

BACKGROUND INFORMATION DOCUMENT



October 2022

PROPOSED KOMATI POWER STATION SHUTDOWN AND DISMANTLING

PROJECT ANNOUNCEMENT

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1. PURPOSE OF THIS DOCUMENT

The purpose of this **Background Information Document** (BID) is as follows:

1. It serves to provide an overview of the proposed **shutdown and dismantling** of the **Komati Power Station** (KPS), which is located in Mpumalanga (the “Project”);
2. It provides an outline of the environmental assessment that will be undertaken for the Project; and
3. It allows for the registration of Interested and Affected Parties (I&APs) and for upfront comments to be raised regarding the proposed Project.



2. BACKGROUND & MOTIVATION

Eskom Holdings SOC (Ltd) is a South African utility that generates, transmits, and distributes about 95% of the country's electricity. KPS is a Coal Fired Thermal Power Plant with an installed capacity of 1000 MW but has only one remaining Operational Unit with a capacity of 120 MW (Unit 9), which is scheduled for shutdown at the end of October 2022. In line with South Africa's Just Energy Transition (JET) and in support of the decarbonization of the minerals and energy sectors in a socially acceptable manner, Eskom embarked on the Just Energy Transition Project (JETP) which is to be financed by the World Bank to pilot Eskom's JET under Eskom's 2035 Strategy and Road Map by the decommissioning and repurposing of KPS.

3. OVERVIEW OF KPS

3.1 Location

KPS is situated approximately 37km south of the town of Middelburg, next to the R35, in the Mpumalanga Province. It falls within the Steve Tshwete Local Municipality and Nkangala District Municipality. The GPS coordinates for the power station are 26°05'24.77"S, 29°28'20.39"E. Refer to the map contained in **Figure 1** below.

