

ESKOM HOLDINGS LIMITED

PLAN OF STUDY FOR AN ENVIRONMENTAL SCOPING STUDY FOR THE PROPOSED ESTABLISHMENT OF A CONCENTRATING SOLAR POWER (CSP) PLANT AND RELATED INFRASTRUCTURE IN THE NORTHERN CAPE PROVINCE.

24 February 2006

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TABLE OF CONTENTS

	PAGE
1. INTRODUCTION	1
1.1 Background to the Project	1
1.2 Description of the proposed project	3
2. SCOPE OF ENVIRONMENTAL INVESTIGATION	5
2.1 Phase 1: Environmental Scoping Study	6
2.2 Phase 2: Environmental Impact Assessment	7
3. PARTICULARS OF THE APPLICANT	7
4. ENVIRONMENTAL CONSULTANTS	7
4.1 Contact Details	7
4.2 Specialist Environmental Study Team	7
5. APPROACH TO UNDERTAKING THE PROJECT	8
5.1 Pre-Application Consultation	8
5.2 Application for Authorisation	9
5.3 Environmental Scoping Study	9
5.3.1 Site Inspection	10
5.3.2 Collection and Review of Relevant Information	10
5.3.3 Alternatives	10
5.3.4 Identification of Issues	10
5.3.5 Evaluation of Issues	11
5.4 Public Participation Process for Scoping Study	12
5.5 Compilation of the Environmental Scoping Report	14
5.6 Public Review of the draft Environmental Scoping Report	14
5.7 Authority Review of Environmental Scoping Report	15
6. WORK PROGRAMME	16
APPENDICES	
Appendix A: Locality Plan	
Appendix B: Application form	

1. INTRODUCTION

1.1. Background to the Project

Eskom's core business is in the retail, trading, transmission (transport) and generation of electricity. In terms of the Energy Policy of South Africa "energy is the life-blood of development". Eskom generates approximately 95% of the electricity used in South Africa. Therefore the reliable provision of electricity by Eskom is critical for industrial development and related employment in the region and therefore a contributing factor to investor confidence and the overall challenge of poverty alleviation and sustainable development in South Africa.

It is important that the investment decisions taken by Eskom are based on, and in support of, the energy related strategic policies and plans of South Africa and integrate and consider the impact of the developments (both positive and negative) on economic development, environmental quality and social equity.

These policies and plans are based on the availability of energy resources, technology and the environmental opportunities and constraints of the region.

Virtually all South African (and many African) electricity users are dependent on Eskom to supply that electricity but Eskom is not free to supply that electricity as it sees fit. As a state-owned company Eskom's principal shareholder is government. Government in turn controls what Eskom does in a variety of ways – firstly through the appointment of Eskom's Board of Directors and secondly through a range of policies, strategies and plans that are principally lead by the Department of Minerals and Energy (DME). In addition Eskom is controlled by independent regulators including the National Electricity Regulator (NER) and the National Nuclear Regulator (NNR). These independent regulators serve to protect the public interest and, in the case of the NER dictate the prices that Eskom can charge for electricity, what types of facilities can be established to generate, transmit and distribute electricity, together with a range of other controls.

Within this framework Eskom also needs to respond to a growing electricity demand. In particular there is a need to establish new generation capacity in South Africa within the next several years. That generation capacity can be met through the harnessing of different energy sources and the application of a number of different technologies. These technologies differ markedly though, in their generation costs, suitability for the South African environment and state of commercial development. The choice of generation technology is thus multi-faceted and complicated and has to happen also within the context of the policy framework described above, as well as within the legal/regulatory framework that has a bearing on these activities.

Integrated Strategic Electricity Planning (ISEP) is the way in which Eskom decides by how much the demand for electricity is likely to grow and how best to meet and manage that demand. It is estimated that over a 20-year horizon the costs and investments associated with meeting and managing that demand are in excess of R120 billion (present value). That planning provides economically and environmentally acceptable options for flexible and timely decision-making, consider Eskom's and shareholder's objectives. With moderate growth in demand for electricity, additional supply-side options are anticipated for commercial service from 2006.

Eskom has also entered into a demand-side management programme in order to defer the commissioning of new plant. The most attractive supply-side option is the return to service of the mothballed plant referred to as the Simunye Power Stations, which were placed in reserve storage during the period of high excess capacity on the Eskom system (e.g. Camden Power Station). Eskom has also investigated a variety of options, including conventional pulverised fuel plants, pumped storage schemes, gas fired plants, nuclear plants (PBMR), greenfield fluidised bed combustion technologies and renewable energy technologies (mainly wind and solar projects). There are also potential power plant development projects external to South Africa which could form part of power trading within the Southern African Power Pool (SAPP).

