

# **BACKGROUND INFORMATION DOCUMENT**

PROPOSED CONSTRUCTION OF KRONOS – HYDRA  
2ND 400kV POWER LINE AND ASSOCIATED  
INFRASTRUCTURE WITHIN PIXLEY KA SEME  
DISTRICT MUNICIPALITY, NORTHERN CAPE  
PROVINCE

## PURPOSE OF THIS DOCUMENT

This Background Information Document (BID) has been structured to provide all potential Interested and Affected Parties (I&APs) and Stakeholders with a concise overview of the proposed project activities and the associated Environmental Authorization and Water Use Licence Application Processes. Furthermore, this BID is also intended to provide I&APs with information relating to how Interested and/ or Affected Parties (I&APs) can voice any issues concerning the proposed project. The compilation and distribution of this BID form part of the Public Participation Process (PPP) for this project.

## DESCRIPTION OF THE ACTIVITY

The Department of Mineral Resources and Energy released the 2019 Integrated Resource Plan (IRP 2019) in October 2019. The Integrated Resource Plan 2019 will see around 6 GW of new solar PV capacity and 14.4 GW of new wind power capacity commissioned by 2030. Since the Northern Cape has favourable sun and wind, the province has around 3.3 GW of committed renewable generation, with over 10 GW expected by 2030. Eskom is therefore required to respond to the aggressive plans for the country to achieve a diversified energy mix. This entails strengthening the Transmission infrastructure network to evacuate the existing and expected renewable power out of the Northern Cape province to other load centres in the country.

Aries – Kronos – Hydra 400 kV is one of the three major backbone corridors that move power to and from the Northern Cape. Furthermore, with the current generation allocation, the existing Kronos – Hydra 400 kV line will experience thermal overload, thus requiring the need for a second (2nd) Kronos – Hydra 400 kV line. The work associated with the second 400kV line is a listed activity according to National Environmental Management Act 107 of 1998: Environmental Impact Assessment (EIA) regulations of 2014 (as amended), for which an Environmental Authorisation (EA) is required before the powerline can be constructed. In addition, other permits such as Water Use Licence (WUL)/ General Authorisation (GA), heritage and tree-cutting permits will be required. Eskom has therefore appointed DIGES to lodge applications for Environmental Authorisation (EA), WUL/GA, heritage and tree-cutting permits with the relevant Competent Authorities.

## PROJECT DESCRIPTION

The scope of work entails the following:

- i. Construction of a second 187 km, 400 kV line from Kronos substation to Hydra substation.
- ii. Equipping the existing 400 kV feeder bay at Hydra Substation.

At the Kronos substation:

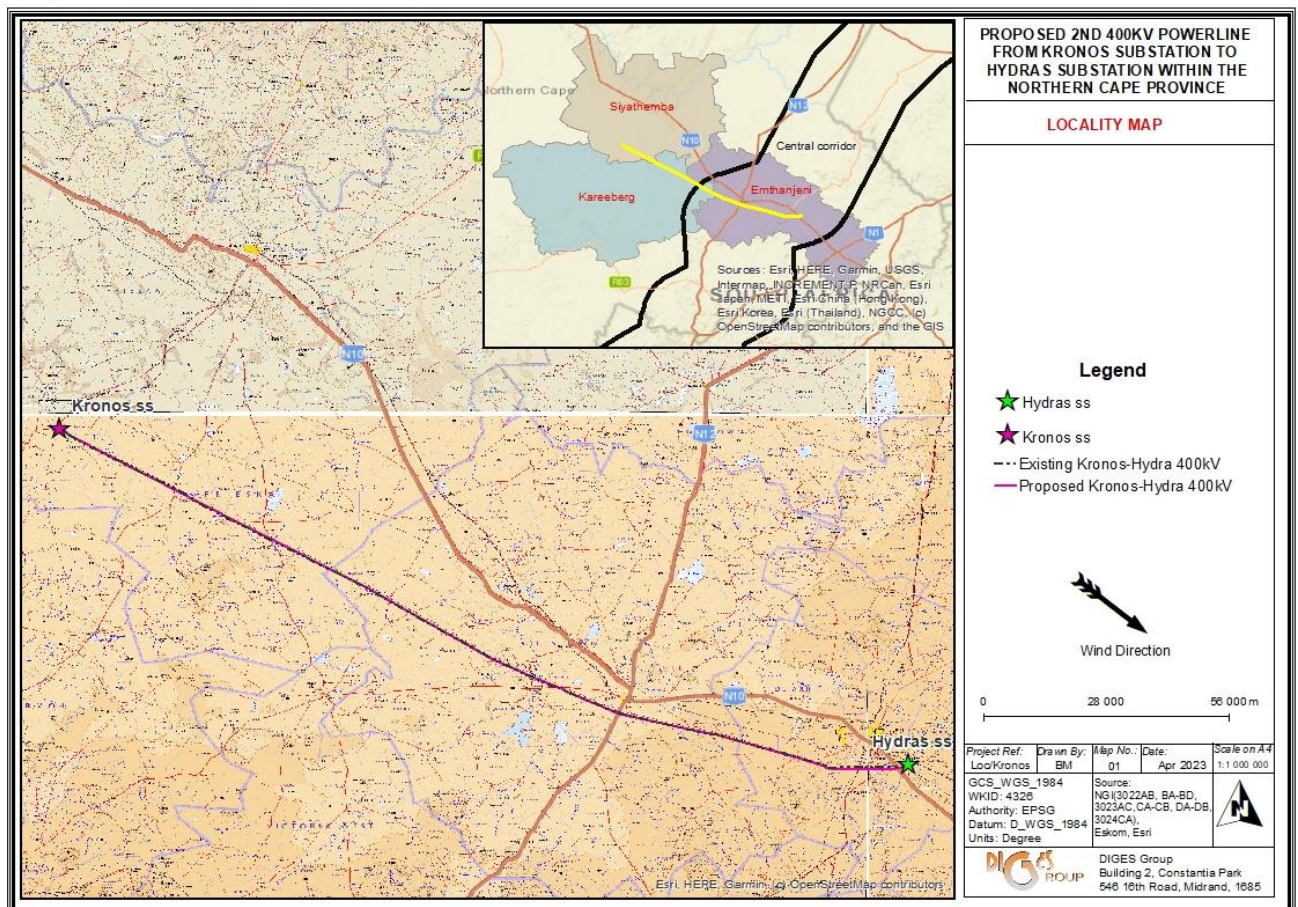
- iii. Establishment of a 400kV HV Yard and equipping it with a new 400kV transformer bay.
- iv. Equipping a new 400kV transformer bay at the 132kV yard.
- v. Installation of a new 400/132kV, 500 MVA transformer at the 132kV yard.
- vi. The extension of the 6m width road to the storage area by 85m; and the extension of a 9m wide road to the new 400 kV yard by 110m.

## LOCATION

Most of the proposed powerline route is within the Central Strategic Transmission Corridor, hence DIGES will assess one pre-negotiated route within a 300m corridor. Table 1 and Figure 1 give the location of the project.