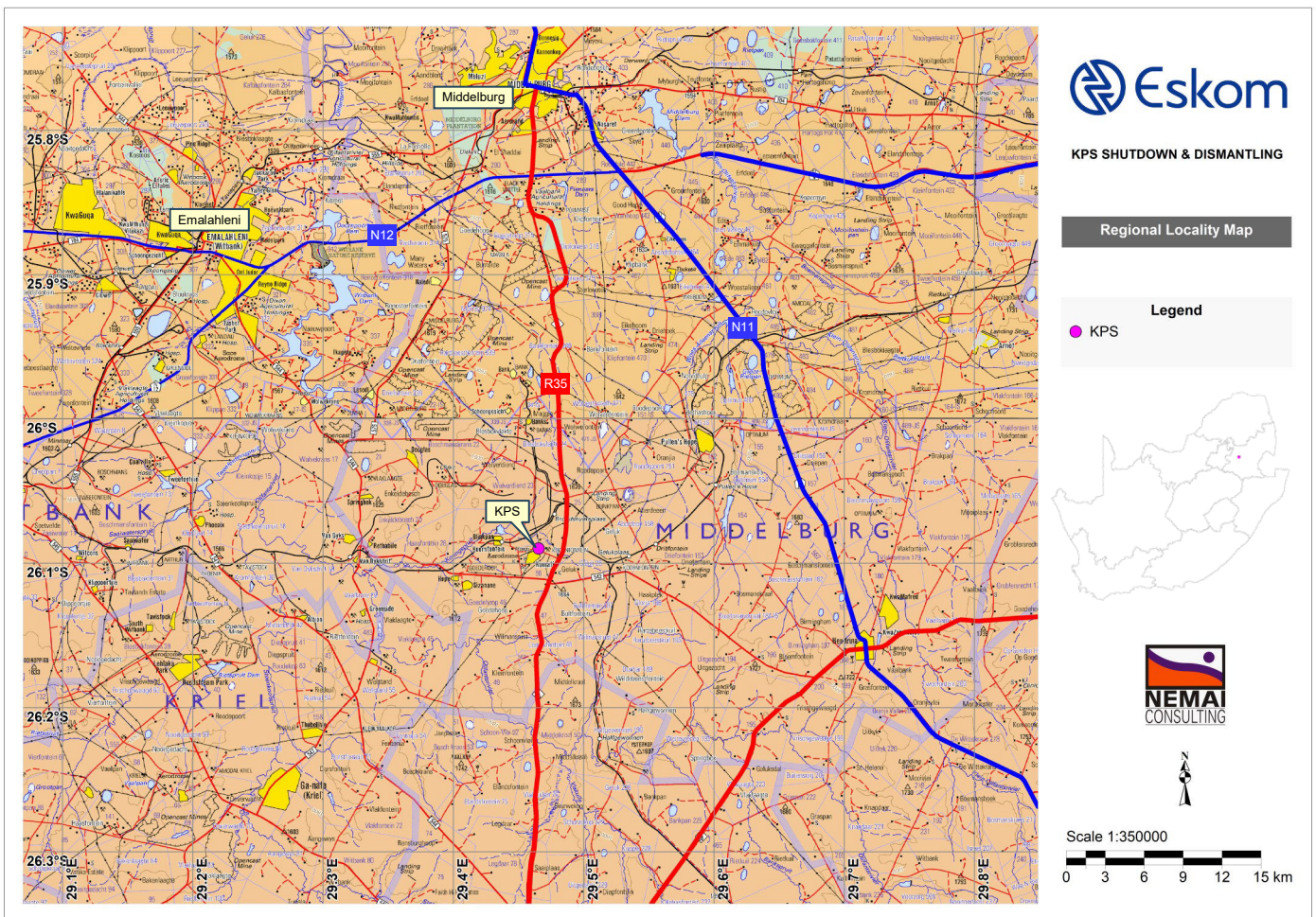


Figure 1: KPS regional locality map

3.2 Historical Context

Planning of KPS commenced in June 1957. The first generator was commissioned at the end of 1961 and the last unit in 1966. The first unit to be mothballed was Turbine 5 on 15 December 1987, followed by Boiler 3. The rest of the plant was mothballed at various intervals thereafter, with the last unit mothballed in December 1990. Eskom decided in the early 2000's to return KPS to service to meet the growing demand of electricity and the full station was brought online in 2011.

3.3 Layout

The two distinct parts of the KPS, as shown in **Figure 2** below, include the power station complex (**Figure 3**) and the ash dam area (**Figure 4**).

