processes and procedures for the purposes of ensuring radiological protection of employees, members of the public and the environment, both on the site and off the site, as a consequence of authorised actions.
- 5.3 The licensee's radiological protection processes must, under all operating states of the authorised actions, ensure that:
- effective radiation doses, including committed effective doses, to persons;
 - the number of people who are exposed; and
 - the likelihood of incurring exposures to radiation, are kept as low as reasonably achievable.
- 5.4 The licensee must comply with the provisions specified in 36-197: "Koeberg Licensing Basis Manual" regarding the following:
- Radiation protection.
 - Radiation protection organisation.
 - Operational radiation protection, artificial radioactive nuclides (other than that contained in radioactive waste and spent nuclear fuel), training and medical control of radiation workers, radiation monitoring instrumentation, respiratory protection, optimisation of protection, radiological surveillance

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and radiation shield verification, together with reviews and technical audits thereof.

- d) The requirements relating to personnel dosimetry together with reviews and technical audits thereof.
- e) Control of radioactive sources.

5.5 A Radiation Dose Register of every occupationally exposed worker must be established and maintained in a form acceptable to the Regulator. The licensee must retain the register for a period of at least fifty years from the date of last entry.

6.0 ENVIRONMENTAL PROTECTION AND EFFLUENT MANAGEMENT

6.1 The licensee must comply with the provisions specified in 36-197: "Koeberg Licensing Basis Manual" regarding the following:

- a) Environmental monitoring programme together with reviews and technical audits thereof.
- b) Meteorological monitoring programme together with reviews and technical audits thereof.

6.2 The licensee must comply with the provisions specified in 36-197: "Koeberg Licensing Basis Manual" regarding the following:

- a) Control over the discharge of radioactive material in liquid and gaseous effluent together with reviews and technical audits thereof.
- b) The discharge of radioactive material in liquid and gaseous effluent.

7.0 RADIOACTIVE WASTE MANAGEMENT

7.1 The licensee must implement programmes for the minimisation and safe management of radioactive waste on the site.

7.2 The radioactive waste management programme must:

- a) ensure the identification, quantification, characterisation and classification of any radioactive waste generated;
- b) provide for the necessary steps leading to safe clearance, authorised discharge, disposal, reuse or recycling; and
- c) provide for the safe storage of radioactive waste between any waste management processes.

7.3 The safety of radioactive waste storage options must be assured for the envisaged period of storage.

7.4 The licensee must comply with the provisions specified in 36-197: "Koeberg Licensing Basis Manual" regarding the generation, processing and disposal of radioactive waste and reviews and technical audits thereof.

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8.0 EMERGENCY PLANNING AND PREPAREDNESS

- 8.1 The licensee must comply with the requirements of RD-014: "Emergency Preparedness and Response Requirements for Nuclear Installations".
- 8.2 The licensee must comply with the provisions specified in 36-197: "Koeberg Licensing Basis Manual" regarding the following:
- a) An emergency plan being established and maintained in a state of preparedness and being subject to reviews and technical audits.
 - b) Management and mitigative measures to be taken as a result of a severe accident.
 - c) Responsibilities and training of staff in severe accident management.
- 8.3 The licensee must implement approved processes related to preparedness for and response to any event or other emergency arising on the site and their associated impacts.
- 8.4 The licensee must ensure that provisions include processes and procedures to ensure that all persons, in the employ of the licensee, who have duties in connection with such processes are properly trained and instructed in:
- a) the performance of the processes;
 - b) the use of any equipment that may be required; and
 - c) the precautions to be observed.
- 8.5 Where such processes and procedures require the assistance or cooperation of, or it is expedient to make use of the services of any person, local authority or any other body; the licensee must ensure that such persons, local authority or other body are consulted in the periodic review and update of such processes.
- 8.6 The licensee must ensure that all such processes and procedures are exercised and tested at such intervals and at such times and to such extent as the Regulator may specify or, where the Regulator has not so specified, as the licensee considers necessary to ensure their continued viability.

