

BASIC ASSESSMENT (BA) FOR THE PROPOSED CONSTRUCTION OF A 132KV, OVER HEAD DISTRIBUTION POWER LINE, SUBSTATION AND SWITCH YARD ON A PORTION OF THE REMAINDER OF THE FARM 469 (HUMANSRUS) AND PORTION 1 OF LEMOENKLOOF NEAR POSTMASBURG, NORTHERN CAPE PROVINCE

(DEA Ref No: 14/12/16/3/3/1/421)
(NEAS Ref No: DEA/EIA/0000907/2012)

INTRODUCTION

SolarReserve South Africa (Pty) Ltd is proposing the construction of an approximate 7km 132kV over head distribution power line, switch yard and a substation on a portion of the remainder of the Farm 469 (Humansrus) and portion 1 of Lemoenkloof near Postmasburg, Northern Cape Province. The 132kV over head distribution power line is to run from the proposed Humansrus Solar Thermal Energy Power Plant to the existing 132kV over head power line near Owendale. The construction of the over head power line will be done by Eskom Distribution. SolarReserve South Africa (Pty) Ltd has appointed SiVEST, as the independent environmental consultants, to undertake the required Basic Assessment process for the above-mentioned proposed project.

PURPOSE OF THIS DOCUMENT

The purpose of this Background Information Document (BID) is to inform interested and/or affected parties (I&APs) about the Basic Assessment (BA) that is being conducted for the proposed development.

In addition to supplying information about the proposed project and the BA process, this BID will also provide I&APs with the opportunity to:

- better understand the proposed project in order to provide comments and raise issues of concern;
- understand the environmental authorisation process in order to participate effectively;
- raise issues of concern and/or submit suggestions to enhance the proposed project;
- contribute local knowledge; and
- comment on the specialist studies that will be conducted.

BACKGROUND TO THE PROPOSED PROJECT

The proposed 132kV over head distribution power line will run from the proposed Humansrus Solar Thermal Energy Power Plant and link into the National Grid via the existing Eskom 132kV power line running east-west near Owendale.

Therefore the proposed project forms part of the country's strategies to meet future energy consumption requirements through the use of renewable energy, should an Environmental Authorisation (EA) be granted by the Department of Environmental Affairs (DEA).

PROJECT INFORMATION

The proposed project consists of:

- Construction of 1 x 132kV over head power line from the proposed Humansrus Solar Thermal Energy Power Plant to the existing 132kV power lines near Owendale substation.
- Construction of a substation and switch yard in the vicinity of the proposed Humansrus solar power plant Humansrus
- Construction of an access road.

Location of the proposed power line and substation extension

The study area is located in the Northern Cape Province, approximately 30km to the east of the town of Postmasburg. The proposed development site is situated within the Tsantsabane Local Municipality which forms part of the Siyanda District Municipality. The proposed power line will traverse a portion of the remainder of the Farm 469 and portion 1 of Lemoenkloof. The substation will be located on the portion of the remainder of the Farm 469 (Humansrus).

