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DEA Reference: 14/12/16/3/3/2/977 Enquiries: Ms Dakalo Netshiombo

Telephone: (012) 399 8877 E-mail: DNetshiombo@environment.gov.za

Ms Martina Phiri Eskom Holdings SOC Limited P. O. Box 1091 JOHANNESBURG 2000

Tel no: 011 800 3550

Email: PhiriM@eskom.co.za

PER EMAIL / MAIL

Dear Ms Phiri

ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998: GNR. 982, 983, 984 & 985 FOR THE PROPOSED KUDU POWER STATION-ORANJEMOND 1ST AND 2ND 400KV POWER LINES, NORTHERN CAPE PROVINCE

With reference to the abovementioned application, please be advised that the Department has decided to grant authorisation. The environmental authorisation (EA) and reasons for the decision are attached herewith.

In terms of Regulation 4(2) of the Environmental Impact Assessment Regulations, 2014 (the Regulations), you are instructed to notify all registered interested and affected parties, in writing and within 14 (fourteen) days of the date of the EA, of the Department's decision in respect of your application as well as the fact that an appeal may be lodged against the decision in terms of the National Appeals Regulations, and the provisions regarding the submission of appeals as contained in the Regulations.

Should any person wish to lodge an appeal against this decision, he/she must submit the appeal to the appeal administrator, and a copy of the appeal to the applicant, any registered interested and affected party, and any organ of state with interest in the matter within 20 days from the date that the notification of the decision was sent to the registered interested and affected parties by the applicant; or the date that the notification of the decision was sent to the applicant by the Department, whichever is applicable.

Appeals must be submitted in writing in the prescribed form to:

Mr Z Hassam, Director: Appeals and Legal Review of this Department at the below mentioned addresses.

By email: appealsdirectorate@environment.gov.za;

By hand: Environment House

473 Steve Biko,

Arcadia, Pretoria, 0083; or By post:

Private Bag X447,

Pretoria, 0001

Please note that in terms of Section 43(7) of the National Environmental Management Act, 1998, the lodging of an appeal will suspend the environmental authorisation or any provision or condition attached thereto. In the instance where an appeal is lodged, you may not commence with the activity until such time that the appeal is finalised.

To obtain the prescribed appeal form and for guidance on the submission of appeals, please visit the Department's website at https://www.environment.gov.za/documents/forms#legal_authorisations or request a copy of the documents at appealsdirectorate@environment.gov.za.

Yours faithfully

Mr Sabelo Malaza

Chief Director: Integrated Environmental Authorisations

Department of Environmental Affairs

Date: 3//07/2017

CC:	Susanna Nel	Landscape Dynamics Environmental Consultants	Tel: 012 460 6043	Email: info@landscapedynamics.co.za
	AT. Makaudi	Northern Cape Provincial Department of Environment and Nature Conservation.	Tel: 053 807 7300	Email: tmakaudi@ncpg.gov.za
	Abraham de Wet	Richtersveld Local Municipality	Tel: 027 851 1112	Email: Abraham@richtersveld.gov.za



Environmental Authorisation

In terms of regulation 25 of the Environmental Impact Assessment Regulations, 2014

The proposed Kudu Power Station-Oranjemond 1st and 2nd 400kV power lines. Northern Cape Province

Namakwa District Municipality

14/12/16/3/3/2/977		
First issue		
ESKOM SOC Ltd		
NORHTERN CAPE PROVINCE: Richtersveld Local Municipality		

This environmental authorisation does not negate the holder of the authorisation's responsibility to comply with any other statutory requirements that may be applicable to the undertaking of the activity.

Decision

The Department is satisfied, on the basis of information available to it and subject to compliance with the conditions of this environmental authorisation, that the applicant should be authorised to undertake the activities specified below.

Non-compliance with a condition of this environmental authorisation may result in criminal prosecution or other actions provided for in the National Environmental Management Act, 1998 and the EIA regulations.

