

**Background Information Document for the
proposed development of a Photovoltaic
Power Plant on the Farm Brakfontein 897-HN,
Taung by Brakfontein Solar Power Plant (Pty)
Ltd**

Description of the proposed project

Brakfontein Solar Power Plant (Pty) Ltd proposes to develop a Photovoltaic (PV) Power Plant and associated infrastructure, which will have a power generation and distribution capacity of 75 MegaWatt (MW) that will feed into the an existing

Eskom 132 kV line. The development will have a footprint of approximately 225 hectares.

Description of the proposed technology

The PV plant will use the solar radiation (light energy) from the sun to generate electricity through a process known as the *Photovoltaic Effect*. Individual PV cells are made of semi-conductive material, such as silicone, that absorbs solar radiation to produce electricity. The direct conversion of sunlight to electricity occurs without any moving parts or

environmental emissions during operation.

Proposed location of the power plant

It is proposed that the power plant is established on a portion of the farm Brakfontein 897 HN (S27.584966°, E024.417409°), located approximately 35 km west of the town of Taung and 27 km east of the town of Reivilo in the North-West Province (Figure 1).

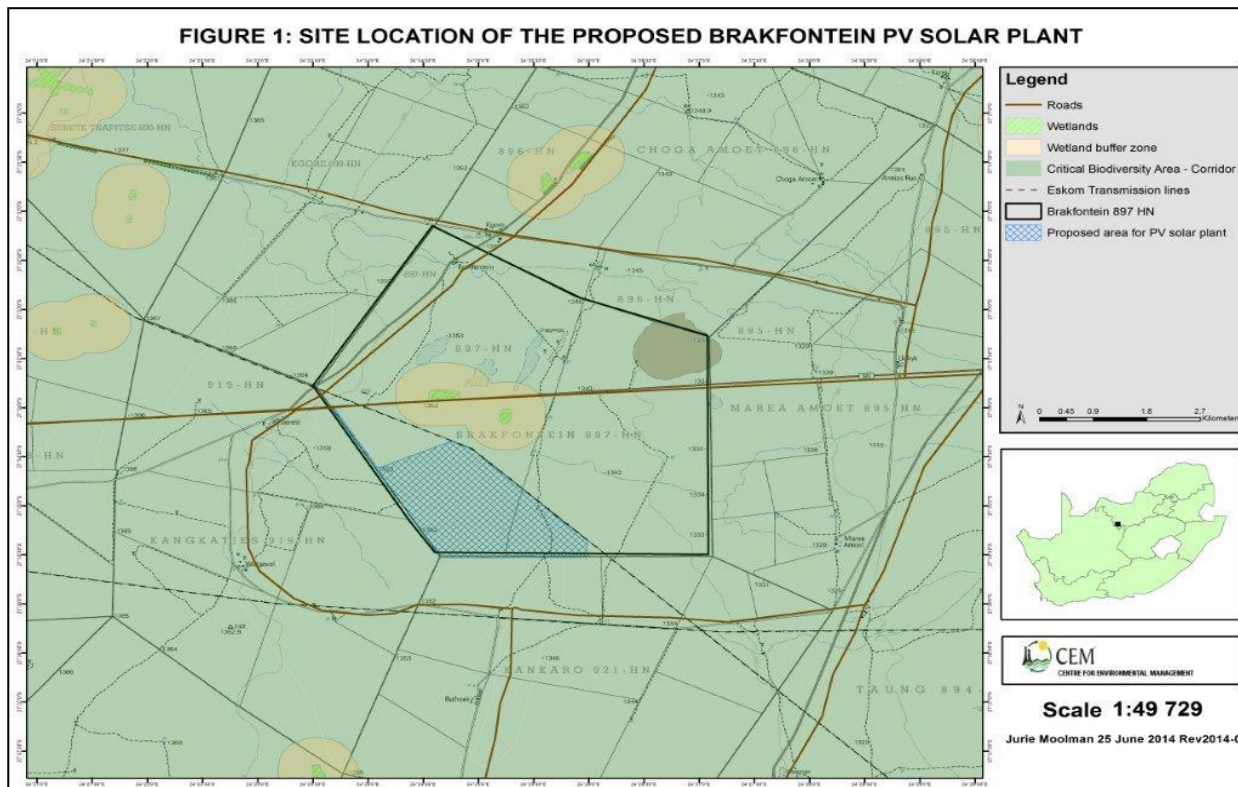
Need and desirability of the proposed project