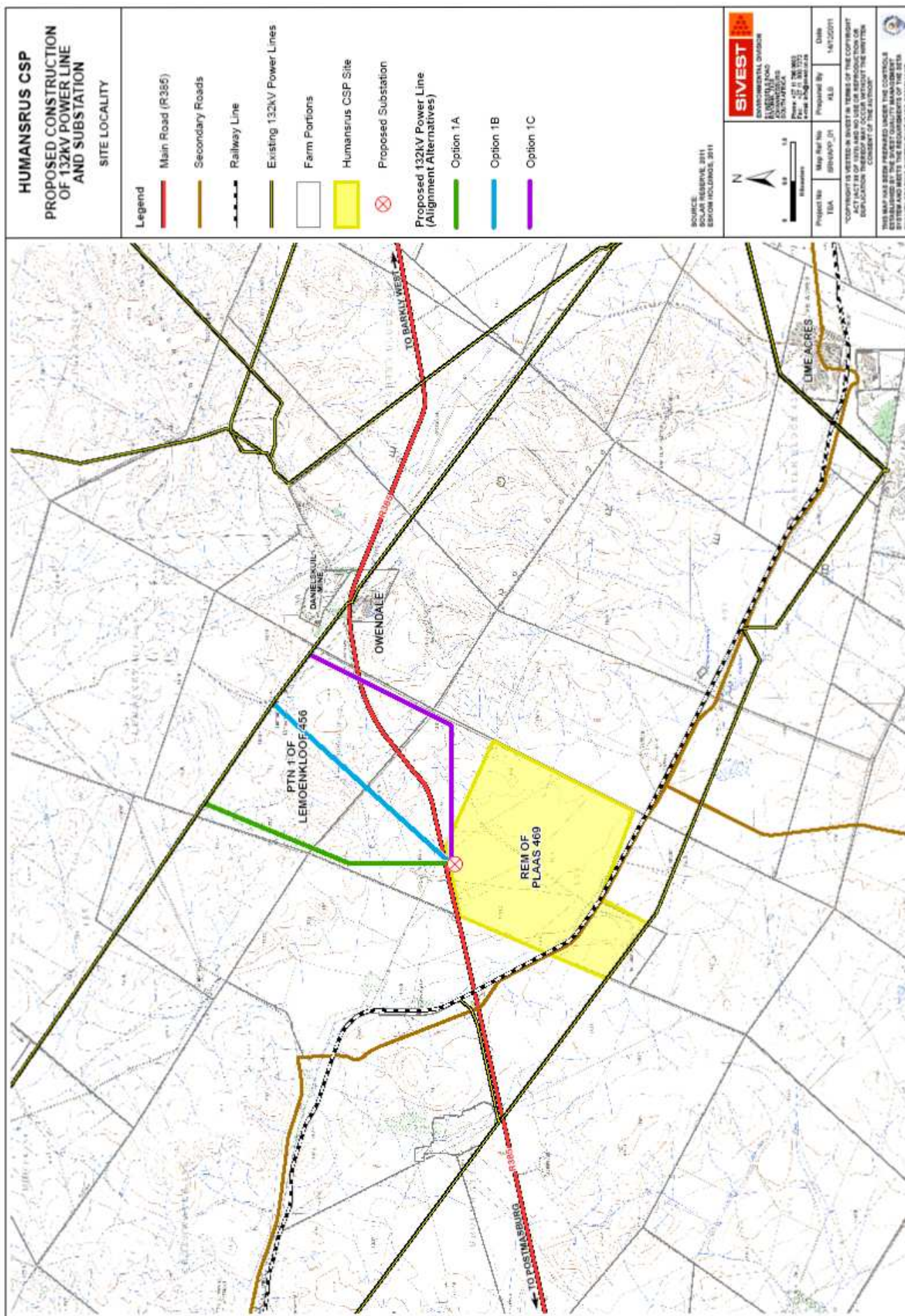
Proposed route alternatives for the 132kV power line and the Substation

There are 3 proposed alignment alternatives that will be assessed during the Basic Assessment. These are as follows:

- Option 1A – approximately 5.8km (green)
- Option 1B – approximately 5.2km (blue)
- Option 1C – approximately 8.3km (purple)

These proposed alignment alternatives are indicated on the locality map (Figure 1).

Figure 1: Regional Locality Map



PROPOSED CONSTRUCTION SCHEDULE AND METHODOLOGY FOR CONSTRUCTING TOWERS AND STRINGING OF CONDUCTORS FOR A132kV, POWER LINE

Timeframe

Depending on the issuing date of the Environmental Authorisation (EA), should it be granted by Department of Environmental Affairs (DEA), it is proposed that SolarReserve South Africa (Pty) Ltd will commence construction in March 2013. The construction period for the proposed power line and substation is estimated to be 3-4 months in total. This includes the clearing of the servitude, construction of the towers, stringing of the conductors, construction of the substation and commissioning of the newly proposed lines and substation.

Employment opportunities during construction

Eskom will appoint a contractor for the construction of the proposed power lines and substation and should any local labour force be required, the appointed contractor will source the labour force through established structures e.g. Local Municipality.

- Power lines: As the construction of power lines requires highly skilled personnel, and are mainly constructed by the utilisation of specialised machinery, it is not envisaged that additional labour force will be required for this proposed project.
- Substations: The substation construction might require the use of local labour and as mentioned above, construction workers will be sourced locally, as far as possible.

Health (possible impacts of Electro-magnetic Fields – EMFs)

Power lines are designed and built to comply with the Occupational Health and Safety (OHS) Act (Act 85 of 1993). As long as activities under the power line comply with the servitude conditions, they are safe to undertake. EMF effects decrease as distance from the power line increases and any living quarters outside the servitude will not be affected by the power line as radiation from the power line is nil at the edge of the servitude. A report on EMFs is available on Eskom's website should further clarity be sought on this subject.

BASIC ASSESSMENT PROCESS

What is a Basic Assessment?