Details regarding the basis on which the Department reached this decision are set out in Annexure 1.

Activities authorised

By virtue of the powers conferred on it by the National Environmental Management Act, 1998 (Act No.107 of 1998) and the Environmental Impact Assessment Regulations, 2014 the Department hereby authorises -

ESKOM HOLDINGS SOC LIMITED

with the following contact details -

Ms Martina Phiri

ESKOM

P.O. Box 1091

JOHANNESBURG

2000

Tel no: 011 800 3550

Email: PhiriM@eskom.co.za



to undertake the following activities (hereafter referred to as "the activity") indicated in Listing Notice 1 (GN R. 983), Listing Notice 2 (GN R. 984), and Listing Notice 3 (GN R. 985):

Listed activities	Activity/Project description
(xii) infrastructure or structures with a physical footprint of 100	Two approximately 2km new power lines will be constructed and the footprint of the pylons will be 100m². Some of the pylon towers will be constructed within 32m from the Orange River.
GN 983 Item 19: The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres from- (i) a watercourse;	Foundations of 100m ² (therefore more than 5m ³) will be constructed for the towers and some will occur within 32m of a watercourse (the Orange River).
GN 983 Item 24: The development of- (ii) a road with a reserve wider than 13,5 meters, or where no reserve exists where the road is wider than 8 metres;	The existing R382 road will be deviated at the south-east corner of the substation extension
GN 983 Item 27: The clearance of an area of 1 hectares 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.	substation site will be enlarged by an additional 4 hectares of land. The site contains indigenous vegetation.
GN 983 Item 47: The expansion of facilities or infrastructure for the transmission and distribution of electricity where the extended capacity will exceed 275 kilovolts and the development footprint will increase.	substation upgrade involve

Listed activities	Activity/Project description
	and bus coupler bay;
	• installing a 1x 315MVA 400/220kV
	transformer
	 creating at least 4x 400kV line bays to allow for potential development
	to allow for potential development
	In order to achieve the above, it is
	required to increase the existing 2,5
	hectare footprint of the substation with
	an additional 4 hectares is required.
	The final footprint will be 6,5ha.
GN 984 Item 9:	
The development of facilities or infrastructure for the	Two approximately 2km 400kV power
transmission and distribution of electricity with a capacity of	
275 kilovolts or more, outside an urban area or industrial	
complex.	Substation also forms part of the project
	components. The study area falls
	outside urban areas and industrial
	complexes.
GN 985 Item 4:	A new access road wider than 4m will
The development of a road wider than 4 metres with a reserve	be built to the existing Oranjemond
less than 13, 5 metres.	Substation site.
(a) In Northern Cape: ii. Outside urban areas, in:	oupotation site.
(ee) Critical biodiversity areas as identified in systematic	The R382 road will be deviated at the
biodiversity plans adopted by the competent authority or in	
bioregional plans;	extension.
(gg) Areas within 10 kilometres from national parks or world	The study area on the northern side of
heritage sites or 5 kilometres from any other protected area	
identified in terms of NEMPAA or from the core areas of a	
biosphere reserve, excluding disturbed areas;	
	The section of the study area on south
	of the Orange River is classified as a