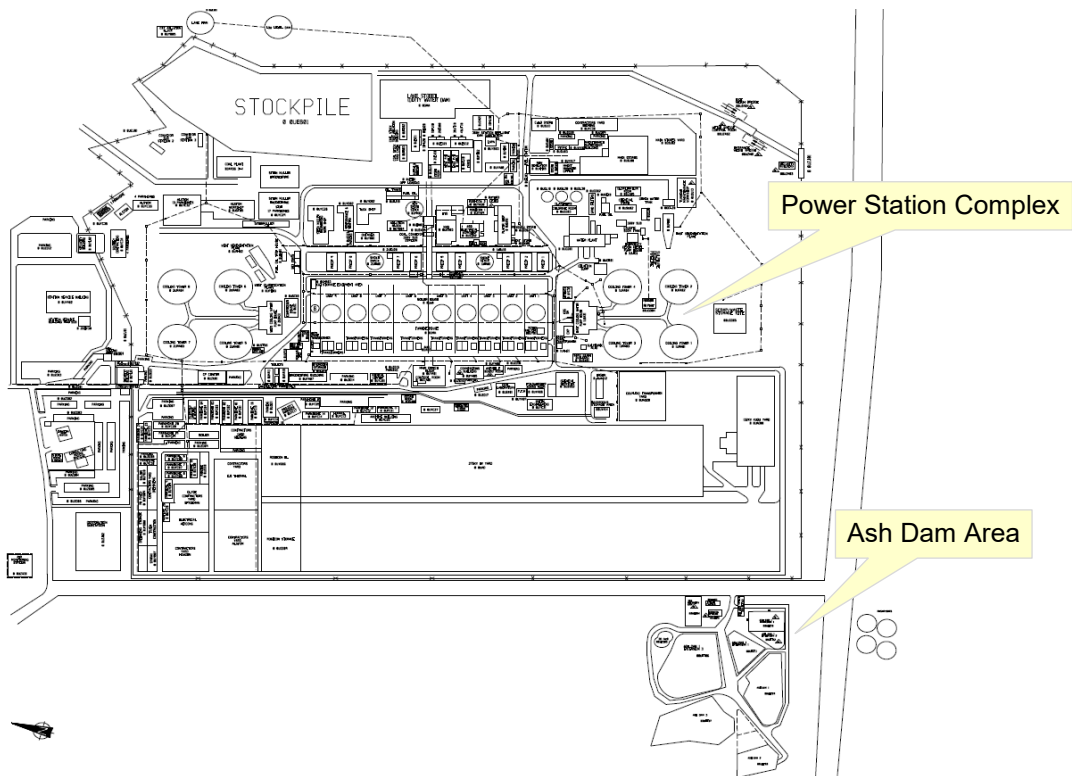


Figure 2: KPS Layout (for illustrative purposes only)



Figure 3: KPS power station complex

KPS operates a wet ash system. The ash dam area includes the existing ash dam, old asbestos disposal facility, old ash dam, new 3D ash dam, ash water return (AWR) dams and a third water recovery dam.



Figure 4: Ash dam area

4. PROJECT DESCRIPTION

4.1 Overall Scope for KPS

The overall scope for KPS, in line with Eskom's 2035 plan and the JET partnership, entails the following:

- **Component A** – Shutdown and dismantling of KPS (focus of this document);
- **Component B** – Repurposing KPS by repowering the plant with solar photovoltaic (PV), batteries and wind and adaption of innovative technical solutions to improve quality of power supply; and
- **Component C** – This component is centred around three key pillars, namely: (a) Transition support for Komati Permanent Workers, Suppliers and Contract Workers; (b) Community Development and Economic Diversification; and (c) Stakeholder engagement.

4.2 Component A: Overview

The overall high-level programme for the decommissioning of KPS includes the following activities:

- Pre-closure planning (current phase of Project) –
 - ◊ Prepare a detailed Decommissioning Plan;
 - ◊ Comply with exiting environmental approvals;
 - ◊ Undertake the Environmental and Social Impact Assessment (ESIA) and seek environmental approvals;
 - ◊ Prepare decommissioning arrangements and programme; and
 - ◊ Plan Occupational Health and Safety measures for closure.
- Management and operation of the shutdown of the power station.
- Decommissioning of all plant, equipment, buildings and facilities, in accordance with the Decommissioning Plan and legal obligations.
- Management of all waste generated, including interim handling, storage, processing, transport and disposal.
- Remediation and return of the site to an agreed end state.

Table 1 lists the areas which are proposed to be kept or removed as part of the retiring and repurposing of KPS.

Table 1: Areas to be decommissioned for retiring (removal) vs repurposing

No.	Area	Keep for Retiring	Keep for Repurposing	Remove
Main Power Station Complex				
1	Parking and induction area			✓
2	Pilot PV project	✓	✓	
3	Main service building		✓	
4	CED and other offices			✓
5	HV Yard and switching stations	✓	✓	
6	Main office block, engineering offices and medical centre		✓	
7	West cooling towers, workshops, and water pump house			✓
8	Boiler house, stacks and precipitators			✓
9	Turbine house		✓	
10	Plater shop, Roshcon, offices, fuel off-loading and other workshops			✓
11	Rotek offices, ops training centre and other offices			✓
12	Main stores, contractor yard and fuel station			✓
13	East cooling towers and east cooling water pump house			✓
14	Water treatment plant	✓	✓	
Ash Dam and related infrastructure				
15	Lake Stoffel			✓
16	Lake Fin			✓
17	Existing ash dam	✓	✓	
18	Old asbestos disposal facility	✓	✓	
19	Old Ash dam	✓	✓	
20	New 3D Ash dam	✓	✓	
21	Wetland/Fish dam		✓	
22	Ash water return dam			✓
23	Old ash water return dams			✓
24	Third water recovery dam			✓
25	Reservoirs	✓	✓	

The preliminary options under consideration for the repurposing and decommissioning of KPS are listed in **Table 2**.

