

# BACKGROUND INFORMATION DOCUMENT

## EAST COAST GAS PROJECT POWER LINE

THE PROPOSED NEW 400kV POWER LINES DEVELOPMENT  
AND ASSOCIATED INFRASTRUCTURE NEAR RICHARDS BAY,  
KWAZULU-NATAL PROVINCE



DEA REFERENCE NO: Still to be obtained



## INTRODUCTION

Eskom mandate is to ensure a reliable electricity supply of acceptable quality and it is essential for the economic development of South Africa. In line with this mandate Eskom is currently in the process for the proposed development of the Richards Bay Combined Cycle Power Plant (CCPP). The power generated at the CCPP will need to be integrated with current 400kV power lines in the Richards Bay area.

To obtain authorization for these new 400kV transmission lines is the focus of this project.

## AIM OF THIS DOCUMENT

The National Environmental Management Act (NEMA) makes provision for the public and local community to partake in the authorization process. The review of key documents by the public and community is a vital part of the project and is referred to as the Public Participation Process (PP). PP forms an integral part of any Environmental Impact Assessment (EIA) process.

This Background Information Document (BID) aims to provide basic information regarding the project and offers the public the opportunity to obtain basic information to decide whether to become involved in the project. The BID gives high level information on the proposed development, location and process to be followed. The BID is also an invitation to the public to become involved and gives details on how to become part of the approval and development team.

## OVERVIEW OF THE PROPOSED PROJECT

### Introduction

The development of the CCPP is proposed in the Richards Bay Industrial Development Zone (IDZ) phase 1D. The Environmental Impact Assessment process for this proposed power plant is currently under way and is managed by Savannah Environmental (Pty) Ltd and the lead consultant is Shaun Taylor, who can be contacted at Tel: +27 (0)11 656 3237, Cell: +27(0)72 779 4899, Fax: +27 (0)86 684 0547.

Eskom requires the power generated by the proposed CCPP to be integrated with its current 400kV infrastructure within the Richards Bay area. The proposed powerlines are connecting to existing powerline infrastructure that connects existing substations. These include Impala, Athene and Invubu substations. The construction of these proposed power lines will require Environmental Authorization issued by the National Department of Environmental Affairs (DEA)

### Need for the Project

The purpose of the CCPP is to ensure the stabilization of the power supply and reduce transmission losses within the Richards Bay and Kwazulu-Natal area. Electricity to be generated in the proposed CCPP will need 4 x 400kV transmission power lines to evacuate power from the proposed power plant. The power will be transmitted to the existing powerline and substation infrastructure.

The new proposed 400kV lines are therefore required to ensure the optimal transmission of the generated power into the Eskom grid.

## Project Scope

Eskom requires the construction of 4 x 400kV power lines to transmit the power generated at the new proposed Combined Cycle Power Plant (CCPP) with a generating capacity of up to 3000MW.

Four 400kV power lines are required:

- 2 x Athene - East Coast Gas 400 kV
- 1 x East Coast Gas – Umfolozi 400 kV
- 1 x East Coast Gas – Invubu 400 kV

And the line configuration could include:

- Typical 400kV self supporting and guyed structures.
- 3 or 4 bundle conductor with Aluminum Conductor Steel Reinforced
- Span length typically between 300 m– 600 m

The project scope will include:

- Upgrade all applicable 400 kV underrated switchgear;
- Install 4 Fault limiting reactors at the 132 kV side of the transformers at Athene substation;
- Loop into Athene- Invubu and Athene – Umfolozi 400 kV lines and construct 4 x 400 kV 12 km lines to the

PS substation;

- Establish 400 kV double busbar with 2 bus couplers, 4 bus sections and transfer bus at the PS substation;
- Equip 4 x 400 kV feeder bays at the PS substation;
- Equip (x) x 400 kV transformer bays at the PS substation
- Establish control room and 400 kV yard with associated equipment, fencing and earthworks for the 400 kV yard

Eskom requires a 55m wide servitude for each proposed powerline to be constructed .

## Location

The proposed power lines will start at the CCPP on Portion 2 and Portion 4 of Erf 11376 which is situated within Phase 1D of the Richards Bay Industrial Development Zone (RIDZ) located approximately 6km south west of Richards Bay and 4km south west of Alton.

The power lines are required to loop into the following current approved power lines:

- Athene- Invubu;
- Athene – Umfolozi.

The loop into is proposed at either:

- Athene Substation which is approximate 6km due West of the start point or;
- Invubu Substation which is approximate 10km due North of the start point.

Within the City of uMhlatuze Local Municipality which falls within jurisdiction of the King Cetshwayo District Municipality, KwaZulu-Natal Province. Please refer to the included map indicating the scope areas.

## Legislation

Application for Environmental Authorization in terms of Sections 24 and 24D of the National Environmental Management Act (No 107 of 1998), as read with the EIA Regulations (2014), as amended on 07 April 2017, of GN R325 to GN R327, a Scoping and EIA is required to be undertaken for the proposed project.

