

**Koeberg Public Safety Information Forum (KPSIF) Minutes of the meeting held
on Thursday, 29 June 2023**

Venue: Koeberg Visitors Centre (in-person)

Chairperson: Ms Smokie La Grange

Deputy Chairperson: Cyril Mack (Apologies)

Name and Surname	Organisation	Present
Becker, Peter	Koeberg Alert Alliance	P
Beyl, Trudy	Resident	Apologies
Browne, Peter	Resident	P
Davidson, Donald	Resident	A
De Roy, John	Resident	Apologies
Du Plessis, Austin	Cycling South Africa	A
Esau, Cele	Social Justice at Cape Town Unitarians	P
Esau, John Patrick	Son of Cele Esau	P
Gorgens, Deon	Resident	P
Goss, Clive	Resident	Apologies
Goss, Marga	Resident	Apologies
Harrison, Douglas	Resident	P
Iosiphakis, John	Resident	A
Jones, John and Anneke	Resident	P
Karsten, Timothy	Resident	P
La Grange, Duval	Resident	Apologies
Le Roux, Adrian	Resident	P
Lee, Nick	Resident	P
Lee, Anne	Resident	Apologies
Lewis, Gary	ABHOA	P
Malgas, Heinrich	Resident	P
Mashele, Rivoningo	Resident	P
Mayhew, Robert	Resident	P
Mayhew, Sylvia	Resident	P
Mayers, Dr Nadine	Resident	P
Mayers, Paul	Resident	P
McKinnel, Jenny	Resident	Apologies
Mutangadura, Tapiwa	Resident	A
Naylor, Paul	Resident	Apologies
Naidoo Andre	Resident	P
Nel, Andrea	Resident	P
Paulus, Elroy	Resident	P
Petersen, Lydia	Resident	P
Pieters, Marvin	Resident	P
Pieters, Nico	Resident	P
Scott, Peter	Resident	Apologies
Slabbert, Johan	Resident	P
Swart, Francois	Resident	P
Terblanche, Jurgen	Resident	A
Van Schalkwyk, Jacques	Resident	P
Watney, Tertius	Resident	P
Wotherspoon, Bruce	Resident	P

OFFICIALS		
Bester, Peter	National Nuclear Regulator	P
Bele, Joyce	Eskom Koeberg	P
Bruiners, Rodger	National Nuclear Regulator	A
Coetzee, Ubert	National Nuclear Regulator	A
Cronje, Nardus	Eskom Koeberg	P
Ditlhake, Kentse	Eskom Koeberg	A
Ellis, Frikkie	Eskom Koeberg	A
Featherstone, Keith	Eskom Koeberg	P
Flatela, Mvola	Eskom Koeberg	P
Franco, Johannes	City of Cape Town	P
Jeannes, Deon	Eskom Koeberg	P
Joshua, Debbie	Eskom Koeberg	P
Julius, Graham	Eskom Koeberg	A
Kotze, Anton	Eskom Koeberg	P
La Grange, Smokie	Chairperson	P
Mack, Cyril	PSIF Deputy Chairperson	Apologies
Mashele, Bravance	Eskom Koeberg	P
Maree, Marc	Eskom Koeberg	A
Maree, Vanessa	National Nuclear Regulator	A
Meyer, Fifi	Eskom Koeberg	P
Minnie, Johan	City of Cape Town	P
Moonsamy, Gino	National Nuclear Regulator	Apologies
Ncuru, Anele	Eskom Koeberg	P
Paul, Vernon	Eskom Koeberg	P
Phidza, Lewis	Eskom Koeberg	P
Pie Thabiso	DMRE	P
Silinga, Nangamso	National Nuclear Regulator	P
Stephanus, Aminah	Eskom Koeberg	A
Swart, Paul Cllr	Ward Counsellor (DA)	Apologies
Touffie, Sadika	Eskom Koeberg	A
Thomas, Mandy	City of Cape Town	P
Van Rensburg, Stephen	City of Cape Town	Apologies
Van Schalkwyk, Tobie	Eskom Koeberg	P
Valaitham, Mahesh	Eskom Koeberg	Apologies
Qabaka	Zameka	P

Abbreviation/definition list			
Abbreviation	Description	Abbreviation	Description
Accident	An unintended event, including operating errors, equipment failures or other mishaps.	Disaster Management	A continuous and integrated multi-sectorial, multi-disciplinary process of planning and implementation of measures aimed at: <ul style="list-style-type: none"> a) Preventing or reducing the risk of disaster b) Limiting the severity or consequences of disasters c) Emergency preparedness d) Responding rapidly and effectively to disaster; and e) Post-disaster recovery and rehabilitation
AFI	Area for Improvement – usually the outcome of a benchmarking exercise, which enables the identification of successful practices/strategies implemented by other organisations in the same or similar industry,	GCE	Group Chief Executive
Boron	A very hard, almost colourless crystalline metalloid element that in impure form exists as a brown amorphous powder. It occurs principally in borax and is used in hardening steel. The naturally occurring isotope boron-10 is used in nuclear control rods and neutron detection instruments.	ECC	Emergency Control Centre
CIA	Central Intelligence Agency	KNEP	Koeberg Nuclear Emergency Plan
Donax	A genus of small, edible saltwater clams, marine bivalve molluscs. The genus is sometimes known as bean clams or wedge shells or white mussels; Donax species have numerous different common names in different parts of the world.	CISF	Centralised Interim Storage Facility
CISF	Centralised Interim Storage Facility	SPF	Spent Fuel Pool
CSB	Cask Storage Building	TEM	Traffic Evacuation Model
DOC	Disaster Operations Centre	Evacuation	The rapid, temporary removal of people from the area to avoid or reduce short-term radiation exposure in the event of an emergency.
ECC	Emergency Control Centre	UAE	United Arab Emirates
EIA	Environmental Impact Assessment	INPO	Institute of Nuclear Power Operations
Emergency Plan	A document describing the organisational structures, its roles and responsibilities, concept of operation, means and principles for intervention during an emergency at Koeberg.	UPZ	Urgent Protective Action Zone
EPZ	Emergency Planning Zone	EPSOC	Emergency Planning Steering and Oversight Committee
FC	Functional Coordinator	CPA	Consumer Protection Act
IPP	Independent Power Producer	KEP	Koeberg Emergency Procedure