Eskom's renewable energy strategy supports the South African Government's white paper on renewable energy. Eskom is committed to investigating and evaluating the options for the diversification of the energy mix over time (including renewable energies).

All renewable energy resources available in South Africa will be evaluated for their applicability to Eskom. Eskom's strategy will have to be updated as Government policy is finalised.

A number of research demonstration facilities continued to be operated as part of Eskom's renewable energy research programme. These included the operation of Southern Africa's first wind energy demonstration facility in the Western Cape, which was opened in 2003. In addition, Eskom conducted a number of pilot projects to assess issues related to the green power market in South Africa.

Eskom has been involved with renewable energy technologies for some time, through various non-grid electrification initiatives. The programme's ultimate objective is to evaluate whether large scale, renewable electricity generation is a viable supply-side option for Eskom and South Africa. The four areas addressed by the programme are biomass, solar thermal, wave and wind energy.

The successful use of renewable energy technology in South Africa still requires extensive investigation, but the Concentrating Solar Power (CSP) technology has been identified as potentially being viable and capable of being employed on a large scale. In order to meet the future energy needs, Eskom Holding Limited (Eskom) is currently assessing the feasibility of constructing a Concentrating Solar Power (CSP) Plant in the Northern Cape Province.

South Africa ratified the United Nations Framework Convention as a developing country and thus has no requirements at present to reduce green house gas emissions. South Africa has also recently acceded to the Kyoto Protocol and as such is eligible to participate in the Clean Development Mechanism (CDM). South Africa is also particularly vulnerable to the adverse impacts of climate change, both due to impacts on the weather patterns in Southern Africa and impacts on the economy as a result of the response measures taken by developed countries.

Eskom has a number of current initiatives which promote greenhouse gas emissions reductions. These include; demand side management programmes and internal efficiency programmes. Future supply side options are highlighted in the sections on Integrated Strategic Electricity Planning (ISEP) on renewable energy. Eskom is actively exploring potential CDM opportunities and CDM is one of a number of mechanisms which can assist with the transfer of new technologies as well as addressing socio-economic issues.

In terms of the Environmental Impact Assessment (EIA) Regulations published in terms of the Environment Conservation Act (ECA, No. 73 of 1989), Eskom requires authorisation from the National Department of Environmental Affairs and Tourism (DEAT), in consultation with the Northern Cape Department of Tourism, Environment and Conservation (NC DTEC) for the undertaking of the proposed project. In order to obtain this authorisation, Eskom acknowledges the need for comprehensive, independent environmental studies to be undertaken in accordance with the EIA regulations. The project, therefore, entails the following:

- The application for authorisation for the establishment of a New Concentrating Solar Power (CSP) Plant and related infrastructure in the Northern Cape Province.

1.2. Description of the proposed project

A Concentrating Solar Power (CSP) plant is proposed to be constructed in the Northern Cape area. It is intended to operate at an installed capacity of approximately 100 MW electrically. The exact output will depend on the specification of the equipment installed and the ambient operating conditions.

A 100 MW plant typically requires 4 km² of terrain with little relief to satisfy construction needs. The key factor, however, is the amount of thermal storage required, as this determines the number of heliostats required. It is estimated that approximately 6000 heliostats will be required to be constructed within the heliostat field in order to obtain a power output of approximately 100 MW electrically for up to 8 hours after the sun has set. The heliostats to be utilised for the CSP plant in the Northern Cape are estimated to have a surface area of 130 m² each. It is also estimated that the receiver will be required to be approximately 210 m in height, and is likely to be constructed using reinforced concrete, with similar technology as that used in the construction of power station smoke stacks. Figure 1.1 shows an example of a Concentrating Solar Power Plant demonstration project undertaken in the United States of America, this project was a 10MW demonstration plant.



Figure 1.1: 10 MW CSP Plant constructed as a demonstration plant in the United States (Courtesy NREL).

The potential impacts associated with the project of this nature will be considered within this EIA.

- *Site alternatives:*

Three candidate sites have been identified in the Upington area as potentially feasible sites for the construction of the power plant and will be evaluated during the environmental scoping study, in order to nominate the preferred site for further investigation in the EIA. The three sites are as follows (see locality plan attached in Appendix A).