A Basic Assessment (BA) is a process of collecting, organising, analysing, interpreting and communicating information that is relevant for the consideration of a particular application. BAs are undertaken where the impacts are less likely to have significant impacts on the receiving environment.

BAs are used by planning authorities/developers to obtain an independent and objective view of the potential environmental

(biophysical and social) impacts that could arise during the construction and operation of the proposed development. This information needs to provide the Competent Authority with a sound basis for their decision-making. Environmental management and mitigation measures are also identified through the BA process.

National Environmental Management Act (NEMA)

The Basic Assessment process, as presented in Figure 2, will be conducted in accordance with the Environmental Impact Assessment (EIA) Regulations 2010 promulgated in terms of Sections 24 (5) read with section 44 of the National Environmental Management Act (No. 107 of 1998) (NEMA), as amended, in Government Notice (GN) No. R543. The proposed project triggers activities in terms of Government Notice (GN) No. 544 (18 June 2010): Listing Notice 1:

Government Notice R544 (18 June 2010)	10	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 kilovolts; or (ii) inside urban areas or industrial complexes with a capacity of 275 kilovolts or more.
Government Notice R544 (18 June 2010)	22	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, or (iii) for which an environmental authorisation was obtained for the route determination in terms of activity 5 in Government Notice 387 of 2006 or activity 18 in Notice 545 of 2010.
Government Notice R544 (18 June 2010)	23	The transformation of undeveloped, vacant or derelict land to – (i) residential, retail, commercial, recreational, industrial or institutional use, inside an urban area, and where the total area to be transformed is 5 hectares or more, but less than 20 hectares, or (ii) residential, retail, commercial, recreational, industrial or institutional use, outside an urban area and where the total area to be transformed is bigger than 1 hectare but less than 20 hectares; - except where such transformation takes place for linear activities.
Government Notice R544 (18 June 2010)	24	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 such land was zoned open space, conservation or had an equivalent zoning
Government Notice R544 (18 June 2010)	38	The expansion of facilities for the transmission and distribution of electricity where the expanded capacity will exceed 275 kilovolts and the development footprint will increase.

The Basic Assessment Process to be followed is illustrated below:

BASIC ASSESSMENT PROCESS

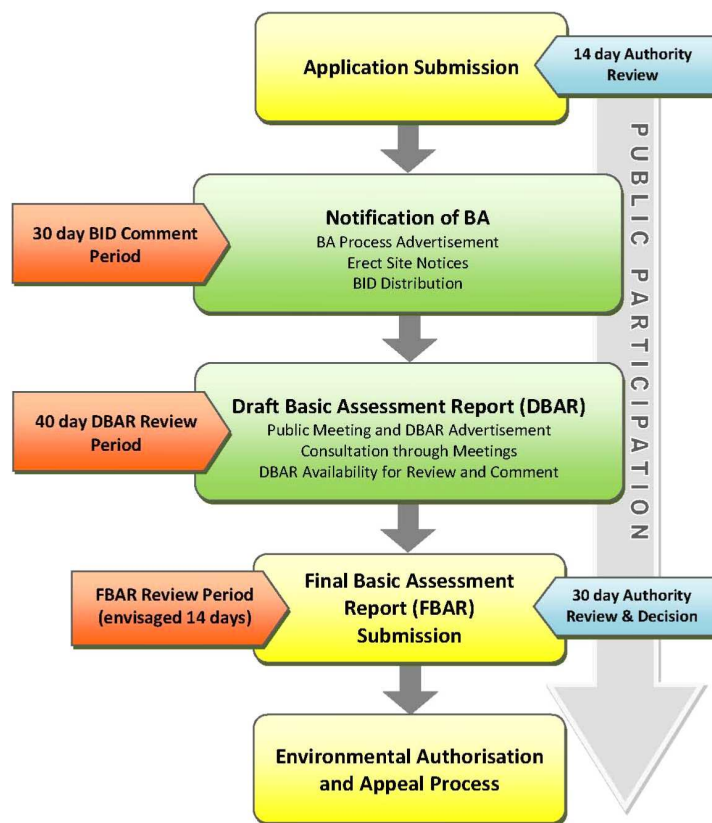


Figure 2: Basic Assessment Process Diagram

Competent Authority

The Competent Authority, as described according to the EIA Regulations, for this proposed project is the National Department of Environmental Affairs (DEA).