9.0 MEDICAL SURVEILLANCE AND HEALTH REGISTER

- 9.1 The licensee must implement measures to ensure fitness for duty of all personnel, including contractors involved in activities impacting on nuclear safety and nuclear security.
- 9.2 The licensee must comply with the provisions and requirements relating to the medical evaluation of nuclear power plant personnel, as contained in LD-

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1077: "Requirements for Medical and Psychological Surveillance and Control".

- 9.3 A comprehensive medical surveillance programme and health register must be maintained in a form approved by the Regulator.
- 9.4 All entries in the health register must be made by an Appointed Medical Practitioner.
- 9.5 The appointed medical practitioner must inform the employee of any medical condition, which could have arisen as a result of occupational exposure to radiation.
- 9.6 The licensee must retain the register for a period of at least fifty years from the date of last entry.
- 9.7 An employee or former employee must have right of access to his medical records and health register at all times.
- 9.8 After consent has been obtained from the employee or former employee, as the case may be, the licensee must, on the request of the Regulator provide access to the employee's medical records and health register. The Regulator may, with the consent of the employee or former employee, as the case may be, appoint an independent medical practitioner to assist in the conduct of a review of said records.

10.0 TRANSPORT

- 10.1 Transport of radioactive material or any equipment or objects contaminated with radioactive material off site must comply with the relevant provisions of the International Atomic Energy Agency Safety Standard Series, No. SSR-6 "Regulations for the Safe Transport of Radioactive Material".
- 10.2 All on site transport of radioactive material or any equipment or objects contaminated with radioactive material must be carried out in accordance with the provisions specified in 36-197: "Koeberg Licensing Basis Manual" regarding the on-site transport of radioactive material.
- 10.3 The licensee must keep a record of all radioactive material consigned to and from the site. Such record must :
 - a) contain particulars of the amount, type and form of such radioactive material, the manner in which it was packaged, the name and address of the person to whom it was consigned to or from and the date when it left or arrived on the site.
 - b) be preserved for a period acceptable to the Regulator.

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10.4 The licensee must not undertake any transport of radioactive material to sites, installations or persons not appropriately authorised to receive such material.

11.0 SAFETY ASSESSMENT

11.1 The licensee must implement processes and procedures for the production and assessment of safety cases consisting of documentation to justify safety during the following lifecycle phases of the installation:

- a) Siting;
- b) Design;
- c) Manufacture of component parts;
- d) Construction;
- e) Commissioning;
- f) Operation;
- g) Termination of operation;
- h) Decontamination; and
- i) Decommissioning.

11.2 The Safety Assessment of the installation, which includes the probabilistic risk analysis, must be updated on a regular basis, at a frequency acceptable to the Regulator, and reflect the current status of the installation, the site and its environs.

11.3 The licensee must establish and implement processes for the periodic and systematic review and reassessment of safety cases.

11.4 The licensee must carry out a review and reassessment of safety and submit a report of said review and reassessment to the Regulator at 10 yearly intervals, or within such period and for such matters or operations as may be specified in a directive.

11.5 The licensee must comply with the provisions specified in 36-197: "Koeberg Licensing Basis Manual" regarding the following:

- a) The safety assessment of the installation.
- b) The risk assessment and demonstration of compliance with the safety criteria of the Regulator in accordance with the requirements of RD-0024: "Requirements on Risk Assessment and Compliance with Principal Safety Criteria for Nuclear Installations".

11.6 The licensee must comply with the provisions specified in KAA-709: "Process for Performing Safety Evaluations, Screenings, and Safety Justifications".