The following listed activities will be applied for:

Listed Activity	Description
GN R327 activity number 12	<p>The development of—</p> <ul style="list-style-type: none"> <li>ii) Infrastructure or structures with a physical footprint of 100 square meters or more where such development occurs—               <ul style="list-style-type: none"> <li>a) within a watercourse;</li> <li>b) in front of a development setback; or</li> <li>c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse</li> </ul> </li> </ul>
GN R325 activity number 9	<p>The development and related operation of facilities or infrastructure for the generation of electricity from a non-renewable resource where the electricity output is 20 megawatts or more</p> <p>GN R325 activity number 9he development of facilities or infrastructure for the transmission and distribution of electricity with a capacity of 275 kilovolts or more, outside an urban area or industrial complex excluding the development of bypass infrastructure for the transmission and distribution of electricity where such bypass infrastructure is —</p> <ul style="list-style-type: none"> <li>a) temporarily required to allow for maintenance of existing infrastructure;</li> <li>b) 2 kilometers or shorter in length;</li> <li>c) within an existing transmission line servitude; and</li> <li>d) will be removed within 18 months of the commencement of development.</li> </ul>

Listed Activity	Description
<p>GN R. 985 Item 3</p>	<p>d. KwaZulu-Natal</p> <ul style="list-style-type: none"> <li>vi) A protected area identified in terms of NEMPAA, excluding conservancies;</li> <li>viii) Critical Biodiversity areas as identified in systematic biodiversity plans adopted by competent authority or in bioregional plans”</li> </ul>
<p>GN R. 985 Item 12:</p> <p>“The clearance of an area of 300 square meters or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purpose undertaken in accordance with a maintenance management plan</p> <p>d. Kwazulu-Natal</p> <ul style="list-style-type: none"> <li>v. Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans.</li> </ul>	<p>The proposed corridors traverse Critical Biodiversity Areas (CBA); therefore, the project will require clearance of an area of 300 square meters or more of indigenous vegetation within CBA.</p>
<p>GN R. 985 Item 14:</p> <p>“The development of development –</p> <ul style="list-style-type: none"> <li>(ii) infrastructure or structures with a footprint of 10 square meters or more</li> </ul> <p>Where such development occurs-</p> <ul style="list-style-type: none"> <li>(a) Within a watercourse</li> <li>(c) If no development setback exists within 32 metres of a watercourse, measured from the edge of a watercourse”.</li> </ul> <p>d. Kwazulu-Natal</p> <ul style="list-style-type: none"> <li>vii. Critical biodiversity areas or ecological support areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans.</li> </ul>	<p>The proposed project entails the development of a powerline with a footprint of more than 10 square meters within or in close proximity to watercourses.</p>



The project may also require approval from the National Department of Water and Sanitation under section 21 of the National Water Act 36 of 1998

Section 21	Description
(c)	impeding or diverting the flow of water in a watercourse
(i)	altering the bed, banks, course or characteristics of a watercourse

## Potential Environmental Impacts

The initial potential impacts identified are:

- Land Use Impact – There are agricultural, communal and or plantation land that could be impacted on by the proposed power lines;
- Visual Impact - due to the closeness of main roads and varying landscape in certain areas the electric pylons, which are very tall structures can be visually intrusive;
- Electro-magnetic fields- the proposed development does generate EMF and could have an impact
- Avifaunal Impact – Tall structure such as the proposed power lines could impact on birds especially on water birds within the area;
- Heritage recourse impacts – Linear developments could come across heritage recourses which could be impacted
- Ecological Impacts – Impacts could occur on ecological sensitive areas, such as wetland.

## The Process

As indicated the approval will require Eskom to do a full EIA Process. The process assists in effective planning and decision-making process with the aim to describe and assess the physical, social and economic impacts, which a given development may have. This enables the competent authority to make an informed decision regarding whether the project should be allowed. The process has the following distinct phases:

- Initial PP invitation;
- Scoping and Plan of Study;
- Environmental Impact Assessment;
- Record of Decision; and
- Appeal.

During the project and phases emphasis is placed on issues, concerns and questions raised by the public as this enables the EIA specialist team to investigate these issues during the detailed study phase.

## Environmental Assessment Practitioner

EkoInfo CC, as independent Environmental Consultants has been appointed by Eskom to assist in the process of compiling information for the Environmental Impact Assessment Report, which will be reviewed by the National Department of Environment Affairs (DEA) as the competent authority. EkoInfo has been in the environmental industry since 1995 and has worked on various linear infrastructure projects over the years.

## Public Participation

NEMA makes provision for the public to have the opportunity to raise concerns and give input in this process. NEMA allows for the review of all documents during the different phases of the project. 30-day review of the draft Scoping and Impact reports will form part of the project.

EkoInfo invites the public, local communities, NOG's, NPO's and other to register and become part of this project and process. By completing the attached registration form and returning it to EkoInfo you will be placed on our Interested and Affected Parties (I&AP's) data base. This will ensure that you receive all communication in future pertaining to this project.

A Public Participation Process (PP) is based on the sharing of relevant information on time and transparently. This allows all parties to the project to engage in a meaningful way. This allows for robust debate and ensures that the competent authority makes informed decisions.

To ensure the effectiveness of the PP process the following is very important:

- Notification of relevant parties including adjacent land owners, governmental department, communities etc.;
- Placing of notifications within the affected areas of concern and newspaper advertisements in local newspapers;
- Registering on the I&AP data base all registrations received and maintaining the I&AP data base;
- Effective communication with all registered I&AP's on project status and review periods.
- Effective meetings with the public and stakeholders during the project.

## Responsibilities of an Interested and Affected Party

Communication is vitally important and there for the public and I&AP's need to:

- Firstly, I&AP's must register with EkoInfo and ensure they are placed on the I&AP data base;
- Supply EkoInfo with your concerns and comments pertaining to the proposed new power lines;
- Attend public and stakeholder meeting;
- Read the DRAFT documents for review and send comments to EkoInfo;
- Ensure that your comments and concerns are included in the documents for decision making by DEA.

EkoInfo invites you to become part of the project and PP if you feel that you could be an I&AP by completing the attached registration form. If you are uncertain do not hesitate to contact us by calling and discussing the matter with us. EkoInfo is looking forward to working with you to ensure a successful process.

Please register with EkoInfo as soon as possible. The first round of meetings is planned for middle to end November 2018. EkoInfo would therefore want to have the I&AP data base compiled by 26 October 2018

### EkoInfo Contact Detail

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