Listed activities	Activity/Project description
	Critical Biodiversity Area (CBA) Type 2
	The study area is located approximately
	10km upstream from the Orange River
	Mouth Wetlands Important Bird Area
	(IBA) (SA 030) This IBA was declared a
	Ramsar site in 1991, as was the
	Namibian side of the mouth in 1995.
	Together they form the Orange River
	Mouth Transboundary Ramsar Site.
GN 985 Item 12:	
The clearance of an area of 300 square metres or more of	The existing 2,5 hectare footprint of the
indigenous vegetation except where such clearance of	substation site will be enlarged by an
indigenous vegetation is required for maintenance purposes	additional 4 hectares of land. The site
undertaken in accordance with a maintenance management	contains indigenous vegetation.
plan.	
(d) In Northern Cape	The study area on the northern side of
(i) Within any critically endangered or endangered ecosystem	the Orange River is classified as an
listed in terms of section 52 of the NEMBA 'or prior to the	Ecological Support Area (ESA).
publication of such a list, within an area that has been	
identified as critically endangered in the National Spatial	The section of the study area on south
Biodiversity Assessment 2004;	of the Orange River is classified as a
(ii). Within critical biodiversity areas identified in bioregional	Critical Biodiversity Area (CBA) Type 2.
plans;	
GN 985 Item 14:	
The development of-	Two approximately 2km new power
(xii) infrastructure or structures with a physical footprint of 10	lines will be constructed and the
square metres or more;	footprint of the pylons will be 100m² (will
c) if no development setback has been adopted, within 32	therefore exceed 10m²).
metres of a watercourse, measured from the edge of a	
watercourse;	Some towers will be constructed within
	32m from a watercourse (the Orange
(a) In Northern Cape	River).

Listed activities	Activity/Project description
. (ii) Outside urban areas, in:	
(ff) Critical biodiversity areas or ecosystem service areas as	The study area is located approximately
identified in systematic biodiversity plans adopted by the	10km upstream from the Orange River
competent authority or in bioregional plans;	Mouth Wetlands Important Bird Area
(hh) Areas within 10 kilometres from national parks or world	(IBA) (SA 030) This IBA was declared a
heritage sites or 5 kilometres from any other protected area	Ramsar site in 1991, as was the
identified in terms of NEMPAA or from the core area of a	Namibian side of the mouth in 1995.
biosphere reserve;	Together they form the Orange River
	Mouth Trans boundary Ramsar Site.

as described in the Environmental Impact Assessment Report (EIR) dated March 2017 at:

Northern Cape Province Richtersveld Local Municipality

10, Namaqualand RD

Farm Name	Portion Number	SG Code
Farm Grootderm 10, Namaqualand RD	l Ordon 1	C05300430000001000004
Remaining Extent of the Farm Grootderm	No Portion number	C05300430000001000000

Powerline corndor 2	Latitude (S)	Longitude (E)
400kv 2 West	16° 36' 6.07" E	28° 32' 43.51" S
400ky 2 West	16° 36' 6.06" E	28° 32' 35.39" S
400kv 2 West	16° 36' 6.05" E	28° 32' 27.27" S
400kv 2 West	16° 36' 2.65" E	28° 32' 19.84" S
400kv 2 West	16° 35' 58.65" E	28° 32' 12.52" S
400kv 2 West	16° 35' 54.66" E	28° 32' 5.20" S
400kv 2 West	16° 35' 50.67" E	28° 31' 57.89" S
400kv 2 West	16° 35' 46.68" E	28° 31' 50.57" S
400kv 2 West	16°35'41.741"E	28°31'45.947"S
Powerline correct	Lattude (S)	Longitude (E)
400kV 1 East	16° 36' 4.08" E	28° 32' 43.55" S
400kV 1 East	16° 36' 4.08" E	28° 32' 35.43" S
400kV 1 East	16° 36' 4.07" E	28° 32' 27.31" S
400kV 1 East	16° 36' 0.56" E	28° 32' 19.91" S
400kV 1 East	16° 35' 56.52" E	28° 32' 12.62" S
400kV 1 East	16° 35' 52.47" E	28° 32' 5.33" S
400kV 1 East	16° 35' 48.43" E	28° 31' 58.03" S

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400kV 1 East	16° 35' 44.39" E	28° 31' 50.74" S
400kV 1 East	16°35'43.748"E	28°31'45.186"S
នាចិន្ទិតិត្រា	Lafftude (S)	Longitude (E)
North-west corner	16°35'55.514"E	28°32'39.262"S
North-east corner	16°36'6.461"E	28°32'38.542"S
South-east corner	16°36'7.276"E	28°32'48.231"S
South-west comer	16°36'7.276"E	28°32'48.231"S

- for the proposed Kudu Power Station-Oranjemond 1st and 2nd 400kV power lines, Northern Cape Province, hereafter referred to as "the property".

