

**Koeberg Public Safety Information Forum (KPSIF) Minutes of the meeting held  
on Thursday, 28 September 2023**

**Venue:** Koeberg Visitors Centre (in-person)

**Chairperson:** Ms Smokie La Grange

**Deputy Chairperson:** Vacant

| <b>Name and Surname</b> | <b>Organisation</b>                    | <b>Present</b> |
|-------------------------|--|----------------|
| Becker, Peter           | Koeberg Alert Alliance                 | P              |
| Beyl, Trudy             | Resident                               | P              |
| Browne, Peter           | Resident                               | P              |
| Engel, Bernard          | Resident                               | P              |
| Esau, Cele              | Social Justice at Cape Town Unitarians | P              |
| Esau, John Patrick      | Son of Cele Esau                       | P              |
| Goosen, A               | Resident                               | 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                               | Apologies      |
| La Grange, Duval        | Resident                               | Apologies      |
| Lee, Nick               | Resident                               | A              |
| Lee, Anne               | Resident                               | Apologies      |
| Lewis, Gary             | ABHOA                                  | P              |
| Mayhew, Robert          | Resident                               | P              |
| Mayhew, Sylvia          | Resident                               | P              |
| Mayers, Dr Nadine       | Resident                               | A              |
| Mayers, Paul            | Resident                               | A              |
| McKinnel, Jenny         | Resident                               | Apologies      |
| Naylor, Paul            | Resident                               | Apologies      |
| Pannaye, Angelique      | Resident                               | P              |
| Paulus, Elroy           | Resident                               | P              |
| Petersen, Lydia         | Resident                               | P              |
| Scott, Peter            | Resident                               | Apologies      |
| Scrimshaw-Wright Piers  | Resident                               | P              |
| Slabbert, Johan         | Resident                               | P              |
| Swart, Francois         | Resident                               | P              |
| Terblanche, Jurgen      | Resident                               | A              |
| Van Schalkwyk, Jacques  | Resident                               | P              |
| Wotherspoon, Bruce      | Resident                               | P              |
| Williams, Jenny         | Resident                               | P              |

| <b>OFFICIALS</b>      |                            |           |
|-----------------------|----------------------------|-----------|
| Bester, Peter         | National Nuclear Regulator | P         |
| Bele, Joyce           | Eskom Koeberg              | P         |
| Cronje, Nardus        | Eskom Koeberg              | P         |
| Ellis, Frikkie        | Eskom Koeberg              | Apologies |
|                       |                            |           |
| Featherstone, Keith   | Eskom Koeberg              | P         |
| Flatela, Mvola        | Eskom Koeberg              | P         |
| Franco, Johannes      | City of Cape Town          | P         |
| Cllr Gross, Nora      | Ward Counsellor (DA)       | Apologies |
| Jeannes, Deon         | Eskom Koeberg              | Apologies |
| Joshua, Debbie        | Eskom Koeberg              | P         |
| Khumalo, Jotham       | City of Cape Town - DRM    | P         |
| La Grange, Smokie     | Chairperson                | P         |
|                       |                            |           |
| Mashele, Bravance     | Eskom Koeberg              | P         |
| Maree, Marc           | Eskom Koeberg              | A         |
| Maree, Vanessa        | National Nuclear Regulator | P         |
| Minnie, Johan         | City of Cape Town          | P         |
| Moonsamy, Gino        | National Nuclear Regulator | P         |
|                       |                            |           |
| Ncuru, Anele          | Eskom Koeberg              | P         |
| Pollard, Alden        | Eskom Koeberg              | P         |
| Phidza, Lewis         | Eskom Koeberg              | P         |
| Pie Thabiso           | DMRE                       | P         |
| Philani Msimango      | City of Cape Town          | Apologies |
| Stephanus, Aminah     | Eskom Koeberg              | Apologies |
| Swart, Paul Cllr      | Ward Counsellor (DA)       | Apologies |
|                       |                            |           |
| 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 |