		mSv	The millisievert (mSv) is a measure of the absorption of ionising radiation by the human body.
ISO	International Standards Organisation	CCT	City of Cape Town
KNPS	Koeberg Nuclear Power Station	IAEA	International Atomic Energy Agency
NOU	Nuclear Operating Unit	SABC	South African Broadcasting Corporation
SGR	Steam Generator Replacement	TISF	Transient Interim Storage Facility
KPSIF	Koeberg Public Safety Information Forum	WANO	World Association of Nuclear Operators
LTI	Lost Time Injury	Emergency	An event that requires taking prompt action, or the special regulation of persons or property, to limit the risk to people's health, safety or welfare, or to limit damage to property or the environment.
MW	Megawatts. A unit of measure - one megawatt is equal to one million watts.	CCGT	Closed Cycle Gas Turbines
NECSA	South African Nuclear Energy Corporation SOC Limited	DOC	Disaster Operations Centre
NNR	National Nuclear Regulator	NOSCAR	The grading of NOSA for safety performance.
NOSA	National Occupational Safety Association	Radiation	Energy released in the form of particles or electromagnetic waves during the breakdown of radioactive atoms.
NSRB	Nuclear Safety Review Board	NRWDI	National Radiation Waste Disposal Institute
OCA	Owner Controlled Area	AECC	Alternate Emergency Control Centre
OEM	Original Equipment Manufacturer	FME	Foreign Material Exclusion
Outage	Refers to the maintenance period on a power plant when a number of activities are performed on equipment that keeps the plant running.	National Electricity Grid	The network of high-voltage power lines fed by the various power stations, which supplies electricity to the country.
PAZ	Precautionary Action Zone	EP	Emergency Plan
PSM	Power Station Manager	Sheltering	A protective action whereby members of the public stay indoors with windows and doors closed, to reduce their exposure to radioactive material in an emergency situation.
Public Notification	Notification to the public of an emergency and the appropriate protective actions to be taken by using the installed siren and loudspeaker system, as well as local authorities, local radio and television station.	EMP	Environmental Management Plan
Release	The controlled or accidental discharge of radioactive substances into the environment.	UPZ	Urgent Protective Action Planning Zone
SAPS	South African Police Service	KCWIB	Koeberg Cooling Water Intake Basin
SHEQ	Safety Health Environment and Quality	WAC	Waste Acceptance Criteria
SSA	Sea Shore Act	SAMG	Severe Accident Management Guideline
TEM	Traffic Evacuation Model	NERSA	National Energy Regulator of South Africa
UAG	Unplanned Automatic Grid Separation	Hazmat	Hazardous material

1. Welcome

The Chairperson, Ms Smokie La Grange, welcomed everyone to the June 2023 Public Safety Information Forum (PSIF) meeting.

2. Safety briefing

Ms Fifi Meyer, Head of the Koeberg Visitors Centre did the safety briefing informing the PSIF members of the safety protocols for the Visitors Centre including the alarms. She indicated where the emergency exit points, and assembly points are and cautioned everyone to use the rails when ascending or ascending the stairs.

3. MS Teams meeting protocol and PSIF Code of Conduct

The chairperson took the members through the PSIF protocol and PSIF Code of Conduct. She informed the meetings are recorded for reference and minute-taking purposes. She informed members to raise their hands if they have any questions and state their name for the record.

4. Apologies

The following apologies were tendered

- Mr Mahesh Valaitham (Mr Tobie van Schalkwyk stood in for him as Power Station General Manager)
- Mr Duval La Grange
- Mr Gino Moonsamy
- Mr Peter Scott
- Mr Stephen van Rensburg
- Ms Trudy Beyl
- Ms Anne Lee
- Mr Mothusi Ramerafe
- Cllr Paul Swart
- Mr Cyril Mack

5. Acceptance of the Minutes of the previous meeting of 30 March 2023

The following corrections were noted:

- Ms La Grange was at the meeting but was marked as absent.
- Ms Fifi Meyer to be added on the attendance register in the Minutes.
- Mr Keith Featherstone to be marked as present (he was marked as apologies).
- Mr Becker's question regarding the total weight of spent fuel at Koeberg on Page 11 - Mr Peter Becker commented that the answer was given in volume which he wants clarification for. He indicated that it was a question asked approximately three months ago and that it was recorded incorrectly from the transcribed Minutes. It should be weight not volume.
Mr Featherstone responded that it amounts to approximately 750kg per assembly which includes the assembly material itself and they discharge approximately – 52/56 fuel assemblies per cycle/per unit every 18 months replaced).
- Change Mr Meyers to Mrs Mayers on page 15
- The KPSIF abbreviation to be carried throughout the Minutes.

- Page 16 – fourth paragraph (Question by Mr Lee – it was not minuted that there was no response by the NNR).
- Mr Lee made a comment about the editorial quality of the Minutes pertaining to absence of the use of Koeberg Public Safety Information Forum (KPSIF) throughout the Minutes as was requested by the PSIF Chairperson before.

Query by Mr Becker

Mr Becker did not support of the approval of the Minutes due to the various mistakes that needs to be amended first prior to it being approved. He also expressed his concern that Minutes are sent out too late (three months after the meeting).

Response by the Chairperson

The Chairperson explained that the Minutes has to be checked by various managers before it is released to the members, which takes time. She also confirmed that it is released in line with the expectations of the PSIF Constitution.

Comment by Mr Becker

Mr Becker explained that as per the KPSIF Constitution the Minutes must first be checked by the members before it is distributed to anyone else.

Response by Mr Phidza

Mr Phidza, explained that as per Mr Becker a question that he posed which he indicated was misinterpreted, therefore the Minutes needs to be corrected and approved in the meeting. He explained that the Constitution states that the Minutes need to be finalised and approved in the meeting. He also explained that the process of transcribing the Minutes from the recording takes time to do as it is a tedious process.

Request by Mr Becker

He requested that the Draft KPSIF Minutes to be sent within two weeks after the meeting, so the members can review it and send their feedback and the corrections, so it can be amended before the next meeting and in so doing prevent too much time being taken up in amending Minutes in the Meeting.

Comment by Mr Lee

Mr Lee commented on an email sent to Ms Joshua about the editorial quality of the Minutes that he has sent. He used the example of the KPSIF not being used consistently throughout the Minutes even though it was requested by the KPSIF Chairperson in a previous meeting.

Response by Chairperson

Ms La Grange confirmed that she did request or the KPSIF abbreviation which refers to the Koeberg Public Safety Information Forum, to be carried throughout the Minutes.

Comment by Ms Petersen

Ms Petersen sought clarity on Mr Phidza's comment on her not understanding something and that he thought that she understood as she was not clear on what he meant. She enquired whether he referred to the weight of the spent fuel as per her question in the last KPSIF, as it was not answered.

Response by Mr Phidza

Mr Phidza explained that he referred to Minute-taker who transcribed the Minutes as per the recording and her being under the impression that she understood what Ms Petersen was asking in her question, pertaining to the weight of the spent fuel.

Comment by Mr Mayhew

Mr Mayhew indicated that when the Minutes are received that the members have an opportunity to make contact with Ms Joshua to indicate any corrections/changes that needs to be made before the next meeting.

Comment by Mr Becker

Mr Becker requested that the current Minutes with the corrections/amendments to be sent out two weeks after the Meeting. He also requested that the presentations be added to the Minutes as addendums as per the Constitution which states that the Minutes of the meeting will include the information that was shared in the meeting. Mr Becker requested that the Minutes thus be added as addendums to the Minutes.

Response by Mr Phidza

Mr Phidza explained that the meeting the presentations cannot be sent as addendums to the Minutes as it will lack the necessary context especially to the members who did not attend the meeting, as was explained before. He indicated that summaries of the presentations will be included in the Minutes from hereon.

Comment by Mr Harrison

Mr Harrison commented that by conducting the KPSIF meeting online as was done during the past three years, worked very well, as it will allow for voice and video recording. This will provide an opportunity for the recording to be made available to the members.

Comment by the Chairperson

The chairperson indicated that the plan is for the next KPSIF (September 2023) meeting to be run as a hybrid meeting.

Comment by Mr Featherstone

Mr Featherstone indicated that with the request for summaries of the presentations to be added to the Minutes, it will be an unrealistic expectation for the Minutes to be available within two weeks.