The South African government has emphasised the need to increase South Africa's capacity to generate electricity from renewable resources, such as solar, wind and biomass energy. The purpose of the proposed PV plant is to increase the utilisation of renewable solar energy in the North-West Province for either industrial or domestic purposes.

Environmental Impact Assessment Process

Due to the extent and nature of the project, Brakfontein Solar Power Plant (Pty) Ltd is required to obtain an Environmental Authorisation (EA) prior to commencement of the activity.

The Centre for Environmental Management (CEM) has been appointed to act as the independent Environmental Assessment Practitioner (EAP) to conduct an Environmental Impact Assessment (EIA) and related processes and specialist studies for the purpose of



obtaining the required authorisation for the project.

The process is being undertaken in terms of the National Environmental Management Act (No. 107 of 1998) (NEMA).

Purpose of the EIA process

The EIA regulations promulgated in terms of NEMA prescribe the procedures that must be followed in the consideration, investigation, assessment, and reporting of activities that have been identified. These regulations aim to provide the competent authority with adequate information to make decisions that will ensure that activities which may have an unacceptable negative impact on the environment are not authorised, and activities that are authorised are undertaken in such a manner that the environmental impacts are managed to acceptable levels.

When an applicant proposes to undertake identified activities, applications for authorisations must be submitted to the competent authorities (in this case, the Department of Environmental Affairs - DEA). All such applications must be supported by reports that are compiled upon completion of the prescribed assessment procedures. After the competent authorities have made decisions on the applications, appeals may be lodged against the decisions, or parts of the decisions.

The aims of environmental assessments are to:

- establish the environmental sensitivity of the site;
- determine environmental impacts related to the project;
- identify alternatives to the current proposals;
- inform Interested and Affected Parties (e.g. neighbours & community groups) about the project and provide them the opportunity to identify issues and alternatives;
- assess the proposals and the issues raised.

What type of assessment process will be undertaken?

The EIA Regulations provide for two types of assessment processes i.e.:

- A Basic Assessment process;
- A Scoping and Environmental Impact Assessment process.

The applicant may not commence with the proposed activity without environmental authorisation after the investigation, assessment and communication of potential impacts have been undertaken that followed the **full EIA** process because of the specific listed activities that are triggered by the proposed development.

Which “listed activities” are triggered by the proposed development?

The proposed development includes the following activities:

Authorisations required in terms of NEMA:

- Activity 10 as published in GN.R. 544 of 2010):

The construction of facilities or infrastructure for the transmission and distribution of electricity: (i) Outside urban areas or industrial complexes with a capacity of more than 33 but less than 275 kV; or (ii) Inside urban areas or industrial complexes with a capacity of 275 kV or more.

- Activity 22 as published in GN.R. 544 of 2010):

The construction of a road, outside urban areas, (i) with a reserve wider than 13,5 meters or, (ii) where no reserve exists where the road is wider than 8 metres.

- Activity 1 as published in GN R. 545 of 2010:

The construction of facilities or infrastructure for the generation of electricity where the electricity output is 20 MW or more.

- Activity 11 as published in GN R. 545 of 2010:

The construction of canals, channels, bridges, buildings exceeding 50 m² in size; or infrastructure or structures covering 50 m² or more, where such construction occurs within a watercourse or within 32 m of a watercourse, measured from the edge of a water course.