| Abbreviation/definition list |   |                            |  |
|------------------------------|---|----------------------------|--|
| Abbreviation                 | Description   | Abbreviation               | Description  |
| <b>Accident</b>              | An unintended event, including operating errors, equipment failures or other mishaps.   | <b>Disaster Management</b> | A continuous and integrated multi-sectorial, multi-disciplinary process of planning and implementation of measures aimed at:<br>a) Preventing or reducing the risk of disaster<br>b) Limiting the severity or consequences of disasters<br>c) Emergency preparedness<br>d) Responding rapidly and effectively to disaster; and<br>e) Post-disaster recovery and rehabilitation |
| <b>AFI</b>                   | 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,  | <b>GCE</b>                 | Group Chief Executive  |
| <b>Boron</b>                 | 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. | <b>ECC</b>                 | Emergency Control Centre   |
| <b>EPSOC</b>                 | Emergency Planning Steering and Oversight Committee   | <b>CIA</b>                 | Central Intelligence Agency  |
| <b>EPC</b>                   | Emergency Planning Committee  | <b>KNEP</b>                | Koeberg Nuclear Emergency Plan   |
| <b>Donax</b>                 | 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.   | <b>CISF</b>                | Centralised Interim Storage Facility   |
| <b>CISF</b>                  | Centralised Interim Storage Facility  | <b>SPF</b>                 | Spent Fuel Pool  |
| <b>CSB</b>                   | Cask Storage Building   | <b>TEM</b>                 | Traffic Evacuation Model   |
| <b>DOC</b>                   | Disaster Operations Centre  | <b>Evacuation</b>          | The rapid, temporary removal of people from the area to avoid or reduce short-term radiation exposure in the event of an emergency.  |
| <b>ECC</b>                   | Emergency Control Centre  | <b>UAE</b>                 | United Arab Emirates   |
| <b>EIA</b>                   | Environmental Impact Assessment   | <b>INPO</b>                | Institute of Nuclear Power Operations  |
| <b>Emergency Plan</b>        | A document describing the organisational structures, its roles and responsibilities, concept of operation, means and principles for intervention during an emergency at Koeberg.  | <b>UPZ</b>                 | Urgent Protective Action Zone  |
| <b>EPZ</b>                   | Emergency Planning Zone   | <b>EPSOC</b>               | Emergency Planning Steering and Oversight Committee  |
| <b>FC</b>                    | Functional Coordinator  | <b>CPA</b>                 | Consumer Protection Act  |
| <b>IPP</b>                   | Independent Power Producer  | <b>KEP</b>                 | Koeberg Emergency Procedure  |

|                            |  |                                  |  |
|----------------------------|--|----------------------------------|--|
|                            |  | <b>mSv</b>                       | The millisievert (mSv) is a measure of the absorption of ionising radiation by the human body.   |
| <b>ISO</b>                 | International Standards Organisation   | <b>CCT</b>                       | City of Cape Town  |
| <b>KNPS</b>                | Koeberg Nuclear Power Station  | <b>IAEA</b>                      | International Atomic Energy Agency   |
| <b>NOU</b>                 | Nuclear Operating Unit   | <b>SABC</b>                      | South African Broadcasting Corporation   |
| <b>SGR</b>                 | Steam Generator Replacement  | <b>TISF</b>                      | Transient Interim Storage Facility   |
| <b>KPSIF</b>               | Koeberg Public Safety Information Forum  | <b>WANO</b>                      | World Association of Nuclear Operators   |
| <b>LTI</b>                 | Lost Time Injury   | <b>Emergency</b>                 | 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. |
| <b>LTO</b>                 | Long Term Operation  |                                  |  |
| <b>MW</b>                  | Megawatts. A unit of measure - one megawatt is equal to one million watts.   | <b>CCGT</b>                      | Closed Cycle Gas Turbines  |
| <b>NECSA</b>               | South African Nuclear Energy Corporation SOC Limited   | <b>DOC</b>                       | Disaster Operations Centre   |
| <b>NNR</b>                 | National Nuclear Regulator   | <b>NOSCAR</b>                    | The grading of NOSA for safety performance.  |
| <b>NOSA</b>                | National Occupational Safety Association   | <b>Radiation</b>                 | Energy released in the form of particles or electromagnetic waves during the breakdown of radioactive atoms.   |
| <b>NSRB</b>                | Nuclear Safety Review Board  | <b>NRWDI</b>                     | National Radiation Waste Disposal Institute  |
| <b>OCA</b>                 | Owner Controlled Area  | <b>AECC</b>                      | Alternate Emergency Control Centre   |
| <b>OEM</b>                 | Original Equipment Manufacturer  | <b>FME</b>                       | Foreign Material Exclusion   |
| <b>Outage</b>              | Refers to the maintenance period on a power plant when a number of activities are performed on equipment that keeps the plant running.   | <b>National Electricity Grid</b> | The network of high-voltage power lines fed by the various power stations, which supplies electricity to the country.  |
| <b>PAZ</b>                 | Precautionary Action Zone  | <b>EP</b>                        | Emergency Plan   |
| <b>PSM</b>                 | Power Station Manager  | <b>Sheltering</b>                | 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.                                  |
| <b>Public Notification</b> | 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. | <b>EMP</b>                       | Environmental Management Plan  |
| <b>Release</b>             | The controlled or accidental discharge of radioactive substances into the environment.   | <b>UPZ</b>                       | Urgent Protective Action Planning Zone   |
| <b>SAPS</b>                | South African Police Service   | <b>KCWIB</b>                     | Koeberg Cooling Water Intake Basin   |
| <b>SHEQ</b>                | Safety Health Environment and Quality  | <b>WAC</b>                       | Waste Acceptance Criteria  |
| <b>SSA</b>                 | Sea Shore Act  | <b>SAMG</b>                      | Severe Accident Management Guideline   |
| <b>TEM</b>                 | Traffic Evacuation Model   | <b>NERSA</b>                     | National Energy Regulator of South Africa  |
| <b>UAG</b>                 | Unplanned Automatic Grid Separation  | <b>Hazmat</b>                    | Hazardous material   |

### 1. **Welcome**

The Chairperson, Ms Smokie La Grange, welcomed everyone to the September 2023 Koeberg Public Safety Information Forum (KPSIF) meeting and also the first hybrid meeting. She explained that she will take three questions from the in-person meeting and three questions from the online platform. She asked that attendees state their name for the record.