Comment by Mx Esau

Mx Esau indicated that they concur with Mr Bester that the Minutes should not take three months to be done and another three months to be finalised as they feel there are only a few items that need to be adjusted. She also sought clarification as in her understanding the Minutes of the meeting can be circulated amongst the members who attended the meeting before it is more broadly circulated which was said it couldn't happen. It was also said that Minutes should be approved within the three-month period and as was established it should not take two and a half months to complete as it will defeat this purpose. They also enquired about the process to change the Constitution as it (the current constitution) is not fit for purpose.

Comment by Mr Phidza

Mr Phidza responded to the member that they can discuss the issue regarding changing the Constitution after the meeting. Mr Phidza enquired when the members received the Minutes and asked how many people informed Ms Joshua about any changes (only two people indicated that they informed Ms Joshua about changes). He urged members to please review the Minutes as soon as they receive it and sent their changes to Ms Joshua as soon as possible, before the meeting, for her to effect all the changes, and resend the updated Minutes for final review and acceptance in the meeting.

Comment by the Chairperson

The Chairperson informed the members that as per the discussion, the Minutes will be completed as Draft Minutes and it will be corrected, finalised and approved in the next meeting.

Comment by Mr van Schalkwyk

Mr van Schalkwyk indicated that the Minutes as per protocol needs to be finalised in the meeting and can be accepted with the changes/amendments. If the changes are not accepted, it needs to be brought back into the meeting for final approval.

5.2 Action list review as per the 30 March 2023 (see updated Action Item list at end of Agenda)**Action item 1: Opening of the Nature Reserve (Keith Featherstone)**

It was decided that this item be kept on the agenda until the reserve is opened.

Action item 2: Hybrid KPSIF

It was decided that we will use the September KPSIF to pilot the Hybrid PSIF. This means that the meeting will still be held at the Visitors Centre for those who so prefer however it will also be hosted online for those who prefer the online meeting.

6. Presentations:**6.1. Koeberg quarterly feedback - Mr Tobie van Schalkwyk (Acting Power Station General Manager)****Summary of presentation:**

Mr van Schalkwyk's presentation covered the following topics:

- Radiological Safety
- Outage 126 Overview and Steam Generator Replacement Update
- Noteworthy Events
- Concluding Remarks

Radiological Safety:

Public dose

Analysis of current performance:

- Less than 1% of NNR public dose constraint of 0.25 mSv.
- Stable performance well below the legal limit.

Analysis of current radiological performance shows the following

- Well within NNR approved Annual Allowable Discharge Quantities
- No reportable effluent releases
- Confirms that the impact on the environment of the Koeberg Nuclear Power Station (KNPS) effluent discharges remains minimal and below limits

Analysis of environmental survey programme shows the following:

Confirms that the impact on the environment of the KNPS effluent discharges remains minimal and below limits

Status update on Koeberg's Performance (Plant Status and Industrial Safety)

Plant Status:

Unit 1:

- On outage (Outage 126)
- Domain - Reactor Completely Defueled (RCD)
- Critical path - SGR window

Unit 2:

- Online for 68 days

Safety System performance:

Safety System availability

- May 2023: Satisfactory performance for High Head Safety Injection, Auxiliary Feedwater system and Emergency Diesels.

Chemistry performance:

Chemistry Performance Index (CPI): Target : < 1.01 (for May 2023)

- **Unit 1:** The monthly CPI for unit 1 had been 1.00.
- **Unit 2:** The monthly CPI for Unit 2 remained at 1.00

Noteworthy events:

Challenge/event: Reactor trip

Component/area: Unit:2

Summary:

- On **15 April 2023 at 04:06**, the Unit 2 reactor tripped on a low-low Steam Generator level.
- The weekly feedwater stop valve partial stroke test on the steam driven feedwater pumps was performed (according to plan) 20 minutes prior to the reactor trip.
- The weekly feedwater stop valve spuriously closed, and the steam driven feedwater pump speed and flow was decreasing, and the pump was manually tripped. The steam driven feedwater pump speed increased but tripped on overspeed due to load demand being above its design capabilities. The runback signal only started with the trip of the steam driven feedwater pump.
- The motor driven feedwater pump started with the runback signal and only reached full flow after the steam driven feedwater pump had tripped.
- As a result of the steam feed pumps tripping, the SG levels could not be maintained and continue to decrease, and reactor tripped on low-low SG level.
- Reactor Trip Procedure (KWB-E-0) was entered, and the Control Room Operators made the unit safe at Hot Shutdown conditions.
- The unit was synchronised to the grid within 41 hours after the trip, with two feedwater pumps lined up.

Outage 126 update:

- Outage 126 started on 10 December 2023.
- Original commercial operation date was 30 June 2023.
- Due to various reasons (like safety events, technical issues, project interfaces and coordination) related to the Steam Generator Replacement

(SGR) Project, the commercial operation date has moved to 14 September 2023.

Update on the Critical Path – Steam Generator Replacement:

- The Original Steam Generators (OSGs) have been removed from the Containment Building and now stored in the Original Steam Generator Interim Storage Facility (OSGISF).
- The Replacement Steam Generators (RSG) have been fitted in the upright position within their cubicles and connected to the primary piping, secondary feedwater piping and steam supply piping.
- The fitment of the lagging and cladding, small bore piping and instrument lines are currently in progress.

Current challenges / emergent issues:

- Schedule adherence remains below expectations (currently at 60%) and slow progress on outstanding bulk work.
- Complete the weld repair on the RSG2 main steam supply pipe (rework).
- Concrete repairs required on the RSG cubicles (emergent defects).

Concluding Remarks:

- Koeberg continues to operate safely and reliably.
- **Koeberg** is currently busy with **Outage 126 execution** and **Outage 226 Preparation**
- As part of Plant Availability, Outage performance remains a priority focus area. Additional outage oversight meetings have been established to drive the required progress / productivity.
- Specific interventions have been implemented to reduce industrial safety incidents and to prioritise the well-being of staff and contractors.

Questions arising from the presentation:

Question by Mr Mayhew

Mr Mayhew enquired on how far behind Koeberg were on the outage.

Response by Mr van Schalkwyk

Mr van Schalkwyk explained that due to challenges experienced on the outage plan as a result of the Steam Generator Replacement, commercial operation has been scheduled for 14 September 2023.

Question by Mr Mayhew

Mr Mayhew asked what the original commercial operation target date were.

Response by Mr Vernon Paul (Koeberg Plant Manager)

Mr Paul informed the member that commercial operation was originally scheduled for 30 June 2023 and has been moved to 14 September 2023.

Question by Mr Becker

Mr Becker asked what the Y-axis on the diagramme was depicting.

Response by Mr van Schalkyk

Mr van Schalkwyk responded that it indicates the water level that they maintain in the primary system.

Response by Mr Featherstone

Mr Featherstone added that the red part on either end of the graph indicates when the plant is at operating temperature and pressure. The colours (red or blue) are an indicator of whether the plant is at operating mode or not.

Question by Mr Becker

Mr Becker enquired whether there were any near misses logged and reported during this outage and how many there has been in the outage thus far?