Environmental issues to be investigated during the BA

SPECIALIST UNDERTAKING THE STUDY	SPECIALIST STUDY
Liesl Koch – SiVEST	Ecology (Flora and Fauna)
Liesl Koch, Paul da Cruz – SiVEST	Avifauna
Paul da Cruz – SiVEST	Surface water
Kurt Barichievy – SiVEST	Agriculture and soils
Andrea Gibb, Paul da Cruz – SiVEST	Visual impact
Wouter Fourie – PGS	Heritage
Nonka Byker – MasterQ Research	Social
Nicolene Venter – Imaginative Africa	Public participation
Kerry Schwartz – SiVEST	GIS and Mapping

The Public Participation Process

Public participation is the cornerstone of any BA, as it will be for this proposed project. The key objective of public participation during this BA will be to provide I&APs with sufficient and relevant information and to conduct a transparent consultation process to ensure effective participation throughout the BA process.

As part of this public participation process you will also be provided with the opportunity to comment on the findings of the Draft Basic Assessment Report (DBAR) and the Final BAR (FBAR), which will be made available on SiVEST's website (www.sivest.co.za).

It is important that relevant I&APs and Stakeholders are identified and involved in the public participation process from the outset of the proposed project.

You will receive personal notification by SA Postal Services, e-mail and/or sms of all documents available for comment, and due dates for comment at every stage.

Your responsibilities as an I&AP:

In terms of the EIA Regulations, your responsibilities as an I&AP are to:

- register yourself on the project database in order to participate in this BA process;
- inform any other parties (neighbours, friends, colleagues, etc) who may be interested and/or affected by the proposed project about the BA process and encourage them to become involved; and
- ensure that any comments regarding the proposed project are submitted within the timeframes that have been approved or set by the DEA, or within any extension of a timeframe agreed to by the DEA and the applicant, Eskom.

Our responsibilities as Independent Environmental Consultants:

In terms of the EIA Regulations, our responsibilities in the public consultation process include:

- providing sufficient information regarding this proposed project to I&APs, either through the BID or providing information as and when requested;
- ensuring that I&APs are provided with an understanding of the proposed project to be able to comment and submit concerns informatively;
- undertaking the following actions upon receiving any comments/queries/issues:
 - a. entered the I&APs contact details into the project database to ensure all further information releases are sent to them;

- b. responding in writing to all queries or comments;
- c. recording all comments/ queries /issues received telephonically;
- d. providing responses (as soon as possible) to all questions that we are unable to answer immediately.

How to become involved

- Respond (by post, phone, fax or e-mail) to our invitation for your participation, which has been advertised in the printed media.
- Post, fax or e-mail the attached Registration and Comment Form to SiVEST.
- Attend the meetings to be held during the course of the project. Should you register as an I&AP you will automatically be invited to attend these meetings. The public meeting / public open day date will also be advertised in the printed media. Please be on the lookout for these advertisements.
- Contact us telephonically should you have a query, comment or require further project information.
- Review the draft Basic Assessment Report within the review periods that will be stipulated in the advertisement and as well as in a personalised letter to be sent to you.

If you consider yourself an I&AP for this proposed project, we urge you to make use of the opportunities created by the public participation process to become actively involved in the process and provide comment or concerns which affect and/or interest you, or about which you would like more information. Your input into this process forms a key part of the environmental studies and we would like to hear from you to obtain your views on the proposed project.

By completing and submitting the accompanying Registration and Comment Form, you automatically register yourself as an I&AP for this proposed project, ensuring that your comments and/or concerns raised regarding the proposed project will be noted. The public participation consultants will respond to all comments and queries received during the course of the project.

Please be informed that all relevant public documents can be downloaded from the SiVEST's website (www.sivest.co.za).

We look forward to your contributions

Contact: Nicolene Venter or Mabel Qinisile

✉ PO Box 2921, RIVONIA, 2128

☎ Phone: (012) 662 2843 or (011) 798 0600 or (083) 377 9112

✉ E-mail: sivest_ppp@sivest.co.za or iafrica@icon.co.za or nicolenev@sivest.co.za

Fax: (011) 803 7272

Websites: www.sivest.co.za

LIST OF ACRONYMS

BA	Basic Assessment
BID	Background Information Document
CBD	Central Business District
DEA	National Department of Environmental Affairs
DBAR	Draft Basic Assessment Report
EA	Environmental Authorisation
EIA	Environmental Impact Assessment
EMF	Electro-magnetic Field
CEMP_r	Construction Environmental Management Programme
FBAR	Final Basic Assessment Report
GN	Government Notice
I&AP	Interested and/or Affected Party
kV	Kilo Volt
NEMA	National Environmental Management Act, 1998 (Act No. 107 of 1998)
OHS	Occupational Health and Safety