- Site 1 – Farm Olyfenhoutsdrif (15km West of Upington)
- Site 2 – Farm Klipbökkop (Just North of Garona Transmission Substation)
- Site 3 – Farm Tampansrus (North west of Groblershoop)

The Environmental Scoping Study will also discuss alternative solar technologies.

2. SCOPE OF ENVIRONMENTAL INVESTIGATION

In terms of Regulations R1182 to R1184 of the Environment Conservation Act (No 73 of 1989) as amended, the following listed activities are applicable:

1. The construction, erection or upgrading of -
 - (a) facilities for commercial electricity generation with an output of at least 10 megawatts and infrastructure for bulk supply;
 - (c) The construction of transportation routes and structures, and manufacturing, storage, handling or processing facilities for any substance which is considered as dangerous or hazardous and is controlled by national legislation.
 - (d) roads, railways, airfields and associated structures;
 - (g) structures associated with communication networks, including masts, towers and reflector dishes, marine telecommunication lines and cables and access roads leading to those structures, but not including above ground and underground telecommunication lines and cables and those reflector dishes used exclusively for domestic purposes;
 - (o) sewage treatment plants and associated infrastructure;
- 2 The change of land use from:
 - (c) Agricultural or zoned undetermined use or an equivalent zoning, to any other land use;

The environmental studies will follow a two-phased approach:

- Phase 1: Environmental Scoping Study
- Phase 2: Environmental Impact Assessment

This Plan of Study outlines the activities to be undertaken within the Environmental Scoping Study (Phase 1).

2.1 Phase 1: Environmental Scoping Study

Existing information and input from specialists, the authorities and Interested and Affected Parties (I&APs) will be used to identify potential environmental impacts (both social and biophysical) associated with the proposed project, and to highlight areas that should be avoided in order to minimise these potential impacts. The Environmental Scoping Study will evaluate three alternative sites for the new CSP Plant.

Through evaluation of the identified alternative sites, including specialist studies and sensitivity mapping, the ESS (Environmental Scoping Study) will recommend the most favourable alternative for further investigation in the EIA phase.

A public participation process will be undertaken to identify issues and concerns of key stakeholders and I&APs. This process will inform all affected landowners and key stakeholders of the project. All issues raised will be recorded within an issues trail, and will be included in the Environmental Scoping Report. The public participation process will commence at the beginning of this phase and will continue throughout the duration of the project.

An issues-based Environmental Scoping Report will be made available to the public for review and comment in order to ensure that all potential impacts are being considered within the scope of the study. This report will provide recommendations regarding the preferred site for the establishment of the CSP Plant, as well as regarding additional studies to be undertaken in an Environmental Impact Assessment (EIA).

The Environmental Scoping Study will aim to adequately investigate and address all environmental issues in order to recommend studies required for further investigation in the EIA phase, and to ensure all significant issues have been identified and addressed. The Environmental Scoping Report will be submitted for review and comment to both the National Department of Environmental Affairs and Tourism (DEAT) and Northern Cape Department of Tourism, Environment and Conservation (NC DTEC). DEAT will provide the Record of Acceptance for the Scoping Phase.

2.2 Phase 2: Environmental Impact Assessment

All potentially significant environmental impacts (social and biophysical) associated with the construction of the proposed CSP Plant identified in the Scoping Study will be further investigated through specialist studies, and their significance will be assessed. The detailed studies will only be undertaken for those environmental impacts identified as potentially significant in the Scoping Study, and for the preferred site only as determined in the Scoping Study. Mitigation measures will be proposed, where required.

The EIA will aim to adequately investigate and assess all environmental issues in order to provide the National DEAT and NC DTEC with sufficient information to make an informed decision regarding the proposed project.

3. PARTICULARS OF THE APPLICANT

The project proponent/applicant is represented by:

Applicant : Eskom Holdings (Pty) Ltd
Contact Person : Dr Louis van Heerden
Telephone Number : (011) 629 5526
Facsimile Number : (011) 629 5366
E-mail address : Louis.VHeerden@eskom.co.za

4. ENVIRONMENTAL CONSULTANTS

4.1. Contact Details

Consultant: : Bohlweki Environmental (Pty) Ltd
Contact Person : Mr Joggie van Staden or Mrs Ashlea Strong
Telephone Number : (011) 466-3841
Facsimile Number : (011) 466-3849
E-mail address : joggievs@bohlweki.co.za or ashleas@bohlweki.co.za

4.2. Specialist Environmental Study Team

Details of the environmental study team and their fields of expertise are provided in Table 4.1 below.

