

MEDIA RELEASE NPP Oversight: SGR/LTO REF: 9/1/10/20

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IMMEDIATE RELEASE

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MEDIA UPDATE: NUCLEAR SAFETY REGULATORY OVERSIGHT OF THE KOEBERG NUCLEAR POWER STATION

The prime responsibility of the National Nuclear Regulator (NNR) is to, amongst others, exercise regulatory control over the siting, design, construction, operation, manufacture of component parts, decontamination, decommissioning and closure of nuclear installations to protect people and the environment from the harmful effects of ionising radiation.

The NNR discharges this responsibility through a process of conducting authorisations, attaching conditions to authorisations and overseeing compliance to regulatory requirements. Authorisation holders (or prospective holders of nuclear authorisations) are required to perform safety assessments to demonstrate safety of the nuclear facility and compliance with applicable NNR regulatory requirements. The authorisation holder (licensee) of a nuclear facility bears the prime responsibility for ensuring that the nuclear facility is sited, constructed, operated and decommissioned in compliance with applicable safety requirements, approved plans and procedures.

In terms of the NNR Act, nuclear installation licences contain conditions deemed necessary to ensure the protection of persons, property and the environment against nuclear damage. The Koeberg nuclear power station is operated in terms of the Nuclear Installation Licence, NIL-01 Variation 19 and associated 29 conditions and is licensed to operate until 2024. The NIL-01, has been varied to include specific conditions relating to ageing management and Long Term Operations and provides for, in conjunction with Regulatory Guide 0027, the regulatory framework for long term operation for the plant. The draft NNR regulations on Long Term Operations of Nuclear Installations were submitted to the Department of Mineral Resources and Energy for promulgation and was subsequently published for public comment. Eskom notified the NNR in July 2020 of its intention to extend the lifespan of the Koeberg nuclear power station for another 20 years and will formally apply to the NNR for Long Term Operations early in 2021. The NNR is currently engaging with Eskom on the licensing schedule and associated deliverables, which includes the completion of the Third Periodic Safety Review of KNPS in support of the Long Term Operation safety demonstration. To this end, the NNR has completed a review of the Periodic Safety Review III basis document and the Long Term Operations licensing strategy for the Koeberg nuclear power station.

Monitoring safety during the removal or dismantling of the old steam generators

There are no nuclear safety consequence scenarios during removal of the old steam generators as the reactor is defueled during these activities. However, the NNR's safety focus during this phase is on monitoring radiation doses to workers to ensure they are kept as low as reasonably achievable and within regulatory requirements. To oversee this, the NNR inspectors will conduct inspections of all important removal activities of the old steam generators as well as the installation, testing and commissioning of the new steam generators.

Oversight of storage of the old steam generators

Eskom expressed an intention to store temporarily the old steam generators at a Transient Interim Storage Facility (TISF) on the Koeberg site. This is subject to obtaining regulatory approval from the NNR. To date, Eskom has applied to the NNR for an authorisation to commence with establishment of a of the old steam generator storage facility in the TISF. This application was published in the public domain and is currently under internal consideration by the NNR. The application suggests that the TISF will remain operational for about 10 years after the end of commercial operation of the Koeberg nuclear power station and does not specify a date. The NNR notes that the period is qualitative as a cooling period of approximately 10 years is required depending on the cask technology before fuel can be transferred safely for dry cask storage.

Eskom plans to eventually dispose the old steam generators at the Vaalputs National Waste Disposal Facility in the Northern Cape. This will also require NNR approvals for; ensuring that the waste packages are in compliance with the Vaalputs Waste Acceptance Criteria, the safe transport of the old steam generators and the process of final disposal at Vaalputs.

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About the National Nuclear Regulator

The mandate of the NNR is to provide for the protection of persons, property and the environment against nuclear damage through:

- The establishment of safety standards and regulatory practices:
- The exercise of regulatory control over nuclear installations, vessels propelled by nuclear power or having radioactive material capable of causing nuclear damage on board and any action capable of causing nuclear damage, to which the NNR Act applies, through the issue of nuclear authorisations and the provision of assurance of compliance thereto; and
- Ensuring that provisions for nuclear emergency planning are in place.

The facilities and actions regulated by the NNR are diverse, including the operation of nuclear power reactors, research reactors, nuclear fuel fabrication, nuclear technology applications and the mining and processing of uranium and other radioactive ores.

The NNR is also mandated to:

- Advise the Minister of Minerals and Energy on matters falling within its purview:
- Fulfil national obligations in respect of international legal instruments concerning nuclear safety; and
- Act as the national competent authority in connection with the International Atomic Energy Agency's Regulations for the Safe Transport of Radioactive Material.