**Table 1: Location**

<b>PROVINCE</b>	Northern Cape
<b>DISTRICT MUNICIPALITY</b>	Pixley ka Semme
<b>LOCAL MUNICIPALITIES AND WARD NOS.</b>	Siyathemba (5 and 6) Kareeberg: (6) Emthanjeni (3, 6, 7 and 8)
<b>AFFECTED FARMS AND ERVEN</b>	WagtBittje 5 Portion 3; Hartebeesthoek 31 Portion 0; Hartebeestplaat 135 Portion 3; De Put/Elands Kloof 135 Portion 0; Winterhoek/De Put 136 Portion 1; Zwartekopjes 131 Portions 2, 0; Brandfontein/Rheno 87 Portion 0, 7; Holput 91 Portion 0; Rooidam/Karrel dam 91 Portion 1; Sweetfontein 92 Portion 2, 3, 4; Blaauwbosch Put 93 Portion 0; Blaauwbosch Put 96 Portion 0; Pettpot 97 Portions 0, 2; Erf 423; Brakwater/ Leno Rust 173; Gemsbokfontein 98 Portion 6 Doorskuilen 100 Portion 1; Karreboschpan 99 Portions 2, 3, 4, 5; Giesenskraal Settlement 75 Portion 0; Giesenskraal Settlement 76 Portion 0; Giesenskraal Settlement 70 Portion 2; Giesenskraal Settlement 161 Portion 0; Giesendal Settlement 157 Portion 0; Tygerpoort 102 Portions 0, 1; Raathfontein 104 Portion 6; Holpan 69 Portion 0; Jagtscherm 68 Portion 0; Zoutaar 66 Portions 0, 1, 2; Biesiespoort 67 Portion 0; Wielpan 124 Portions 0, 1; Modderfontein 125 Portion 0; Roodevloer 123 Portions 0, 1, 2; Naauwe Kloof 122 Portion 4; Jonkerwater 121 Portions 0, 1, 2, 3,5; Granaatkop 120 Portion 1; Kaffirs Kolk 118 Portion 3; Hoek Plaas 146 Portion 0; Farm (Mierdam) 118 Portion 1; Ridgil Klipgats Pan 117 Portion 4
<b>NEARBY SETTLEMENTS</b>	Small Settlements (Copperton, Griesenkraal, Britstown, De Aar)
<b>WATER MANAGEMENT AREA</b>	Orange
<b>QUARTERNARY CATCHMENT</b>	D54D, D62A-D, D62H



**Figure 1: Location of the proposed corridors**

## LEGAL REQUIREMENT

### NATIONAL ENVIRONMENTAL MANAGEMENT ACT (ACT 107 OF 1998)

EIA Regulations [GNR982 as amended]/ GNR326] published in terms of sections 24(5) and 44 of the National Environmental Management Act, 1998 (Act No. 107 of 1998), makes provision for two types or levels of assessment, namely Basic Assessment and Scoping and EIA. The EIA regulations specify that all activities that appear in Listing 1 [GN No. R. 983 (as amended)/GNR 327] and Listing 3 [GN No. R. 985 (as amended)/GNR 324] require a Basic Assessment whilst activities indicated in Listing 2 [GN No. R. 984 (as amended)/GNR 325] require a Scoping and Environmental Impact Assessment. The construction of a 400kV line is listed in Listing 2, however as the proposed powerline is within the Central Strategic Transmission Corridor, the EIA application will be done in compliance with GN R 113 published on 16 February 2018. As a result, a Basic Assessment (BA) process per the regulations above will be undertaken, and an application will be lodged with the DFFE towards obtaining an Environmental Authorisation. The Table below indicates the listed activities being applied for. These are subject to change based on responses from Public Participation and the Pre-Application meeting with DFFE:

**Table 2: List of Activities being applied for**

ACTIVITY NO	ACTIVITY AS SET OUT IN LISTING NOTICE 1, GOVERNMENT NOTICE R983, 2014 (AS AMENDED)	APPLICABILITY
12(ii)	The development of infrastructure or structures with a physical footprint of 100 square metres or more where such development occurs: (a) within a watercourse (c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse.	Cumulatively the tower footprints within 32m of the river have a physical footprint of more than 100m <sup>2</sup>
19	The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from a watercourse	The possible excavation of more than 10 m <sup>3</sup> and infilling of rivers and wetlands with more than 10 m <sup>3</sup> of material during construction.
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	The clearance of approximately 1.4 hectares for the construction of the 400kV yard at the Kronos substation.
ACTIVITY NO	ACTIVITY AS SET OUT IN LISTING NOTICE 2, GOVERNMENT NOTICE R984 OF 2014 (AS AMENDED)	APPLICABILITY
9	The 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	The construction of 187km, 400kV powerline outside urban areas.
ACTIVITY NO	ACTIVITY AS SET OUT IN LISTING NOTICE 3, GOVERNMENT NOTICE R985 OF 2014 (AS AMENDED)	APPLICABILITY
12	The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan.  (g) Northern Cape ii. Within critical biodiversity areas identified in bioregional plans	The clearance of approximately 5500 square metres of indigenous vegetation in an area classified as CBA2 in the Northern Cape CBA Map.

The BA process will follow the procedure prescribed in Regulations 19 and 20; however, the timeframes within which DFFE has to issue a decision are shortened from 107 days to 57 days. The following diagram outlines the steps that are followed in undertaking a BA process.

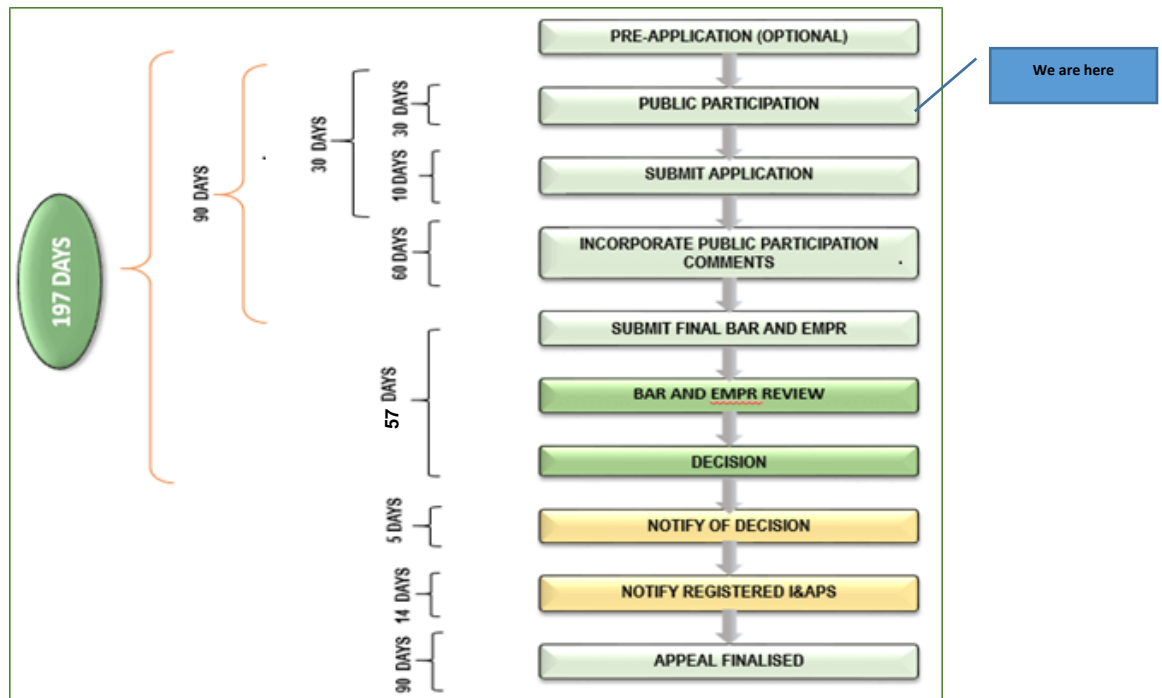


Figure 2: Basic Assessment Process

## OTHER PERMITS

The authorisations/permit that will be required for the development are discussed in the Table Below

Legislation	Permit/ Authorisations/ Approval	Relevance
National Water Act, 1998	(WUL) / General Authorisation (GA) in terms of S21(c) and (i)	The corridor is within 500m of various wetlands and will traverse across streams such that there is a likelihood that structures will be placed within a 1:100-year floodline. Therefore, a WUL / GA will be required before any work commences in these areas.
National Heritage Resources Act, 1999	Heritage Permit	There is a possibility of surface and subsurface archaeological objects within the servitude. Therefore, a heritage permit will be required before any disturbance.
National Forests Act, 1998 National Environmental Management: Biodiversity Act, 2004	Protected Trees Permit Threatened Or Protected Species (TOPS) permit	The project area (corridor) will traverse across vegetated areas with threatened and protected species as such, before picking parts of, or cutting, chopping off, uprooting, damaging or destroying, a permit will be required.

## POTENTIAL IMPACTS

Some of the potential impacts associated with the project are given below. Of note is that the list is not exhaustive, and impacts will be detailed in the Basic Assessment Report and the associated Specialist Reports:

- Impacts on Biodiversity and Species of Conservation Concern.
- Impacts on soil and agricultural potential.



- Stormwater and erosion.
- Impact on water resources.
- Nuisance impacts such as noise and dust.
- Waste generation.
- Impact on visual aesthetics.
- Impact of cultural and heritage resources.
- Socio-economic impacts.

## HOW CAN YOU BE INVOLVED?

A Public Participation Process (PPP) will be conducted as part of the Basic Assessment Process. The steps that will be undertaken as part of the PPP conform to the requirements laid down in Regulation 4(2), 41-44 of the NEMA EIA Regulations 2014, as amended. The PPP will provide Interested and Affected Parties (I&APs) with a platform to voice any matters or issues relating to the proposed project. The following activities will be undertaken:

- (i) DIGES Group will identify stakeholders in different sectors of society and invite them to register as Interested and/or Affected Parties (I&APs).
- (ii) Site notices will be placed at prominent points within the project area and its surroundings.
- (iii) BIDs with notification letters will be emailed or hand-delivered to the Ward Councillors and relevant stakeholders (including municipalities and state departments).
- (iv) Notification of the project and availability of the draft report will be done via adverts in the local newspapers.
- (v) Focus Groups and Public meetings will be held during the draft report's 30-day comment period.
- (vi) Where necessary telephonic consultation will be undertaken with registered stakeholders; and
- (vii) The registered stakeholders will be notified of DEFF's decision on whether the authorisation has been granted/declined.

To be registered as an Interested and Affected Party, please complete and return the registration form included with the BID by no later than 03 July 2023. This will ensure that you can raise your concerns and receive further information (documents) about the project. All issues raised will be addressed and incorporated into the Basic Assessment Report.

For enquiries, please get in touch with **DIGES Group**, Brenda Makanza/ Livhuwani Rasilingwani, P.O. Box 7068, Midrand, 1685, Email: [brendam@diges.co.za](mailto:brendam@diges.co.za) / [livhuras@gmail.com](mailto:livhuras@gmail.com)



**REGISTRATION AND COMMENTS FORM**

*Please complete the form and return it to the Environmental Assessment Practitioner (as above)*

<b>TITLE</b>		<b>NAME</b>	
<b>SURNAME</b>			
<b>ORGANISATION</b> <small>(Please do not use any acronyms)</small>			
<b>ADDRESS</b>			
			<b>POSTAL CODE</b>
<b>TELEPHONE NO</b>		<b>FAX NO</b>	
<b>EMAIL ADDRESS</b>			
<b>CELLPHONE NO</b>			
<b>DATE</b>		<b>SIGNATURE</b>	

Please <b>formally register me as an interested and/or affected party (I&amp;AP)</b> so that I may receive further information and notifications during the Basic Assessment process	<b>YES</b>	<b>NO</b>
I would like to receive documents for comment as follows:	By email	
	By post	
	By fax	

**COMMENTS** (please use separate sheets if you wish)

I suggest that the following issues of concern be considered in the Basic Assessment Report:

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**Please register the following colleagues/friends/neighbours as I&APs for this project:**

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**THANK YOU FOR YOUR CONTRIBUTION**