Response by Mr van Schalkwyk

He explained that on a daily basis all near misses for both Eskom staff and contractors are reported via their daily internal publication (Communication Pack). He informed the members (as extracted from the daily communication pack) that for the duration of the outage to date, Eskom have recorded one x Lost Time Injury (LTI), eight medicals, four x first aid incidents, 11 near misses and 198 unsafe conditions, and for contracting staff, four LTIs, five medicals, 13 x first aid incidents and 42, near misses were reported to date. He explained to the members that the unsafe conditions for contractors and Eskom employees are added together. He further explained that all Lost Time Injuries need to be managed at the unsafe condition stage, in order to see any change.

Question by Pieters

Mr Pieters enquired what the staff complement is between Eskom and contractors.

Response by Mr van Schalkwyk

Mr van Schalkwyk explained that they have over 100 staff and close to 4000 contractors which come onto the Koeberg site at varied times throughout the outage (this number is not all at one time).

Question by Mr Paulus

Mr Paulus wanted to know how Koeberg compares in terms of global standards and international best practice.

Response by Mr van Schalkwyk

Mr van Schalkwyk explained that Koeberg conducts regular international benchmarks towards improvement and that Koeberg compares favourably with the rest of the world. The Institute of Nuclear Power Operations (INPO) and the World Association of Nuclear Operators (WANO) do regular reviews and assessments in order to evaluate Koeberg on how they conduct our business. During these reviews, gaps in performance are identified and strengths and weaknesses identified.

Comment by Mr Featherstone

Mr Featherstone explained that when it comes to safety, it is difficult to determine what is acceptable. At Koeberg their target is to have zero injuries, because safety is one of the indicators that you want to be at zero and if considering a target of zero the safety statistics that was shared are not acceptable.

Question by Mr Paulus

Mr Paulus asked if the information pertaining to Koeberg's results from the reviews and benchmarks are available to the public and where they can access the information/reports.

Response by Mr van Schalkwyk

Mr van Schalkwyk informed the member that the information can be made available upon request.

Question by Mr Mayhew

Mr Mayhew enquired how this outage running late is affecting the upcoming Unit 2 outage and when the planned start date for the Unit 2 outage is.

Response by Mr Paul

Mr Paul explained that the Unit 2 outage (Outage 226) has been moved to a later date due to the Unit 1 outage running late and to allow them time to complete this outage and also to ensure they don't have both units offline at the same time. He informed the member that the current outage on Unit 1 (Outage 126) is scheduled for completion on 14 September 2023 and that the Unit 2 outage is scheduled to start on 20 October 2023.

Question by Mr Mayhew

Mr Mayhew enquired if the lessons learnt from the Unit 1 outage will be incorporated into the Unit 2 outage in order for them do perform the next outage more effectively and in quicker time.

Response by Mr Paul

Mr Paul explained that Koeberg forms part of INPO and at the Atlanta Centre you will find chiseled into the wall the word excellence, but the last e is not completely formed, indicating that although they strive for excellence, the journey to excellence is continuous.

Question by Mr Mayhew

Mr Mayhew enquired whether they have the necessary equipment on site for the outage on Unit 2.

Response by Mr Paul

Mr Paul indicated that they have the equipment on site, but it needs to be serviced, calibrated and prepared for the next outage.

Question by Mr Becker

Mr Becker enquired when the outage on Unit 2 will be concluded.

Response by Mr Paul

Mr Paul indicated that the Unit 2 outage (Outage 226) will commence on 20 October 2023 and is planned for a duration of approximately 260 days.

Response by Mr Featherstone

Mr Featherstone explained that the most important learning taken from the current outage is that they were naïve in believing the main contractor when they indicated the duration in which they believed they could realistically complete the work (Steam Generator Replacement) especially considering that it was the first time they were doing it in South Africa. They (Koeberg) underestimated the duration of the outage and did not build in enough buffer based on the work scope to be covered, and by doing this they put themselves under huge pressure in the eyes of the greater Eskom organisation and the country as it appears that Koeberg is continuously slipping on the outage. He further explained that Koeberg has been slipping on the plan as it was based on a plan that they thought was a realistic and achievable which was not the case. Eskom has subsequently awarded Koeberg more time in which to complete the outage and not continually in a mode of defending why the unit is not back online yet.

6.1.1 Eskom NNR Emergency Plan Exercise feedback: Ms Anele Ncuru - Emergency Management Manager

Summarised presentation:

Original NNR Findings	Eskom – completed Actions	Eskom – Actions (In-progress)
<p>(NC 7&9) Non compliances (NCs) identified in the Medical centre and at Tygerberg:</p> <ul style="list-style-type: none"> Absence of the Appointed Medical Practitioner (AMP), which initially led to nurses sending internally contaminated patient to the wrong off-site medical facility (corrected during the NNR exercise). Some Nurses/Doctors not wearing Proper PPE and dosimetry. 	<p>AMP was coached on prioritizing the NNR exercise. On-site Medical and TRCF staff have been trained (findings from the NNR exercise was included in this training) Posters have been displayed on site and at TRCF, sharing the PPE and dosimeter requirements. Disaster Medicine exercise have been conducted with Tygerberg.</p>	<p>Additional Tygerberg staff to be trained. (Tygerberg to provide training dates) Eskom specific exercise to be conducted with Tygerberg. (August 2023) * Working with Medi-clinic to establish a RCF closer to Koeberg. (Long Term)</p>

Original NNR Findings	Eskom – completed Actions	Eskom – Actions (In-progress)
<p>(NC1-6) Non compliances identified for the Field Survey teams pertaining to:</p> <ul style="list-style-type: none"> Completion of Survey Form Issuing of Potassium Iodate (KIO3) tablets Monitoring of the vehicle for residual contamination Proactive chasing of the leading edge of the radioactive plume Sample handling and labelling ALARA Practices 	<p>Reinforced requirements and expectations by means of coaching, Field Team Briefs. Where required, the relevant checklists have been updated.</p>	<p>Inclusion of all key learnings from the exercise during Field Survey Team and Field Team Leader requalification training. (Aug 2023)</p>

Original NNR Findings	Eskom – completed Actions	Eskom – Actions (In-progress)
<p>(NC-8) Procedures, KEP-087 (Medical Response to a Radiological Accident Or Incident) & KAA-583 (The Provision And Application Of First Aid And Emergency Care), have passed their review dates.</p>	<p>Both KEP-087 and KAA-583 have since been revised, updated and have been replaced in the applicable cabinets and files. In future, all Emergency Plan Procedure status are being tracked at our Emergency Plan (onsite) Forum.</p>	<p>None</p>
<p>(NC-10) The whole-body counter (WBC) instrumentation used to measure internal radioactivity, was not available during the exercise.</p>	<p>On site WBC to be used with shielding in emergencies.</p>	<p>Alternative means of quantifying internal contamination if the on-site WBC is unavailable to be determined and implemented. (Long Term)</p>

Concluding remarks

Koeberg has evaluated the findings as identified by the National Nuclear Regulator and actions have been implemented to address the findings. They are confident that they will meet the actions where implementation is still in progress as per the dates specified.

Questions arising from the presentation:

Question by Mr Becker

Mr Becker enquired whether a non-compliance (NC) was missing since reference were made only to NC-8 and NC-10.

Response by Ms Ncuru

Ms Ncuru explained that the non-compliances 7 and 9 were referenced on the previous slide.

Question by Mr Mayhew

Mr Mayhew asked who were qualified to train the personnel at Tygerberg Hospital.

