Koeberg Public Safety Information Forum (PSIF)

Minutes of the meeting held on Thursday, 15 March 2018

Venue: Visitors Centre, Koeberg Nuclear Power Station

Chairperson: Smokie La Grange

Deputy Chairperson: Natasha Leaner

Name and Surname	Organisation	Present
Anderson, Melville	Resident	A
Arbuckle, Graham	Resident	A
Beyl, Trudy	Resident	P
Boulanger, Catherine	Resident	A
Browne, Peter	Resident	P
Bruce, Peter	Resident	A
Coertzen, MPC	Resident	P
Coertzen, PZN	Resident	P
Duval, Monique	Tygerburger	A
Fiet, LK	Resident	P
Fiet, TBH	Resident	P
Gobel, Klaus	Resident	A
Gordon, Stuart Maurice	Resident	A
Graaf, Michael	Resident	A
Iosiphakis, John	Resident	P
Jones, Jones	Resident	P
Jones, Anneke	Resident	P
Ketcher, A	Resident	A
Kleynhans, Samie	Chairperson: Melkbosstrand Community Police Forum	A
La Grange, Duval	Resident	A
La Grange, Smokie	Melkbosstrand Ratepayers Association	P
Lee, Nick	Resident	P
Lingard, David	Resident	P
Mayhew, Robert	Resident	P
Mayhew, Sylvia	Resident	P
Maigrot, Cynthia	Resident	A
Maigrot, Harold	Resident	A
Moses, Bramwell	Resident	P
Motloane, Ntsoaki Beauty	Resident	P
Motlalepula, Mosia	Resident	P
Mpofu Ntabethemba Wellington	Resident	P
Muspratt- Williams Angela	Resident	P
Nagan, Roy	Resident	P
Naylor, Paul Edward	Resident	P
Pieters, Nico	Resident	A
Pienaar-Bouwer, A	Melkbosstrand Private School	P
Rakuba, Mmakgotha	Resident	P
Rodrigues, Neil	Resident	A
Scott, Neade	Resident	P
Scott, Peter	Resident	P
Slabbert, JA	Resident	P
Scheepers, Cornelius	Symbiosis	P
Van Diemen, A	Resident	P
Venter, Ursula	Greater Table View Action Forum	A
Williamson, Cordelia	Resident	A
Williamson, Raymond	Resident	A
Wucherpfennig, Lyn	Resident	A
Wucherpfennig, Roy	Resident	P

OFFICIALS		
Abrahams, Colin	City of Cape Town	A
Bester, Peter	National Nuclear Regulator (NNR)	A
Bruiners, Rodger	National Nuclear Regulator (NNR)	A
De Wet, Joy	Eskom – Koeberg Operating Unit	P
Douglas, Mehl	National Nuclear Regulator (NNR)	A
de Bruin, Annelise	City of Cape Town	A
Featherstone, Keith	Eskom – Koeberg Operating Unit	P
Fisher, Jason	Eskom – Koeberg Operating Unit	P
Franco, Johannes	Disaster Risk Management Centre	A
Grose, Nora	Councillor – Ward 23	A
Hirachund, Antje	National Radioactive Waste Disposal Institute (NRWDI)	P
Jeannes, Deon	Eskom – Koeberg Operating Unit	A
Joshua, Debbie	Eskom - Koeberg Operating Unit	P
Kline, Kim	Eskom – Koeberg Operating Unit	P
Kunene, Ntaoleng	National Radioactive Waste Disposal Institute (NRWDI)	A
Lavelot, Randall	Eskom – Koeberg Operating Unit	P
Leaner, Natasha	PSIF Deputy Chairperson	A
Makgai, Reuben	National Nuclear Regulator (NNR)	A
Maphoto, Katse	Department of Energy	A
Maree, Marc	Eskom	A
Maree, Vanessa	National Nuclear Regulator (NNR)	A
Matlala, Obakeng	Department of Energy	P
Moffat, Robert	Eskom	A
Moonsamy, Gino	National Nuclear Regulator (NNR)	A
Ndomondo, Thembi	National Nuclear Regulator (NNR)	P
Nicholls, Dave	Chief Nuclear Officer - Eskom Koeberg Operating Unit	P
Ntuli, Velaphi	Power Station Manager - Eskom Koeberg Operating Unit	A
Osman, Shireen	Eskom – Koeberg Operating Unit	P
Phidza, Lewis	Eskom – Koeberg Operating Unit	P
Pillay, Greg	City of Cape Town	A
Powell, Charlotte	City of Cape Town	A
Ramerafe, Mothusi	National Nuclear Regulator (NNR)	A
Sataar, Haaroen	Eskom – Koeberg Operating Unit	P
Sesinyj Palesa	Eskom – Koeberg Nuclear Power Station	P
Stwayi, Mandisi	Eskom – Eskom Koeberg Operating Unit	P
Thomson, Gary	Eskom - Koeberg Operating Unit	P
Tshepe, Tshakane	Department of Energy	P
Valaitham, Mahesh	Eskom – Koeberg Nuclear Power Station	P
Van Rensburg, Stephen	City of Cape Town	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: 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
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
CISF	Centralised Interim Storage Facility	**SPF**	Spent Fuel Pool
DOC	Disaster Operations Centre	**TEM**	Traffic Evacuation Model
ECC	Emergency Control 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.
EIA	Environmental Impact Assessment	**UAE**	United Arab Emirates
Emergency Plan	A document describing the organisational structures, its roles and responsibilities, concept of operation, means and principles for intervention during	**Plant**	Nuclear power station with associated components, machinery, equipment or devices