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12.0 MODIFICATION TO DESIGN OF PLANT

- 12.1 Modifications to the plant must be carried out in accordance with the requirements of the LD-1012: "Requirements in Respect of Proposed Modifications to the Koeberg Nuclear Power Station", augmented by the additional requirements as stipulated in Appendix A of this Licence.
- 12.2 The licensee must comply with the provisions specified in 36-197: "Koeberg Licensing Basis Manual" regarding the following:
- a) Control of Plant Design and Configuration
 - b) Modifications made to the plant or any other change which may impact on nuclear safety.
- 12.3 The fuel design of fuel assemblies, including lead assemblies, and associated fuel rods must be approved by the Regulator prior to use in the Koeberg reactors.
- 12.4 The Regulator's approval for the use of any particular fuel design must be based upon the licensee's justification of the fuel's anticipated satisfactory performance under specified operating conditions. The Regulator's approval is given via the acceptance of the reload core design for each specific reactor reload. Furthermore, the Regulator's re-approval is required for every change in the Plant's operating conditions where this change will have an impact upon the fuel's performance.
- 12.5 For each reactor reload the licensee must submit to the Regulator for its acceptance the core design documentation as specified in 36-197: "Koeberg Licensing Basis Manual". This documentation must be submitted prior to the planned criticality of the core.

13.0 DESIGN AND MANUFACTURING OF COMPONENTS

- 13.1 The design of structures, systems and components important to safety must consider the effects of ageing and wear on structures, systems and components both in the provision of design margins and the provision for monitoring, testing, sampling, and inspecting structures, systems and components to assess ageing mechanisms, verify predictions, and identify unanticipated behaviors or degradation that may occur during operation.
- 13.2 Design and manufacturing of components important to safety must be carried out in accordance with the requirements of RD-0034: "Quality and Safety Management Requirements for Nuclear Installations" and PP-0012: "Manufacturing of Components for Nuclear Installations".

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13.3 The licensee must comply with the provisions specified in 36-197: "Koeberg Licensing Basis Manual" regarding the design and manufacturing of components important to safety.

14.0 LIMITS AND CONDITIONS ON OPERATIONS

14.1 The licensee must ensure that operations are controlled and carried in compliance with approved limits and conditions and accordance with approved procedures.

14.2 The station must be operated in accordance with the Operating Technical Specifications and the provisions specified in 36-197: "Koeberg Licensing Basis Manual".

14.3 The Regulator may in the interests of safety, at any time revoke, amend or impose any limiting condition on operations.

15.0 MAINTENANCE AND IN-SERVICE INSPECTION

15.1 The licensee must comply with the provisions specified in 36-197: "Koeberg Licensing Basis Manual" regarding the following:

- a) In-service inspection and testing of all plant, systems, structures and components, including testing software.
- b) Monitoring and maintenance of the plant, systems, structures and components, including software.
- c) Monitoring of the reactor pressure vessels for radiation embrittlement.
- d) Inspection, Survey, Testing and Monitoring of the Containment Structures, Aseismic Bearings including upper and lower raft, and the Soil Cement Sub-foundation.

15.2 The provisions must provide for the preparation of a plant maintenance schedule. The licensee must submit to the Regulator, such part or parts of any plant maintenance schedule as the Regulator may specify.

15.3 The licensee must ensure that a full and accurate report of every examination, inspection, maintenance or test, of any part of a plant, system, structure or component, indicating the date thereof and signed by a suitably qualified and experienced person appointed by the licensee, is made.

15.4 The licensee must ensure, in the interests of safety, that examination, inspection, maintenance and testing of a plant or any part thereof is carried out:

- a) only by suitably qualified and experienced persons;
- b) in accordance with written procedures;
- c) within the intervals specified in the plant maintenance schedule; and

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d) under the control and general supervision of a suitably qualified and experienced person appointed by the licensee for that purpose.

15.5 When any examination, inspection, maintenance or test of any part of a plant reveals any matter indicating that the safe operation or safe condition of that plant may be affected, the suitably qualified and experienced person appointed to control or supervise any such examination, inspection, maintenance or test must forthwith bring it to the attention of the relevant management who must take appropriate action and ensure the matter is then notified, recorded, investigated and reported in accordance with approved processes.

15.6 Test results of the Soil Cement Sub-foundation must be reported to the Regulator in such a form that changes of properties can be related to time and that trends are made visible.