Table 4.1: Proposed specialist team and their fields of expertise

Name and Organisation	Specialist study to be undertaken
Joggie van Staden of Bohlweki Environmental	Project Director for the EIA process and public participation process
Ashlea Strong of Bohlweki Environmental	Project Manager for the EIA Process and public participation process
Johan du Preez of MDA Consulting	Ecological assessment (flora & fauna)
Jon Smallie of Endangered Wildlife trust	Assessment of potential impacts on Avifauna
Lourens du Plessis of MetroGIS	Visual Impact assessment and GIS mapping
Jude Cobbing and Arthur Chapman of the CSIR	Assessment of surface and groundwater impacts
Garry Paterson of the Agricultural Research Council (ARC)	Assessment of soils and agricultural potential
Cobus Dreyer	Heritage Impact Assessment
Derek Cosijn of Jongens Keet and Associates	Noise Impact Assessment
Jan Perold of Afrosearch	Social Impact Assessment (SIA)
Nicolene Venter of Imaginative Africa	Public participation & stakeholder involvement process & SIA
Martin Jansen van Vuuren and Zengeziwe Masimang of Grant Thornton	Assessment of impacts on tourism potential
David de Waal of Afrosearch	Facilitation of public meetings
Martin van Staden of Aerotherm	Computational Fluid Dynamic (CFD) modelling.
Michael Vermaak of Imbewu Enviro-legal Specialists	Legal review and advise

5. APPROACH TO UNDERTAKING THE PROJECT

In order to obtain the required Record of Acceptance for the Environmental Scoping Study from DEAT for the project, the following activities will be undertaken:

5.1 Pre-application Consultation

Consultation with NC DTEC and DEAT was initiated prior to the commencement of the environmental studies for the project in order to determine specific authority requirements regarding the proposed project. A pre-application meeting was held together with DEAT and NC DTEC in Pretoria on 20 February 2006. The pre-application consultation served as a basis for agreement on:

- The process to be followed for environmental authorisation
- The methodology and scope of the public participation process which should be undertaken and
- Potential issues arising from the project.

Ongoing consultation with all relevant authorities, including DEAT, NC DTEC, the Department of Water Affairs and Forestry (DWAF), South African Heritage Resources Agency (SAHRA) and the local council will continue throughout the duration of the project.

5.2 Application for Authorisation

An application for authorisation in terms of Section 22 of the Environment Conservation Act (No 73 of 1989) in respect of an activity identified in terms of Section 21 of the said Act was submitted to both the NC DTEC and DEAT on 20 February 2006 for their consideration. This application form is included within Appendix B.

5.3 Environmental Scoping Study

The Environmental Scoping Study (ESS) will provide a description of how the environment may be affected by the development of the proposed project. Desktop and field studies, and the use of existing information will highlight and assist in the identification of potential impacts (both social and biophysical) associated with the proposed project.

Additional issues for consideration will be extracted from feedback from the public participation process, which will commence at the beginning of the Scoping phase, and will continue throughout the duration of the project. All issues identified during this phase of the study will be documented within an issues-based Environmental Scoping Report. Thus the Environmental Scoping Report will provide a record of all issues identified, and a preliminary evaluation of the significance of the issues in order to make recommendations regarding a preferred site and further studies required to be undertaken within an EIA.

The ESS will aim to address the following:

- identification of potential positive and negative environmental (biophysical and social) impacts, and an evaluation of their significance in terms of the project;
- identification of "hotspots" which should be avoided where possible due to the significance of impacts;
- description of alternatives identified and scoping to determine a preferred site for the CSP Plant within the broader study area;
- evaluation of the potential feasible alternatives and nomination of a preferred site for the CSP Plant for further investigation in the EIA phase; and
- optimisation of positive impacts to the benefit of the local environment and community.

5.3.1 Site Inspection

Site inspections will be undertaken by the project team members. The site inspection will be used to investigate the study area, gather information, assess the current situation and identify any potential environmental (biophysical and social) impacts as a result of the proposed project.

5.3.2 Collection and Review of Relevant Information

An initial information scan and desktop study will provide important information regarding the study area and the proposed project, including the project need and justification. Readily available data will be collected and reviewed.

5.3.3 Alternatives

In terms of the EIA Regulations, feasible alternatives are required to be considered within the ESS. The ESS will evaluate location and technology alternatives as well as the no-go option. The technology options will be within the ambit of the concentrating solar plant technology.

