

Proposed Eskom Distributed Battery Energy Storage System (BESS) at the Elandskop Substation, Located within uMgungundlovu District Municipality, KwaZulu-Natal



# Purpose of a Background Information Document (BID)

The purpose of this Background Information Document (BID) is to provide Interested and Affected Parties (I&AP's) with background information on the proposed project and introduce the Environmental Basic Assessment (BA) process to be followed. It also aims to (i) inform I&AP's on how to participate in the BA, (ii) encourage responses to documents that will be distributed for review and (iii) encourage I&AP's to attend any public meetings.

1World Consultants have been appointed as the independent Environmental Assessment Practitioner (EAP), to undertake the Basic Assessment Process for the Environmental Authorisation for the Proposed Eskom Distributed Battery Energy Storage System (BESS) across KwaZulu-Natal.

#### **Nature and Location of Activity**

Eskom Holdings SOC Limited has identified distributed storage as an alternative to support renewable energy expansion in South Africa.

The Elandskop substation was identified to have sufficient space to accommodate BESS. The criteria are as follows:

- Network simulations identified constrained distribution feeders where BESS can provide a solution:
- Ownership of the property (substation owned by Eskom);
- Proximity of load customers to existing or confirmed future renewable generators (IPPs);
- Availability of sufficient Medium Voltage connection capacity for the BESS; and
- Availability of sufficient space at the substation for installation of the BESS containers.

Eskom is considering two (2) types of BESS technology alternatives:

- Solid state Batteries which comprise of Lithium-ion:
- Flow Batteries which comprise of Venadium Redox and Zinc Bromide; and
- A third alternative which is a combination of 1 & 2.

### **Environmental Impact**

The proposed development triggers the following listed activities as per Listing Notice 1:

#### Listing Notice 1: Activity 14:

The development and related operation of facilities or infrastructure, for the storage, or for the storage and handling, of a dangerous good, where such storage occurs in containers with a combined capacity of 80 cubic metres or more but not exceeding 500 cubic metres.

#### **Listing Notice 1: Activity 27:**

The clearance of an area of 1 hectare or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for—

- (i) the undertaking of a linear activity; or
- (ii) maintenance purposes undertaken in accordance with a maintenance management plan.



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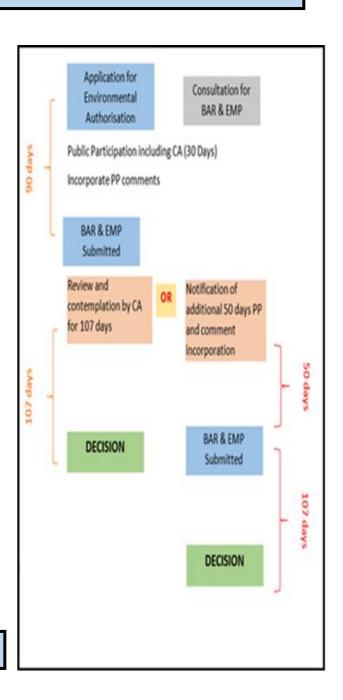


### The Basic Assessment Process and Public Participation Process (PPP)

The primary aim of the Basic Assessment is to ensure that any potential environmental impacts that may occur, due to the construction and/or operation of the proposed development, are mitigated.

The main aspects of a Basic Assessment are:

- Investigate and gather information on the area,
- Describe the environment and how the development would fit in,
- Identify and involve potential I&AP's and stakeholders,
- Identify potential impacts,
- Investigate alternatives to the proposed development,
- Recommend mitigation measures and compile an Environmental Management Program (EMPr) for the construction and operational phases.



# **Mitigation Measures**

There are several risks associated with construction activities. Initial mitigation measures include a minimal working footprint, site demarcation, demarcation of no-go areas, designated and demarcated site access routes, sediment control measures, spillage control measures, dust control measures, general construction control, staff training and site rehabilitation post construction. A monitoring and auditing plan for the construction phase of the development, will be formulated to ensure that the mitigation measures, detailed in the Environmental Management Program (EMPr) are followed.



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# Elements of the Public Participation Process (PPP)

The public is invited to register as an I&AP and take part in the PPP via the following methods:

- Media Notices placed in newspapers.
- Distribution of this Background Information Document (BID)
- Site notice boards
- Stakeholder meetings
- Public meeting (if necessary)
- Submission of comments on the media notices, BID, and Draft Basic Assessment Report.

Note: All information is available on request.

## **How to Participate?**

All Interested and Affected Parties (I&AP's) are invited to register, on the database managed by 1World Consultants (Pty) Ltd by email or fax using the details provided.

Comments and recommendations regarding the proposed development are welcome and may be addressed to:

#### Roschel Maharaj

Tel: 031 262 8327

Postal: P.O. Box 2311, Westville, 3630

Email: roschel@1wc.co.za



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# **Site Photographs**





**Proposed Eskom Distributed Battery Energy Storage** System (BESS) at the Elandskop Substation, Located within uMgungundlovu District Municipality, KwaZulu-Natal



	Snapshot	Description
2		Snapshot 2: depicts the Elandskop Substation.
3		Snapshot 3: depicts the area for BESS.



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