16.0 AGEING MANAGEMENT AND LONG TERM OPERATION

16.1 The licensee must ensure that an effective ageing management programme is developed, implemented and maintained to ensure that the required safety functions of systems, structures and components are fulfilled over the entire operating lifetime of the installation.

16.2 Where applicable, the licensee must establish and implement a comprehensive programme for ensuring long term safe operation of the installation beyond the time-frame established by this licence or the design limits.

16.3 The licensee must comply with the provisions specified in 36-197: "Koeberg Licensing Basis Manual" regarding the following:

- a) Integrated management of plant ageing.
- b) Development of a programme for Long Term Operation as applicable.
- c) Safety related programmes used for ageing management and evaluation for long term operation, these include the Maintenance, Equipment qualification, In-service inspection, Water chemistry and corrective action programmes.

17.0 DECOMMISSIONING

17.1 The licensee must comply with the provisions specified in 36-197: "Koeberg Licensing Basis Manual" regarding the decommissioning of facilities or any part thereof on the site.

17.2 The licensee must submit for approval a decommissioning plan, as early as possible in the life cycle of the activity or facility. The plan should be revisited and updated as necessary.

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17.3 A detailed decommissioning plan must be submitted to the Regulator for approval prior to the commencement of decommissioning activities.

17.4 It must be demonstrated to the Regulator that sufficient human and financial resources will be available from the time of cessation of operations until termination of the period of responsibility.

17.5 Where appropriate decommissioning may be divided into stages. If so specified by the Regulator, the licensee may not commence with nor proceed from one stage of the decommissioning to the next without the prior approval of the Regulator.

17.6 The licensee must establish and maintain a list of all contaminated areas on the site, which will require decontamination in the future.

18.0 PHYSICAL SECURITY

18.1 The licensee must comply with the provisions specified in 36-197: "Koeberg Licensing Basis Manual" regarding physical security.

18.2 The licensee must ensure the safety and security of the:

- a) site; and
- b) all installations and persons thereon,

18.3 The physical protection system must be designed to protect against the design basis threat, theft or diversion of radioactive material and sabotage.

18.4 The licensee must prevent unauthorised persons from entering the site or any part thereof.

19.0 DEALING WITH SITE

19.1 The licensee must ensure that every person authorised to be on the site receives instructions (to the extent that this is necessary having regard to the circumstances of that person being on the site) with regards to the risks and hazards associated with the nuclear installations and their operation, the precautions to be observed in connection therewith and the actions to be taken in the event of an accident or emergency on the site.

19.2 The licensee must implement approved processes for suitable training of all persons who have responsibilities for any operations which may affect safety.

19.3 The licensee must ensure that suitable and sufficient methods are employed on the site for the purposes of informing persons thereon of each of the following matters:

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- a) the meaning of any warning sign used on the site;
- b) the location of any exit from any place on the site, where such exit is provided for use in the event of an emergency;
- c) the measures to be taken by such persons in the event of any emergency.

20.0 AUTHORISED AND QUALIFIED PERSONS

- 20.1 The control room and the emergency shut-down panel controls must be manipulated only by individuals licensed by the Regulator as reactor operators or senior reactor operators, except that a trainee operator may manipulate the controls as part of his training under the direction and in the presence of a licensed reactor operator or senior reactor operator. Access to the emergency shut-down panel and work on the emergency shut-down panel must only be undertaken in the presence of a licensed reactor operator or senior reactor operator.
- 20.2 Two operators licensed by the Regulator must be present at the controls in the control room of each reactor at all times after the first fuel assembly has been loaded into the core and until such time as all fuel assemblies have been unloaded from the core.
- 20.3 All reactor operators and senior reactor operators licensed by the Regulator must comply with the requirements of LD-1081: "Requirements for Operator Licence Holders at the Koeberg Nuclear Power Station".
- 20.4 All candidates for reactor operator and senior reactor operator licences must comply with the requirements of LD-1092: "Requirements for Initial Operator Licensing at Koeberg Nuclear Power Station".
- 20.5 The simulator used in the initial and requalification training of reactor and senior reactor operators must comply with the requirements of LD-1093: "Requirements for the Full Scope Operator Training Simulator at Koeberg Nuclear Power Station".
- 20.6 The licensee must comply with the provisions specified in 36-197: "Koeberg Licensing Basis Manual" that ensures that only suitably qualified and experienced persons perform any duties, which may affect the safety of operations on the site, or any duties assigned by or under these conditions of licence.
- 20.7 Such provisions must allow for the appointment, as appropriate, of duly authorised persons to control and supervise operations, which may affect plant safety.

