



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

Environmental Authorisation

In terms of regulation 36 of the Environmental Impact Assessment Regulations, 2010

Construction a 400kV power line from the Ferrum Substation to the 400/132kV Solar Park
Substation, Northern Cape Province

John Taolo Gaetsewe and Siyanda District Municipality

Authorisation register number:	<i>12/12/20/2607</i>
NEAS reference number:	<i>DEA/EIA/0000778/2011</i>
Last amended:	<i>First issue</i>
Holder of authorisation:	<i>Eskom Holdings SOC Limited</i>
Location of activity:	<i>NORTHERN CAPE PROVINCE: Khara Hais, !Kheis, !Garib Local Municipalities</i>

This 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 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 107 of 1998) and the Environmental Impact Assessment Regulations, 2010 the Department hereby authorises –

ESKOM HOLDINGS SOC LIMITED

with the following contact details –

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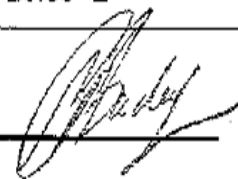
to undertake the following activities (hereafter referred to as "the activity") indicated in Listing Notices 1, 2 or 3 (GN R. 544, 545 & 546):

Listed activities	Activity/Project description
<p><u>GN R544 Item 11:</u> <i>The construction of:</i> (iii) bridges; (xi) infrastructure or structures covering 50 square metres or more where such construction occurs within a watercourse or within 32 metres of a watercourse, measured from the edge of a watercourse, excluding where such construction will occur behind the development setback line.</p>	<p>The establishment of new access routes may require the construction of small pipe or culvert bridges to prevent damage and erosion of the road service through submersion of the road service during heavy rains.</p>
<p><u>GN R544 Item 24:</u> <i>The transformation of land bigger than 1000 square metres in size, to residential, retail, commercial, industrial or institutional use, where, at the time of the coming into effect of this Schedule or thereafter such land was zoned open space, conservation or had an equivalent zoning.</i></p>	<p>The construction of the proposed power lines from the proposed CSP substation to the Ferrum substations is expected to result in the transformation of land larger than 1000m. to commercial or industrial use where the zoning of the land (i.e. Agricultural Zoning – mostly grazing) can be considered an equivalent zoning to Open Space.</p>
<p><u>GN R545 Item 8:</u> <i>The construction 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.</i></p>	<p>The project will entail the upgrade of a substation infrastructure outside an urban area which will include the construction of infrastructure (transformers) for the transmission of electricity with a capacity of 400kV. The substation footprint will not be expanded.</p>
<p><u>GN R546 Item 13:</u> <i>The clearance of an area of 1 hectare or more of vegetation where 75% or more of the vegetation cover constitutes indigenous vegetation</i></p>	<p>The establishment of the 55 m wide servitude for the 400kV line may require the clearance of more than 1 hectares of indigenous vegetation</p>

Listed activities	Activity/Project description
(c) <i>in Northern Cape</i> (ii) <i>Outside urban areas</i> (ff) <i>areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core area of a biosphere reserve.</i>	outside an urban area. The presence of the Kathu Forest which is nationally protected is located within 5 km from the eastern extent of the power line at the Ferrum substation.
<u>GN R546 Item 14:</u> <i>The clearance of an area of 5 hectares or more of vegetation where 75% or more of the vegetation cover constitutes indigenous vegetation</i> (a) <i>In Northern Cape,</i> i. <i>All areas outside urban areas.</i>	The establishment of the 55 m wide servitude for the 400 kV line may require the clearance of more than 5 hectares of indigenous vegetation outside an urban area. The proposed power line does not fall below the thresholds set in Notice 544 of 2010 therefore this activity is not exempted based on the fact that it is a linear activity.

as described in the final Environmental Impact Assessment Report (EIAR) dated November 2013 at:

Ferrum Alternative 3F	Latitude	Longitude
Solar Park Substation (Start point of power line)		
Northern border left corner	28°32'48.57" S	21°07'49.72" E
Northern border right corner	28°32'26.95" S	21°08'18.66" E
Southern border left corner	28°33'13.83" S	21°08'13.35" E
Southern border right corner	28°32'52.72" S	21°08'42.30" E
Power line from the Solar Park Substation to the Ferrum Substation (alternative 3F)		
Starting point of activity	28°32'47.42" S	21°08'01.45" E
Middle point of activity	28°15'41.9" S	22°04'53.8" E
End point of activity	27°43'51.95" S	23°03'20.30" E



Ferrum Substation (End point of power line)		
Northern border left corner	27°43'42.32" S	23°03'17.19" E
Northern border right corner	27°43'42.36" S	23°03'39.43" E
Southern border left corner	27°44'00.14" S	23°03'17.31" E
Southern border right corner	27°43'59.75" S	23°03'39.62" E

- for the construction of a 400kV power line from the Eskom Solar Park Substation to the Ferrum Substation, Northern Cape Province, hereafter referred to as "the property".