	an emergency at Koeberg.		
EPZ	Emergency Planning Zone	**UPZ**	Urgent Protective Action Zone
FCs	Functional Coordinators	**EPSOC**	Emergency Planning Steering and Oversight Committee
IPP	Independent Power Producer	**CPA**	Consumer Protection Act
		KEP	Koeberg Emergency Procedure
ISO	International Standards Organisation	**mSv**	The millisievert (mSv) is a measure of the absorption of ionising radiation by the human body.
KNPS	Koeberg Nuclear Power Station	**CoCT**	City of Cape Town
KOU	Koeberg Operating Unit	**IAEA**	International Atomic Energy Agency
KPSIF	Koeberg Public Safety Information Forum	**SABC**	South African Broadcasting Corporation
LTI	Lost Time Injury	**WANO**	World Association of Nuclear Operators
MW	Megawatts. A unit of measure - one megawatt is equal to one million watts.	**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.
NECSA	South African Nuclear Energy Corporation SOC Limited	**CCGT**	Closed Cycle Gas Turbines
NNR	National Nuclear Regulator	**DOC**	Disaster Operations Centre
NOSA	National Occupational Safety Association	**NOSCAR**	The grading of NOSA for safety performance.
NSRB	Nuclear Safety Review Board	**Radiation**	Energy released in the form of particles or electromagnetic waves during the breakdown of radioactive atoms.
OCA	Owner Controlled Area	**NRWDI**	National Radiation Waste Disposal Institute
OEM	Original Equipment Manufacturer	**AECC**	Alternate Emergency Control Centre
Outage	Refers to the maintenance period on a power plant when a number of activities are performed on equipment that keeps the plant running.	**FME**	Foreign Material Exclusion
PAZ	Precautionary Action Zone	**National Electricity Grid**	The network of high-voltage power lines fed by the various power stations, which supplies electricity to the country.

PSM	Power Station Manager	**EP**	Emergency Plan
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.	**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.
Release	The controlled or accidental discharge of radioactive substances into the environment.	**EMP**	Environmental Management Plan
SAPS	South African Police Service	**UPZ**	Urgent Protective Action Planning Zone
SHEQ	Safety Health Environment and Quality	**KCWIB**	Koeberg Cooling Water Intake Basin
SSA	Sea Shore Act	**NSRB**	Nuclear Safety Review Board
TEM	Traffic Evacuation Model	**SAMGs**	Severe Accident Management Guidelines
UAG	Unplanned Automatic Grid Separation	**NERSA**	National Energy Regulator of South Africa
WAC	Waste Acceptance Criteria	**Hazmat**	Hazardous material
		FA	Fuel Assembly

1. Welcome

The Koeberg PSIF Chairperson, Ms Smokie La Grange, welcomed all the members to the first meeting of 2018.

2. Safety briefing

Mr Phidza presented a safety briefing of the venue, highlighting the safety protocols of the venue as well as the emergency alarms and what they mean. He also reminded the attendees to ensure that they had signed the attendance register, which also serves as an accountability register in case of an emergency.