### 2. **Safety briefing**

Mr Lewis Phidza, Stakeholder Management Manager, did the safety briefing informing the PSIF members of the safety protocols for the Visitors Centre including the alarms. He indicated where the emergency exit points, and assembly points are and cautioned everyone to use the handrails when ascending or descending the stairs. She thanked Feedem for the lemon meringue pies.

### 3. **Apologies**

*The following apologies were tendered:*

- Mr Mahesh Valaitham (*Mr Tobie van Schalkwyk stood in for him as Power Station General Manager*)
- Mr Peter Scott
- Mr Philani Msimango
- Cllr Nora Grose
- Mr Clive Goss
- Cllr Paul Swart
- Mr John and Ms Anne Jones

### 4. **Due to no comments or corrections that were received after the September meeting, the March 2023 Minutes were approved by Ms La Grange and seconded by Mr Mayhew.**

### 5. **Acceptance of the Minutes of the meeting of 29 June 2023**

*The following corrections were noted:*

- Mr Featherstone clarified that **Unit 2** will be shut down for outage on 21 July 2024. **Unit 2 to be changed to Unit 1.**
- On the 126 Outage update on page 9 it reads that Outage 126 started on 10 December **2023** to be changed to **10 December 2022.**

The June Minutes with the amendments were approved by Mrs Smokie La Grange and seconded by Mr Mayhew.

### 5.2 **Action list review as per the 29 June 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 to be hosted in the September PSIF as a pilot**

Completed (The September KPSIF was run as a hybrid 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 Update
- Upcoming EP Exercises
- WANO Continuum Site Visit Update
- 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 legal limit.
- Radioactive discharges less than 10% of limits
- No uncontrolled or unplanned radioactive discharges

### Status update on Koeberg's Performance (as of 26 September 2023)

#### Plant Status:

##### Unit 1:

- **Status:** Outage 126
- **Domain:** RSD, Fuel Reload completed

##### Unit 2:

- **Status:** Online for 163 days
- **Energy Output:** 97.78% Pn; **Generated:** 960MWe; **Sent Out:** 920MWe

#### Safety System performance:

##### *Safety System availability*

- August 2023: Good performance for High Head Safety Injection, Auxiliary Feedwater system and Emergency Diesels

#### Chemistry performance:

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

- **Unit 1:** The annual CPI for unit 1 had been 1.00
- **Unit 2:** The annual CPI for Unit 2 at 1.01

*The combined annual CPI for the units is 1.00 which is a top quartile.*

#### Outage 126 update:

##### Upcoming activities - Critical Path

- Replacement Steam Generators installed - COMPLETE
- Core Reload – COMPLETE
- Steam Generator level sensor cross-calibration - COMPLETE
- Tests needed for reactor cavity drain down – COMPLETE
- Reactor cavity drain down and reactor head on - IN PROGRESS

- Fill and vent Primary Circuit and complete the 2.5MPa squeeze.
- Primary Pumps running
- RRA (Residual Heat Removal) system valved out
- Stable Hot shutdown Conditions
- Reactor Critical
- Warm through steam lines and spin turbine – ready for synchronization.

**RISK:** *AT ANY STAGE NEED TO RESOLVE ALL EMERGENT DEFECTS*

#### **Subcritical activities**

- Condenser cooling system in service - **COMPLETE**
- Feedtrain on long recirculation and vacuum raising – **IN PROGRESS**
- Turbine center line (*ready, being routinely rotated*)

#### **Projected Dates (assuming defect resolution is not protracted)**

- Reactor at Cold & Intermediate Shutdown: end 02 October 2023
- Reactor at Hot Shutdown & Dilute to Criticality: end 13 October 2023.
- Turbine runup & 1st Synchronization: end 16 October 2023.
- SG commissioning testing and 100% load rejection test.
- 2nd Synchronization on 03 November 2023 (commence commercial operation).

#### **Upcoming Emergency Preparedness (EP) Exercises**

##### **Scheduled Station EP Exercises for 2023**

- 16 November
- 23 November
- 29 November
- 7 December

##### **Technical Support Centre (TSC) Exercise**

- 23 - 27 October

**\* The next NNR Exercise is taking place in 2024**

##### **WANO Continuum Site Visit (CSV):**

4 – 22 September 2023

WANO indicated overall improvement with the Station's performance.