The location alternatives are large areas at present. The study will attempt to identify smaller alternative sites within the larger areas. The following alternative sites will be evaluated during the ESS:

- Site 1 – Farm Olyfenhoutsdrif (15km West of Upington)
- Site 2 – Farm Klipbokkop (Just North of Garona Transmission Substation)
- Site 3 – Farm Tampansrus (North west of Groblershoop)

A preferred site will be identified for further investigation in the EIA.

The Environmental Scoping Study will also discuss alternative solar technologies.

5.3.4 Identification of Issues

Potential issues identified from desktop studies, the examination of maps, the site inspection and consultations with the Client, the authorities and I&APs will be considered within the Scoping Report. The specialists within the project team will provide desk-top input in terms of an evaluation of the defined study area, the identification of potential hot-spots, and the nomination of a preferred concentrated solar thermal plant. Issues to be addressed in the scoping report are likely to include the following:

- *Hydrology and Geohydrology*: including potential impacts on sources of surface water and groundwater through all components and phases of the

project.

- *Ecology*: including potential impacts on ecological systems and functioning, and fauna (terrestrial and avifauna) and flora as a result of the proposed project.
- *Visual impacts*: including visual impacts of the new facility.
- *Social impacts*: specifically relating to impacts on surrounding communities (e.g. health and safety), land use and employment opportunities.
- *Noise*: including the noise impacts of the proposed power station and associated activities
- *Tourism*: including the potential impact on tourism potential.
- *Heritage*: including the potential impacts on heritage, cultural and palaeontological sites.
- *Agricultural and soils*: including the potential impacts on the soils and agricultural potential of the study area.
- *Construction and operational impacts*: including general construction impacts from dust, noise, traffic, waste, soil erosion and water pollution.
- *Positive impacts*: including benefits associated with both the construction and operation of the proposed project and its overall contribution to Eskom's renewables strategy.

Other issues identified during the ESS phase of the environmental studies will be evaluated at desktop level. Recommendations regarding the significance of the potential impacts and the nomination of a preferred CSP Plant site will be made within the Environmental Scoping Report. Each of the alternative sites will be evaluated in terms of the potential impacts. The site with the lowest overall environmental, economic and social impact, taking all the potential impacts into consideration, will be nominated for further consideration in the EIA phase. The overall ranking of the sites will consider the technical and economic feasibility of the sites, together with the environmental feasibility. This is considered key to the overall success of the project.

5.3.5 Evaluation of Issues

In order to evaluate issues such that priorities can be assigned, it is necessary to identify the characteristics of each potential issue/impact:

- the *nature*, which shall include a description of what causes the effect, what will be affected and how it will be affected;
- the *extent*, wherein it will be indicated whether the impact will be limited to the immediate areas or site of the development activity (local), limited to the immediate surroundings, sub-regional, regional, and/or national;
- The *duration*, wherein it will be indicated whether the lifetime of the impact will be of a short duration (0-5 years), medium term (5-10 years), long terms (>15 years) or permanent.

- *Intensity*, to establish whether the impact is destructive or benign
- *Probability*, to describe the likelihood of the impact actually occurring.

A synthesis of the description of the above characteristics of each identified issue will assist in the determination of the potential significance of the issues.

5.4 Public Participation Process for Scoping Study

The primary aim of the public participation process during the ESS will be to identify issues and concerns of key stakeholders and affected landowners with regards to the proposed development. Issues and concerns raised during the public participation process will assist in identifying the potential environmental (biophysical and social) impacts associated with the proposed development.

- *Advertising*
In terms of the EIA Regulations, the commencement of the EIA process for the project will be advertised within appropriate local (*Die Gemsbok*) and regional (*Die Volksblad* and *The DFA*) newspapers in order to ensure that a wide group of I&APs are informed regarding the proposed project.
- *Identification of and Consultation with Stakeholders*
The first step in the public participation process will be to identify stakeholders. Specific stakeholders will include:
 - National Department of Environmental Affairs and Tourism (DEAT)
 - Northern Cape Department of Tourism, Environment and Conservation (NC DTEC)
 - Department of Water Affairs (DWAf)
 - Department of Minerals and Energy (DME)
 - Department of Science and Technology
 - Local Councils & Municipalities
 - South African National Roads Agency Limited (SANRAL)
 - South African Heritage Resources Agency (SAHRA)
 - Farmers Associations
 - Neighbouring properties of the alternative sites
 - Residents Associations or Community Organisations
 - Environmental NGOs (e.g. Earthlife Africa, WESSA and GroundWork)

All I&AP information (including contact details) together with dates and details of consultations and a record of all issues raised will be recorded within an electronic database. This database will be updated on an on-going basis throughout the project process, and will act as a record of the communication/involvement process.