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21.0 QUALITY AND SAFETY MANAGEMENT

- 21.1 All activities embodied in the scope of this Licence must comply with the requirements of quality and safety management as contained in RD-0034: "Quality and Safety Management Requirements for Nuclear Installations".
- 21.2 Quality and Safety Management processes and procedures must be established, implemented and maintained in respect of all matters that may affect safety, in order to ensure compliance with the conditions of this licence.
- 21.3 The licensee must ensure the implementation and maintenance of a safety culture program to encourage a questioning and learning attitude to radiation protection and nuclear safety and to discourage complacency.

22.0 DOCUMENTS AND RECORDS

- 22.1 The licensee must comply with the provisions specified in 36-197: "Koeberg Licensing Basis Manual" regarding the keeping of adequate records to demonstrate compliance with the conditions of this licence.
- 22.2 The licensee must implement and maintain an approved document management system to ensure that every document required, every record made, every authority, consent or approval granted and every directive or certificate issue in pursuance of these conditions of licence is preserved for the expected lifetime of the facility or such other period as the Regulator may approve.
- 22.3 Operational reports must be submitted to the Regulator at predetermined periods, approved by the Regulator, and must contain such information as the Regulator may require on the basis of the nuclear installation's safety assessment.
- 22.4 An accounting and operating records system must be established and maintained to the satisfaction of the Regulator and reports must be made available to the Regulator of all fuel movements and consequent changes in material balances and fuel inventories, if so requested by the Regulator.

23.0 ORGANISATIONAL CHANGES

- 23.1 The licensee must comply with the provisions specified in 36-197: "Koeberg Licensing Basis Manual" regarding the control of changes to its organisational structure or resources that may have a bearing on health, safety and the environment as contemplated in the Act.
- 23.2 The provisions must provide for the classification of changes to the organisational structure or resources according to their safety significance.

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23.3 The processes must include a requirement for the provision of documentation to justify the safety of the proposed change and shall where appropriate provide for the submission of such documentation to the Regulator.

24.0 SAFETY COMMITTEES

24.1 The licensee must comply with the provisions specified in 36-197: "Koeberg Licensing Basis Manual" regarding the establishment of safety committee(s).

24.2 The provisions must ensure that safety committee(s) oversee and manage its safety responsibilities and to which it refers for consideration and advice:

- a) matters required by or under this licence;
- b) safety policies, procedures, processes or documents required by these conditions of licence or as the Regulator may specify and any subsequent alteration or amendment to said processes or documents;
- c) any matter affecting safety on or off the site which the Regulator may specify; and
- d) any other matter, which the licensee considers should be referred to a safety committee.

24.3 The licensee must ensure that the members of any such committee are suitably qualified and experienced, so as to enable said committee to consider any matter likely to be referred to it and to advise the licensee authoritatively and, so far as practicable, independently.

24.4 The licensee must ensure that a safety committee shall consider or advise only during the course of a properly constituted meeting of that committee. Minutes must be kept of all such meetings.

25.0 FINANCIAL SECURITY

25.1 The licensee must on an annual basis provide proof to the Regulator that any claim for compensation to an amount contemplated in Section 30(2) of the Act can be met.

25.2 The licensee must on an annual basis provide proof to the Regulator that the required financial and human resources are available to ensure the safe operation of the plant.