The proposed project entails the development of the following:

- The existing Oranjemond MTS Substation would be upgraded and expanded to accommodate the new power lines as follows:
 - Constructing a 400kV yard and equipment including busbar;
 - o Installing a 1x 315MVA 400/220kV transformer; and
 - Create at least 4x 400kV line bays to allow for potential development.
- 2 x 400kV power lines would be constructed from the Namibian side of the Orange River across the river to connect to the Oranjemond MTS Substation;
- A new access road to the existing Oranjemond Substation site;
- The R382 road deviation at the south-east corner of the substation extension; and
- A two-track service road between the two new power lines within the servitude.

Conditions of this Environmental Authorisation

Scope of authorisation

- The preferred routes Alternatives 1 and 2 and Substation Alternative East for the proposed Kudu Power Station-Oranjemond 1st and 2nd 400kV power lines, Northern Cape Province with the above coordinates is approved.
- Authorisation of the activity is subject to the conditions contained in this environmental authorisation, which form part of the environmental authorisation and are binding on the holder of the authorisation.
- 3. The holder of the authorisation is responsible for ensuring compliance with the conditions contained in this environmental authorisation. This includes any person acting on the holder's behalf, including but not limited to, an agent, servant, contractor, sub-contractor, employee, consultant or person rendering a service to the holder of the authorisation.

- 4. The activities authorised may only be carried out at the property as described above.
- 5. Any changes to, or deviations from, the project description set out in this environmental authorisation must be approved, in writing, by the Department before such changes or deviations may be effected. In assessing whether to grant such approval or not, the Department may request such information as it deems necessary to evaluate the significance and impacts of such changes or deviations and it may be necessary for the holder of the authorisation to apply for further environmental authorisation in terms of the regulations.
- 6. The holder of an environmental authorisation must apply for an amendment of the environmental authorisation with the competent authority for any alienation, transfer or change of ownership rights in the property on which the activity is to take place.

Notification of authorisation and right to appeal

- 7. The holder of the authorisation must notify every registered interested and affected party, in writing and within 14 (fourteen) calendar days of the date of this environmental authorisation, of the decision to authorise the activity.
- 8. The notification referred to must
 - 8.1. specify the date on which the authorisation was issued;
 - 8.2. inform the interested and affected party of the appeal procedure provided for in the National Appeal Regulations, 2014;
 - 8.3. advise the interested and affected party that a copy of the authorisation will be furnished on request; and
 - 8.4. give the reasons of the competent authority for the decision.

Commencement of the activity

9. The authorised activity shall not commence until the period for submission of appeals has lapsed as per the National Appeal Regulations, 2014 and no appeal has been lodged against the decision. In terms of section 43(7), an appeal under section 43 of the National Environmental Management Act, 1998 will suspend the environmental authorisation or any provision or condition attached thereto. In the instance where an appeal is lodged you may not commence with the activity until such time that the appeal has been finalised

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Management of the activity

 The Environmental Management Programme (EMPr), submitted as part of the Application for EA is hereby approved. This EMPr must be implemented and strictly adhered to.

Frequency and process of updating the EMPr

- 11. The EMPr must be updated where the findings of the environmental audit reports, contemplated in Condition 22 below, indicate insufficient mitigation of environmental impacts associated with the undertaking of the activity, or insufficient levels of compliance with the environmental authorisation or EMPr.
- 12. The updated EMPr must contain recommendations to rectify the shortcomings identified in the environmental audit report.
- 13. The updated EMPr must be submitted to the Department for approval together with the environmental audit report, as per Regulation 34 of GN R. 982. The updated EMPr must be subjected to a public participation process, which process has been agreed to by the Department, prior to submission of the updated EMPr to the Department for approval.
- 14. In assessing whether to grant approval of an EMPr which has been updated as a result of an audit, the Department will consider the processes prescribed in Regulation 35 of GN R.982. Prior to approving an amended EMPr, the Department may request such amendments to the EMPr as it deems appropriate to ensure that the EMPr sufficiently provides for avoidance, management and mitigation of environmental impacts associated with the undertaking of the activity.
- 15. The holder of the authorisation may apply for an amendment of an EMPr, if such amendment is required before an audit is required. The holder must notify the Department of its intention to amend the EMPr at least 60 days prior to submitting such amendments to the EMPr to the Department for approval. In assessing whether to grant such approval or not, the Department will consider the processes and requirements prescribed in Regulation 37 of GN R. 982.