- *Briefing Paper*

A briefing paper for the project will be compiled (in English and Afrikaans) for distribution to I&APs and stakeholders. The aim of this document will be to provide a brief outline of the proposed project, indicate identified candidate sites, provide preliminary details regarding the EIA process, and explain how I&APs can become involved in the project. The briefing paper will be distributed to all identified stakeholders together with a comment sheet inviting I&APs to submit details of any issues and concerns.

- *Consultation and Public Involvement*

Through consultations, issues for inclusion within the Scoping Report will be identified and confirmed. One-on-one consultation meetings will be held with key stakeholders (e.g. environmental organisations, local authorities, affected landowners) and other relevant I&APs in order to identify key issues, needs and priorities for input into the proposed project. Consultation will also take place in the form of personal interviews, focus group meetings and public meetings.

- *Public meeting:*

Public meetings will be held in the Upington and Groblershoop area before the Environmental Scoping Report is released for public comment. The primary aim of these meetings will be to:

 - disseminate information on the proposed project to I&APs (including the preliminary findings of the ESS),
 - provide details regarding the preferred site nominated,
 - supply more information regarding the EIA process and the specialist studies undertaken,
 - answer questions regarding the project and the EIA process,
 - obtain feedback from I&APs with respect to the ESS report which can then be incorporated into the report before it is finalised,
 - receive input regarding the public participation process and the proposed development.

Formal minutes of the public meetings will be compiled and distributed to the attendees. These proceedings will be included in the Environmental Scoping Report.

In accordance with the requirements of the EIA Regulations, the public meetings will be advertised at least 10 days prior to the event. This advertisement will be combined with the advert announcing the commencement of the EIA Process. Advertisements will be placed in appropriate local and regional newspapers.

Networking with I&APs will continue throughout the duration of the project. Minutes of meetings and comments received will be included in the Scoping Report.

- *Social Issues Trail*

Issues and concerns raised during the first phase of the public participation process will be compiled into an Issues Trail. This information will be incorporated as an important component of the Environmental Scoping Report.

5.5 Compilation of the Environmental Scoping Report

An Environmental Scoping Report will be compiled, and will contain the following:

- a brief project description (including a description of the proposed activity, plans illustrating the study area and proposed alternative sites, detailed technical details regarding the proposed project, and a description of all alternatives identified (including location alternatives);
- a brief description of the pre-construction environment;
- a description of the public participation process, including the identification of I&APs, a record of the procedures followed, and the perceptions and views of the I&APs regarding the activity;
- a description of environmental (biophysical and social) issues identified and potential impacts of the proposed project on these aspects (i.e. how the environment may be affected as a result of the proposed activity) and an evaluation of the identified potential impacts (both negative and positive impacts);
- a comparative evaluation of the alternatives culminating in the nomination of a preferred site;
- conclusions and recommendations regarding the presence of any environmental fatal flaws and recommendations regarding further detailed studies required in the EIA.

The report will include schematics, maps and photographs to aid illustration of certain aspects of the project. Use will be made of GIS maps to illustrate the alternative sites.

5.6 Public Review of the draft Environmental Scoping Report

The draft Environmental Scoping Report will be made available at public places for public review and comment, in accordance with the EIA Regulations. A 30-day period will be allowed for this review process. An advert indicating the availability of this report will be placed in local and regional newspapers. I&APs registered on the project database will be notified by the Consultants of the

availability of this report and the review period.

The report will be made available at several easily accessible venues within the vicinity of all of the alternative sites (e.g. public libraries).

5.7 Authority Review of the Environmental Scoping Report

The Draft Environmental Scoping Report will be submitted to NC DTEC and DEAT for their review and comment. The report will be made available to both the Authorities and the public simultaneously. All I&AP comments received during the 30-day public review period will be incorporated into a final Environmental Scoping Report. This final report will be submitted to the Authorities for their review and consideration.