Response by Mr Cronje

Mr Nardus Cronje (Senior Physicist – Emergency Management) informed the member that he reports to Ms Ncuru in the Emergency Management Department and that he is responsible for the training. He explained that his role is not to train the medical staff on their specific jobs but to train them on all radiation aspects and how it interacts with the medical aspects. The training is essentially about placing risks in perspective as it relates to the prioritizing of the medical aspects over the radiation aspects in certain situations, and also the level of radiation they should be concerned about.

Question by Mr Mayhew

Mr Mayhew enquired whether Tygerberg has a specific ward/facility dedicated to contaminated patients as a result due to radiation.

Response by Mr Cronje

Mr Cronje confirmed this and added that they train staff on the theoretical aspects which is followed by a walk down of the facility with them.

Question by Mr Mayhew

Mr Mayhew enquired about the numbers that are being trained and whether the training will continue.

Response by Mr Cronje

He informed the member that the numbers varied from 10 to 40 trainees based on availability. He also confirmed that the training is ongoing and continuous.

Question by Mr Paulus

Mr Paulus was interested in Koeberg's interaction with the Disaster Risk Management Centres and the Provincial Government of the Western Cape as his experience during the Xenophobic crisis he was part of a team and they engaged with those departments as a first point of contact especially in dealing with trauma as a result of radiation and related issues.

Response by Ms Ncuru

Ms Ncuru informed the member that his question will be covered by the City of Cape Town who is in attendance and who will be presenting on those aspects.

Question by Mr Becker

Mr Becker enquired about the outstanding items and the stipulated time frame in which they need to be addressed.

Response by Ms Ncuru

Ms Ncuru explained that the due date for all the outstanding items is set for end of August 2023, of which some actions are long-term actions such as the whole-body counter issue as it requires an investigation first, before the issue can be permanently resolved.

Comment by Mr Featherstone

Mr Featherstone clarified that the original findings identified by the NNR has already been dealt with and closed, and what Ms Ncuru was referring to (whole-body counter issue) was what Koeberg was doing over and above the finding to ensure the issue is permanently resolved.

6.2 NNR Emergency Plan Exercise: City of Cape Town feedback on non-compliances/actions: Mr Johan Minnie - Head of the City of Cape Town Disaster Management Centre

Question by Mr Mayhew

Mr Mayhew expressed concern in one of the NNR findings which was the non-availability/non-participation of the Department of Social Development (DSD) in the exercise, due to a lack of resources and in their response that they will be available in a real emergency. Mr Mayhew was concerned about the (DSD) lack of urgency and not treating the exercise like a real emergency, which is the purpose of these exercises.

Response by Mr Minnie

Mr Minnie explained, that although they were disappointed in the response from the Department of Social Development, they do not have a legislative authority over them in an exercise.

Question by Mr Mayhew

Mr Mayhew enquired about the role of the Department of Social Development (DSD).

Response by Mr Minnie

Mr Minnie explained that the DSD is focused on social and psychosocial support, which relates to the welfare of people.

Question by Mr Becker

Mr Becker enquired whether there is a Memorandum of Understanding (MOU) that is signed between them and the City of Cape Town.

Response by Mr Minnie

Mr Minnie informed the member that as a Provincial Department they are not fully included in the MOU.

Comment by Mr Becker

Mr Becker enquired how as members of the public they can put pressure on the right people and places to ensure the City has the necessary authority to take action.

Response by Mr Minnie

Mr Minnie explained that the DSD did apologise profusely and that the City can just keep reminding them of their responsibility.

Question by a member

The member enquired whether intergovernmental relations applies in holding them accountable.

Response by Mr Minnie

Mr Minnie explained that it would apply and that in the situation, they (City of Cape Town) made contact, with them, discussed the matter and they have their commitment that the behaviour will not be repeated.

Question by Mr Mayhew

Mr Mayhew enquired about the size of the Mass Care Centre (MCC) team and the number of people target to be evacuated to the MCC.

Response by Mr Minnie

Mr Minnie informed the member that there is about 40 people in the Mass Care Centre team. He explained that they targeted 1500 people to be evacuated which was the target for the MCC for the exercise.

Comment by Mr Becker

Mr Becker sought clarity on Mr Minnie's comment that the City of Cape Town disagreed with the NNR finding in this matter, he found it interesting, especially since there is no dispute resolution for this and since no one has authority over the other.

Response by Mr Minnie

Mr Minnie explained that while they are in the process of implementing corrective actions to improve the situation, so no dispute has been lodged, they just feel that the interpretation of the Non-compliance 12 (NC-12) was not 100% accurate.

Question by Ms Petersen

Ms Petersen questioned whether the team of 40 people manning the Mass Care Centre. are able to manage and sustain the influx of 1500 evacuees at a time.

Response by Dr Minnie

Mr Minnie explained that this is only one MCC and depending on the situation and the number of people that needs to be evacuated, multiple MCCs might have to be activated.

Comment by Dr Minnie

On the finding that contaminated from the decontaminated water was running on the ground uncontained. Mr Minnie explained that if the SANDF team is not available, the options to deal with contaminated water was to pump it into tanks or bladders on site or to manage the flow into store water or wastewater but block the flow so it can be contained on site or close as possible to the site. In the exercise the Fire Services didn't activate a tanker for the exercise to collect the water.

Question by Mr Becker

Mr Becker explained that the issue was not the unavailability of a tanker, which in itself is not the solution, but that the (contaminated) water was not contained and as a result flowed from the parking area into the drains, rivers and into the sea.

Response by Dr Minnie

Mr Minnie indicated that they are addressing this in their procedures relating to decontamination by ensuring they have the right resources on site.

Comment by Mr Becker

Mr Becker raised a concern in considering how frequently these exercises are conducted and yet they have not found a way to contain the contaminated water.

Response by Dr Minnie

He explained that this was the first time the SANDF (Navy) Chemical, Biological and Radiological (CBR) Mass Decontamination Unit was unavailable for an exercise.

Question by Mr Mayhew

Mr Mayhew enquired about the time frame required to train people in order for them to be ready for the exercise, especially in the light of the fact that the SANDFs Naval team was disbanded, as per Dr Minnie's presentation.

Response by Dr Minnie

Mr Minnie indicated that they have enquired about the time frame in which the team will be reconstituted for which they are still awaiting a response.

Response by Ms Thomas

Ms Thomas indicated that unfortunately it is not within the City's authority to ensure that a decision is made by the SANDF. The most they can do is to keep reiterating the importance and taking it up with National.

Question by Mr Mayhew

Mr Mayhew enquired who is ensuring that this issue is resolved.

Response by Dr Minnie

Dr Minnie indicated that the issue has been tabled at the Emergency Planning and Oversight Committee (EPSOC) which is chaired by the Department of Mineral Resources and Energy and that they hope that this will gain traction on a national level.

Question by Ms Petersen

Ms Petersen enquired whether they couldn't employ a specific team that is trained on an ongoing basis to deal specifically with the exercises and emergency evacuation drills.

Response by Dr Minnie

Mr Minnie explained that the concept of a specific incident management team for a specific incident that trains together and are deployed for emergency exercises are in place. He further explained that they are in the process of building teams that know and understand each other and that work together on specific hazards even though there will be overlaps.