3. Apologies

The following apologies were tendered:
Ms Jenny McKinnell
Mr Neil Rodrigues
Mr Obakeng Matlala
Mr Tshakane Tshepe
Mr Duval La Grange
Ms Anne Lee
Mr Velaphi Ntuli
Mr Riedewaan Bakardien

4. Acceptance of the Minutes of the previous meeting

The Minutes were accepted by Mr Mayhew and seconded by Ms La Grange with the following correction:
Page 10 paragraph 4 should be 950 cubic metres not cubic litres.

Question by Mr Iosiphakis
Mr Iosiphakis requested that cubic metres be converted into kilolitres for better understanding.

Response by Mr Valaitham
Mr Valaitham agreed, and confirmed that kilolitres would be the unit used in future.

Question by Mr Mayhew
Mr Mayhew enquired why there is a delay in distributing the Minutes to the members.

Response by Mr Phidza
Mr Phidza explained that the Minutes are subject to a lengthy approval process as numerous stakeholders' first check the document before it can be sent to the members. He also stated that as per the PSIF Constitution the Minutes will remain in Draft format until they are accepted by the PSIF Members in the meeting.

5. Matters arising from the previous meeting

Ms La Grange raised a concern that the 2018 Koeberg Emergency Plan (EP) Calendar was distributed in the third week of January 2018 as residents would have acquired another calendar by the time the Koeberg EP Calendar was distributed. She offered her assistance to ensure that the calendar is distributed timeously, and requested that the

date blocks on the Calendar be enlarged to be more user-friendly. She also complimented the photography, which included PSIF members, thus showing it to be a calendar of the people for the people.

Comment by Mr Mayhew
Mr Mayhew said that he did not receive the calendar at his home, and happened to pick one up at the dentist.

Question by Mr Thomson
Mr Thomson queried whether Mr Mayhew resides in a complex as there have been problems with the distribution of the calendar to complexes.

Response by Mr Mayhew
Mr Mayhew responded that he does not live in a complex, and voiced a concern that residents in his street may not have received calendars. He stated that he would verify with his neighbours.

Comment by Mr Phidza
Mr Phidza responded that the matter would be followed up once the details have been obtained from Mr Mayhew.

Response by Mr Phidza
In response to Ms La Grange's previous comment, Mr Phidza informed the members that Koeberg Stakeholder Management engages various stakeholders with regard to the best delivery date for the calendars. Schools and farmers request that it be delivered in January, while residents requesting that it be delivered before Christmas. He explained the contract and cost implications of various distribution dates, and explained that the best compromise is therefore January. He went on to inform the members that an advert is placed in the local newspapers annually requesting members of the public residing in the EPZ who did not receive the calendar to contact Koeberg Stakeholder Management. He informed the members that the calendar will be workshopped at the September 2018 PSIF and that members would then be able to provide input into the look and feel and delivery of the 2019 calendar.

Comment by Mr Valaitham
Mr Valaitham informed the members that a request was made for an update of the desalination plant as matters arising in the previous meeting, and confirmed that it was one of the meeting's Agenda items but would also be included in his Koeberg quarterly feedback presentation.

Comment by Mr Phidza
Mr Phidza informed the members that a request was made at the previous PSIF that the pictures of the NNR Board be made available to the PSIF members. He explained that the NNR representative, Mr Peter Bester, would present it during the meeting.

6. Agenda Items

6.1 Koeberg Nuclear Power Station Quarterly Feedback – Mr Mahesh Valaitham (Koeberg Power Station Plant Manager)

Mr Valaitham informed the members that he was standing in for Koeberg's Power Station Manager, Mr Ntuli, who was overseas at the time of the meeting.

Summary:

Plant status:
- Unit 1 – Outage 123
- Unit 2 online for 296 days since Outage 222

Outage 123:
- Unit 1 shutdown on 26 February 2018
- Return to service is planned for end May 2018 (87 days planned)

Safety related information:
- 3 x LTIs (investigations were held)
- Workstop held on 8 February 2018 followed by various interventions

Fire incident – Saturday, 10 March 2018
- There was a small fire that was successfully extinguished before causing major damage at one of the buildings that houses maintenance staff and a canteen at Koeberg nuclear power station.
- An investigation is underway to determine the cause of the fire.
- Fire had a minor impact – only maintenance staff had to be relocated.