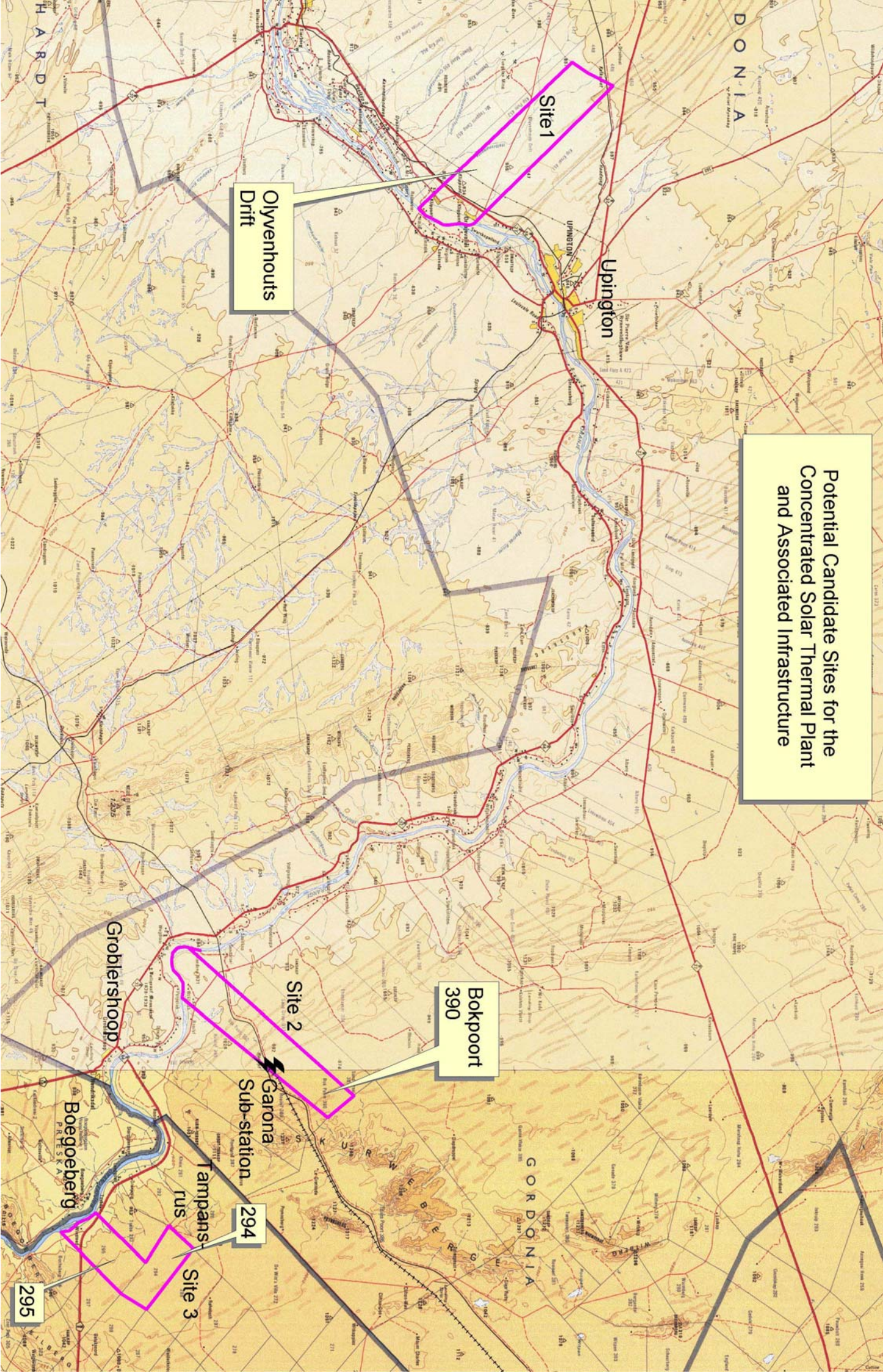
6. WORK PROGRAMME

The programme for the Environmental Scoping Study (ESS) is outlined in the table below:

Activity	Proposed Completion Date
Pre-application consultation (DEAT)	February 2006
Submit Application for Authorisation	February 2006
Obtain written confirmation of application and EIA reference number	February 2006
Site inspection - project team	February 2006
Submit Plan of Study (PoS) for Scoping to DEAT	February 2006
Obtain written approval of PoS for Scoping from DEAT	March 2006
Advertising of EIA process (approval required from DEAT)	March 2006
Desk-top scoping study	February - March 2006
Identification of I&APs & stakeholders	Ongoing
Consultation with I&APs & stakeholders	Ongoing
Compile ESS Report	February - March 2006
Hold public meeting/s	April 2006
Make ESS report available for public comment	April 2006
Public review period (advertise public review period)	April - May 2006
Submit Final Scoping Report to DEAT	May 2006
Record of Acceptance	July 2006
Submit Plan of Study for EIA	July 2006

