

**DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND
TOURISM**

**FEDSURE BUILDING,
315 PRETORIUS STREET,
PRETORIA
0002
Facsimile: 012 320 7539**

Date:

15 May 2007

Enquiries:

Tel +27 11 800 3501

D L Herbst

ATTENTION: MS. GROBBELAAR

Ref: GEM07-LO38

Dear Madam

**ENVIRONMENTAL IMPACT ASSESSMENT AND ENVIRONMENTAL MANAGEMENT
PROGRAMME FOR A PROPOSED NUCLEAR POWER STATION**

Eskom proposes the potential construction of a Conventional Nuclear Power Station and associated infrastructure in the Eastern, Northern or Western Cape areas (hereafter known as 'Nuclear 1').

In ensuring that the above mentioned Environmental Impact Assessment process complies with the Guidelines that pertain to the Environmental Impact Management Process [i.e. Department of Environmental Affairs and Tourism (DEAT) hereafter referred to as the Department] Guideline Document: EIA Regulations, April 1998), Eskom would like to confirm the following in submission of the attached Application to the Department.

1 INTRODUCTION

Eskom Holdings Limited (Eskom) is responsible for the provision of reliable and affordable power to South Africa. The South African economy is currently experiencing greater than expected economic growth, resulting in a rapidly declining surplus of power. Demand for power in South Africa is expected to grow at around the same pace as that of the gross domestic product, with long-term forecasts putting electricity demand on a growth path of 4.2%. Eskom's current plant mix includes gas fired stations (including open cycle) hydropower, pumped storage schemes, nuclear and coal fired based load stations, the latter making up the largest portion of the current power mix.

The National Energy Regulator's second National Integrated Resource Plan (NIRP), which focuses on planning options for meeting South Africa's long term energy demands specifically, highlights the importance of energy diversification.

Generation Division
Environmental Management
Megawatt Park Maxwell Drive Sunninghill Sandton P.O Box 1091 Johannesburg 2000 SA
Tel +27 11 800 8111 Fax +27 11 800 5140 www.eskom.co.za

Directors: MV Moosa (Chairman) TS Gcabashe (Chief Executive) M Bello (Nigerian) LCZ Cele
Dr BM Count (British) LG Josefsson (Swedish) WE Lucas-Bull PM Makwana JRD Modise V Mohanlal Rowjee
AJ Morgan SA Mpambani U Nene B Nqwababa* (*Executive Director) **Company Secretary:** M Adam
Eskom Holdings Limited Reg No 2002/015527/06



South Africa's existing Nuclear Power Station at Koeberg has been safely supplying electricity for more than 20 years. Over the past ten years, Eskom has undertaken a number of studies that has aimed to identify possible sites for potential additional nuclear power plants in the northern, western and southern Cape coastal areas.

In the late 1980s, a screening process of the following sites was undertaken to determine the potential for the proposed establishment of a conventional nuclear power station:

- Thyspunt – west of Cape St Francis, Eastern Cape (Greenfields site, Conservation area);
- Batamsklip – west of Cape Agulhas, Western Cape (Greenfields site, Conservation area);
- Koeberg – Atlantis in Cape Town, Western Cape (Next to existing Koeberg power station);
- Skulpfontein – Hodeklipbaai/Kleinsee area, Northern Cape (Alexcor Mining land); and
- Brazil – Kleinsee/Port Nolloth area, Northern Cape (Alexcor Mining land).

Eskom has now commissioned further, detailed studies to identify a preferred candidate site for the proposed conventional nuclear development. These include technical, engineering and environmental studies, as well as nuclear safety studies as required by the National Nuclear Regulator (NNR), for the construction of the proposed Nuclear Power Station and associated infrastructure.

1.1 Legislative requirements

In terms of the legal requirements for the construction of a Nuclear Power Station the recently promulgated regulations of the National Environmental Management Act (NEMA) 2006, necessitate that an Environmental Impact Assessment (EIA) be undertaken for "the construction of facilities of infrastructure, including associated structures or infrastructure for

"(a) the generation of electricity where the electricity output is 20 megawatt or more", and

"(b) nuclear reaction including the production, enrichment, processing, reprocessing, storage or disposal of nuclear fuels, radioactive products and waste"

2 PROPOSED APPROACH TO THE ENVIRONMENTAL IMPACT ASSESSMENT

ARCUS GIBB (Pty) Ltd (ARCUS GIBB) has been appointed by Eskom as an independent environmental consultants to undertake the EIA and Environmental Management Plan (EMP) for the proposed Nuclear Power Station. The following specialist studies will be undertaken and will feed into the EIA and EMP for the development:

- Climatology
- Geology
- Hydrology and Geohydrology
- Geotechnics
- Geo-risk
- Marine biology
- Air quality and health risk assessment
- Noise
- Visual and aesthetics
- Fauna (invertebrates & vertebrates)
- Flora (west coast and south coast)
- Freshwater ecology
- Archaeology and heritage
- Socio-economics
- Oceanography
- Traffic and transport
- Geographic Information Systems
- Public Involvement Process

Due to the complexity of the project and its sensitive nature, ARCUS GIBB has also commissioned an EIA peer reviewer, nuclear specialist reviewer and legal advisor to the study.

3 APPLICATION FORM

Please find attached the relevant application form for the above-mentioned project, along with the following Appendices:

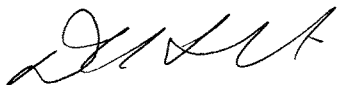
- Appendix A – Locality Maps
- Appendix B – Detailed explanation by the applicant explaining why landowner consent is not possible (Covering Letter)
- Appendix C – List of Landowner Details
- Appendix D – List of Local Authority Details
- Appendix E – List of Property Descriptions
- Appendix F – List of Nearest Towns

Eskom is aware that the Application form requires letters of landowners consent for all sites, as well as alternative sites, on which the proposed development may take place. Eskom has not managed to obtain these signed letters at this point in time due to the complexity and nature of this proposed project. Eskom kindly requests that the Department process this application, whilst we await the return of all signed letters of consent from the respective landowners.

Eskom, would however, like to point out that all relevant landowners have been consulted about the proposed project. Once all the signed consent letters have been received by Eskom we will be in a position to provide the Department with all outstanding information. Eskom would further like to request that the Department provide Eskom with some additional time to obtain all the Surveyor General 21 digit site reference numbers, whilst the Department considers the application. Eskom has however provided a contacts list of all landowners (Appendix D) as well as a List of Property Descriptions (Appendix E) which Eskom kindly requests the Department utilised in the acceptance of this Application whilst the remainder of the information is sourced.

Should you have any queries, please do not hesitate to contact us at the details provided above.

Yours faithfully



**D L HERBST
ENVIRONMENTAL MANAGER
GENERATION DIVISION**