- WANO evaluated the following areas and noted these areas either as satisfactory performance or noted improvements within these areas:
  - Operations area
  - Maintenance
  - Engineering and Equipment Reliability
  - Chemistry and Radiation Protection

##### **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.

***Questions arising from the presentation:***

**Question by Ms Williams**

Ms Williams enquired about the precautions Koeberg have in place in the event of a flooding disaster, and how Koeberg would be affected by it. She explained that a Professor from Witwatersrand university spoke on the news that night and said that climate change played a part in the recent flooding in the Western Cape, and that the African coast would be affected, and it would only get worse in the future. She asked if Eskom could arrange for a special presentation on this by a climate expert for the next meeting. Since Koeberg is a vulnerable point, she felt that the public needs to know that Koeberg and its residents will be safe and that there won't be a disaster.

**Response by Mr van Schalkwyk**

Mr van Schalkwyk indicated that Koeberg is situated 8 metres above sea level and the storm surges that was prevalent in the Western Cape recently would not have affected Koeberg. He clarified that the damage he referred to in his presentation was from wind damage.

**Question by Ms Williams**

Ms Williams reiterated her request for a climate change expert to address the KPSIF members in the next meeting.

**Response by Mr Featherstone**

Mr Featherstone indicated that they would present what they have on the topic. He emphasised that is not a commitment for a climate change expert to address the meeting attendees/KPSIF members.

**Question by Mr Mayhew**

Mr Mayhew enquired whether the WANO report findings and corrective actions will be presented to the members.

**Response by Mr Featherstone**

Mr Featherstone confirmed that as is the practice, they will present a summary of the WANO report as soon as the final report becomes available.

**Question by Mr Piers Scrimshaw-Wright**

The member enquired about the seawater that is used as a coolant, that is pushed back into the sea at an increased temperature of 10 degrees and within a kilometre it normalises to normal sea temperature. He enquired whether the numbers provided is historic and whether there is an update in the numbers considering the rise in sea temperature.

**Response by Mr Featherstone**

Mr Featherstone explained that very recently due to the change in the Coastal Waters Discharge Act they had to reapply for their water permit, which covers the seawater that is used for cooling. They also did new studies pertaining to the temperature profiles which forms part of their Coastal Waters Discharge permit which was presented to the KPSIF a few meetings ago.

**Question by Mr Reyskens**



Mr Reyskens enquired whether Koeberg made provision for a Tsunami in view of the geological fault line that is situated near the cape coast and close to the Koeberg nuclear plant, especially in the light of what caused the Fukushima nuclear accident.

#### **Response by Mr Featherstone**

Mr Featherstone responded that they have made provision for a tsunami in their design base. The height for a tsunami that has been calculated for this area is 4m in the original design base, and the Koeberg terrace is at 8m with extra conservatism built in based on the height of a potential tsunami predicted for the area.

### **6.1. Long Term Operation of Koeberg: Progress feedback and recent developments - Ms Bravance Mashele (Senior Manager Nuclear Engineering)**

#### **Summary of presentation:**

#### **Developments Related to the LTO Safety Case**

##### **Eskom/NNR Engagement**

- (Recap - Rev 1a of LTO safety case issued to the public).
- Eskom has addressed NNR comments associated with Rev1a.
- Eskom submitted Rev 2 of the safety case to the NNR.
- Currently resolving Rev 2 NNR comments.
- NNR has informed Eskom of the intention to conduct further public consultation on the LTO application.

#### **Interested parties' engagement:**

- Eskom received a request for the latest revision of the LTO safety case through the PAIA process.
- A copy of the LTO safety case Rev 2 issued to the interested party (less redacted compared to Rev1a).

#### ***Questions arising from the presentation:***

##### **Question by Mr Mayhew**

Mr Mayhew clarified the issue with the hardened water (stored in the 8-meter tanks) that supplies water if a beyond-design water supply problem occurs. He enquired about the reason why the contract has not been signed, considering that they know it is a priority and needed.

##### **Response by Ms Mashele**

Ms Bravance explained that pertaining to the design basis (original design) of the plant, everything is in place, she further explained that the issue Mr Mayhew is referring to, relates to when they experience severe external events.

##### **Question by Mr Mayhew**

Mr Mayhew was concerned that the two aspects (design basis of the plant and severe external events beyond design basis) are not connected to the issue. His concern was, should there be an external event the (hardened water supply) contract should be in place and the design basis and severe external events aspects should be connected.

##### **Response by Mr Featherstone**

Mr Featherstone explained that the design basis of the plant is the regulated basis which determines that the plant is acceptably safe to be operated. The external review initiative is not a requirement, however Koeberg decided to further improve on the safety

of the plant beyond what is reasonably needed. He explained that it is not a regulatory requirement, but it is modifications Koeberg have added to the plant as an extra defense-in-depth which is over and above the design basis of the plant to which the National Nuclear Regulator (NNR) will keep them accountable for as they have made the commitment to the Regulator. The reason it is indicated in red, is because of the commitment they have made to have these further improvements made to the plant, done by a certain date, and their concern that they won't meet the date (for this action).