Strategic Modifications/Projects
PTR Tank Replacement:
Included in Outage 123 (pending NNR approval)

Spent Fuel Pool Casks:
Safety studies on suitability of CSB for cask storage are completed.

Desalination Plant:
Desalination Plant has been commissioned during February 2018.

Upcoming events:
Outage 223
Start Date is planned for 24 September 2018

WANO Mid-cycle Peer Review Follow-up
Scheduled for 25 – 29 June 2018

INPO Training Accreditation
Scheduled for July 2018

Safety:
- There has been no significant increase in risk to the public, and environment.
- Koeberg Nuclear Power Station continues to operate safely and reliably.

Summary of PTR Tank Replacement Project – Mr Soso Fisa (Project Manager)
Mr Fisa explained to the members that the Reactor and Spent Fuel Pool (PTR) tanks of both Koeberg Units would be replaced, and the new tanks would be manufactured on the Koeberg site. He indicated that the work is scheduled to commence during Outage 123 pending NNR approval.

Question by Mr Iosiphakis
The member enquired why the PTR tank would be stored at the Koeberg Low Level Waste storage and what would happen to it after the storage period.

Response by Mr Fisa
Mr Fisa explained that it would only be stored there temporarily, and after being deconstructed it would be transported in containers to Vaalputs, the national nuclear waste repository site.

Question by Mr Naylor
Mr Naylor queried why the PTR tank has to be replaced and why it has to be stored at the Koeberg Low Level Waste storage.

Response by Mr Valaitham
Mr Valaitham explained that due to stress-corrosion cracking the tank needs to be replaced.

Response by Mr Nicholls
Mr Nicholls clarified that the reason for the old tank having to be stored at Low Level waste is due to low activity.

Comment by Mr Valaitham
Mr Valaitham emphasised that the reason for replacing the tank is not due to radioactivity but because of stress corrosion cracking, which is common in the nuclear generation industry.

Comment by Mr Scott
Mr Scott commented that it seems like a wasted opportunity in capitalising on the Koeberg quarterly feedback presentation. Koeberg could have expanded on the good work being done with the various modifications on the plant which provides an opportunity to share with the PSIF members the effort employed by Koeberg to improve safety. He advised Koeberg Management not to let this opportunity slip.

Desalination Plant feedback/update - Mr Mandisi Stwayi (Chemistry Manager)
Mr Stwayi pointed out that since June 2017, besides distributing water to the plant Koeberg saved about 11 500 kilolitres of water, which the City of Cape Town can use to supply 11 000 households. Furthermore, Koeberg held an official opening of its temporary groundwater desalination plant on 14 February,201 8, which was attended by various media houses and members of the public, including PSIF members.

Question by Mr Mayhew
Mr Mayhew enquired whether the borehole used to supply the desalination plant still has sufficient supply, and whether it will become over-subscribed.

Response by Mr Featherstone
Mr Featherstone explained that the aquifer that the water is being drawn from is quite large, and that both the City of Cape Town and Eskom use this water guided by feasibility studies, water usage restrictions, and permits administered and monitored by local government. Although the CoCT draws more water than Eskom Koeberg from the aquifer, both are still within water permit restrictions limit. He went on to explain that the water use is carefully monitored to ensure that the aquifer is not over-subscribed.

Question by Mr Mayhew
Mr Mayhew queried what would happen should the desalination plant stop operating.

Response by Mr Valaitham
Mr Valaitham explained that in a worst case scenario, the station can still connect to the CoCT water supply. When at full capacity, the water storage tank on the Koeberg site can last for two weeks to ensure the safe shutdown of both units.

Question by Councilor Grose
Councilor Grose requested an estimate of the volumes of water extracted on a daily basis.

Response by Mr Stwayi
Mr Stwayi stated that in total approximately 450 tons per day is extracted, which caters for Koeberg's daily need.

Question by Mr Mayhew
Mr Mayhew referred to the discussion that they had at the previous meeting where a question was asked about where the excess water used in the Koeberg plant operation is released to. He asked whether the water used in the Koeberg plant operation is routed to back to the sea.

Response by Mr Phidza
Mr Phidza explained that it is part of the physical design of the plant as was explained in the previous meeting. He further explained that Koeberg is currently complementing the City's water system with the underground water system as an added alternative, in the absence of a recycling facility.

Response by Mr Featherstone
Mr Featherstone added that the plant does have not have the ability to re-use/process the waste water outflow that has been discharged to the sea.

Question by Councilor Grose
Councilor Grose queried whether Koeberg only extracts what they need and whether they bulk store the water.

Response by Mr Featherstone
Mr Featherstone responded that that Koeberg does store bulk water but only up to a fixed volume (as per the capacity of the tanks on site).

Response by Mr Stwayi
Mr Stwayi explained that Koeberg stores water in a tank with a capacity of about 9 000 kiloliters that can last for up to two weeks. He reiterated that Koeberg is currently saving huge volumes of water as a result of their desalination plant, and that this water is now available to the City for other use.

Comment by Mr Valaitham
Mr Valaitham added that water usage at Koeberg has dropped from 1 300 kiloliters per day to 900 kiloliters per day.

Question by Mr Iosiphakis
Mr Iosiphakis queried whether Koeberg used water from the aquifer as well as municipal water before the establishment of the desalination plant.

Response by Mr Featherstone
Mr Featherstone explained that Koeberg had a Reverse Osmosis (RO) plant in the past, which was obtained from one of Eskom's old fossil fuel power stations. He explained that the plant used aquifer water but it had become too expensive as it was an old plant with old technology which had become a challenge to maintain due to the outdated technology. The plant was run for approximately two years and after it was discontinued, the plant did not use the aquifer.

Comment by Mr Scott
With reference to the quarterly plant feedback presented by Mr Valaitham, he stated that he felt that the detail regarding the plant trip was skipped amidst the other information that was shared in more detail. He also pointed out that it would be of interest to the public to be informed why the plant tripped twice, which will cast light on the lessons learnt.

Response by Mr Valaitham
Mr Valaitham acknowledged the comment and explained that due to the incident still being under investigation, it would have been premature for him to share more detail. He agreed to share more about the incident as well as the lessons learnt as part of the quarterly power station feedback in the June PSIF.

Question by Mr Lee
Mr Lee questioned why Koeberg would be commencing work on replacing the PTR tank during the outage when NNR approval had not yet been obtained.

Response by Mr Valaitham
Mr Valaitham explained that the intrusive work had not yet commenced, only the construction of the new tank and the necessary preparation work, such as building a crane and storage preparation, while awaiting NNR approval.

Question by Mr Lee
Mr Lee asked whether the sirens can be tested on weekends when people are home.

Response by Ms La Grange
Ms La Grange explained to the member that the aim of the Full Volume Siren Test is to test the sirens in situations that mirror a real-life scenario. If the sirens were to be tested on weekends it would bring about other challenges such as interfering with church services on Sundays and sports matches on Saturdays.

Comment by Mr Phidza
Mr Phidza said that an emergency occurs unscheduled, which is the reason for testing the sirens during a normal day when everyone is busy with their normal day-to-day activities.

Response by Ms La Grange
Ms La Grange commended Koeberg on the great work done on the siren test advertisements which were in all the local newspapers, and the lamp pole posters that were already up three days before the test, from Atlantis to Parklands.

Question by Mr Lingard
Mr Lingard expressed concern that he lives on Blouberg road opposite Flamingo Square and did not hear the sirens.

Response by Mr Thomson (Emergency Management Manager)
Mr Thomson explained to Mr Lingard that he was not supposed to hear the sirens as the sirens cover the 16km area around Koeberg, which stretches as far south as Porterfield Road, and Parklands Main Road as part of the approved Emergency Plan.

Question by Mr Lingard
Mr Lingard expressed concern that something might happen and by the time people realise it, the roads will already be blocked. He asked whether more sirens can be erected further out to convey the message about the emergency.

Response by Mr Phidza
Mr Phidza explained that in a real-life emergency scenario the emergency will be broadcast on radio and television, that there will be roadblocks, and that emergency information will be widely distributed. The purpose of the siren test was to check whether the sirens were audible and working - no action was required from the

residents. Mr Phidza explained that information and adverts were everywhere to communicate that it was a test - this also included a radio broadcast that Koeberg did on One FM and other radio stations to explain that it was only a test. This is according to the Emergency Plan, and the approved plan requires that the sirens only be erected within the 16km Emergency Planning Zone.