The infrastructure associated with this facility includes:

- Ferrum Substation:
 - Establish 1 x400kV transformer feeder bay within the existing footprint of the Ferrum Substation; and
 - A 400/132kV transformer;
- Transmission Line:
 - Approximately 1 x ±200km 400kV power lines between the Ferrum Substation and the Solar Park Substation.
 - Approximately 1 x ±75km 400kV power line between the Eskom Concentrated Solar Park site and Nieuwehoop Substation.
- Access routes will be constructed adjacent to the power line where required.

Conditions of this Environmental Authorisation

Scope of authorisation

1. The preferred route corridor Ferrum_Alternative 3F, located at the coordinates described above, as described in the final EIAR is hereby approved.
2. Authorisation of the activity is subject to the conditions contained in this 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 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 authorisation in terms of the regulations.
6. This activity must commence within a period of five (5) years from the date of issue of this authorisation. If commencement of the activity does not occur within that period, the authorisation lapses and a new application for environmental authorisation must be made in order for the activity to be undertaken.
7. Commencement with one activity listed in terms of this authorisation constitutes commencement of all authorised activities.
8. The holder of an environmental authorisation must notify the competent authority of any alienation, transfer and change of ownership rights in the property on which the activity is to take place.

Notification of authorisation and right to appeal

9. The holder of the authorisation must notify every registered interested and affected party, in writing and within 12 (twelve) calendar days of the date of this environmental authorisation, of the decision to authorise the activity.
10. The notification referred to must –
 - 10.1. specify the date on which the authorisation was issued;
 - 10.2. inform the interested and affected party of the appeal procedure provided for in Chapter 7 of the Environmental Impact Assessment Regulations, 2010;
 - 10.3. advise the interested and affected party that a copy of the authorisation will be furnished on request; and
 - 10.4. give the reasons of the competent authority for the decision.



11. The holder of the authorisation must publish a notice –
 - 11.1. informing interested and affected parties of the decision;
 - 11.2. informing interested and affected parties where the decision can be accessed; and
 - 11.3. drawing the attention of interested and affected parties to the fact that an appeal may be lodged against this decision in the newspaper(s) contemplated and used in terms of regulation 54(2)(c) and (d) and which newspaper was used for the placing of advertisements as part of the public participation process.

Management of the activity

12. The Environmental Management Programme (EMPr) submitted as part of the Application for EA is hereby approved. This EMPr must be implemented and adhered to.
13. The EMPr must be included in all contract documentation for all phases of the development.
14. Changes to the EMPr, which are environmentally defensible, shall be submitted to this Department for approval before such changes could be effected.
15. The Department reserves the right to amend the EMPr should any impacts that were not anticipated or covered in the EIAR dated November 2013 be discovered.
16. The provisions of the approved EMPr including recommendations and mitigation measures in the EIAR dated November 2013 and specialist studies shall be an extension of the conditions of this EA and therefore noncompliance with them would constitute noncompliance with the EA.

Monitoring

17. The applicant must appoint a suitably 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 authorisation are implemented and to ensure compliance with the provisions of the EMPr.
 - 17.1. The ECO must be appointed before commencement of any authorised activity/ies.
 - 17.2. Once appointed, the name and contact details of the ECO must be submitted to the *Director: Compliance Monitoring* of the Department.
 - 17.3. The ECO must meet with the contractors to discuss the conditions of the EA and the contents of the EMPr prior to any site clearing occurring



- 17.4. The ECO must keep record of all activities on site, problems identified, transgressions noted and a task schedule of tasks undertaken by the ECO.
- 17.5. 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

18. All documentation e.g. audit/monitoring/compliance reports and notifications, required to be submitted to the Department in terms of this authorisation, must be submitted to the *Director: Compliance Monitoring* at the Department.
19. The holder of the authorisation must submit an environmental audit report to the Department within 30 days of completion of the construction phase (i.e. within 30 days of site handover) and within 30 days of completion of rehabilitation activities.
20. The environmental audit report 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 EMPr.
21. 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.

Commencement of the activity

22. The authorised activity shall not commence within twenty (20) days of the date of signature of the authorisation.
23. An appeal under Section 43 of the National Environmental Management Act (NEMA), Act 107 of 1998 (as amended), does not suspend an environmental authorisation or exemption, or any provisions or conditions attached thereto, or any directive, unless the Minister, MEC or delegated organ of state directs otherwise.
24. Should you be notified by the Minister of a suspension of the authorisation pending appeal procedures, you may not commence with the activity until such time that the Minister allows you to commence with such an activity in writing.