26.0 INSPECTION PROGRAMME

26.1 Pursuant to the provisions of Section 26(2) of the Act, the licensee must implement an inspection programme to ensure compliance with all conditions of the nuclear installation licence.

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27.0 EVENTS ON SITE

27.1 Occurrences as identified in LD-1000: "Notification Requirements for Occurrences Associated with Koeberg Nuclear Power Station" must be reported to the Regulator in accordance with the provisions of that document and as required by RD-0025 "Emergency Communication with the National Nuclear Regulator".

27.2 The licensee must comply with the provisions specified in 36-197: "Koeberg Licensing Basis Manual" regarding the notification, recording, investigation, reporting and closeout of events (incidents, accidents, etc.) occurring on the site.

28.0 PUBLIC SAFETY INFORMATION FORUM

28.1 In order to inform the persons living in the municipal area in respect of which an emergency plan has been established, in terms of Section 38(1) of the Act, on nuclear and radiation safety matters, the licensee must establish a Public Safety Information Forum as prescribed.

29.0 DISPLAY OF NUCLEAR INSTALLATION LICENCE

29.1 To ensure public access to the conditions specified in this licence, the licensee must at all times display copies of this Nuclear Installation Licence at the entrance to the installation.

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Appendix A (From k10000663N)

1. The classification of all Eskom Koeberg plant changes (permanent or temporary) including computer systems hardware and software changes, shall be based on the deterministic importance category of the most constraining component/system (highest safety classification) as determined in the safety review of the plant change (KAA-709 safety screening or safety evaluation). The modification process shall not allow for downgrades of the modification classification.

2. All safety related modifications (classification SR, CSR) shall be submitted to the Regulator for approval. Modifications classified as non-safety related that may incur radioactive dose to the public or personnel either during implementation or operation shall be submitted to the Regulator for approval. Modifications classified as non-safety related that are implemented in order to provide a mitigation function or that impact on a mitigation function during beyond design accidents shall be submitted to the Regulator for approval. The Regulator shall be informed of all non-safety related modifications at least 3 months prior to implementation. All non-safety related modifications should be adequately documented and accessible to the Regulator.

3. The modification process must consider the long term health of new components installed during a plant change. A comprehensive maintenance and inspection program for all components installed during a plant change must be provided to the Regulator as part of the modification proposal. Where new plant/components have been assigned safety functions by the design, Eskom must submit its functional testing programme to the Regulator as part of the modification proposal.

4. All modification submissions to the Regulator shall comprise of the elements below. Where these elements are absent from the submission without adequate justification, the submission shall be considered incomplete by the Regulator:
 - Detailed Design
 - Safety Review
 - Risk Impact Analysis
 - Manufacturing, Implementation and Procurement Specifications
 - Implementation Safety Case
 - Commissioning Requirements Document
 - Configuration Management Document
 - Maintenance and Inspection Programme for New Components
 - Functional Testing Programme
 - Independent Design Review Report

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5. For modifications where the detailed design was subject to Regulatory approval, field changes shall be submitted to the Regulator for information prior to restarting the plant. Where field changes significantly change the scope or intent of the modification or affect the safety assessment as assessed during the original safety review process, such field changes shall be submitted to the Regulator for approval prior to implementation.
6. Eskom shall maintain, sufficient and competent staff and resources to specify, set standards, manage and evaluate all work carried out by contractors or vendors during the plant change processes.
7. Installed modifications submitted to the Regulator for approval shall be assessed to determine if the plant change has met the original stated objectives and requirements. Any identified deficiencies shall be addressed and, where possible, preventative measures shall be applied to future projects. Where new plant / components have been assigned safety functions by the design, such new safety functions shall be adequately verified during the commissioning process. A modification effectiveness report shall be submitted to the Regulator for information within 2 years of completion of the installation of the modification. The report shall also provide evidence that code required inspections and commissioning tests were comprehensive and correctly implemented, and that all documentation relevant to the plant change are appropriately revised and implemented and/or archived.