Question by Mr Iosiphakis
Mr Iosiphakis informed the members that he read an article stating that the City of Cape Town Emergency Services/Disaster Risk Management has been taken over by a private company.

Response by Mr Featherstone
Mr Featherstone explained that there was an article in the newspaper recently that read that the City of Cape Town Disaster Risk Management will no longer co-ordinate relief efforts after a disaster. However, they will still be performing their regular function.

6.2 Dry Cask Storage feedback: Mr Haaroen Sataar - Project Manager Spent Fuel Storage Project

Question by Mr Naylor
Mr Naylor enquired about the criteria that determine whether fuel is stored in wet or dry storage.

Response by Mr Sataar
Mr Sataar explained that the fuel must be stored in the spent fuel pool (wet storage) for at least 10 years, and cooled down to a certain level before being moved to dry storage (dry storage casks).

Question by Mr Mayhew
Mr Mayhew queried whether the fuel is taken out of wet storage and placed into dry storage and whether some of the fuel is moved back into wet storage in order to create space.

Response by Mr Sataar
Mr Sataar explained that when fuel is moved from wet to dry storage it will not be moved from dry storage back to wet storage.

Question by Mr Mayhew
Mr Mayhew asked how long the fuel will stay in dry storage.

Response by Mr Sataar
Mr Sataar explained that once in dry storage it will be transported to an Interim Storage Facility; one of the sites which have been identified was Vaalputs. Thereafter, it will be moved to a Centralised Interim Storage Facility.

Response from Mr Nicholls
Mr Nicholls explained that the fuel can be stored in dry storage for about 100 years, and in wet storage for more than 10 years.

Question by Mr Mayhew
Mr Mayhew expressed his concern about the fuel being stored at Koeberg in dry storage. He said that he is aware that the plan was to store it temporarily at Koeberg before the fuel is moved to another site but feels that it is more contained and safer in wet storage than in dry storage at Koeberg.

Response by Mr Nicholls
Mr Nicholls explained that storing 10 year old fuel in dry storage casks is a much safer way to store fuel than wet storage. He said that the length of time it is stored on the Koeberg site is dependent on how long it will take for the National Centralised Interim Storage Facility to be established at Vaalputs. He went on to explain that the Environmental Impact Assessment (EIA) studies done allow Koeberg to store the casks at the Interim Storage Facility on site, until Koeberg has been decommissioned.

Question by Mr Mayhew
Mr Mayhew wished to confirm his understanding that the spent fuel will be stored at Koeberg for 10 years before being moved to another facility.

Response by Mr Nicholls
Mr Nicholls explained that the position and policy from the National Radiation Waste Institute is to have a Centralised Waste Disposal Facility at Vaalputs by 2025. This decision resides with national government. Koeberg received approval to store the spent fuel at Koeberg until the end of its plant life should this facility not established before then.

Question by Mr Naylor
Mr Naylor asked whether the spent fuel would to be shipped to Vaalputs

Question by Mr Nicholls
Mr Nicholls explained that the spent fuel will be transported to the final waste repository or be reprocessed.

Question by Mr Mayhew
Mr Mayhew enquired whether the casks are movable.

Response by Mr Nicholls
Mr Nicholls explained that 14 of the casks are both storage and transportable.

Question by Mr Iosiphakis
Mr Iosiphakis queried whether the size of the Spent Fuel Pool remains the same even with fuel being taken out in order to extend the fuel pool.

Response by Mr Sataar
Mr Sataar explained that during an outage the reactor is unloaded, and some of the fuel is taken out of the Spent Fuel Pool. The size of the fuel pool remains the same irrespective of fuel assemblies in the pool.

Question by Mr Scott
Mr Scott confirmed that the Spent Fuel Cask Project is part of Koeberg's plant life extension projects and asked whether there is any slide that shows this.

Response by Mr Sataar
Mr Sataar explained that Phase One of the project is to create adequate space up to 2025. Phase Two is to accommodate the life extension of Koeberg.

Comment by Mr Nicholls
Mr Nicholls added that the life span of Koeberg is targeted to be 60 years, which takes us up to 2045.

Question by Mr Lingard
Mr Lingard queried whether the water in the Spent Fuel Pool is included in the 950 kilolitres mentioned in the earlier discussion.