Table 2: Preliminary options under consideration

ADF	<ul style="list-style-type: none"> • Default option: keep and rehabilitate ADF • Ash beneficiation • Treatment
Waste Management	<ul style="list-style-type: none"> • Non-hazardous waste: <ul style="list-style-type: none"> ◊ Permanent onsite waste disposal facility ◊ Offsite disposal • Hazardous waste: <ul style="list-style-type: none"> ◊ Treat and manage as non-hazardous waste ◊ Offsite disposal
Land Use & End-State Options	<ul style="list-style-type: none"> • Remain vacant • Renewable energy development • Agriculture
Repurposing Options	<ul style="list-style-type: none"> • Repurposing options (other than renewable energy) that will benefit the surrounding communities.
Remediation Options	<ul style="list-style-type: none"> • <i>Ex situ</i> remediation • <i>In situ</i> remediation
No-Go Option	-

4.2 Component A: Timeframes

According to the preliminary programme, it is intended to undertake decommissioning from January 2025 to July 2026.

5. ENVIRONMENTAL ASSESSMENT

5.1 Environmental Process for Component A

Eskom will need to comply with all obligations in terms of existing environmental approvals for KPS and obtain the new approvals required for the decommissioning and repurposing of the power station.

Nemai Consulting was appointed by Eskom to undertake an ESIA for Component A. The ESIA for the proposed shutdown and dismantling of KPS must satisfy the following –

- The proposed Project will be supported by funding from the World Bank Group, and therefore it is to be executed to meet all related requirements, including the World Bank Environmental and Social Framework, the General Environmental, Health and Safety (EHS) Guidelines, Industry specific EHS Guidelines and Good International Industry Practice (GIIP).
- South Africa’s environmental legal requirements, including the following:
 - ◊ National Environmental Management Act (Act No. 107 of 1998) (NEMA) and the Environmental Impact Assessment (EIA) Regulations of 2014, as amended (“EIA Regulations”); and
 - ◊ National Environmental Management: Waste Act (Act No. 59 of 2008) (NEM:WA).

An Integrated Application in terms of NEMA and NEM:WA will be submitted to the Department of Forestry, Fisheries and the Environment (DFFE) to seek Environmental Authorisation and a Waste Management Licence for Component A. Based on the listed activities and waste management activities triggered by Component A, a Basic Assessment Process (outlined in **Figure 5** below) will be undertaken in accordance with the EIA Regulations.