**Question by Mr Scrimshaw-Wright**

Mr Scrimshaw-Wright expressed concern as to the reason why the safety case was redacted and what the catalyst was for it to be unredacted. He felt that the public needs transparency and in so doing Eskom will gain public trust, in redacting the document it comes across as though Eskom is hiding something.

**Response by Ms Mashele**

Ms Mashele explained that the initial safety case reductions were based on the fact that when that safety case was produced, a lot of the information that she presented, were in the initial phase of the commercial process. From a PAIA perspective and having to deal with the competitiveness of the market in getting this work done, a lot of the information was redacted from the safety case. She further explained that in the last meeting she discussed the availability of the information and provided an update on some of the redacted items this was because contracts were already placed and work were already being conducted, which were the basis for the majority of the redactions. She indicated that the requirement from the NNR Act was that they needed to redact some of the work that was contained in the safety case, in line with the NNR Act.

**Comment by Mr Featherstone**

Mr Featherstone highlighted the fact that as per the NNR Act, the only information that can be redacted is information that is considered to be of a sensitive nature, that you don't want to be in the public domain. He further emphasised that it has nothing to do with the safety of the safety case for LTO, but it relates to information that is pertinent to the design of Koeberg that should not be in the public domain.

**Question by Mr Scrimshaw-Wright**

Mr Scrimshaw-Wright asked if it pertains to commercially sensitive information.

**Response by Mr Featherstone**

Mr Featherstone responded that it not related to commercially sensitive information, but design sensitive information which relates to security-related information.

**Question by Mr Slabbert**

The member asked whether the public information document will be provided to the public and added that the document being so heavily redacted presents like a CIA document.

**Response by Mr Featherstone**

Mr Featherstone explained that the requirement of the NNR Act is that they have to provide a public information document to the public in terms of what the issues are with regards to the LTO license application. The NNR required more transparency and requested that the public be provided with a copy of the safety case, which is the document that has been redacted. He further explained that the first version of the safety case had a fair number of redactions, and the second version has a lot less redactions.

## **6.2 Overview of the Koeberg Emergency Plan: Mandy Thomas - Head: Special Planning and Critical Infrastructure, Disaster Risk Management Centre City of Cape Town**

### **Question by Ms La Grange**

Ms La Grange asked what the RRR Plan refers to.

### **Response by Ms Thomas**

Ms Thomas responded that it refers to the Radiological Release Response Plan

### **Comment by Mr Mayhew**

Mr Mayhew expressed his doubt about the statement by the City that they are looking after the welfare of the people of Cape Town. This is based on the presentation done by the City of Cape Town in the previous KPSIF on the NNR Exercise findings, where they've reported that one of the critical departments (Department of Social Development) didn't turn up for the exercise and the fact that they had contaminated water running into the drains because the SANDF (Navy) Chemical, Biological and Radiological (CBR) Mass Decontamination Unit was disbanded.

### **Response by Ms Thomas**

Ms Thomas explained that they've had a few meetings with the various parties following the exercise and that on 3 August 2023 they've had a Mass Care Centre exercise, which yielded much better cooperation from all the services, with all services presented and she confirmed that even the navy turned up with all their equipment.

### **Question by Mr Mayhew**

Mr Mayhew questioned where all these services were three months ago during the exercise and why the lack of taking the exercises seriously.

### **Response by Ms Thomas**

Ms Thomas explained that they needed to understand the complexity and the urgency of having an exercise and why it is important to participate in exercises. She says that it has a lot to do with people moving on and others taking over and there not being handover. She felt that it has a lot to do with COVID as they couldn't conduct any during COVID and last year was the first time a full-scale exercise was conducted.

### **Question by Mr Mayhew**

Mr Mayhew enquired whether there will be any consequences to these departments not showing up and that it should constitute disciplinary action.

### **Response by Mr Khumalo**

Mr Khumalo introduced himself as being part of the City of Cape Town Disaster Risk Management Centre. He explained that they as the City of Cape Town Disaster Risk Management Centre, they have no control or authority over other departments, but all they can do is to engage them and show them the seriousness of them being part of the NNR Plan. He explained that the Mass Care Centre exercise is one of the things that they try to improve on every time they have an exercise implement to try and improve on, every time they have an exercise. He indicated that there will be gaps and there will be challenges which they are constantly trying to overcome as and when they have an exercise.

### **Question by Ms Mayhew**

Mrs Mayhew enquired how the public will know when it is an exercise and when it is a real emergency, even though it is unlikely.

**Response by Ms Thomas**

Ms Thomas explained that this is the purpose of the sirens, to convey the message of whether Koeberg is experiencing a real emergency or an exercise.

**Response by Ms La Grange**

Ms La Grange explained that she's lived in the area for 37 years and to the best of her knowledge, there has never been an Alert declared at Koeberg. There have been unusual events, when Koeberg had a whale shark in their intake basin and jellyfish in their intake basin, and Koeberg even had an incident where Green Peace entered their intake basin, but there has never been an Alert declared.

**Comment by Mr Featherstone**

Mr Featherstone explained that the objective of these exercises, which serve as training exercises, are to identify gaps and areas for improvement. Once identified, the purpose is to ensure issues are addressed and corrected. He also explained that the Emergency Planning Department at Koeberg don't have the authority over other departments in the Nuclear Operating Unit the same as the City of Cape Town Disaster Risk Management don't have authority over other departments within the City of Cape Town.

**Question by Mr Mayhew**

Mr Mayhew enquired when the next NNR Exercise will be taking place.

**Response by Ms La Grange**

Ms La Grange informed Mr Mayhew that she will revert back to him about the date of the next NNR Exercise.

**Comment by a member**

The member commented about the concern that was raised about the absence of Social Services during the previous exercise, he indicated that their performance during the recent flooding could be a way in which one could determine whether they were up to standard.

**Response by Ms Thomas**

Ms Thomas informed the member that it was two separate incidents. With the recent flooding they had, the Department of Social Services were fully on board. They had SASA and other NGOs and organisations that could provide humanitarian support and assistance.

**Questions by Ms Petersen**

Ms Petersen posed three questions; she explained that the first question was posed by her in the previous KPSIF in response to the City's comment that they do not have a mandate to ensure participation by other role players in the emergency exercises. She enquired whether a MOU or MOA was signed between Eskom, the City of Cape Town and local or provincial government. She explained that the answer she was given by the city representative was that they will have to check and confirm, and it was not noted in the Minutes. Ms Petersen's question was when this MOU or MOA was signed. The second question pertained to the WANO report that they were informed, will not be made public, she queried why the information are being withheld from the public. She also queried the summarised WANO report that will be made available and not the actual report and her question was why the full report will not be made available to the public as it contains crucial information pertaining to nuclear and its safety aspects. Her last question was about the NNR non-compliances that was presented in the last KPSIF where Eskom promised that it would be published in the Minutes, and she queried why it has not been published in the Minutes.

**Response by Ms Thomas**

Ms Thomas responded to Ms Petersen's first question informing Ms Petersen that the MOU between the City of Cape Town, Provincial Government and Eskom was signed in 2007. She confirmed that it is known as a tripartite agreement. She further explained that pertaining to their authority over another department, they can engage the South Africa National Defence Force (SANDF) but they don't have the authority to compel them to participate in an exercise as they are a national department.

**Comment by Ms Petersen**

Ms Petersen expressed her concern as to the non-participation by the SANDF in the last exercise especially since they are an integral part of these exercises. She wanted to know where the accountability stops. She reiterated the comment she made in the previous meeting that the time for knocking on doors, begging cap in hand, has to stop because the lives of people and the environment are at stake. She felt that from an MOU point of view, something needs to be done to ensure full accountability from all the stakeholders, whether on a national, provincial or a local level, so that the back and forth on this issue could be minimised and the emergency exercises can be effectively executed in case of a disaster.

**Response by Mr Phidza**

Mr Phidza responded to the second question by Ms Petersen and confirmed that on page 13 and 14 of the June KPSIF Minutes, all the NNR findings were recorded. Mr Phidza also answered the member's last question regarding the WANO report. He explained to the member that the WANO report is not an Eskom report and thus Eskom don't have the authority to publish the full report.

**Comment by the Chairperson**

The chairperson invited Ms Petersen to direct any further questions or comments in this regard, to her via email.

**Question by Mr Reyskens**

Mr Reyskens explained that he has been living in in the area (Flamingo Vlei) for the last 30 years and in all his 30 years of living here, he still has no understanding what the announcements are saying when the sirens go off, that is when he is able to hear them. He also queried the good of all the convoluted plans with multiple organisations within the different spheres of government, if the City of Cape Town policy still promotes further densification of the Table View/Blouberg region, which according to the conservative estimate, already contains three quarters of a million people including Dunoon. He expressed his scepticism with the current infrastructure congestion, which is noticeable every day, and asked how widespread panic would be prevented and an orderly evacuation would be done, in case of a serious accident. He believes it is an exercise in futility and that widespread panic would ensue in case of a serious accident (black swan event) at Koeberg.

**Response by the chairperson**

Ms La Grange responded and informed the member that the message broadcasted over the sirens during a test is, "*This is a test and only a test. Please do not respond.*" It is repeated in Afrikaans which is "*Hierdie is 'n toets, net 'n toets moet nie hierop reageer nie.*"

**Comment by Mr Reyskens**

Mr Reyskens commented that it would have been appreciated if this message was communicated clearly and properly so it could be understood, but the message is usually mumbled/distorted and with the southeaster coming in from Rietvlei half the conversation is lost to the north.

**Response by the Chairperson**

The chairperson assured the member that if there should be an Alert declared at Koeberg, he will be informed thereof.

**Response by Ms Thomas**

Ms Thomas explained that the City of Cape Town have a Spatial Planning Department and with every application that involves either the zero to five or the zero-to-16-kilometre zones of Koeberg, the application undergoes a process which identifies the kinds of stresses that the development will exert on the evacuation plan or the Transport Evacuation Plan of the city in determining. Based on this the application will be weighed and the City will decide whether to grant the go-ahead or not. She further explained that these applications are also channelled via Eskom and the NNR for their input and comment in determining whether the development have the go-ahead or not.

**Comment by Mr Reyskens**

Mr Reyskens were not satisfied with the response as his concern was the number of high-rise buildings that are being erected, which gives the impression that the City's rules have been overridden. He said a decision needs to be made as whether the City supports densification and do away with Koeberg, or forbid the erection of any further high-rise buildings.

**Comment by Mr Bester**

Mr Bester explained that the City has included in their bylaws the requirements of the Regulator in terms of what will be allowed based on the impact of these developments on the Koeberg Evacuation Plan. All developments within these areas are assessed and evaluated against these criteria and against the Traffic Evacuation Model (TEM) that has been approved by the National Nuclear Regulator and hence they are confident that the people that needs to be evacuated within the respective zones will be evacuated within the prescribed times when an emergency arises.

**Comment by Mr Reyskens**

Mr Reyskens expressed his scepticism in the ability of the City to realistically evacuate 750 000 people and his lack of confidence in the City's evacuation plan, considering the that has been identified and highlighted. He believes that widespread panic will ensue, and this is not even taking into consideration the proximity of the refinery.

**Comment by Ms Williams**

Ms Williams also expressed her scepticism because 20 years ago she was told that the population limit had already been reached for the 16km radius - and now all this new development has since taken place.

**Response by Mr Minnie**

Mr Minnie explained that no development will be approved that will compromise the ability to evacuate the area within the allotted time. Evacuation routes and capacity are added before additional population is allowed through development.

**Response by the Chairperson**

The Chairperson informed the members that a presentation on the City’s Traffic Evacuation Model will be presented in 2024 where all these issues can be addressed. She also informed the members that the information is also included in the Emergency Plan Calendar.

**Comment by Mr Phidza**

Mr Phidza informed the members that the Traffic Evacuation Model (TEM) has been presented in the PSIF several times before but that he supports the Chairperson it being presented in one of the 2024 meetings.

**6.3 Koeberg Nature Reserve bird research update: Ms Jurina Le Roux - Koeberg Environmental Manager**

**KNR Baseline data collection requirements from the Management Plan**

| Key deliverables  | Management Activities   | Management Target                                       |
|---|---|---|
| <b>Record Keeping</b>   | Record all credible siting of any threatened and endangered species found in the Koeberg Nature Reserve | Maintaining an accurate list of siting’s with locations |
| <b>Allow the City of Cape Town CapeNature and any other research initiative to conduct specific conservation monitoring programmes within the Conservation Zone</b> | Approve research initiatives and allow access to perform specific conservation monitoring               | Not applicable  |

**Record keeping:**

- The Koeberg Nature Reserve team collate and capture all data for fauna and flora sightings into the fauna and flora species register and notify CapeNature of any newly found or special species sightings.
- The registers contain dates and locations of sightings.
- The registers contain accurate and up to date lists of all Flora, Amphibians, Reptiles, Mammals and Invertebrates that have been seen in the nature reserve.

**Data collection:**

- The Koeberg Nature Reserve Management Authority allows the City of Cape Town, CapeNature and any other research initiative or organisation to conduct specific conservation

monitoring programmes within the conservation zone of the Koeberg Nature Reserve through a permit system.

- Researchers must supply the Koeberg Nature Reserve with all the data that was collected during the research as well as a copy of the final report.
- This presentation will showcase some of the bird research programmes what have been authorised over the past.

### **Montana Cooperative Wildlife Research**

- The Montana Cooperative Wildlife Research Unit was measuring energy expenditure.
- of parent birds and their nestlings between September and November 2016. The link between energy expenditure and life expectancy was being investigated.
- Although their research mainly focused on the studying of birds, they also collected valuable data on other species during their field work.

### **Research on Pied Crows**

- The University of Cape Town (UCT) conducted research on the predation by Pied Crows within the Western Cape.
- The aim of the project was to understand the level of tortoise predation by Pied Crows during chick rearing in southwestern South Africa, and the factors that explain predation rates by Pied Crows on tortoises like habitat type or prey abundance.

### **Work Integrated Learning Student data collection:**

- Occasionally Eskom assist students to do their Nature Conservation Work Integrated Learning year at the Koeberg Nature Reserve.
- One of the tasks of the students is to collect baseline data. In 2019 the students recorded a red billed oxpecker in the nature reserve.
- A first for the nature reserve as it is outside of the home range of the bird.

### **Department of Forestry, Fisheries and the Environment: Avian Monitoring**

- DFFE have been conducting seabird monitoring at the Koeberg Power Station intake basin since 1996.
- They collect data about the bird species and number of birds of each species that were spotted at the intake basin during the bi-annual counts.
- Since cormorants, oystercatchers and seagulls' nest on the harbour blocks and surrounding buildings the number of nests for these species are also monitored.
- Five species of cormorants are known to breed in South Africa. The global population of the two species of cormorants, Cape cormorant and Bank cormorant has dropped by nearly 50% since the late 1970s and are now regarded by the International Union for the Conservation of Nature (IUCN) as endangered.



## Protection of bird breeding sites

| Key Deliverables                  | Management Activities   | Management Target                                 |
|-----------------------------------|---|---|
| Protection of bird breeding sites | Limit activities that could disturb the nesting and breeding habits to those essential to the operation of Koeberg. | Maintain an environment that encourages breeding. |

### Questions arising from the presentation:

#### Question by the Chairperson

The chairperson enquired about the names of the six birds that was showcased on slide 8 of Jurina's presentation.

#### Response by Ms Le Roux

She explained that from the top left to the right you will find the klaas's cuckoo not frequently seen but often heard, the European bee-eater that usually nest in the sandy cliffs, the three-banded plover, chicks of the spotted eagle owl (Keith's owl) that generally breed on the ground, the yellow-billed kite bird and lastly the barn owl.

#### Question by a member

One of the members enquired about the fish eagles.

#### Response by Ms Le Roux

Ms Le Roux explained that the fish eagles disappeared temporarily due to them having to clean the basins and they were dry. She further explained that the water has been pumped back and thus the fish eagles are back.

#### Comment by Mr Van Schalkyk

Mr Van Schalkwyk asked Ms Le Roux to explain to the members where the pot plant with the pictures of the chicks of the spotted eagle owl (Keith's owls) on slide 10, were located.

#### Response by Ms Le Roux

Ms Le Roux explained that the pot plant is located at the Bulk Stores entrance outside Keith's old office hence it is called Keith's owls.

## 7. General

#### Comment by the Chairperson

The Chairperson responded to Ms Williams' question in the online chat, about the presentation by the City of Cape Town Fire Marshall that was promised for the September meeting. She explained that the City of Cape Town Fire Marshall retired after close to 35 years of service and that the City has to find someone in his place with his level of experience and competence to present at the KPSIF, which have been moved to the November 2023 meeting to make allowance for this.

#### Question by the Chairperson

Ms La Grange enquired about the progress of the 2024 Calendar from Mr Phidza.

**Response by Mr Phidza**

Mr Phidza informed the members that the 2024 Calendar is completed in terms of design and that they are in the final stages of procuring a printing company to print the calendars. He confirmed that distribution will commence by end of November 2024, and it will be continuing in January 2024 to accommodate the schools and certain businesses reopening.

**Question by Mr Harrison**

Mr Harrison enquired about the amount of spent fuel in kilogrammes stored on site and the forecast for Long Term Operation (LTO) which he has asked before and it was not answered effectively. He asked if the total could be made available in the next meeting.

**Response by Mr Featherstone**

Mr Featherstone indicated that they will only be able to provide the answer in total number of fuel assemblies and that it will be added to the Koeberg Quarterly Report presentation.

**Question by Ms Petersen**

Ms Petersen enquired about the absence of a Deputy Chair in the last two meetings.

**Response by Mr Bester**

Mr Bester explained that the term of office for the Deputy Chair came to an end and that the Deputy Chairperson position was advertised in the local newspapers on 15 June 2023 by the NNR, where nominations for the position were invited, the closing date was 17 July 2023. The NNR also sent the invitation to the KPSIF registered members. To date they have not received any nominations. He explained that the following options will be considered: The KPSIF can nominate a person and make the necessary information and paperwork available to the NNR. He also explained that if the forum decides not to do so, they will have to readvertise.

**Comment by Ms Petersen**

Ms Petersen thanked Mr Bester for the clarity and confirmed that she will spread the news about the nominations.

**Comment by the Chairperson**

The chairperson informed the members that her term of office as Chairperson will also soon come to an end and that nominations for the position of Chairperson will also soon become available.

**Response by Mr Moonsamy**

Mr Moonsamy explained that there is a process for nomination that needs to be followed for both the Chairperson and Deputy Chairperson position. This involves a public notice where nominations are invited from the public. The criteria for nominees for the Deputy and Chairperson are that the nominees should be persons living within the relevant municipal area as defined in the Regulation. He suggested that his email address be shared by Mr Phidza or Ms Moonsamy to those interested in submitting a nomination, for further information on the process.

**7. Agenda items for the next KPSIF**

*The following items were proposed for the next KPSIF:*

- Koeberg Quarterly Feedback
- The presentation by the City of Cape Town Fire Chief/Marshall

**8. Date of the next KPSIF**

Thursday, 30 November 2023

### KPSIF Action item list – 28 September 2023

| No. | Action   | Raised by   | Comment   | Status         |
|-----|--|-------------|---|----------------|
| 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.      | <b>Ongoing</b> |
| 2.  | Proposal to run a hybrid KPSIF for future meetings especially for people travelling from afar. | Mr Harrison | The September Public Safety Information Meeting was used to pilot the Hybrid KPSIF. | <b>Closed</b>  |