Notification to authorities

25. Fourteen (14) days written notice must be given to the Department that the activity will commence. 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. This notification period may coincide with the notice of intent to appeal period.


Operation of the activity

26. Fourteen (14) days written notice must be given to the Department that the activity operational phase will commence.

Site closure and decommissioning

27. Should the activity ever cease or become redundant, the applicant shall 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

28. No activities will be allowed to encroach into a water resource without a water use authorisation being in place from the Department of Water Affairs.
29. All areas below the 1:100 flood line, within riverine vegetation, closer than 50m from the edge of a river, stream or wetland must be demarcated by a freshwater ecologist prior to the commencement of construction activities.
30. A heritage specialist must be commissioned to perform a final walkthrough of the site once the final route alignment and tower positions have been identified. All heritage sensitivities, if any, must be recorded and avoided and a specialist report must be submitted to the Department for approval prior to construction.
31. An avifaunal specialist must be commissioned to perform a final walkthrough of the site once the final route alignment and tower positions have been identified. The exact pylon/tower coordinates must be geo-referenced and forwarded to this Department. The specialist must cover buffer identification, no-go areas and fine scale mapping of the distribution of all bird nesting sites within
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1km radius of the approved corridor. This specialist report must be submitted to the Department for approval prior to construction.

32. Anti-collision devices such as bird flappers must be installed where power lines crosses avifaunal corridors, as recommended by the avifaunal specialist. The input of an avifaunal specialist must be obtained for the fitting of the anti-collision devices onto specific sections of the line once the exact positions of the towers have been surveyed and pegged.
33. A botanist must be appointed to perform a final walkthrough of the alignment to identify sensitive plant species, and assist in identifying the areas that require protection.
34. A permit must be obtained from the relevant nature conservation agency for the removal or destruction of indigenous protected and endangered plant and animal species.
35. Liaison with land owners/farm managers is to be done prior to construction in order to provide sufficient time for them to plan agricultural activities.
36. Vegetation clearing must be kept to a minimum.
37. Any areas disturbed during construction and operation must be rehabilitated with local indigenous vegetation. The area that has been rehabilitated must be maintained for a period of 12 months to ensure the successful establishment of the vegetation.
38. No exotic plants may be used for rehabilitation purposes. Only indigenous plants of the area may be utilised.

General

39. A copy of this authorisation and the approved EMPr must be kept at the property where the activity/ will be undertaken. The authorisation and approved EMPr must be produced to any authorised official of the Department who requests to see it and must be made available for inspection by any employee or agent of the holder of the authorisation who works or undertakes work at the property.
40. The holder of the authorisation must notify both the *Director: Integrated Environmental Authorisations* and the *Director: Compliance Monitoring* at the Department, in writing and within 48 (forty eight) hours, if any condition of this authorisation cannot be or is not adhered to. Any notification in terms of this condition must be accompanied by reasons for the non-compliance.
41. 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 applicant or his 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 applicant 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: 24 APRIL 2014



Mr Ishaam Abader

Deputy Director-General: Legal, Authorisations, Compliance and Enforcement
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 EIAR dated November 2013;
- b) The comments received from the organs of state and interested and affected parties as included in the EIAR dated November 2013;
- c) Mitigation measures as proposed in the EIAR dated November 2013 and the EMP;
- d) The information contained in the specialist studies contained within Appendix H of the EIAR dated November 2013;
- e) Findings of the site visit conducted on 30-31 October 2013; and
- f) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the National Environmental Management Act, 1998 (Act 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 all the specialist studies conducted and their recommended mitigation measures.
- b) The electricity generated at the Upington Solar Park (by IPP's and Eskom) will need to be integrated into the National Grid. The purpose of this project is to address the major infrastructural investments that Eskom will need to make in order to tie the Upington Solar Park into the National Grid.
- c) The EIAR dated November 2013 identified all legislation and guidelines that have been considered in the preparation of the EIAR.
- d) The methodology used in assessing the potential impacts identified in the EIAR dated November 2013 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, 2010 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 EIAR dated November 2013 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) The information contained in the EIAR dated November 2013 is accurate and credible.
- e) EMPr measures for the pre-construction, construction and rehabilitation phases of the development were proposed and included in the BAR and will be implemented to manage the identified environmental impacts during the construction process.

In view of the above, the Department is satisfied that, subject to compliance with the conditions contained in the environmental authorisation, the proposed activity 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 proposed activity can be mitigated to acceptable levels. The environmental authorisation is accordingly granted.