Response by Mr Nicholls
There is no consumption in the Spent Fuel Pool. The water in the spent fuel pool is circulated by coolers within the spent fuel pool for cooling purposes.

Question by Mr Mayhew
Mr Mayhew asked how much spent fuel goes into a cask.

Response by Mr Sataar
Mr Sataar explained that it differs depending on the design and the manufacturer of the casks. The new casks can hold 32 spent fuel assemblies, whereas the previous design could only hold 28 spent fuel assemblies.

Question by Mr Scott
Mr Scott asked why Koeberg decided to change the design of the casks.

Response by Mr Nicholls
Mr Nicholls explained that it was an open tender process and the supplier that met Koeberg's safety and technical requirements was awarded the contract. He stated that although the design is different to the casks provided by the previous supplier, safety has not been compromised.

Question by Mr Scott
Mr Scott queried whether the heat removal system at Koeberg is a passive system.

Response by Mr Sataar
Mr Sataar confirmed that is a passive system.

NNR Board Presentation (feedback from previous meeting) – Mr Peter Bester (Programme Manager – Site office)
In response to a request from PSIF members, Mr Bester delivered a presentation which included photographs of the NNR Board members and requirements relating to the composition of the Board.

Question by Mr Mayhew
Mr Mayhew commented that it seems like the NNR Board is composed of very knowledgeable and educated individuals as observed from their level of education and experience. He expressed his concern with regard to their nuclear experience as that was not very evident from their working experience.

Response by Mr Bester
Mr Bester explained that the Board has a mix of experience and that they have appointed two technical advisors who come from the nuclear industry. He also explained that the Board can co-opt people with nuclear experience as and when required.

7. General

Question by Mr Lee
Mr Lee enquired about the starting time of the PSIF as it is not reflected on the Minutes.

Response by Mr Phidza
Mr Phidza informed Mr Lee that it was advertised in the newspapers, on the siren test leaftlet and in the 2018 calendar, and since inception of the PSIF Meetings it has always been 19:00.

Question by Mr Lee
Mr Lee referred to the PSIF Minutes of December 2016 where he enquired about the state of the NNR building in Duynefontein and asked about the progress made to date as the signage is still there and the building is still in a state of disrepair.

Response by Mr Bester
Mr Bester explained that the project has been placed on hold due to a delay in approvals from the City of Cape Town and due to budget constraints.

Comment by Ms La Grange
Ms La Grange suggested that the board with their name be removed as the building is derelict and reflects badly on the NNR's reputation.

Question by a member
One of the members enquired whether it is safe to swim in the sea at Melkbosstrand as there are pools of warm water at certain points walking on the beach towards Koeberg.

Response by Ms La Grange
Ms La Grange confirmed that it is about 96% safe but she cautioned the member to rather refrain from walking in the river.

Response by Mr Browne
Mr Browne responded that from a radiological safety point of view there is no threat and that the sea is safe to swim in.

Comment by Mr Nicholls
Mr Nicholls explained that the condensers at Koeberg heat up the outfall water by about approximately 10 degrees but that within 100m from the outfall; there's approximately only a one degree difference in temperature.

Question by Mr Naylor
Mr Naylor said that he spoke to the outgoing chairperson about three months before about observing a spill of oil in the smoke detector display in the Visitors Centre display area. He said that he asked for it to be repaired but noticed that it still hadn't been repaired, and that after six months he found it in the same condition. His concern was that if it was the same maintenance team that is responsible for Koeberg's maintenance, then he is very concerned.

Response by Mr Phidza
Mr Phidza explained that the oil Mr Naylor was referring to is less than five drops of oil. He said that the Koeberg Maintenance team prioritises plant work; however, the panel maintenance at the Visitors Centre will be done before the next PSIF Meeting in June 2018.

8. Proposed Topics:
The following topics were proposed for the upcoming meeting:

- Environmental monitoring of the outfall (update)
- Effect of the drought on the fauna and flora
- Update on desalination
- Outage update/progress (quarterly station feedback)

9. Date of next meeting
The next meeting will take place on Thursday, 28 June 2018, at the Koeberg Visitors Centre.

10. Closure
The Chairperson thanked all the members for attending. The meeting was adjourned at 21:30.