**APPENDIX A:
LOCALITY PLAN**

Potential Candidate Sites for the Concentrated Solar Thermal Plant and Associated Infrastructure



Site 1

Olivenhouts Drift

Upington

Site 2

Bokpoort 390

Garona Sub-station 294

Tampansrus Site 3

295

Groblershoop

Boegeberg

295

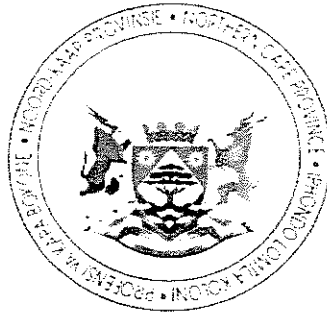
DONIA

GORDONIA

HARDT

**APPENDIX B:
APPLICATION FORM**

Northern Cape Province
DEPARTMENT OF TOURISM,
ENVIRONMENT &
CONSERVATION



Porofensi Ya Kapa Bokone
LEFAPHA LA BOJANALA,
TIKOLOGO LE
SHOMARELO

APPLICATION FOR AUTHORIZATION

in terms of Section 22 of the Environment Conservation Act, 1989
(Act No. 73 of 1989) in respect of a listed activity identified in terms of Section 21 of the said Act

Project applicant:	Eskom Holdings (Pty) Ltd		
Business reg. no./ID. no.:	2002/015527/06		
Contact person:	Dr Louis van Heerden		
Postal address:	Private Bag 40175, Cleveland, 2022		
Telephone:	(011) 629-5526	Cell:	082 88 11 579
E-mail:	Louis.VHeerden@eskom.co.za	Fax:	(011) 629-5361

Project title:	The establishment of the proposed Concentrating Solar Power Plant (CSP) and associated infrastructure, Northern Cape.				
Brief project description	The project involves the establishment of a Concentrating Solar Power Plant (CSP), with associated infrastructure, in the Northern Cape. The plant will have an approximate installed capacity of 100 MW. This will require a footprint area of between 3 km ² and 5 km ² .				
Project location:	Upington / Groblershoop areas, Northern Cape				
1:250 000 Map reference:	2821 and 2822				
Co-ordinates:	Latitude:	28°	30'	07"	South
	Site 1: Longitude:	21°	07'	40"	East
Site 2:	Latitude:	28°	45'	16"	South
	Longitude:	21°	56'	18"	East
Site 3:	Latitude:	28°	54'	32"	South
	Longitude:	22°	10'	18"	East
District municipality	Siyanda District Municipality				
Local authority/municipality:	!Kheis Local Municipality (Groblershoop) Kara Hais Local Municipality (Upington)				

Name of property:	Site 1 - Olievenhouts drift or Mc Taggart's camp Site 2 – Rooilyf or Sand Draai Site 3 – Tampansrust or Farm 294		
Farm/erven name and number	Unknown		
Size of property:	Unknown		
Closest city/town:	Upington and Groblerhoop	Distance (in km):	15 – 50 km

Registered landowner(s):	Various Landowners – to be identified during the Public participation process.		
Business reg. no./ID. no.			
Contact person:			
Postal address:			
Telephone:		Cell:	
E-mail:		Fax:	

Environmental consultant:	Bohlweki Environmental		
Business reg. no./ID. no.	1995/000770/07		
Contact person:	Joggie van Staden / Ashlea Strong		
Postal address:	P O Box 11784, Vorna Valley, 1686		
Telephone:	011 466 3841	Cell:	
E-mail:	Joggievs@bohlweki.co.za ashleas@bohlweki.co.za	Fax:	011 466 3849

DECLARATION: I hereby declare that I am fully aware of my responsibilities in terms of Government Notice No. R.1183 of 5 September 1997 and that failure to comply with these requirements may constitute an offence in terms of the Environment Conservation Act, 1989 (Act No. 73 of 1989).

Signed at Rosherville this 16th day of February

Applicant: G. R. Tosen Signature: [Signature]

Witness: [Signature] Witness: [Signature]

FOR OFFICIAL USE ONLY

Reference no.:	
Date received:	
Case officer:	