



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

Environmental Authorisation

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

For 132KV Waterloo powerline south west of the town of Vryburg within the Naledi Local Municipality

in the North West Province

Dr Ruth Segomotsi Mompati District Municipality

Authorisation register number:	<i>14/12/16/3/3/1/1552</i>
Last amended:	<i>First issue</i>
Holder of authorisation:	<i>DPS79 Solar Energy (Pty) Ltd.</i>
Location of activity:	<i>a portion of the farm Waterloo 992 IN, a portion of Portion 7 of the Farm Waterloo No 730 IN, a portion of the Remaining Extent of Portion 3 of the Farm Waterloo No 730 IN, a portion of Portion 2 of the Farm Waterloo No 730 IN, a portion of Portion 12 of the Farm Waterloo No 730 IN,</i>

	<p><i>and a portion of the Remaining Extent of the Farm Rosendal 673.</i></p> <p><i>Naledi Local Municipality</i></p> <p><i>Dr Ruth Segomotsi Mompati District Municipality</i></p> <p><i>North West Province</i></p>
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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 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 –

DPS79 SOLAR ENERGY (PTY) LTD

with the following contact details –

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DPS79 Energy (Pty) Ltd
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28 Sturdee Avenue
ROSEBANK
2196

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

Activity number	Activity description
<p><u>GNR. 983 Activity 11:</u> <i>“The development of facilities or infrastructure for the transmission and distribution of electricity-</i> <i>(i) Outside an urban area or industrial complexes with a capacity of more than 33 but less than 275 kilovolts.”</i></p>	<p>The powerline has a capacity of 132kv</p>
<p><u>GNR. 983 Activity 12:</u> <i>“The development of –</i> <i>(xii) infrastructure or structures with a physical footprint of 100 square metres or more; where such development occurs-</i> <i>(a) Within a watercourse or</i> <i>(c)...within 32 metres of a watercourse, measured from the edge of a watercourse”</i></p>	<p>The development will take place within 32 meters of a non-perennial stream running through the site</p>
<p><u>GNR. 983 Activity 19:</u> <i>“The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation,</i></p>	<p>Excavations will take place in the non-perennial stream running through the site</p>

<p><i>removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres from –</i> <i>(i) a watercourse...”</i></p>	
<p><u>GN R. 985 Activity 4:</u> <i>“The development of a road wider than 4 metres with a reserve less than 13.5 metres</i> <i>(e) In North West</i> <i>(i) Outside urban areas in</i> <i>(ee) critical biodiversity areas as identified in bioregional plans.”</i></p>	<p>An internal site road network to provide access to the solar field and associated infrastructure will be required. All site roads will require a width of ~ 4m. Therefore this activity is triggered since the site is located outside an urban area and within a critical biodiversity area.</p>
<p><u>GN R. 985 Activity 12:</u> <i>“The clearance of an area of 300 square metres or more of indigenous vegetation –</i> <i>(a) In North West</i> <i>(ii) Within critical biodiversity areas identified in bioregional plans in the North West Province.”</i></p>	<p>This activity is triggered since 19.9 hectares of indigenous vegetation will be removed within a critical biodiversity area.</p>

as described in the Basic Assessment Report (BAR) dated June 2016 at:

Site (preferred):

Alternative (preferred site)	Latitude	Longitude
Start Point	27°01'54.18" S	24°47'31.78" E
Bend 1	27° 0'46.61"S	24°46'54.98"E
Bend 2	27° 0'42.06"S	24°46'35.66"E
Bend 3	27° 1'7.62"S	24°45'38.61"E
Bend 4	27° 1'12.83"S	24°45'16.16"E
Bend 5	27° 1'11.88"S	24°45'11.00"E
Bend 6	27° 0'22.20"S	24°44'46.05"E
Bend 7	27° 0'26.27"S	24°44'35.39"E
End Point	27° 0'30.96"S	24°44'37.77"E

-for the proposed 132 kV power line to Mookodi Substation, Naledi Local Municipality, North West province located on a portion of the farm Waterloo 992, Registration Division IN, a portion of Portion 7 of the Farm Waterloo No 730 IN, a portion of the Remaining Extent of Portion 3 of the Farm Waterloo No 730 IN, a portion

of Portion 2 of the Farm Waterloo No 730 IN, a portion of Portion 12 of the Farm Waterloo No 730 IN, and a portion of the Remaining Extent of the Farm Rosendal 673, North West situated within the Naledi Local Municipality area of jurisdiction hereafter referred to as "the property".