Question by Mr Mayhew

Mr Mayhew queried the timeline given by the NNR for when actions needed to be closed out.

Response by Dr Minnie

Mr Minnie responded that all the actions are due by end August 2023.

Comment by Mr Mayhew

Mr Mayhew enquired whether they will be able to meet the implementation date of end August 2023.

Response by Mr Thomas (City of Cape Town)

Ms Thomas responded that they were not given a specific due date by the NNR but that the NNR usually requests a date from the city in which they will be able to close out/implement all the actions and keep them to those dates.

Comment by Mr Becker

Mr Becker expressed his deep concern and disappointment at the lack of equipment. He asked it if was fair to assume that should there be an emergency today, that (the City of Cape Town) will not be able to protect the public and the environment from radioactive contamination due to the lack of equipment.

Response by Dr Minnie

Dr Minnie explained that the City of Cape Town Hazardous Materials Response Team and the Provincial Hazardous Working Group has been alerted about the issue and they will deploy their resources to the best of their ability to address the issue. He reiterated that the tankers and pumps are available, and that their water and sanitation services are able to block of sewage and stormwater systems. He confirmed that they will be able to respond.

Comment by Mr Becker

Mr Becker commented that as per international best practice the onus is on the Operator which in this case is Eskom, to supply the tanker/bladder. So, Eskom is responsible to supply the equipment. He explained that in the United States the regulator will withdraw the operating license of the organisation in this scenario which is not done in our country.

Response by Mr Featherstone

Mr Featherstone explained that the onus rests on Disaster Management under the legislation of the country to determine who is responsible. He further explained that in an exercise they don't have the legislated mandate like they would have in an actual emergency. He explained that if the expected responders don't have the capability to participate in an exercise scenario, it puts pressure on the City to deal with issues that

should be dealt with by other organisations. The Emergency Planning and Oversight Committee (EPSOC) is the vehicle used to ensure national departments are held liable.

Comment by Mr Becker

Mr Becker indicated that this has happened been six months ago and the issue has not been dealt with or resolved and he foresees that in another 18 months when the next Emergency Plan exercises happen, the issue would still not be resolved. He added that the same issue happened in 2014 which is nine years ago. He felt that no one is trying to resolve the issue and that the matter is not taken seriously and that the attitude displayed is “that it will never happen, so we don’t have to get it” which is evident in the lack of urgency displayed by the absence of a of resolution in the six months that have passed. He expressed his disappointment and dissatisfaction in the lack of urgency expressed by the city in not taking the matter seriously enough to actively pursue a resolution.

Response by Dr Minnie

Dr Minnie reiterated that they are utilising every available avenue and opportunity to raise the issue.

Comment by Ms Petersen

Ms Petersen expressed concern in the attitude expressed by a department who didn’t view the exercise as a real emergency and thus, they couldn’t come, and if the City of Cape Town has to constantly “knock on doors” to get a response and resolution, then it seems that that they don’t think that it could be a real emergency. exercise is not viewed as an emergency. She questioned having an evacuation plan if the emergency exercises are not taken seriously and dealt with as a real emergency. She feels that there should be oversight and that the matter should be addressed as soon as possible or taken to another level for it to be addressed and dealt with, as the matter cannot continue, because the safety of the public and the environment is at stake.

Response from Dr Minnie

Dr Minnie agreed with the the member and explained that the Emergency planning Oversight Committee

Comment by Mx Cele Esau

The member expressed that there is a real concern around safety and that there is a challenge with the type of communication that is available in the current climate. She thanked Eskom for making it clear that they are serious about going above and beyond to make Koeberg safe. She highlighted the fact that everyone has a part to play as dealing with nuclear is very and precarious which requires everyone to be on board otherwise it will not be safe. She personally felt that due to too many variables (Koeberg) it is not safe.

6.3 Koeberg Long-term operation update – Ms Bravance Mashele

Summarised presentation:

Overview of topics covered in the presentation:

- Impact of Koeberg nuclear power station on the national grid and electricity supply to the Western Cape
- Long Term Operation (LTO) of nuclear power plants
 - LTO Definition
 - Nuclear Safety Assessments for LTO
 - Progress status on the 2022 safety aspects of long-term operation (SALTO)
 - mission issues raised
 - Information on the public domain
- Radioactive waste management for LTO
- Conclusion

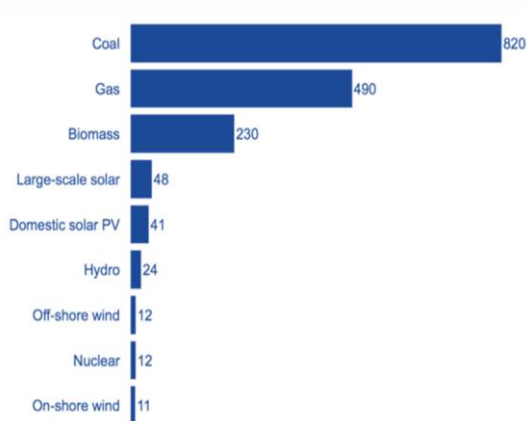
Koeberg overview:

- Koeberg Nuclear Power Station (KNPS) is the only base load power station within the Western Cape grid.
- The Western Cape grid connects to the Mpumalanga Generation pool via transmission line which are more than 1000 km away (400 kV and 765 kV),
- If KNPS is not in service, there would be large active and reactive power losses. These losses occur when transporting power over long distances.
- KNPS is categorised as base load and the inertia of its large turbine and generators contributes to frequency stabilisation of the Southern African Power Pool (SAPP).
- If KNPS is shut down in 2024, this **would put the electricity system under immense strain**; also considering the IRP indicates a significant amount of ageing coal power plants will retire before 2030.

Environmental insights:

- Nuclear remains one of the lowest carbon-emission sources of energy and KNPS life extension will contribute to South Africa's commitment to zero carbon by 2050 in terms of the Paris Agreement,
- Nuclear plants are among the cleanest sources of energy at 12 gCO₂/kWh since nuclear plants have no direct emissions.
- Water usage is a critical issue in South Africa. To ensure low water usage, the steam cycle at KNPS is cooled by sea water and not freshwater, so the freshwater usage is low.
- Radiation exposure requirements and limits will be applicable and will still need to be respected, in accordance with Regulation for Safety Standards and Radiation Practices (R388)

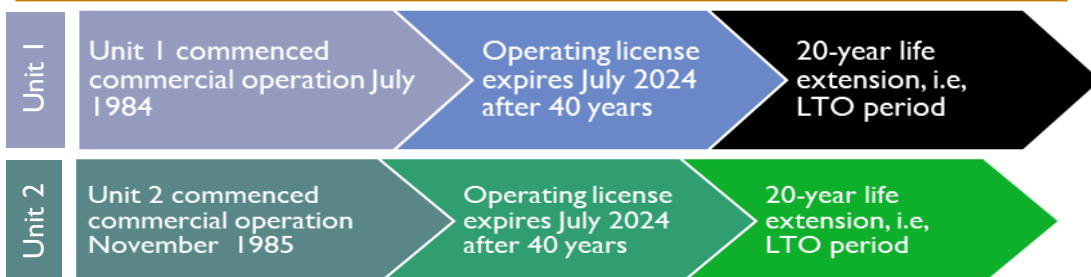
Lifecycle Emissions from electricity generation, gCO₂/KWh



LTO overview

- LTO - term used for extending operation beyond its original operating licence term, typically 40 years.
- It is supported by nuclear safety assessments to demonstrate safe operation for the additional intended period.
- Regulation R266, LTO of Nuclear Power Plants.
- Requires National Nuclear Regulator (NNR) approval, therefore strict oversight from NNR.
- There are 133 nuclear reactor units that have been in operation for 40 years or more.