Monitoring

16. The holder of the authorisation must appoint an experienced independent Environmental Control Officer (ECO) for the construction phase of the development that will have the responsibility to ensure that the mitigation/rehabilitation measures and recommendations referred to in this environmental authorisation are implemented and to ensure compliance with the provisions of the approved EMPr.

- 16.1. The ECO must be appointed before commencement of any authorised activities.
- 16.2. Once appointed, the name and contact details of the ECO must be submitted to the Director: Compliance Monitoring of the Department.
- 16.3. The ECO must keep record of all activities on site, problems identified, transgressions noted and a task schedule of tasks undertaken by the ECO.
- 16.4. The ECO must remain employed until all rehabilitation measures, as required for implementation due to construction damage, are completed and the site is ready for operation.

Recording and reporting to the Department

- 17. All documentation e.g. audit/monitoring/compliance reports and notifications, required to be submitted to the Department in terms of this environmental authorisation, must be submitted to the Director: Compliance Monitoring of the Department at the following e-mail address:

 DirectorCompliance@environment.gov.za
- 18. The holder of the environmental authorisation must, for the period during which the environmental authorisation and EMPr remain valid, ensure that project compliance with the conditions of the environmental authorisation and the EMPr are audited, and that the audit reports are submitted to the *Director: Compliance Monitoring* of the Department.
- 19. The frequency of auditing and of submission of the environmental audit reports must be as per the frequency indicated in the EMPr, taking into account the processes for such auditing as prescribed in Regulation 34 of GN R. 982.
- 20. The holder of the authorisation must, in addition, submit an environmental audit reports to the Department within 30 days of completion of the construction phase (i.e. within 30 days of site handover) and a final environmental audit report within 30 days of completion of rehabilitation activities.
- 21. The environmental audit reports must be compiled in accordance with appendix 7 of the EIA Regulations, 2014 and must indicate the date of the audit, the name of the auditor and the outcome of the audit in terms of compliance with the environmental authorisation conditions as well as the requirements of the approved EMPr.
- 22. Records relating to monitoring and auditing must be kept on site and made available for inspection to any relevant and competent authority in respect of this development.

Notification to authorities

23. A written notification of commencement must be given to the Department no later than fourteen (14) days prior to the commencement of the activity. Commencement for the purposes of this condition includes site preparation. The notice must include a date on which it is anticipated that the activity will commence, as well as a reference number.

Operation of the activity

24. A written notification of operation must be given to the Department no later than fourteen (14) days prior to the commencement of the activity operational phase.

Site closure and decommissioning

25. Should the activity ever cease or become redundant, the holder of the authorisation must undertake the required actions as prescribed by legislation at the time and comply with all relevant legal requirements administered by any relevant and competent authority at that time.

Specific conditions

- 26. Sections of the power line crossing adjacent to river must be marked with bird flappers on the earth wires to reduce the impact on avifauna.
- 27. Vegetation clearing must be kept to the development footprint to ensure least disturbance to sensitive areas.
- 28. Activities must be restricted away from any rocky hills and outcrops as well as wooden riparian along the Orange River.
- 29. All bare soil must be covered by planting indigenous vegetation to prevent degradation and erosion.
- 30. No exotic plants may be used for rehabilitation purposes. Only indigenous plants of the area must be utilised.
- 31. The proposed power lines alignments must be routed along the existing informal access roads, livestock pathways as well as degraded and transformed habitats or vegetation units.
- 32. The Water Use Licenses must be obtained from the Department of Water and Sanitation.
- 33. Should any archaeological sites, artefacts, paleontological fossils or graves be exposed during construction work, work must cease and it must be reported immediately to the Western Cape



Provincial Heritage Resources Authority and SAHRA so that a professional investigation can be undertaken. Sufficient time should be allowed to investigate and to remove/collect such material. Recommendations made after the investigation must be adhered to.