The 132kV DPS79 Expansion Power line will comprise the following:

- One small on-site high voltage substation with high voltage power transformers, stepping up the voltage to the voltage of the Eskom's grid (132 kV) and a 132 kV busbar with metering and protection devices and a control building (also called 'switching station') to be located within the PV plant development area;
- A new 132 kV line 7km in length from the 132kV busbar of the new on-site switching station (Alternative connection 1) connecting to the Eskom Mookodi MTS;
- Access road.

Technical details of the proposed facility:

Component	Description/ Dimensions
Location of the site	Approximately 7 to 10 kilometres south-east of Vryburg, North West Province
Footprint	The footprint of each tower will be approximately 10mx10m (100m ²). The approximately 7km long 132kV overhead power line (including access roads) would be constructed in a specific servitude of approximately 36m in width.
SG Codes	TOIN0000000099200000 TOIN0000000073000003 TOIN0000000073000007 TOIN0000000073000002 TOIN0000000073000012 TOIN0000000067300000
Preferred Site access	Access to the site will be from Amalia Road (D1196)
Capacity	132 kV
Proposed technology	Suspension pole or bend structure
Height	Approximately 36 meters
Width and length of internal roads	A road for construction and maintenance would run the length of the line and will require a width of approximately 5-6m

Conditions of this Environmental Authorisation

Scope of authorisation

1. The 7km 132kV DPS79 Power Line, North West situated within the Naledi Local Municipality as described above is hereby approved.
2. 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.
7. This activity must commence within a period of five (05) years from the date of issue of this environmental 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.
8. Construction must be completed within five (05) years of the commencement of the activity on site.
9. Commencement with one activity listed in terms of this environmental authorisation constitutes commencement of all authorised activities.

Notification of authorisation and right to appeal

10. 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.
11. The notification referred to must –
 - 11.1. specify the date on which the authorisation was issued;
 - 11.2. inform the interested and affected party of the appeal procedure provided for in the National Appeal Regulations, 2014;
 - 11.3. advise the interested and affected party that a copy of the authorisation will be furnished on request; and
 - 11.4. give the reasons of the competent authority for the decision.
12. The holder of the authorisation must publish a notice –
 - 12.1. informing interested and affected parties of the decision;
 - 12.2. informing interested and affected parties where the decision can be accessed; and
 - 12.3. drawing the attention of interested and affected parties to the fact that an appeal may be lodged against this decision in terms of the National Appeal Regulations, 2014.

Commencement of the activity

13. The authorised activity shall not commence until the period for the submission of appeals has lapsed as per the National Appeal Regulations, 2014. 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.

Management of the activity

14. A copy of the final development layout map must be made available for comments by registered Interested and Affected Parties and the applicant must consider such comments. Once amended, the final development layout map must be submitted to the Department for written approval prior to commencement of the activity. All available biodiversity information must be used in the finalisation of the

layout map. Existing infrastructure must be used as far as possible e.g. roads. The layout map must indicate the following:

- 14.1. Position of the switching station and its associated infrastructure;
 - 14.2. Connection routes (including pylon positions) to the distribution/transmission network;
 - 14.3. Foundation footprint;
 - 14.4. Internal roads indicating width;
 - 14.5. Wetlands, drainage lines, rivers, stream and water crossing of roads and cables;
 - 14.6. All sensitive features e.g. heritage sites, wetlands, pans and drainage channels that will be affected by the facility and associated infrastructure;
 - 14.7. All existing infrastructure on the site, especially roads; and,
 - 14.8. All “no-go” and buffer areas.
15. The Environmental Management Programme (EMPr) submitted as part of the BAR is not approved and must be amended to include measures as dictated by the final site lay-out map and micro-siting; and the provisions of this environmental authorisation. The EMPr must be made available for comments by registered Interested and Affected Parties and the applicant must consider such comments. Once amended, the final EMPr must be submitted to the Department for written approval prior to commencement of the activity. Once approved the EMPr must be implemented and adhered to.
16. The EMPr is amendable and must be implemented and strictly enforced during all phases of the project. It shall be seen as a dynamic document and shall be included in all contract documentation for all phases of the development when approved.
17. Changes to the EMPr, which are environmentally defensible, shall be submitted to this Department for acceptance before such changes could be effected.
18. The Department reserves the right to amend the EMPr should any impacts that were not anticipated or covered in the BAR be discovered.
19. The provisions of the approved EMPr including recommendations and mitigation measures in the BAR and specialist studies shall be an extension of the conditions of this EA and therefore noncompliance with them would constitute noncompliance with the EA.
20. The EMPr amendment must include the following:
- 20.1. All recommendations and mitigation measures recorded in the BAR.
 - 20.2. All mitigation measures as listed in the specialist reports must be included in the EMPr and implemented.
 - 20.3. The requirements and conditions of this authorisation.
 - 20.4. The final site layout map.
 - 20.5. The EMPr must be compiled by an independent EAP, and not by the applicant.

Frequency and process of updating the EMPr

21. The EMPr must be updated where the findings of the environmental audit reports, contemplated in Condition 28 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.
22. The updated EMPr must contain recommendations to rectify the shortcomings identified in the environmental audit report.
23. 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 have been 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.
24. 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.
25. 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

26. 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.
 - 26.1. The ECO must be appointed before commencement of any authorised activities.
 - 26.2. Once appointed, the name and contact details of the ECO must be submitted to the *Director: Compliance Monitoring* of the Department.
 - 26.3. The ECO must keep record of all activities on site, problems identified, transgressions noted and a task schedule of tasks undertaken by the ECO.
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- 26.4. 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

27. 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.
28. 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.
29. 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.
30. The holder of the authorisation must, in addition, submit 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.
31. 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.
32. 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

33. 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

34. 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

35. 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

Conditions for non-operational aspects

36. A pre-construction survey of the final development footprint must be conducted by a qualified floral specialist to ascertain the identity and the exact number of individuals of protected species affected by the proposed development. Prior to the commencement of construction, a rescue and rehabilitation operation for these species which could survive translocation must be conducted.
37. Before the clearing of the site, the appropriate permits must be obtained from the Department of Agriculture, Forestry and Fisheries (DAFF) for the removal of plants listed in the National Forest Act and from the relevant provincial department for the destruction of species protected in terms of the specific provincial legislation. Copies of the permits must be made available on request.
38. After initial vegetation clearance has taken place, before the ground is levelled for construction, a professional palaeontologist must undertake a walkthrough and document any identified paleontological findings. The survey/walkthrough must be conducted as per the South African Heritage Resources Agency (SAHRA) requirements.
39. The powerline must be fitted with the necessary bird flappers as per Eskom guidelines.
40. Liaison with land owners/farm managers must be done prior to construction in order to provide sufficient time for them to plan agricultural activities.
41. A permit must be obtained from the relevant nature conservation agency for the removal or destruction of any indigenous protected and endangered plant and animal species if required.
42. Ablution facilities must be placed outside of the 1:100 year floodline of a watercourse.