Lifecycle of the units



- KNPS must submit a safety case to the National Nuclear Regulator demonstrating safe operations will be achieved for the intended 20-year period.

Redacted safety case issued to the public on direction from the NNR:

- In line with the Promotion of Access to Information Act (PAIA), Koeberg has not previously supplied unredacted version of the business documentation for the following reasons:
 - Personal information has been redacted in terms of section 34(1) of the Act,
 - In terms of section 42(3)(b), financial information has been redacted, as this could cause harm to the commercial and/or financial interests of the public body,

- Third-party information has been redacted in terms of section 37(1)(a), as Eskom is bound by a duty of confidence owed to third parties,
 - Information that is an opinion, advice, a report, or a recommendation has also been redacted in terms of section 44(1)(a).
- **The NNR instructed Eskom to redact the safety case as follows:**

The following information may be redacted from the Safety Case:

 - Confidential and /or sensitive information;
 - Commercial information; and
 - Security arrangements as contemplated in section 51 of the NNR Act.
- **The redacted safety case is in line with the PAIA act requirements,** which is what Eskom would produce should it be required to do so.
- Additionally, a public information document is available on the Eskom Website containing additional information on the safety of Koeberg.

Safety Aspects of Long-Term Operation (SALTO) IAEA peer review process was used to support LTO activities:

SALTO process:

- It is a **comprehensive safety review** directly addressing strategy and key elements for the safe LTO of nuclear power plants.
- The evaluation of programmes and performance is made on the basis of the IAEA's Safety Standards and other guidance documents.

Key objectives:

- To assess the current status of the plant's programmes for LTO and ageing management
- To identify existing or potential issues in respect of safe LTO
- To propose measures to address issues identified
- To facilitate exchange of experience.

Peer review focus areas:

- The peer review follows the IAEA Safety Report on safe aspects of long-term operation of nuclear power plants to review the following areas:
- LTO feasibility
- Scoping and screening of plant structures, systems and components (SSCs) important to nuclear safety
- Assessment and management of SSCs for ageing degradation for LTO
- Revalidation of safety analysis that used time limited assumptions.

Review Process:

When the IAEA conduct a SALTO mission, they **gather facts** which they then **group to make conclusions**, with the **aim of defining overall problems**. They then **propose recommendations or suggestions** directly linked to resolving this overall problem. The intent is that if the recommendations and suggestions are resolved, then it will take care of the issues and ultimately the facts.

Findings:

- 3 Good practices
- 12 *Suggestions
- 2 **Recommendations.

Report Summary Focus Areas:

- Comprehensively review and implement all plant programmes relevant for LTO.
- Complete the revalidation of qualification of cables inside containment.
- Ensure full functionality of the containment structure monitoring system.

KNPS followed the IAEA SALTO process specifically to ensure an internationally recognised, structured approach to life extension was used. The IAEA provides an independent review to determine areas for improvement and support the country in preparing for safe LTO, SALTO is a multi-step process as shown below, and the IAEA have over 50 successful missions worldwide assisting nuclear power plants with LTO.

Major completed and ongoing activities to improve the safety and reliability of KNPS:










Colour coding:

Brown – resolved

Blue – in progress

Green – work completed to support LTO (not linked to the safety case)

Major activities completed or planned for completion

	Steam generator replacements.
	Replacement of refuelling water storage tanks.
	Replacement of the reactor vessel heads.
	Concrete repairs of the reactor building.
	Upgrade of obsolete analogue monitoring and control systems.
	Implementation of additional ageing management programmes.
	Inspection and testing of equipment important to safety (e.g., containment building integrated leak rate test).
	Updated assessment of all aspects of Koeberg site characteristics (seismic, tsunami, tornadoes, etc.).
	Transient interim storage facility for used nuclear fuel.

Concluding remarks:

- LTO is commonly implemented across the world because it is a safe, cost-effective solution for low carbon power generation.
- The PSR and SALTO provided a systematic and proven approach to assess the safety and readiness of KNPS for LTO.
- The abovementioned safety assessment have provided the improvement actions for safe LTO
- The nuclear safety assessments have not identified any safety, health or environmental concern that preclude the plant from safe LTO
- The LTO safety case submitted to the NNR demonstrates that Koeberg operations causes no undue risk to safety, health, or the environment.
- The power provided by Koeberg provides grid stability and prevents approximately two stages of loadshedding.

- KNPS has a track record of safe, reliable operation.
- Continued, safe operation of KNPS will provide significant financial and economic benefits for the region.
- The NNR provides strict oversight of KNPS and will make the final decision on the LTO license application.
- It is expected that the NNR will issue the LTO license once they are satisfied that Eskom meets the regulatory requirements for LTO

Questions arising from the presentation

Comment by Mr Phidza

Mr Phidza referred to the comment made by Cele Esau whereby the member so easily said that Koeberg is not safe. He commented that when we engage in discussion that members refrain from rushing to a conclusion that Koeberg is safe or unsafe, but rather ask the question why it is safe or not safe. He made the example of a new car parked in a garage that is safe but if that car is driven by a young, inexperienced drunken driver it is no longer safe. He urged members to rather focus on what makes Koeberg safe or unsafe as opposed to jumping to a generalised conclusion

Question by Ms Petersen

Ms Petersen expressed confusion that in the fact the SALTO report came back heavily redacted from the SALTO Peer Review until Eskom submitted the Safety Case to the NNR. When she requested a unredacted version, she was told that the safety case contained sensitive information. She expressed confusion in the fact that the unredacted report is now available and why it could not have been added to the safety case for the public to get an update on the progress made by Eskom and the actions that were still outstanding. She explained that according to the peer review, words such as inadequate, incomplete, and not compatible were used and now she heard that some of the issues have been resolved. Her question was when it was resolved and whether it was resolved before the safety case was submitted. Her other question related to the fact that there are two separate licenses for the two reactors (at the NNR). She enquired whether the two reactors are not included in the LTO license application.

Response by Ms Mashele

Ms Mashele explained that the redacted safety case contains all aspects that were covered in her presentation. She queried where the information came from that stated that the activities performed are not being contained in the safety case and not available to the public, as it was not factual. She confirmed that all activities performed are contained in the redacted safety case and that the redaction was only sensitive information such as financial data etc. which is in line with the Act. She explained that the activities that are being performed were not removed from the safety case and that a one-on-one comparison can be made between her presentation and the safety case. She further explained that the SALTO Mission Report was issued to the public via the IAEA and the unredacted report is available on the IAEA website and was generated prior to the submission of the safety case and the information that came from the report and considered as part of the report that was submitted to the NNR.

Comment by Ms Petersen

Ms Petersen indicated that she read through the safety case and noticed that there were some actions that were redacted and because she is not knowledgeable on these matters, and don't know what has been redacted. She was just don't understand how they are now being provided with a complete and comprehensive report and why this could not have been added in the safety case before. She asked Ms Mashele if she can consult further with her on this matter.