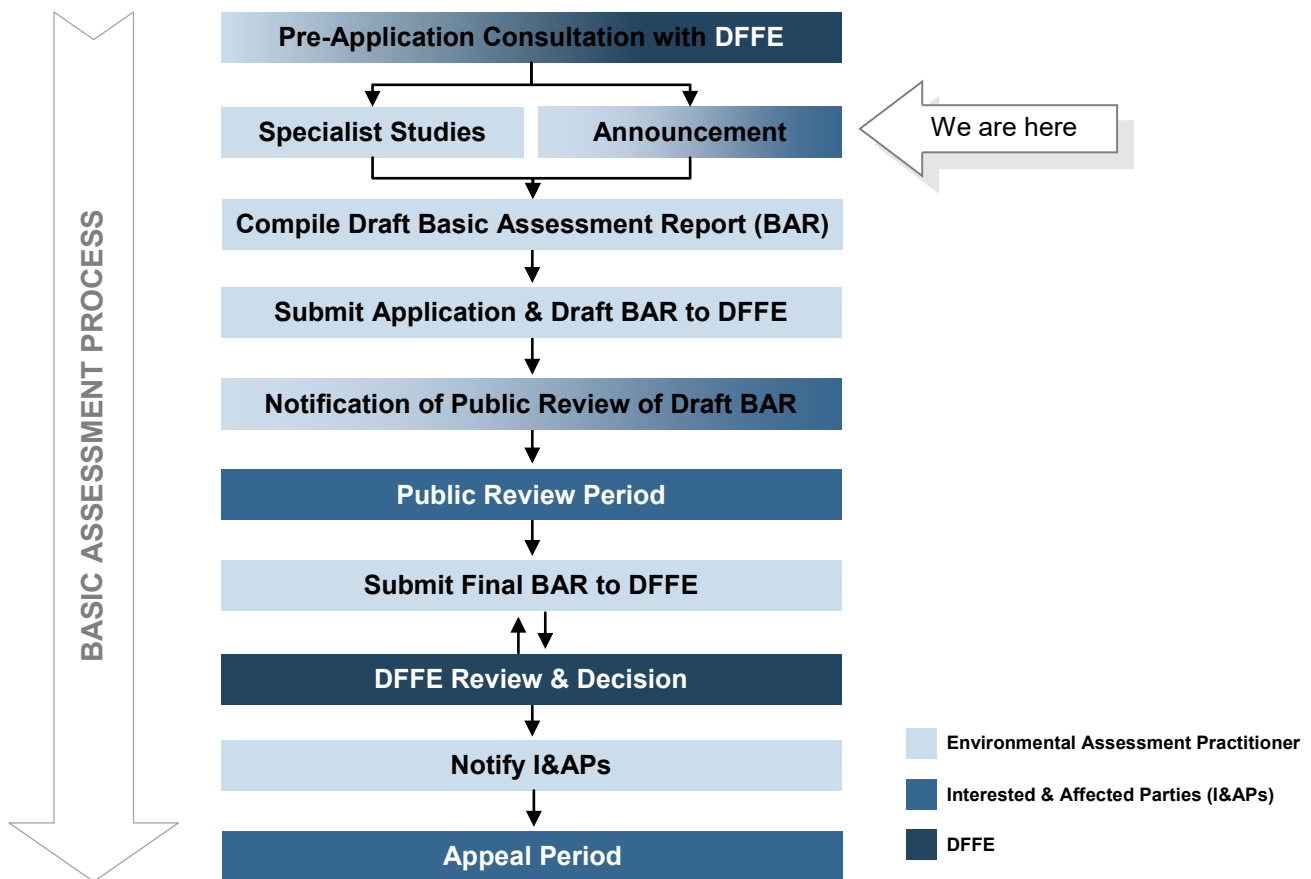


Figure 5: Outline of Basic Assessment Process for Component A

In addition to the ESIA, the following plans stipulated in KPS’s existing Water Use Licence (WUL) that was granted in terms of the National Water Act (Act No. 36 of 1998) (NWA) must be developed:

- Integrated Water and Waste Management Plan (IWWMP);
- Rehabilitation Strategy and Implementation Plan (RSIP); and
- Closure Plan.

There are also other pieces of legislation and mandated authorities governing specific environmental management topics (e.g., air quality) and features (e.g. biodiversity, heritage and cultural resources, etc.), which will be considered further as the Basic Assessment unfolds.

5.2 Public Participation

5.2.1 Overview of Public Participation Process

Public Participation will be undertaken in accordance with Chapter 6 of the EIA Regulations. Some of the key tasks that form part of the Public Participation Process include the following:

- Compile and maintain a database of stakeholders;
- Announce the Project and allow for the registration of I&APs (*note: this is where we currently are in the process*);
- Grant authorities and registered I&APs a period of 30 days to review and submit comments on the draft BAR; and
- Provide notification of DFFE's decision and explain the appeal processes.

5.2.2 Public Engagement

The following public engagement sessions have been scheduled to provide a platform for project-related discussions and to obtain input from stakeholders:

Table 3: Public Engagement Sessions

Date:	3 November 2022	
Session:	Open Day	Public Meeting
Time:	1:00 PM – 4:30 PM	5:30 PM – 7:30 PM
Venue:	Koorfontein Community Hall, Blinkpan (let us know if you require directions)	

Note: You do not need to attend both the Open Day and Public Meeting, as the same information will be presented.

5.2.3 Registration as an I&AP

To register as an I&AP and to raise any comments or concerns regarding the proposed Project (Component A), please complete the **attached Reply Form** and return it to Nemaï Consulting by **28 November 2022**.

6. CONTACT DETAILS

6.1 Component A

For any queries or comments related to Component A, please contact the Environmental Assessment Practitioner below:



Contact Person: *Donavan Henning*
Tel: *(011) 781 1730*
Fax: *(011) 781 1731*
Mobile: *082 891 0604*
Email: *donavanh@nemaï.co.za*
Postal Address: *PO Box 1673, Sunninghill, 2157*

6.2 Component B



Note: Eskom appointed WSP Group Africa (Pty) Ltd to undertake a separate ESIA for the proposed repurposing of KPS (Component B). The contact person is Megan Govender (T: +27 011 361 1300; E: Megan.Govender@wsp.com).