43. No exotic plants must be used for rehabilitation purposes. Only indigenous plants occurring within a ten (10) kilometre radius of the development site must be utilised.
44. Vegetation clearing must be kept to an absolute minimum. Mitigation measures must be implemented to reduce the risk of erosion and the invasion of alien species.
45. Construction must include design measures that allow surface and subsurface movement of water along drainage lines so as not to impede natural surface and subsurface flows. Drainage measures must promote the dissipation of storm water run-off.
46. An integrated waste management approach must be implemented that is based on waste minimisation and must incorporate reduction, recycling, re-use and disposal where appropriate.
47. Any solid waste, which will not be recycled 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). No waste material must be left on site after construction.
48. If any evidence of archaeological sites or remains (e.g., remnants of stone-made structures, indigenous ceramics, bones, stone artefacts, ostrich eggshell fragments, marine shell and charcoal/ash concentrations), unmarked human burials, fossils or other categories of heritage resources are found during construction, the South African Heritage Resources Agency (SAHRA) must be alerted immediately, and a professional archaeologist or palaeontologist, must be contacted to inspect the findings.
49. The recommendations of the EAP in the BAR dated June 2016 and the specialist studies attached must be adhered to. In the event of any conflicting mitigation measures and conditions of the Environmental Authorisation, the specific condition of this Environmental Authorisation will take preference.

Conditions for operational aspects

50. The footprint of the development must be limited to the areas required for actual operational activities.
51. During operation, any electrocution and collision events that occur must be recorded, including the species affected and the date. If repeated collisions occur within the same area, then, further mitigation and avoidance measures must be implemented.
52. The recommendations of the EAP in the BAR dated June 2016 and the specialist studies attached must be adhered to. In the event of any conflicting mitigation measures and conditions of the Environmental Authorisation, the specific condition of this Environmental Authorisation will take preference.

General

53. A copy of this environmental authorisation, the audit and compliance monitoring reports, and the approved EMPr, must be made available for inspection and copying-
- 53.1. at the site of the authorised activity;
 - 53.2. to anyone on request; and
 - 53.3. where the holder of the environmental authorisation has a website, on such publicly accessible website.
54. 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: 10/10/2015



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 listed activities as applied for in the application form received on 29/03/2016.
- b) The information contained in the BAR dated June 2016.
- c) The comments received from the Department of Water and Sanitation, Eskom and PRASA and interested and affected parties as included in the BAR dated June 2016.
- d) Mitigation measures as proposed in the BAR and the EMPr.
- e) The information contained in the specialist studies contained within the appendices of the BAR dated June 2016 and as appears below:

Title	Prepared by	Date
Cultural heritage impact assessment	J Van Schalkwyk	March 2016
Avifaunal Impact Assessment	A. Hudson of HUDSON ECOLOGY PTY LTD	March 2016
Ecological fauna and flora habitat survey	A. Hudson of HUDSON ECOLOGY PTY LTD	March 2016
Soil, land capability and agricultural potential study	A.R. Götze of ENVIRONMENT RESEARCH CONSULTING	November 2012 (Assessment Report) May 2016 (Expansion Impact Statement)
Palaeontological heritage assessment	J.E. Almond of Natura Viva cc	January 2013 (Assessment Report) June 2016 (Expansion Impact Statement)
Dolomite Stability Investigation	R. Freese and F. Pequenino of SMEC South Africa (Pty) Ltd.	January 2015
Hydrogeological Report	R. Freese and F. Pequenino of SMEC South Africa (Pty) Ltd.	October 2015

Visual Impact Statement	J. Botha of Phala Environmental Consultants	February 2016 (Expansion Impact Statement)
Social Impact Assessment	T. Barbour and S. van der Merwe of Tony Barbour Environmental Consulting And Research	July 2012 (Assessment) June 2016 (Expansion Impact Statement)

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 aim of the project is to expand the existing Waterloo PV Facility.
- c) The BAR dated June 2016 identified all legislations and guidelines that have been considered in the preparation of the BAR dated June 2016.
- d) The methodology used in assessing the potential impacts identified in the BAR dated June 2016 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 BAR dated June 2016 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 BAR dated June 2016 is deemed to be 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 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.