Response by Ms Bravance

Ms Mashele informed the member that she is welcome to consult further with her on this matter. On the license issue (second part of Ms Petersen's question) she informed the member that the licenses for the two units are not separated and that they only have one license for both units for July 2024. They have requested of the NNR to consider the separation of the licenses.

Response by Mr Featherstone

Mr Featherstone explained that they are not requesting for two separate licenses as it will always be one license for Koeberg as a facility. They are requesting a separate end date per unit in the license.

Comment by Ms Petersen

Ms Petersen explained that she was attending a meeting where Eskom presented to the DMRE Portfolio Committee stating that they are applying for two licenses for Unit 1 for 1984 and Unit 2 for 1985 and that it is currently with the NNR.

Response by Mr Featherstone

Mr Featherstone clarified that is not two separate licenses, but they are requesting two separate dates for the two units in the one license for Koeberg as a facility which is NIL-01. He explained that the current variation 19 contains one date, which states that operations (operating the units) ceases on 21 July 2024 which is 40 years after which Unit 1 started commercial operation, Unit 2 started commercial operation in November 1985 and therefore they requested two separate end dates to be specified in the license. In their application for the extra 20 years, they have also asked for the end dates to be very specific for the two units specifically.

Comment from Ms Petersen

Ms Petersen indicated that she will further confer with Mr Featherstone regarding the actual words that were used in the presentation which referred to two separate licenses which she enquired what the LTO was for. She is still awaiting a response from Mr Moonsamy.

Comment by Mr Becker

Mr Becker informed Mr Phidza that he doesn't have the authority to state that Koeberg is safe but that he has an authority to make a safety case to the NNR and that the NNR has the final say and authority as to whether the plant is safe to operate or not.

Response by Mr Phidza

Mr Phidza informed the member that as the Operator he has the authority to state that the facility is operated safely. He explained that the Regulator provide the oversight.

Question by Mr Becker

Mr Becker asked about the status of the Seismic Hazard Analysis study known as the SSHAC – Senior Seismic Hazard Analysis Committee study. He also enquired about the two green dots that appeared next to the SSHAC.

Response by Anton Kotze

Mr Kotze explained that the process was delayed due to the experts not being available. They expect the finalised version of the SSHAC to be available on 24 March 2024.

Response by Ms Mashele

Ms Mashele explained that the two green dots are referred to as robots. She explained that the first robot refers to whether they were on schedule or not and they are on schedule although they had initial delays, which they have managed to resolve. The second robot refers to challenge to enter into LTO due to scheduling issues, and there were no challenges identified that prevented them from entering into LTO.

Question by Mr Becker

Mr Becker enquired whether the study will be made available to the public.

Response by Mr Featherstone

Mr Featherstone explained that they haven't considered it and would have to put it through the process for consideration. He reiterated that they would have to evaluate the request and make decision. He informed the member that the seismic spectrum for the site is public knowledge.

Question by Mr Becker

Mr Becker enquired about Table 9.4 in the safety case that is entirely redacted in terms of actions taken. He referred to Ms Mashele's statement that it was all redacted in line with the Paia Act (the Promotion of Access to Information Act). He enquired which clause in the Paia Act she referred to that allows the redaction of actions that is going to be taken on time, minutes and age analysis process.

Response by Ms Mashele

Ms Mashele requested more information from the member in order for her to give an informed answer. She explained that redactions related to actions are usually related to hazards to the site which is of a security concern.

Question by Mr Pieters

Mr Pieters enquired about the license expiring on 21 July 2024 and the fact that the unit will be shut down on 24 July 2024 for 200 days, whereby we will lose about 900 MW off the grid when we already facing loadshedding challenges. He wanted to know whether there is a guarantee that it will only be shutdown for 200 days and why it will be shut down three days after the license expires.

Response by Mr Featherstone

Mr Featherstone clarified that Unit 2 will be shut down for outage on 21 July 2024 on the date of expiry and not three days later as the member mentioned. The Outage is planned for 200 days due to the work that needs to be performed and it includes extra days to make provision for additional work that the Regulator might be requiring from them to perform. Whether they utilise the 200 days or not, it is built into the Generation Planning window 200 days for the unit to be shut down. He explained that with the current Unit 1 outage they planned for too short of a time and did not add a buffer hence they have to constantly explain why the outage is running late. Although they might not need the 200 days, they need to have a buffer built in to have the extra time if needed.

Question by Mr Lee

Mr Lee requested that the link of the redacted safety case in the Minutes. He also asked that a response to his question on the status of the NNR building (looks like a bomb shelter) asked in the previous meeting, be added to the Minutes.

Link to the safety case

https://www.eskom.co.za/wp-content/uploads/2023/01/331-618_Rev1a-Safety_Case.pdf

Response by Mr Bester (NNR)

The building is an office building for NNR staff that are working on Nuclear Power Plants and complies with the City's building regulations.

7. General**Question by Mr Mayhew**

Mr Mayhew referred to a programme he watched on television where the Electricity Minister said that they were going to appoint a person who was going to oversee Koeberg and another power station. According to the interviewer the person appointed was going to be paid millions (the interviewer was not impressed by the millions he would be paid). He asked how this impacts Koeberg.

Response by Mr Featherstone

Mr Featherstone explained that Jan Oberholzer was asked to return to Eskom and awarded a contract to assist Eskom in areas where Jan is experienced in. He explained that Jan has many years of experience with Eskom which is very useful. He was asked to assist Koeberg if needed, but his role is not to provide oversight of Koeberg. He further explained that Jan is very resourceful and has very good contacts which can assist in areas of challenge for Koeberg, such as obtaining and expediting visas from the Department of Home Affairs for our French contractors whose skill is required on the Steam Generator Replacement as this often disrupts the smooth flow and progress of a project such as the Steam Generator Replacement. He also has historical relationships with the top people in Framatome which the new GCE and board don't have. They are also tapping into his ability to maintain and strengthen relationships and they are also utilising his expertise to get the most out of him. He explained that in Jan's previous role as Chief Operating Officer (COO) he had extreme line authority and that in Jan's new role he has no line authority or accountability, and he also doesn't fit into the Eskom structure.

8. Proposed Agenda items for the next meeting

The following items were proposed as Agenda items for the September KPSIF meeting.

- Koeberg Quarterly Feedback (Eskom/Koeberg)
- Avian research and monitoring in the Koeberg Nature Reserve (Ms Jurina Le Roux)
- Koeberg Evacuation Plan (City of Cape Town)
- Presentation by the Fire Marshall (as was proposed by Mr Peter Becker)

The Chairperson requested that the presentations be kept short and summarised to accommodate questions and to respect everyone's time.

9. Date of next meeting:

The next KPSIF will be held on Thursday, 28 September 2023. It will be a hybrid meeting which will be held in-person at the Koeberg Visitors Centre and online via MS Teams.

10. Closing

The KPSIF meeting was adjourned at 22:16.

KPSIF Action item list – 29 June 2023

No.	Action	Raised by	Comment
1.	Re-opening of the Koeberg Nature Reserve	Mr Naylor	Item to remain open for updates and will be closed when the reserve is opened.
2.	Proposal to run a hybrid KPSIF for future meetings especially for people travelling from afar.	Mr Harrison	The September Public Safety Information Meeting will be used to pilot the Hybrid KPSIF.