- 34. All construction material, equipment and any other foreign objects brought into the area by contractors and staff must be removed immediately after construction.
- 35. Any solid waste must be disposed of at a landfill licensed in terms of section 20 (b) of the National Environment Management Waste Act, 2008 (Act No.59 of 2008).

General

- 36. A copy of this environmental authorisation, the audit and compliance monitoring reports, and the approved EMPr, must be made available for inspection and copying-
 - 36.1. at the site of the authorised activity;
 - 36.2. to anyone on request; and
 - 36.3. where the holder of the environmental authorisation has a website, on such publicly accessible website.
- 37. National government, provincial government, local authorities or committees appointed in terms of the conditions of this authorisation or any other public authority shall not be held responsible for any damages or losses suffered by the holder of the authorisation or his/her successor in title in any instance where construction or operation subsequent to construction be temporarily or permanently stopped for reasons of non-compliance by the holder of the authorisation with the conditions of authorisation as set out in this document or any other subsequent document emanating from these conditions of authorisation.

Date of environmental authorisation: 31/07/2017

Mr Sabelo Malaza

Chief Director: Integrated Environmental Authorisations

Department of Environmental Affairs

Annexure 1: Reasons for Decision

1. Information considered in making the decision

In reaching its decision, the Department took, inter alia, the following into consideration -

- a) The information contained in the EIR dated March 2017 and received on 31 March 2017.
- b) Mitigation measures as proposed in the EIR dated March 2017 and the EMPr.
- c) The information contained in the specialist study contained within Appendix D of the EIR; and
- d) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the National Environmental Management Act, 1998 (Act No.107 of 1998).

2. Key factors considered in making the decision

All information presented to the Department was taken into account in the Department's consideration of the application. A summary of the issues which, in the Department's view, were of the most significance is set out below.

- a) The findings of the specialist study conducted and its recommended mitigation measures.
- b) The need for the proposed development is to provide a transmission solution to the proposed Kudu Gas Power Station in Southern Namibia and to ensure reliable electricity will result in uninterrupted supply and therefore growth in industry,
- c) The EIR dated March 2017 identified all legislations and guidelines that have been considered in the preparation of the EIR.
- d) The methodology used in assessing the potential impacts identified in the EIR dated March 2017 and the specialist studies have been adequately indicated.
- e) A sufficient public participation process was undertaken and the applicant has satisfied the minimum requirements as prescribed in the EIA Regulations, 2014 for public involvement.

3. Findings

After consideration of the information and factors listed above, the Department made the following findings-

- a) The identification and assessment of impacts are detailed in the EIR dated March 2017 and sufficient assessment of the key identified issues and impacts have been completed.
- b) The procedure followed for impact assessment is adequate for the decision-making process.
- c) The proposed mitigation of impacts identified and assessed adequately curtails the identified impacts.
- d) EMPr proposed mitigation measures for the pre-construction, construction and rehabilitation phases of the development and were included in the EIR. The EMPr will be implemented to manage the identified environmental impacts during the construction phase.

In view of the above, the Department is satisfied that, subject to compliance with the conditions contained in the environmental authorisation, the authorised activities will not conflict with the general objectives of integrated environmental management laid down in Chapter 5 of the National Environmental Management Act, 1998 and that any potentially detrimental environmental impacts resulting from the authorised activities can be mitigated to acceptable levels. The environmental authorisation is accordingly granted.