- Activity 15 as published in GN R. 545 of 2010:

Physical alteration of undeveloped, vacant or derelict land for residential, retail, commercial, industrial or institutional use where the total area to be transformed is 20 ha or more; except where such physical alteration takes place for: (i) Linear development activities; or (ii) Agriculture or afforestation where Activity 16 in this schedule will apply.

- Activity 18 as published in GN R. 545 of 2010:

The infilling or depositing of any material of more than 5 m³ into, or the dredging, excavation, removal or moving of soil, sand, ... pebbles or rock of more than 5 m³ from a watercourse, ... but excluding where such infilling, depositing, dredging, excavation, removal or moving is for maintenance purposes undertaken in accordance with a management plan agreed to by the relevant environmental authority.

- Activity 14 as published in GN R. 546 of 2010:

The clearance of an area of 5 ha or more of vegetation where 75% or more of the vegetative cover constitutes indigenous vegetation.

Licenses required in terms of the National Water Act No. 36 of 1998

Section 21(c):

Impeding or diverting the flow of water in a watercourse.

Section 21(i):

Altering the bed, banks, course or characteristics of a watercourse.

The environmental assessment process for this project will involve the following steps:

- Engaging with competent authorities
- Development of Background Information Document (BID) & Advertisements (newspaper & site notices)
- I&AP registration & circulation of BID to registered I&APs
- Public participation meeting
- Drafting of Scoping Report (SR)
- Circulation of draft SR to registered I&APs for review
- Revision of SR, based on I&AP comments
- Submission of final SR to authorities
- Conducting of specialist studies
- Drafting of Environmental Impact Report (EIR) & Environmental Management Programme (EMP)
- Circulation of draft EIR & EMP to registered I&APs for review
- Revision of draft EIR & EMP, based on I&AP comments
- Submission of final EIR & EMP to competent authority for environmental authorisation

- Informing registered I&APs of the decisions by competent authorities (letter & newspaper ad).

What is the role of I&APs in the EIA process?

One of the most important parts of the environmental authorisation processes is public consultation and participation, which provides I&APs with the opportunity to gain a better understanding of the proposed development and to raise any environmental issues or concerns they may have. You are invited to register as an I&AP in the environmental assessment processes of the proposed project.

How do I register as an I&AP?

Please note that in order to be registered as an I&AP, you must request that your name be added to the registered I&AP list or provide written comments on the proposal or raise issues/concerns that you would like to be addressed in the assessment (see attached form). Future correspondence will only be distributed to registered I&APs.

Details of the EAP: Mr. Theunis Meyer

Telephone: 018 299 1467 Fax: 086 513 7996

E-mail: theunis.meyer@nwu.ac.za

Contact person for I&AP registration and all correspondence regarding the environmental authorisation processes: Mr. Jurie Moolman

Centre for Environmental Management

Private Bag X6001, Potchefstroom, 2520

Telephone: 018 299 1588 Fax: 018 299 4266

E-mail: 20035551@nwu.ac.za

INTERESTED & AFFECTED PARTY REGISTRATION FORM

Application for for the proposed development
of a Photovoltaic Power Plant on the Farm
Brakfontein 897-HN, Taung by Brakfontein
Solar Power Plant (Pty) Ltd

1. I, hereby, acknowledge receipt of
information regarding the proposed
application.

I wish to register as an interested and affected party and receive further information	
I DO NOT wish to register as an interested and affected party and do not wish to receive further information	

2. Name and surname:

3. Name of business/entity which is
represented:

4. Physical Address:

5. Language preference:

Afrikaans ☐ English ☐ Setswana ☐

6. Communication preference?

Letter ☐ Fax ☐ E-mail ☐

SMS ☐ Please call me ☐

7. Postal address:

8. Telephone number:

9. Cellphone number:

10. Fax number:

11. E-mail address:

12. Do you wish to receive future
communication?

Yes ☐ No ☐

13. Please indicate any initial issues of
concern regarding the proposed project:

14. Please indicate any suggestions to
improve the proposed project and the
public participation process:
