



WESTERN CAPE DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND  
DEVELOPMENT PLANNING

Department: Environmental Management  
EIA Guideline Series

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**EIA Application Form and Scoping Checklist**  
**for applications in terms of Sections 22 and 28A of the Environment Conservation Act, 1989**  
**(Act No. 73 of 1989)**

**JUNE 2004**

## **1 INTRODUCTION**

The National Minister of Environmental Affairs & Tourism identified various activities in terms of section 21 of the Environment Conservation Act (Act No. 73 of 1989) (Rf Annexure A) which may have a substantial detrimental effect and which therefore require prior written authorisation from the relevant authority. (Rf GN No R1182 and GN No R1183 of 5 September 1997, as amended). A Record of Decision authorising or refusing the application shall only be issued after consideration of reports concerning the impact of the proposed activity and of alternative proposed activities, as prescribed by the Environmental Impact Assessment ("EIA") Regulations, (Rf Gn No R1183 of 5 September 1997, as amended).

It must be noted by proponents/developers that submit applications as required by the EIA Regulations, that the EIA Regulations state that "[The applicant] must indemnify the government of the Republic, the relevant authority and all its officers, agents and employees, from any liability arising out of the content of any report, any procedure or any action for which the applicant or consultant is responsible in terms of these regulations".

"Environment" in the context of the EIA Regulations must be understood in a very wide sense and must include biophysical, social economic and cultural heritage issues.

The EIA Regulations require the following:

1. The proponent/developer must complete an application form for any project that is listed in Schedule 1 of the EIA Regulations (Refer to Annexure A).
2. The proponent/developer must ensure that the environmental issues/concerns related to the project are identified. This is achieved through undertaking a scoping process. The **purpose** of scoping is to **identify issues and concerns** related to the proposed development. These issues and concerns can be identified in a number of ways:
  - (a). Consultation with relevant regulatory authorities (i.e. authorities who are involved in issuing permits, approvals or authorizations for the project).
  - (b). Consultation with interested and affected parties (e.g. neighbours, community organisations).
  - (c). Local knowledge and expertise of neighbours and adjacent communities.
  - (d). Knowledge and expertise of the proponent/developer.
  - (e). Knowledge and expertise of professionals/consultants that may be involved in the project (e.g. engineers, town planners).

- (f). Knowledge and expertise of environmental professionals/experts (e.g. local environmental organizations, environmental consultants/specialists).
3. The relevant authority considers the results of the scoping process and will make a decision as follows:
    - (a). Authorise the activity;
    - (b). Refuse/turn down the activity;
    - (c). Require that an EIA be undertaken. This is dependent on whether any issues of concern have been identified and the nature of these concerns.
  4. If the relevant authority requires that an EIA be undertaken, the proponent/developer must ensure that the environmental issues and concerns associated with the project are fully investigated. The number and type of issues that need to be investigated depends on the outcome of the scoping process. It should be noted that the **purpose** of the EIA process is to **investigate the consequences** of the development on the environment. The results of the impact assessment must be documented in the Environmental Impact Report (EIR).
  5. The relevant authority considers the EIR and will make a decision as follows:
    - (a). Authorise the activity
    - (b). Refuse/turn down the activity.

## 2 APPROACH OF THE DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND DEVELOPMENT PLANNING REGARDING THE APPLICATION AND SCOPING PROCESS TO COMPLIANCE WITH THE REQUIREMENTS OF THE EIA REGULATIONS

### 2.1 Application and scoping process

In order to streamline the process required by the EIA Regulations, the Department has combined the application process with initial scoping activities in this scoping checklist (hereafter referred to as “the checklist”). This has been done to enable the Department to obtain sufficient information about the project at the earliest possible stage in the EIA process. As a result the Department will be able to determine the requirements for scoping and will be able to advise the proponent/developer accordingly. This information must therefore be submitted in the checklist prior to any pre-application meeting to enable the Department to provide adequate guidance regarding the tasks that need to be undertaken to ensure compliance with the requirements of the EIA Regulations. It is therefore in the interests of the proponent/developer to provide **all relevant** information, as this will ensure that unnecessary time delays are avoided.

The following procedure therefore applies:

1. The proponent/developer must complete the attached application form and checklist and submit these to the Department. This must be done by forwarding the application form and checklist to the Department at the postal address given below or by deliver thereof to the Registry Office. The Department will not take responsibility for any documents hand delivered to any of its officers.
2. In accordance with the discretion accorded to the relevant authority, the following decisions may be made:
  - (a). *Authorisation of the activity*: Should it be apparent that the nature of the activity and/or sensitivity of the environment is such that the proposed development will not have a significant environmental impact, the authorisation may be granted. The relevant authority will decide whether the information provided in the checklist is deemed to fulfil the requirements of a final scoping report, or not. In order to finalise this decision the relevant authority may require:
    - That the proponent/developer advertise the fact that authorisation of the activity is being considered, to provide an opportunity for the public to comment on the proposed development.
    - Request additional information on any item in the checklist that the relevant authority considers necessary to enable a final decision.
  - (b). *Refuse the activity* : Should it be clearly apparent that the nature of the activity and/or sensitivity of the environment is such that significant environmental degradation will result from the proposed development/activity, the relevant authority may refuse the application. This means that the relevant authority will deem the information in the checklist to fulfil the requirements of a final scoping report, thus enabling a decision to refuse the application, to be made.
  - (c). *Require that additional scoping tasks be undertaken*: In cases where the information provided in the checklist is considered inadequate to fulfil the requirements of a final scoping report, the relevant authority will require additional scoping tasks to be completed. This decision is dependent on the **nature** and **scale** of the proposed activity and the **characteristics** of the **affected environment**. In determining what additional tasks may be required in terms of the

EIA Regulations, the relevant authority may call for a meeting with the proponent that may include other relevant authorities. The additional tasks that may be required include, but are not limited to:

- Public participation in accordance with the Guidelines for Public Participation for the EIA Process, September 2001.
  - Undertaking additional investigation into the identification of alternatives for the project.
  - Appointment of an independent environmental consultant to undertake the extended scoping activities required by the relevant authority (assuming that an independent environmental consultant has not been involved in the completion of the scoping checklist).
  - Providing additional information on any aspect of the project or the affected environment.
3. Once the additional scoping tasks required by the relevant authority have been completed, the following decisions may be taken:
- (a). The activity may be authorised.
  - (b). The activity may be refused.
  - (c). The proponent/developer may be required to undertake an EIA.

## 2.2 The Checklist

The checklist is divided into 4 sections:

1. *Section I* : Project Description
2. *Section II* : Policy and Legislation
3. *Section III* : Environmental Characteristics
4. *Section IV* : Initial Identification of Environmental Issues

The checklist has been compiled to include questions that cover the full range of activities listed in Schedule 1 of the EIA Regulations (Refer Annexure A). This means that not all questions may be relevant to every Listed Activity. Where questions are not relevant to the project, please indicate “not applicable”. Information **must be provided for all questions relevant to the project** for which an application is being made.

Proponents/developers are responsible for the accuracy of the information supplied and are therefore required to complete the checklist fully and honestly. Incomplete or inadequate information will not be accepted and will be returned to the proponent/developer, (hereinafter referred to as “the applicant”), which may result in lengthy delays. Should assistance be required in completing the checklist, an appropriately qualified environmental consultant should be appointed.

For further information, please refer to the following documents issued by this Department:

- ✓ Information Document on Requirements with respect to the EIA Regulations, January 2003
- ✓ Letter re applicants and independent consultants: applying for authorisation in terms of section 22 of the Environment Conservation Act 73 of 1989, (“the ECA”)
- ✓ Letter re amendment of conditions of Records of Decision, 30 July 2002
- ✓ Letter re Schedule 1 Item 10: The cultivation of any other use of virgin ground, 30 July 2002
- ✓ Guideline for Plan of Study for Scoping for the EIA Process, November 2001
- ✓ Guidelines for Public Participation for the EIA Process, September 2001

- ✓ Guideline on the Application of the EIA Regulations to Structures associated with Communication Networks, September 2001
- ✓ Guideline for the Management of Development on Mountains, Hills and Ridges of the Western Cape, April 2002

**Please include the following information with the application form and checklist:**

1. If the proposed project is to be undertaken on leased or rented land, a letter of consent from the landowner must also be provided. If on state owned land, a letter from the responsible management authority must be obtained (e.g. school governing body).
2. Documentation from other national, provincial and/or local authorities that provides their comments, conditions or recommendations concerning the proposed activity, if available. This documentation is required to supplement the information given in response to Section II of the checklist.
3. Written comments/correspondence from neighbours must be included in an appendix together with the response from the proponent/developer to concerns raised. This documentation is required to supplement the response given to question 9 in Section I of the checklist. (Rf Regulation 6(1)(e) and 8(c)(iii)).
4. Please attach copies of any Needs and Desirability Analysis and/or Business Plan if available.

**IMPORTANT NOTES**

1. Should the applicant wish to be exempted from the following provisions in the EIA Regulations, a written motivation in this regard must be submitted:
  - (a). 3(1) (a) (b) (c) and (d) which relate to the appointment of an independent consultant and matters relating to costs and independence of the consultant.
  - (b). 3(1) (e) which relates to the information required in terms of the EIA Regulations being provided by the consultant – this information will still need to be provided but by the proponent/developer.
  - (c). 6(1) (d) which relates to the description of alternatives.

The relevant authority will take the nature and scale of the proposed activity and the sensitivity of the affected environment into account in deciding whether an exemption from any of the above provisions is appropriate or not.

2. If an independent environmental consultant is appointed to complete the application form and checklist on behalf of the proponent/developer, the declaration of independence (provided in Annexure B) must be completed by the independent environmental consultant and submitted with the application form and checklist.
3. The applicant must always sign the application form where indicated. The original must be submitted to the relevant authority. Applications not containing such a signature shall not be considered by the relevant authority until such signature has been received.

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## **DEPARTMENTAL DETAILS**

### **CAPE TOWN OFFICE REGION A (Breede River/ Winelands, City of Cape Town: Tygerberg and Oostenberg Administrations)**

Department of Environmental Affairs and Development Planning  
Attention: Directorate: Integrated Environmental Management (Region A2)  
Private Bag X 9086  
Cape Town,  
8000

Registry Office  
1<sup>st</sup> Floor Utilitas Building  
1 Dorp Street,  
Cape Town

Queries should be directed to the Directorate: Integrated Environmental Management (Region A2) at:  
Tel: (021) 483-4628  
Fax (021) 483-3633

### **CAPE TOWN OFFICE REGION B (West Coast, Overberg, City of Cape Town: Helderberg, South Peninsula, Cape Town and Blaauwberg Administrations)**

Department of Environmental Affairs and Development Planning  
Attention: Directorate: Integrated Environmental Management (Region B)  
Private Bag X 9086  
Cape Town,  
8000

Registry Office  
1<sup>st</sup> Floor Utilitas Building  
1 Dorp Street,  
Cape Town

Queries should be directed to the Directorate: Integrated Environmental Management (Region B) at:  
Tel: (021) 483-4094  
Fax (021) 483-4372

### **GEORGE OFFICE (Eden and Central Karoo)**

Department of Environmental Affairs and Development Planning  
Attention: Directorate: Integrated Environmental Management (Region A1)  
Private Bag X 6509  
George,  
6530

Registry Office  
4<sup>th</sup> Floor, York Park Building  
93 York Street  
George

Queries should be directed to the Directorate: Integrated Environmental Management (Region A1) at:  
Tel: (044) 874-2160  
Fax (021) 874-2423

View website: <http://www.westerncape.gov.za/eadp> (for the latest version of the documents)

## GLOSSARY OF TERMS

**“Actual Agricultural use”** means land that is being used for farming purposes. This includes cultivated land and the farming of animals. Agricultural land use includes activities and buildings that are reasonably connected with the main farming activities.

**“Agricultural zoning”** means the property is zoned for agricultural use irrespective of whether it has actually been used for farming practices

**“Applicant”** means the person, including juristic persons, (Eg Companies, CC's, organs of state etc) who will be responsible for the undertaking of the activity and on whom all the obligations in terms of the EIA Regulations, will rest. This will not necessarily be the landowner. If the applicant is not the landowner, the applicant must be able to provide proof that the landowner has consented to the particular activity to take place on his/her/it's land or that the applicant has been mandated, for example, attach a power of attorney.

**“Environmental Consultant”** means the independent consultant who has expertise in the area of environmental concern being dealt with in the specific application and who must on behalf of the applicant, comply with the requirements of the EIA regulations (GN No R1183 of 5 September 1997, as amended) and who must have no financial or other interest in the undertaking of the proposed activity, except with regard to the compliance with these regulations

**“Footprint”** means the total surface area of the proposed project/development

**“Listed activity”** means any activity as identified in GN No R1182 of 5 September 1997, as amended, in terms of section 21 of the Environment Conservation Act 73 of 1989, (“the ECA”), which may have a substantial detrimental effect on the environment and therefore requires prior written authorisation in terms of section 22 of the ECA

**“Planning Consultant”** means the person, including juristic persons, who has been appointed to undertake all work associated with the necessary planning approvals required for the proposed project

**“Project Consultant/Manager”** means the person, including juristic persons, who has been appointed to facilitate the undertaking of the proposed project

**“Property”** means the portion of land on which the project/development is proposed to be undertaken and which has cadastrally defined boundaries following lines of subdivision with set co-ordinates for boundary points. The property must be represented on a diagram held by the Surveyor General.

**“Proposed project”** means the entire development that the applicant intends undertaking, which includes any listed activities but also encompasses all other aspects of the entire development

**“Resource Conservation Measures”** means measures that have/will be taken to ensure that the environmental resources are being adequately managed, for example, water and energy conservation, waste minimisation and pollution prevention measures

**“Terms of Reference”** means the specific parameters within which the consultants/specialists are required to undertake the work for which they were appointed



**Application Form and Checklist**  
**in terms of Section 21, 22, 26 and 28A of the**  
**Environment Conservation Act, 1989**  
**(Act No. 73 of 1989)**

**APPLICATION DETAILS**

Project Applicant /Agent of Applicant: (Please specify and attach copy of agency agreement if applicable) Contact person: Postal Address: Telephone: Email:	<b>Eskom Holdings Limited</b>		
	Deidre Herbst		
	P O Box 1091 Johannesburg, 2000		
	(011) 800 3501	Cell:	083 660 1147
	deidre.herbst@eskom.co.za	Fax:	(011) 800 5140

Project title:	EIA for the proposed 400 MW(t) PBMR Demonstration Power Plant on the Koeberg power station site in the Western Cape			
Project location:	The Koeberg power station site is located north of Ouskip, Van Riebeeckstrand and Melkbosstrand and to the east of the R27 on the farm Duynefontein 34. The site is located about 2 km from the Duynefontein residential area, 30 km north of Cape Town and 10 km south of Atlantis.			
Co-ordinates:	Latitude:	33 °	40 ' "	South
	Longitude:	18 °	26 ' "	East
Magisterial District:	Malmesbury that is now part of the City of Cape Town Metropolitan Municipality			
Name of Property:	Koeberg power station			
Farm/Erf name and number	Duynefontein 34			
Size of Property: (as per title deed)	The proposed PBMR DPP, once constructed, would require approximately 9 hectares of the Koeberg power station (approximately 125 ha) which is situated on the Duynefontein 34 farm (approximately 1257 ha)			
Closest City/Town:	Cape Town	Distance (in km) 30 km		

Project Consultant: Contact person: Postal Address: Telephone: Email:	PBMR (Pty) Ltd		
	Mr Terry McGowan		
	P O box 9396, Centurion, 0046		
	(012) 677 9966	Cell:	083 648 0256
	terry.mcgowan@pbmr.co.za	Fax:	(012) 677 5427

<b>Fill in if applicable</b>	Environmental Consultant	ARCUS GIBB Pty (Ltd)		
	Contact person:	Ms Jaana-Maria Ball		
	Postal address:	PO Box 2700, Rivonia, 2128		
	Telephone:	(011) 519 4600	Cell:	083 650 5489
	Email:	jball@gibb.co.za	Fax:	(011) 807 5670

<b>Fill in if applicable</b>	Planning Consultant	NOT APPLICABLE		
	Contact person:			
	Postal address:			
	Telephone:		Cell:	
	Email:		Fax:	

<b>Is there a Terms of Reference?</b>	<b>Yes</b>	
If so, please attach a copy thereof to this application form and scoping checklist		
<b>Scope of work currently being negotiated.</b>		



Registered landowner/s:	Eskom Holdings Limited		
Contact person:	Deidre Herbst		
Postal Address:	P O Box 1091, Johannesburg, 2000		
Telephone:	(011) 800 3501	Cell:	083 660 1147
Email:	deidre.herbst@eskom.co.za	Fax:	(011) 800 5140
Local authority/municipality:	City of Cape Town Metropolitan Municipality		
Contact person:	Mr Stephen Granger		
Postal Address:	P O Box 4557, Cape Town, 8000		
Telephone:	(021) 487 2284	Cell:	
Email:	enviro@capetown.gov.za	Fax:	(021) 487 2255
Registered owner of mining rights:	NOT APPLICABLE		
Contact person:			
Postal Address:			
Telephone:		Cell:	
Email:		Fax:	

**Declaration :**

I hereby declare that I am fully aware of my responsibilities in terms of the EIA Regulations (Government Notice No R1183 of 5 September 1997, as amended), 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):

Applicant (Full names) \_\_\_\_\_ Date: \_\_\_\_\_ Place: \_\_\_\_\_

Signature \_\_\_\_\_ (duly authorised to sign on behalf of Applicant)

Witness Full names) \_\_\_\_\_ Date: \_\_\_\_\_ Place: \_\_\_\_\_

Signature \_\_\_\_\_

**PROJECT DESCRIPTION**

Please provide the following:

a) A **Locality Plan**, which clearly shows the site in relation to the surrounding area. The plan must be of sufficient quality to enable the Department to locate the site for the purposes of a site inspection.

(Please refer Annexure 1)

b) A **Site Plan**, indicating the proposed new development, existing servitudes, 1:50 year flood line, 1:100 year flood line (if available), adjacent land use and developments, contours, existing infrastructure, and any additional information that may be of assistance to the Department in considering an application.

(Please refer Annexure 2)

c) The above plans must be **clearly legible** and **must indicate the scale** and must indicate where **North** is,

d) **Photographs** of the site and its surroundings (taken of the site and from the site). The vantage points from which the photographs were taken, must be indicated on the site plan, or locality plan as applicable. If available, please also provide a recent aerial photograph.

e) A **letter of consent** from the landowner, if the site of the proposed development is rented or leased.

(Not Applicable)

**1** Please provide a description of the proposed development.

The proposed activity consists of the construction, commissioning, operation, maintenance and decommissioning of a Pebble Bed Modular Reactor (PBMR) Demonstration Power Plant (DPP) with a nominal thermal output of 400 MW(t). The definition applied to the PBMR DPP is described by the White Paper on the Energy Policy for the R.S.A. as published on 18 December 1998.

The proposed PBMR DPP is a graphite moderated, helium cooled, nuclear reactor, configured as an electricity generating power station. The PBMR DPP uses a direct gas turbine cycle to convert the heat, generated by nuclear fission in the reactor and transferred to the helium coolant, into electrical energy by means of a horizontally configured turbo-generator.

Fuel for the proposed PBMR DPP would consist of spherical pebbles (approximately 60 mm in diameter) that contain Triso coated Uranium Oxide kernels (up to 10% enriched), which are embedded in a pure graphite matrix.

Provision would also be made to accommodate all spent fuel on the site for the design life of the plant subject to statutory prescription. Radioactive waste (excluding spent fuel) would be processed on site and via the existing Koeberg power station facilities in accordance with statutory prescription.

The PBMR DPP will incorporate standby diesel generators.

A double circuit transmission line operating at 132 kV, and including transmission pylons, between the proposed PBMR DPP and the Koeberg substation, via the Duine substation, all on the Koeberg power station site, would link the proposed PBMR DPP to the national transmission network.

A widening of a portion of the road to the Koeberg power station from the R27 turnoff, and the construction of the internal roads on the Koeberg power station site for access to the PBMR DPP site are also proposed.

The proposed PBMR DPP would to a large extent make use of existing Koeberg infrastructure and services. These include:

- General water supply
  - Raw water for the intermediate cooling system and domestic use in the station
- Cooling water from the sea
  - Marine cooling water intake basin and outflow structures
- Transmission network including substations
- Sewage facilities
- Roads
- Security

**2** Is the project a new development or an upgrade of an existing development?

The project is new development on the existing Koeberg (nuclear) power station.

**3** Which of the listed activities in Schedule 1 of the EIA Regulations apply to the development (refer Annexure A)? Please indicate all activities that are applicable

The following activities are applicable:

- Activity 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;
  - (b) nuclear reactors and facilities for the production, enrichment, processing, reprocessing, storage or disposal of nuclear fuels and wastes;

	(c) with regard to any substance which is dangerous or hazardous and is controlled by national legislation - (II) manufacturing: storage, handling, treatment or processing facilities for any such substance;
	(d) roads, railways, airfields and associated structures;
<b>Activity 2.</b>	The change of land use from- (c) agricultural or zoned undetermined use or an equivalent zoning to any other land use;
<b>Activity 9.</b>	Scheduled processes listed in the Second Schedule to the Atmospheric Pollution Prevention Act, 1 965 (Act No. 45 of 1 965): 29. <i>Power generation processes.</i> That is to say, processes in which any fuel-burning appliance is used that is not controlled in terms of Pad III of this Act, excluding appliances in private dwellings.

**4** What is the estimated capital investment for the project? Please indicate if this information is confidential.

Confidential at present.

**5** What does the proposed project comprise? Please provide details of all components of the proposed project and attach diagrams (e.g. architectural drawings or perspectives, engineering drawings, process flow charts).

Buildings	Yes	No
<b>Provide brief description:</b>		
The PBMR Demonstration Power Plant (DPP) consists of a number of buildings, of which the main ones are described below (refer Annexure 2 for the layout): Please note that all dimensions are approximate.		
<b>An Integrated Reactor Building and Generator Building:</b>		
The nuclear reactor and associated components are housed in the Reactor Building which has a rectangular shape and plan dimensions of approximately 77 m x 37 m . The Reactor Building structure is constructed of reinforced concrete. The Reactor Building foundation comprises an approximately 3 m thick raft, founded on bedrock approximately 26 m below terrace level. The terrace around the Reactor Building at the proposed site is at elevation of approximately +13.5 m above mean sea level.		
The generator and associated electrical and auxiliary power plant are located in a Generator Building, located adjacent to the northern gable of the Reactor Building. The plan dimensions of the Generator House are approximately 40 m x 37 m . The Generator House comprises a conventional framed structure, constructed of conventional reinforced concrete to 3 m above the generator floor, located approximately +10 m above the terrace. Above this level a structural steel support system, covered with aluminium sheeting, is proposed.		
<b>A Services Building:</b>		
The Services Building houses the Main Control Room and the Waste Handling and Storage System and also provides the controlled access to the Reactor Building. The dimensions of this building are approximately 35 m x 50 m.		
<b>An Ancillary Building:</b>		
The Ancillary Building is located to the east of the Reactor Building and north of the Services Building and houses the medium and low voltage switchgear, the diesel generators, and other systems associated with the operation of the PBMR DPP. The plan dimensions of this building are approximately 35 m x 40 m. Underground tunnels interconnect the Reactor Building with the Services and Ancillary Buildings.		
<b>A Cooling Water Plant Building:</b>		
Sea water is used for cooling the helium gas that cycles between the reactor and the turbines, A Cooling		

Water Plant Building is located to the west of the Generator Building and houses the cooling water pumps and heat exchangers. The plan dimensions are approximately 45 m x 30 m. Piping between the Cooling Water Plant Building and the Reactor Building is routed via an underground tunnel.

**An Administration Office Building:**

An Administration Office Building on the southwest corner of the terrace will house the PBMR DPP staff. The plan dimensions are approximately 25 m x 20 m.

The Services Building, Ancillary Building, Administration Building and Cooling Water Plant building are likely to be constructed using conventional beam column frames supporting reinforced concrete floors and structural steel, clad roofs.

**Infrastructure (e.g. roads, power and water supply)**

**Yes**

No

**Provide brief description:**

Infrastructure that will be established generally be of a limited nature and within the owner-area of Koeberg power station.

**Access roads:**

The existing access road from the R27 to the Koeberg power station site will also provide access from the R27 for the PBMR DPP. At the R27 intersection, the existing access road will be widened to facilitate traffic flow during construction.

**Internal roads:**

An internal road to the PBMR DPP site will be constructed from the existing access road. This road will be designed to standards required for the transportation of ultra heavy loads experienced during the construction phase. On the terrace around the proposed PBMR DPP, roads which are not required to facilitate the ultra heavy transporters, will be designed to national standards.

**Sewerage:**

The sewer system will service all ablution facilities on the PBMR DPP site and will connect into the existing sewer network of the Koeberg power station site.

**Storm water system:**

The terrace comprises the platform on which the PBMR DPP plant is located. The earthworks are raised above the natural ground level to ensure that water runoff from the terrace is always away from the Reactor Building and Generator Building. Runoff from the site surrounding the terrace is intercepted by channels which route the water around the terrace to the western part of the site. The storm water system comprises a network of underground pipes and open channels which are designed to collect rainwater runoff from the various buildings on the site and divert the water to the western part of the site off the terrace. Two storm water systems are designed namely, clean water and contaminated water systems. The clean water system caters for unpolluted runoff whilst the contaminated water system collects runoff from areas that could potentially be polluted. The polluted water would be diverted to a pollution control structure where oils would be separated from the water.

**Transform Bay:**

The transformer bay civil works comprise those structure required to support the transformers for the PBMR DPP. The structures also interface with the storm water system to ensure that any spillages of transformer oil can be diverted to the pollution control structures. The transformers are generally surrounded on three sides by blast walls designed to protect the Reactor Building and Generator Building from fires.

**Power supply:**

Power is provided to the PBMR DPP site from existing substations on the Koeberg power station site.

**Water supply:**

Water supply will be provided from the main potable water supply line to the Koeberg power station. The connection into this supply line will be on the Koeberg power station site.

**Sea eater for cooling:**

Cooling water for the proposed PBMR DPP will be extracted from the sea using the existing Koeberg power station facilities. A pipeline would be constructed from the existing Koeberg intake basin to the Cooling Water Plant Building. The sea water would be returned to the sea using the existing Koeberg

outflow structures, via a pipe line from the Cooling Water Plant Building to the outflow structure.								
<b>Processing activities (e.g. manufacturing, storage, distribution)</b>	<b>Yes</b>	<b>No</b>						
<b>Provide brief description:</b>								
Processing of low and intermediate level radioactive waste will be done in accordance with the requirements of the National Nuclear Regulator.								
<b>Storage facilities for raw materials and products (e.g. volume and substances to be stored)</b>								
<b>Provide brief description</b>	<b>Yes</b>	<b>No</b>						
Space will be provided for lay down areas, workshops and stores adjacent to or on the terrace of the PBMR DPP during the construction phase. It is necessary to provide protection for plant components against corrosion due to the sea air.								
Stocks of various consumables associated with the operation and maintenance of an electricity generating power station will be stored in the appropriate PBMR DPP buildings. Examples of such consumables are:								
<ul style="list-style-type: none"> <li>• Transformer oil;</li> <li>• Lubricating oil;</li> <li>• Turbine control fluid;</li> <li>• Compressed combustible gas (oxygen, acetylene, propane);</li> <li>• Refrigerant (for air conditioning systems);</li> <li>• Fire protection system gas;</li> <li>• Demineralised water chemical additives;</li> <li>• Battery acid;</li> </ul>								
As an integral part of the operation and maintenance of the PBMR DPP, storage tanks will be included in the design of the Reactor Building and Generator Building for a number of materials (the actual sizes are still to be determined), for example:								
<ul style="list-style-type: none"> <li>• Diesel generator fuel oil;</li> <li>• Diesel generator lubricating oil;</li> <li>• Turbine fire resistant fluid;</li> <li>• Helium gas;</li> <li>• New graphite spheres; and</li> <li>• New and used nuclear fuel spheres (in accordance with the requirements of the National Nuclear Regulator)</li> </ul>								
<b>Storage facilities for water</b>	<b>Yes</b>	<b>No</b>						
<b>Provide brief description</b>								
For main raw water supply the PBMR DPP will make use of the Koeberg power station bulk supply/storage facility that has sufficient capacity for both Koeberg and the PBMR DPP. The PBMR DPP will require the following storage facilities for water:								
<table border="0"> <tr> <td>• Demineralised water</td> <td>6000 litre tank proposed</td> </tr> <tr> <td>• Fire system</td> <td>2 x 800 m 3 tanks proposed</td> </tr> <tr> <td>• Potable water system</td> <td>200 m 3 tank proposed</td> </tr> </table>			• Demineralised water	6000 litre tank proposed	• Fire system	2 x 800 m 3 tanks proposed	• Potable water system	200 m 3 tank proposed
• Demineralised water	6000 litre tank proposed							
• Fire system	2 x 800 m 3 tanks proposed							
• Potable water system	200 m 3 tank proposed							
<b>Storage facilities for solid waste and effluent generated by the project</b>	<b>Yes</b>	<b>No</b>						
<b>Provide brief description</b>								
As an integral part of the operation and maintenance of the PBMR DPP, facilities for the handling and treatment, including storage, and management of radioactive waste will be included in the design of the PBMR DPP, in accordance with the requirements of the National Nuclear Regulator and Government Policy:								
<ul style="list-style-type: none"> <li>• Used graphite spheres</li> <li>• Spent nuclear fuel spheres</li> <li>• Radioactive gaseous and liquid effluents and solid waste</li> </ul>								
Non-radioactive wastes will be disposed of via the municipal system after sorting and recycling.								

<b>Other activities (e.g. water abstraction activities, crop planting activities)</b>	<b>Yes</b>	<b>No</b>
<b>Provide brief description</b>		
During the construction phase it may be necessary to "de-water" the excavation. The abstracted water would be routed to the sea via the existing Koeberg power station facilities.		

**6** Please provide the following information on the construction phase

<b>How long will the construction phase last?</b>	~ 3 - 4 years	
<b>Is the proposed project going to be undertaken in phases? If so, provide details.</b>	<b>Yes</b>	<b>No</b>
<b>Indicate the area of the site that will need to be disturbed in the construction phase in order allow the proposed activity to take place</b>		
Approximately 200 000 m <sup>2</sup> for the contractors yards, temporary stockpile etc, including the terrace on which the PBMR DPP will be constructed		

**7** What is the size/scale of the project?

<b>Height of permanent structures (e.g. buildings, communication masts, dam walls, electricity pylons, storage tanks)</b>
<ul style="list-style-type: none"> <li>• The terrace around the Reactor Building at the proposed site is at elevation of approximately +13.5 m above mean sea level.</li> <li>• On the northern end, the roof of the Reactor Building, which comprises a flat reinforced concrete slab, is at level approximately +34 m above the terrace.</li> <li>• On the southern end, the roof is at level approximately +40 m above the terrace. Parapet walls, about 1.2 m high are constructed on the perimeter of the building above the roof. Ventilation structures on top of the roof are likely to result in an overall height of approximately 45 m above terrace level.</li> <li>• The overall height of the Generator Building above the terrace is approximately 33 m.</li> <li>• The heights of the Services Building, Ancillary Building, Administration Building and Cooling Water Plant Building are anticipated to be less than 15 m above terrace level.</li> <li>• The 132 kV transmission lines between the Duine substation and the Koeberg substation (approximately 1km distance - all on the existing Koeberg power station site) would be supported by transmission pylons of approximately 31 m height above ground level. '</li> <li>• Most of the storage facilities will in incorporated into the design of respective buildings. Those that are external to buildings are anticipated to be less than the height of the buildings (i.e. anticipated to be less than 15 m above terrace level).</li> </ul>
<b>Indicate the extent of the footprint for the proposed activity in relation to the site in its entirety. (Please note that this is different to question 5 above regarding the surface area that requires to be disturbed in order for construction to take place)</b>
The PBMR DPP site (also designated the terrace) will be approximately 90 000 m <sup>2</sup> . The total area of the Koeberg power station site (i.e. the total area within the access control 1 security fence) is approximately 1 250 000 m <sup>2</sup> .
<b>Indicate the surface area taken up by buildings (e.g. accommodation units, offices, garages) and infrastructure (e.g. roads, parking, storage facilities etc.)</b>
The PBMR DPP buildings, parking, loading bays, etc, but excluding the areas between the buildings, will occupy approximately 15 000 m <sup>2</sup> .

<b>For residential or resort developments indicate the density of the development</b>
N/A
<b>If the development will be nodal or clustered, state the density (units per hectare) of development for each node or cluster.</b>
N/A

**8** Current land use of the proposed site(s) for the activity and surrounding land uses?

<b>Are any of the following applicable to the proposed site?</b>	<b>Yes/No</b>	<b>Details</b>
Actual agricultural use	No	
Zoned undetermined (or equivalent)	Yes	<p>According to the zoning certificate, Cape farm no. 34 (Duynefontein) which is Koeberg power station site, Cape farm no. 33 (Kleine Springfontein) and Cape farm no. 1375 (Admiralty Zone land) are zoned rural, rural and undetermined respectively.</p> <p>Nuclear power generation by Koeberg power station is the accepted use of Cape Farm no. 34 (Duynefontein). The proposed PBMR DPP site will be situated within the existing access control 1 security fence of the Koeberg power station site and thus will be on land currently used for nuclear power generation.</p>
Actual use for grazing	No	
Use for nature conservation	No	<p>The area registered as the Koeberg nature reserve and the Koeberg natural heritage site surrounds the Koeberg power station site on three sides, <b>and specifically excludes the Koeberg power station site area</b>. The proposed PBMR DPP will be situated within the access control 1 security fence of the Koeberg power station site and hence not in the area registered as the nature reserve and the natural heritage site.</p>
Zoned open space	No	
Other (for example, natural vegetation)	No	
<b>Surrounding land uses (describe)</b>		
<p>The Koeberg power station site is situated in Blaauwberg LMC on a portion of the farm Duynefontein (farm number 34). Eskom owns Duynefontein (farm number 34), which stretches 4.4 km along the coast and 3.5 km inland, comprising 1 257 ha. The West Coast Road passes over the farm giving excellent access to the site. The adjoining farm, Kleine Springfontein (farm number 33) also belongs to Eskom. This property includes 3.6 km of coast to the north of Duinefontein and stretches 3.75 km inland measuring 1 590 ha. South of Duynefontein, Eskom also owns land that has been developed as a housing estate, originally for Koeberg employees. The housing development utilizes about 87.5ha of the local area of 309 ha owned by Eskom. This housing development area is now private property and part of Melkbosstrand.</p>		

The land-use pattern within a 20km radius of the Koeberg power station can be classified in the following categories: nature reserve, cultivated land; uncultivated land; residential development; industrial development, dune areas; vlei areas and river valleys. The Melkbosstrand urban strip, which lies along the coast, is the dominant land-use within a 5 km radius of Koeberg power station. The area to the immediate east of Koeberg power station is largely uncultivated as it consists of sandy soil of low agricultural value.

The northern area consists of Standveld Coastal Shrublands. Poorly vegetated sands occur in the dune areas along the coast and further inland to the NNW of Koeberg power station. The soil quality generally improves outwards towards the 20 km radius and this is reflected in the intensity and quality of the agricultural output. The farming is typically Swartland with wheat and fodder crop cultivation dominating agricultural activities. Dairy farming is also popular. Poultry farming occurs mainly in the NE sector, particularly in the area of smallholdings east of Atlantis.

The industrial and residential towns of Atlantis form the most significant urban development to the north of Koeberg power station. There is metropolitan growth in the area north of Milnerton (SSE and SE of Koeberg power station). The area immediately north of Table View is exhibiting rapid growth. Residential development in this area is still beyond the 10 km radius from Koeberg power station.

South of Koeberg power station, adjacent to the conservation area, lies the town Duynefontein. Scattered industries in the form of brickfields and waste sites also occur in the SE and SSE sectors. Extensions of industrial areas south of the Diep River characterise the SE sector around the 20 km radius.

**Regional Context (Planning vision – indicate how the project will comply with current forward planning documents for example, Integrated Development Plans, and Spatial Development Frameworks)**

Forward planning document	Confirmed by whom?
The Koeberg power station site and the Koeberg nature reserve is integrated with the: Atlantis Growth Corridor Management Plan Metropolitan Spatial Development Framework	Cape Metropolitan Council, 2000 Cape Metropolitan Council; 1996

**9** Please indicate whether any of the following emissions and wastes will be produced by the project during the construction and operational phases?

Item	Yes / No	Source & Anticipated Volumes	How will this be managed? (Refer to existing permit conditions if applicable)
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Item	Yes / No	Source & Anticipated Volumes	How will this be managed? (Refer to existing permit conditions if applicable)
Air emissions	Yes	<p>Dust during the excavation phase</p> <p>Nitrogen during the cold commissioning – quantities unknown at this stage</p> <p>Helium during the operation of the station – anticipated quantities are expected to be less than 10 kg per day</p>	<p>Appropriate dust control measures, such as phase dust suppression with water, will be implemented in accordance with the environmental management plan.</p> <p>Nitrogen and helium are both inert gases. Nevertheless special design and operational measures will be implemented to reduce losses due to the cost of gases.</p>
Odours	No		

Item	Yes / No	Source & Anticipated Volumes	How will this be managed? (Refer to existing permit conditions if applicable)
Radiation	Yes	<p><b>Radioactive gases and liquids –</b> These will be contained in specialised holding tanks, as part of the PBMR DPP design. The National Nuclear Regulator sets a limit of a maximum of 0.25 milliSieverts for the radiation exposure to the release of radioactive materials into the environment around the Koeberg power station site. The performance of Koeberg power station has been such that the radiation exposure as a result of the release radioactive effluents has never exceeded 0.025 milliSieverts. By design the releases from the PBMR DPP will be such that the cumulative effect from the PBMR DPP and Koeberg will respect the NNR limits.</p> <p><b>Radioactive solids –</b> Spent fuel will be contained in purpose-designed tanks that are housed within the PBMR DPP in accordance with standards and licence conditions of the National Nuclear Regulator and Government Policy. Other radioactive solids will be treated on the PBMR DPP site prior to disposal at Vaalputs in accordance with the standards and licence conditions of the National Nuclear Regulator.</p>	As an integral part of the operation and maintenance of the PBMR DPP, facilities for the handling and treatment, including storage, and the management of radioactive gases, liquids and solids will be included in the design of the PBMR DPP, in accordance with the requirements of the National Nuclear Regulator and Government Policy.
Noise	Yes	The gas turbine air intake facility will cause the highest level of residual noise	The design of the PBMR DPP will incorporate measures to reduce the internal build up of noise and minimise its transmission outside. This will be assessed during the EIA process.
Industrial or agricultural effluent	Yes	Quantities will be determined during the EIA process.	

Item	Yes / No	Source & Anticipated Volumes	How will this be managed? (Refer to existing permit conditions if applicable)
Domestic, Industrial or agricultural solid waste	Yes	<b>General Solid Waste –</b> Small volumes of waste will be generated.	Minimisation and recycling of waste will be implemented with residual waste being disposed of at a licensed municipal waste disposal facility.
Hazardous solid or liquid waste	No	<b>Oils/greases</b> generated during the operation and maintenance of the PBMR DPP – small quantities of	Minimisation and recycling of waste generated will be implemented with residual waste being disposed of at a licensed hazardous waste facility.

**10** Will the project involve the use of, storage of or production of hazardous substances?

Substance	Volume	Control measures/solutions to minimise environmental impacts
Nuclear materials and radioactive waste	See above	See above.

**11** How will the site be serviced and who will provide the services and/or infrastructure?

**11.1 For projects where service infrastructure is available** and where the project can be readily connected to the existing infrastructure (e.g. from the local authority, Eskom, Water Board). Can the project be catered for by the existing services infrastructure? Please provide details in the table below and attach correspondence confirming service provision from the relevant service provider, if available. (**NOTE:** A response to this question **must** be provided unless Question 11.2 is applicable to the project).

Item	Service Provider	Amount or capacity required	Capacity confirmed (Y/N)	Confirmed by whom?	Resource Conservation Measures
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Item	Service Provider	Amount or capacity required	Capacity confirmed (Y/N)	Confirmed by whom?	Resource Conservation Measures
<p><b>Water supply</b></p> <p>Peak demand (l/s) (If provided by the local authority, please submit written confirmation by the municipality of sufficient availability of water)</p>	<p>City of cape Town</p>	<p>Assuming demand of approximately 200 litres per person per day:            During construction approximately 800 – 1000 people are expected on site. This implies a water demand of approximately 160 – 200 kl per day.</p>	<p>No</p>		

Item	Service Provider	Amount or capacity required	Capacity confirmed (Y/N)	Confirmed by whom?	Resource Conservation Measures
Average demand (kl/day)	City of Cape Town	<p>Assuming a demand of approximately 200 litres per person per day:</p> <p>During normal operation, approximately 100 – 150 people are expected on site. This implies approximately 20 – 30 kl per day demand. During maintenance periods (<i>the maintenance cycle for the PBMR is 6-yearly intervals</i>), an approximate additional 250 – 300 people are expected on site. This implies an additional approximately 50 – 60 kl per day demand.</p>	No		

<b>Item</b>	<b>Service Provider</b>	<b>Amount or capacity required</b>	<b>Capacity confirmed (Y/N)</b>	<b>Confirmed by whom?</b>	<b>Resource Conservation Measures</b>
<b>Electricity</b> Peak demand (kVA)	There are Eskom Distribution substations on the Koeberg power station site, from which electricity will be drawn	N/A	N/A		
Average demand (kVA)	See above				
<b>Solid waste</b> - Collection (m <sup>3</sup> )		Quantities will be determined during the EIA process			
- Transport (m <sup>3</sup> )		Quantities will be determined during the EIA process			
- Disposal (m <sup>3</sup> )	City of Cape Town	Quantities will be determined during the EIA process			
- Treatment (m <sup>3</sup> )	City of Cape Town	Quantities will be determined during the EIA process			

Item	Service Provider	Amount or capacity required	Capacity confirmed (Y/N)	Confirmed by whom?	Resource Conservation Measures
<b>Sewerage/effluent</b> Peak flow (l/s)		Assuming 120 litre per person per day: During construction, approximately 800 – 1000 people are expected on site – impleas approximately 96 – 120 kl per day flow. It is anticipated that this will be covered by the current permit for the Koeberg power station site	Y	Mr. G. Pienaar, Afrox	N/A

Item	Service Provider	Amount or capacity required	Capacity confirmed (Y/N)	Confirmed by whom?	Resource Conservation Measures
Average flow (kl/day)		<p>Assuming 120 litre per person per day:</p> <p>During normal operation, approximately 100 – 150 people are expected on site – implies approximately 12 – 30 kl per day flow.</p> <p>During maintenance periods (<i>the maintenance cycle for the PBMR is 6-yearly intervals</i>), an additional approximate 200 – 300 people are expected on site. This implies an additional flow of approximately 30 – 36 kl per day. It is anticipated that the current permit for the Koeberg power station site will cover this.</p>	No		



Item	Service Provider	Amount or capacity required	Capacity confirmed (Y/N)	Comments
<b>Stormwater</b> Peak flow (l/s)	N/A			Stormwater will be directed off the terrace to the sea..
Average flow (l/s)	N/A			As above.
<b>Access (roads, rail)</b>	N/A			Existing access roads will be used.
<b>Other</b>	N/A			

**11.2 For projects where service infrastructure is not available and will have to specifically be developed for the project.** What services will the project require and how will these be provided? (NOTE: This question need only be answered for developments where infrastructure and services are not in place).

Item	Yes/No	Quantity	Control measures to minimise environmental impacts/Resource Conservation Measures
<b>Water abstraction</b> (indicate source and any existing water servitudes inc. applicable volumes)	N/A		
<b>Water supply</b> (Additional volume required)	N/A		
<b>Proposed water conservation measures to be implemented</b>	N/A		
<b>Electricity</b>	N/A		
<b>Solid waste</b>	N/A		
- Collection (m <sup>3</sup> )	N/A		
- Transport (m <sup>3</sup> )	N/A		
- Disposal (m <sup>3</sup> )	N/A		
- Treatment (m <sup>3</sup> )	N/A		
<b>Sewerage/effluent</b> Peak flow (l/s)	N/A		

Item	Yes/No	Quantity	Control measures to minimise environmental impacts/Resource Conservation Measures
Average flow (l/s)	N/A		
<b>Stormwater</b> Peak flow (l/s)	N/A		
Average flow (l/s)	N/A		
<b>Access</b> (roads, rail)	N/A		
<b>Other</b>	N/A		

**12** Please describe any alternatives that address environmental issues related to the development that are being considered (e.g. project layout, project site, technology selection, access)? **NOTE: If alternatives are not being considered, please submit an adequately motivated request in terms of section 28A for exemption from considering alternatives together with this checklist.**

Alternative	Description and Comments (Indicate which environmental impacts will be mitigated by way of the alternatives proposed)
<b>Energy and technology alternatives</b>	<p>During the Scoping for the 302 MW(t) PBMR DPP, energy and technology alternatives were discussed and motivated in terms of Eskom's Integrated Strategic Electricity planning (ISEP) process. This process provides Eskom with strategic projections of supply-side and demand side options to be implemented to meet long-term forecasts based on their obligation to supply electricity. ISEP provides the framework for Eskom to investigate a wide range of new supply-side and demand side technologies with a view to optimising investments and returns. The results of the ISEP process are similar to, and consistent with the conclusions, where applicable of the integrated Energy Plan of the department of Minerals and Energy and the National Integrated Resource Plan of the National electricity Regulator.</p> <p>To diversify the national energy mix for the generation of electricity, a number of technologies are under investigation for further development, including the PBMR technology. The PBMR DPP is part of these investigations.</p>
<b>Alternative sites</b>	<b>Description and Comments</b> (Indicate which environmental impacts will be mitigated by way of the alternatives proposed)
Thyspunt site in the Southern Cape	The site had been previously identified as meeting the criteria for a nuclear site and was purchased by Eskom for this purpose. However, the 302 MWt EIA did not identify it as the

	preferred site for the PBMR DPP due to the fact that it is a greenfield site in a pristine environment, with a total absence of infrastructure. See Annexure 3 for details.
Bantamsklip in the Western Cape	The site had been previously identified as meeting the criteria for a nuclear site and was purchased by Eskom for this purpose. However, the 302 MWt EIA did not identify it as the preferred site for the PBMR DPP due to the fact that it is a greenfield site in a pristine environment, with a total absence of infrastructure. See Annexure 3 for details.
Keoberg power station site	This site forms part of the Eskom Holdings Limited land holdings, located on Duynefontein (Farm number 34). This site is already in use for Koeberg power station, which is licensed by the National Nuclear Regulator. The terrace on which the proposed PBMR DPP would be constructed is located immediately south of Koeberg power station, within the existing access control 1 security fence. From an ownership, environmental impact, socio-economic, cost and infrastructure point of view this was shown by the 302 MWt EIA to be the preferred site. See Annexure 3 for details.
Pelindaba site in the North West Province (Inland site)	This site is owned by the South African Nuclear Energy Corporation. The 302 MWt EIA did not identify it as the preferred site for the PBMR DPP due to factors of cost, cooling water shortage and ownership

**13** Please provide details on the following environmental management procedures as applicable to your project or your organisation.

Item	Y/N	Details and examples
Have environmental factors been taken into account in the design and layout of the project (e.g. location of buildings and infrastructure, architectural style, landscaping)? Provide details / examples.	Yes	The main environmental factors that were taken were taken into consideration are topography, geology, seismicity, hydrology, geo-hydrology, meteorology, demography, oceanography and social impacts..
Does your organisation/company normally implement environmental management procedures during the construction phase of projects? Provide details / examples.	Yes	Environmental management procedures are implemented from construction through to decommissioning in accordance with Eskom's Environmental Policy (attached as Annexure 4) and Guidelines.
Has your organisation implemented environmental management procedures for ongoing operations (e.g. an ISO 14001 Environmental Management System)?	Yes	Eskom Generation Division Business Units are ISO 14001 compliant. Compliance audits are conducted annually by an external auditing company.

**14** Please provide additional information on mitigation measures or recommendations to manage environmental impacts, should you wish to supplement the information given in response to any of the previous questions.

<b>Element of Project</b>	<b>Control measures/ solutions to minimise impacts</b>
Entire project	The EIR for the 302 MW(t) PBMR DPP contained a comprehensive EMP for the construction and operation/maintenance of the proposed project. The mitigation measures and recommendations regarding management of environmental impacts will be amended/augmented as appropriate for the 400 MW(t) PBMR DPP.

## PUBLIC PARTICIPATION

- 15** You are required, as a minimum, to advise the adjacent/immediate neighbours and other relevant authorities about the project. What are the comments of the neighbours? Please summarise below and attach their written comments. Please furnish this Department with proof of such notification. Where concerns or positive comments have been obtained from the neighbours, the applicant's response to these must also be attached. This information must be attached as an Appendix. **On review of this application, the Department may request that further public participation be undertaken in terms of the Guideline for Public Participation for the EIA Process, September 2001.**

With respect to this application, no public participation has been conducted as of yet. A comprehensive public participation process will be implemented during the Scoping and EIA phases of the project. The focus will be on informing the interested and affected parties (IAPs) of the proposed development and specifically the significant differences between the 302 MW(t) and 400 MW(t) PBMR DPPs, and collate and incorporate the issues and comments raised into the Scoping and EIA process. The process to be followed for public participation will be fully outlined in the Plan of Study to be submitted to the relevant authority.

Note that an extensive public participation process was conducted for the 302 MW t PBMR DPP..

**Please be advised that if section 38 of the National Heritage Resources Act 25 of 1999 is applicable to your proposed development, then you are requested to furnish this Department with written comment from Heritage Western Cape as part of your public participation process. Section 38 of the Act states as follows:**

*38. (1) Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorised as-*

*(a) the construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;*

*(b) the construction of a bridge or similar structure exceeding 50 m in length;*

*(c) any development or other activity which will change the character of a site-*

*(i) exceeding 5 000 m<sup>2</sup> in extent; or*

*(ii) involving three or more existing erven or subdivisions thereof; or*

*(iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or*

*(iv) the costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority;*

*(d) the re-zoning of a site exceeding 10 000 m<sup>2</sup> in extent; or*

*(e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority,*

*must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.*

## SOCIO ECONOMIC CONSIDERATIONS

- 16** How many permanent jobs will be created by the project and how many jobs will be created during the construction phase?

<b>Permanent jobs</b>	Approximately 100 – 150	<b>Comments</b> During the 6-yearly maintenance cycle an additional approximate 250 – 300 people will be involved for about 30 to 50 days.
<b>Construction jobs</b>	Approximately 800 - 1000	<b>Comments</b> 800 – 1000 people during the peak of construction.

- 17** Please provide a brief description of the socio-economic characteristics of the area in which the project is proposed. Indicate possible negative and positive social consequences/implications.

According to the Atlantis Growth Corridor Management Plan (AGCMP), Blaauwberg has an estimated population of 131 379 (1996 census). Blaauwberg has a diverse economic base, with the main growth sectors in industry, retailing/business services and tourism/recreation. The need for housing and industrial opportunities was identified in the AGCMP. There are five informal settlements and an estimated 2245 informal dwellings in Blaauwberg.

The Atlantis Framework has been formulated within the guidelines set out by the Metropolitan Spatial Development Framework. The framework identified four important elements in spatial planning: urban nodes, a metropolitan open space system, activity corridors and an urban edge. The metropolitan framework recognised the West Coast Development Corridor as a potential activity corridor in the Cape Metropolitan Area that may eventually link Cape Town and Atlantis.

The potential consequences of the proposed PBMR DPP were determined through a Social Impact Assessment that was conducted for the 302 MW(t) design.

## GAPS IN KNOWLEDGE & ASSUMPTIONS

- 18** Please provide a brief description of gaps in information, any predictive measures used, and all underlying assumptions made pertaining to the project as well as any limitations (if no terms of reference are available); as well as any uncertainties encountered in the compiling of the required information.

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## II LEGAL AND POLICY ISSUES

**The project may require approvals/permits from other authorities in the case of a new development, or revisions to existing permits in the case of an extension or upgrade of an existing development. If the response to any of the following questions is affirmative then you are advised to query the matter further with the relevant department in addition to submitting this checklist to the Department. If you are uncertain about the legislation that is applicable to your development, please consult the relevant authority shown in the table.**

- 1** *National and Provincial Legislation:* Please provide relevant details in the table below and attach any authorisations already issued for the project.

Authorisation	Y/N	Application submitted?		Application approved?	
		Y/N	Date	Y/N	Date
<p><b>Air emissions</b> - Refer to the Second Schedule of the Atmospheric Pollution Prevention Act, 1965 (Act No. 45 of 1965)</p> <p><i>(Dept of Environment Affairs &amp; Tourism - Applicable to industrial and manufacturing projects where air emissions will be discharged to atmosphere generally via a smoke stack or to extractive industries where dust will be generated)</i></p>	Yes	No			
<p><b>Comments:</b></p> <p>The Second Schedule of the Atmospheric Pollution prevention Act, 1965 9Act No. 45 of 1965) clause 29 refers to “power generation processes: That is to say will processes in which -</p> <p>(a) fuel is burned for the generation of electricity for distribution to the public or for purposes of public transport;</p> <p>(b) boilers capable of burning fuel at a rate of not less than 10 tons per hour are used to raise steam for the supply of energy for purposes other than those mentioned in (a) above;</p> <p>(c) any fuel burning appliance is used that is not controlled in terms of Part III of this Act, excluding appliances in private dwellings;</p> <p>Clause 29 sub sections (a) and (b) are not applicable for the PBMR DPP since it is a nuclear reactor and uses a closed helium gas cycle.</p> <p>The PBMR DPP will however have stand-by diesel generators, as such Clause 29 sub-section (c) may be applicable. This will be determined with the relevant Authority.</p>					
<p><b>Effluent disposal</b> - Refer to the Section 21 of the National Water Act, 1998 (Act No. 36 of 1998).</p>	Yes	No			

Authorisation	Y/N	Application submitted?		Application approved?	
		Y/N	Date	Y/N	Date
<p><i>(Dept of Water Affairs &amp; Forestry – Applicable to projects where liquid waste is produced and will be disposed to a watercourse, wetland, dam or the sea. If effluent is to be discharged to a municipal sewer, application must be made to the relevant local authority)</i></p>		<p><b>Comments:</b></p> <p>The current Koeberg power station water permit authorises the following:</p> <ul style="list-style-type: none"> <li>• 75m<sup>3</sup> per day of purified domestic effluent by means of discharge to the sea</li> <li>• 2 920 000 m<sup>3</sup> per annum of effluent arising from the use of sea water for cooling purposes by means of discharge into the sea</li> <li>• Effluent arising from the use of potable water for industrial purposes by means of discharge into the sea. Purified sewage effluent disposed of into the sea in admixture with the sea water coolant and other effluent. (Faecal) coli value is relaxed to permit a count of not more than 1000 units per 100 ml of effluent '</li> <li>• The temperature of the combined effluent shall not exceed 13 0c above that of the sea at the intake.</li> <li>• Free chlorine content shall not exceed 0.5 mg/l Cl</li> <li>• Boron content shall not exceed 1 .0 m g/l above that of the sea in the area</li> </ul> <p>The PBMR DPP effluent is expected to result in:</p> <ul style="list-style-type: none"> <li>• Approximately 75 000 000 m<sup>3</sup> per annum of effluent arising from the use of sea water for cooling purpose by means of discharge into the sea, through the existing Koeberg power station cooling water outflow structures.</li> <li>• An additional increase in temperature equal or less than approximately 1°C to the temperature of the combined effluent from the PBMR DPP and the Koeberg power station.</li> <li>• The temperature of the combined effluent from PBMR DPP and Koeberg power station will comply with the limit in the current Koeberg power station water permit of 13°C above that of the sea at the intake.</li> </ul> <p>The relevant Authorities will be consulted regarding the permit requirements.</p>			



Authorisation	Y/N	Application submitted?		Application approved?	
		Y/N	Date	Y/N	Date
<p><b>Water use</b> – Refer to section 7 of the Water Services Act, 1997 (Act No. 108 of 1997) and Chapter 4 of the National Water Act, Act 108 of 1998.</p> <p><i>Dept of Water Affairs &amp; Forestry – Applicable to projects where the water required for the project will be obtained from a source other than from an established municipal supply system ()</i></p>	Yes	No			
			<p><b>Comments:</b></p> <p>The current Koeberg power station water permit authorises the following:</p> <ul style="list-style-type: none"> <li>• 1 825 000 m<sup>3</sup> per year of potable water</li> <li>• 912 500 m<sup>3</sup> per year of purified or treated water (sewage effluent)</li> <li>• 2 920 000 000 m<sup>3</sup> per year of sea water for cooling</li> </ul> <p>The expected water usage for the PBMR DPP will be determined as part of the EIA process.</p> <p>The relevant Authorities will be consulted regarding the permit requirements.</p>		
<p><b>Solid waste disposal</b> - Refer to section 20 of the Environmental Conservation Act, 1989 (Act No. 73 of 1989) and the Minimum requirements for Waste Management from Dept. Water Affairs &amp; Forestry</p> <p><i>(Dept of Water Affairs &amp; Forestry – Applicable to any project where a solid waste disposal transfer station, treatment facility or disposal site is to be established or where a waste product will be stored for more than three months)</i></p>	No	N/A			
			<p><b>Comments:</b></p>		
<p><b>Development of structures and lease of land below the high water mark-</b> Refer to the Sea Shore Act, 1935 (Act No. 21 of 1935)</p> <p><i>(Dept of Environmental Affairs &amp; Tourism and the Western Cape Nature Conservation Board)</i></p>	No	N/A			
			<p><b>Comments:</b></p> <p>The PBMR DPP will not require development below the high water mark. It will make use of the existing marine intake and outflow structures of Koeberg power station.</p>		

Authorisation	Y/N	Application submitted?		Application approved?	
		Y/N	Date	Y/N	Date
<p><b>Driving of vehicles and construction of boat launching sites within the coastal zone</b> - Refer to the Control of Vehicles in the Coastal Zone Regulations promulgated in terms of section 44 of The National Environmental Management Act, 1998 (Act No. 107 of 1998)</p> <p><i>(Dept of Environmental Affairs &amp; Tourism, Dept of Environmental Affairs &amp; Development Planning, the Western Cape Nature Conservation Board, SANP and relevant local authority)</i></p>	No	N/A			
	<p><b>Comments:</b></p> <p>The proposed site for the PBMR DPP lies within the Koeberg power station site, which is fenced off from the coastal zone by the access control 1 security fence. The construction of PBMR DPP will not require access to the coastal. Koeberg power station has permit for accessing the coastal zone as part of the operation of the site.</p>				
<p><b>Agricultural activities</b> - refer to the Conservation of Agricultural Resources Act, 1983 (Act No. 43 of 1983)</p> <p><i>(Dept of Agriculture - Applies to projects where agricultural activities involving ploughing and clearing of virgin land is being considered)</i></p>	No	N/A			
	<p><b>Comments</b></p>				
<p><b>Archaeological , cultural, historical and other resources related to national heritage</b> - Refer to the National Heritage Resources Act, 1999 (Act No. 25 of 1999)</p> <p><i>(Heritage Western Cape/SAHRA- Applies to projects where there are naturally and culturally significant features on or adjacent to the site where development is being proposed)</i></p>	No	N/A			
	<p><b>Comments:</b></p> <p>It is not expected that archaeological, cultural, historical and other resources related to national heritage will be discovered. However, if any such discovery is made during excavation and construction activities, activities will immediately be stopped and the applicable representatives from SAHRA will be contacted and invited to the PBMR DPP site to evaluate the situation.</p>				

Authorisation	Y/N	Application submitted?		Application approved?	
		Y/N	Date	Y/N	Date
<p><b>Removal of indigenous fauna and flora</b> - refer to the Nature Conservation Legislation: Nature and Environmental Conservation Ordinance, 1974 (Ordinance 19 of 1974)</p> <p><i>(Western Cape Nature Conservation Board - Applies where fauna and flora may need to be removed and relocated. Applies to projects that involve the establishment of private nature reserves, development within nature reserves, establishment of nurseries or zoos).</i></p>	No	N/A			
			<p><b>Comments:</b></p> <p>The terrace on which the proposed PBMR DPP would be built is not part of the Koeberg nature reserve and does not contain indigenous fauna and flora. Changes to internal roads are also not considered to require the removal and relocation of indigenous fauna and flora. However, in the event that this is required, the required authorisations will be obtained from the relevant authorities.</p>		
<p><b>Hazardous Installations</b> - Refer to the Major Hazard Installation Regulations promulgated in 1998 in terms of the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) – Section on Major Hazard Installation).</p> <p><i>(Dept of Labour and Dept of Environmental Affairs &amp; Tourism – Applicable to projects where hazardous substances are stored and /or produced. Also refer to section 2 (1) of the Hazardous Substances Act, 1973 (Act No. 15 of 1973)</i></p>	No	N/A			
			<p><b>Comments</b></p> <p>The PBMR DPP will be regulated by the Nuclear Energy Act and the national Nuclear Regulator Act and not by the Major Hazard Installation Regulations.</p>		

*Note: Although there is provincial legislation that deals with land use matters, the necessary application in terms of this legislation must be lodged with the relevant local authority/municipality – refer question 2 below.*

- 2** Is the project subject to any local authority authorisations (e.g. effluent disposal, land use planning, permit for fuel burning devices, development in sensitive coastal areas or in designated protected natural areas)? If yes, please provide a summary of discussions and agreements with local authorities, if any.

Authorisation	Y/N	Application submitted?		Application approved?	
		Y/N	Date	Y/N	Date
Land use planning	N				
Type of land use planning application:					
Effluent disposal	N				
Water supply	N				
Fuel burning device (e.g. boiler, furnace)	N				
Protected natural environment (PNE)	N				
Sensitive coastal area (Eg. OSCA regs)	N				
Noise	N				
Odours	N				
Other	N				

- 3** Has any national, provincial or local authority considered any development applications on the property previously? If so, please give a brief description of these applications, indicating if the applications were successful or not, as well as the periods of validity or expiry dates.

<b>Previous application</b>	<b>Yes</b>	
<b>Type/nature of application</b>		
Application for EIA for 302 MW(t) PBMR DPP		
<b>Authority that considered application:</b>		
Department of Environmental Affairs and Tourism		
<b>Application approved</b>	<b>Yes</b>	
<b>Reasons for decision</b>		
Record of decision issued on 25 June 2003.		
<b>Period of validity of decision and expiry dates</b>		
Cape High Court set aside the Record of Decision on 26 January 2005. The Court judgement was related to the final decision making process and not the merits of the PBMR DPP or the environmental assessment.		

- 4** Is an amendment to the Structure Plan (including regional structure plans and former guide plans) required in order to accommodate the proposed development? If so, please indicate whether an application has been lodged with the relevant authority in this regard.

Clarity will be obtained in this regard as part of the Authority consultations to be undertaken.

### III ENVIRONMENTAL CHARACTERISTICS

**1** Please provide information in the table below for **ALL THREE** questions for **EVERY SENSITIVE FEATURE** listed below. Please note that it is not necessary to commission specialist studies to respond to this table.

- (a). Are any of the following located on or near the site earmarked for development (second column)? if yes provide brief explanation (sixth/last column)
- (b). If yes, indicate distance from the site (third column)
- (c). Has this information been verified (fourth column)? If yes, provide details (fifth column). Information can be verified through discussion with the relevant authorities, published scientific papers/knowledge, local agricultural extension officers, local nature conservation officers and other similar means.

Feature	Y/N	Distance (m)	How was it determined?	Verified	
				Y/N	By whom
Unique geological feature	N	N/A	During the EIA for 302 MW(t) PBMR DPP	Y	EIR Study for 302 PBMR
Steep slopes (>1:4)	N	N/A	During the EIA for 302 MW(t) PBMR DPP	Y	EIR Study for 302 PBMR
High potential agricultural land/soil	N	N/A	During the EIA for 302 MW(t) PBMR DPP	Y	EIR Study for 302 PBMR
Mountainous area	N	N/A	During the EIA for 302 MW(t) PBMR DPP	Y	EIR Study for 302 PBMR
River, dam, lake or wetland	N	N/A	During the EIA for 302 MW(t) PBMR DPP	Y	EIR Study for 302 PBMR
A floodplain or within - 1:50 floodline / 1:100 floodline	N	N/A	During the EIA for 302 MW(t) PBMR DPP	Y	EIR Study for 302 PBMR
Currently used or potentially valuable groundwater resources	Y Currently used	Atlantis Aquifer to the northwest of the site	During the EIA for 302 MW(t) PBMR DPP	Y	DWAF & CSIR
Marine life	Y	400 m	During the EIA for 302 MW(t) PBMR DPP	Y	EIR Study for 302 PBMR

Feature	Y/N	Distance (m)	How was it determined?	Verified	
				Y/N	By whom
Area below the high water mark	Y	400 m	During the EIA for 302 MW(t) PBMR DPP	Y	EIR Study for 302 PBMR
Coastline or coastal feature such as dunes, estuaries and lagoons	Y	200 m	During the EIA for 302 MW(t) PBMR DPP	Y	EIR Study for 302 PBMR
Areas occupied by indigenous vegetation such as:					
- Forests	N	N/A	During the EIA for 302 MW(t) PBMR DPP	Y	EIR Study for 302 PBMR
- Lowland fynbos	N	N/A	During the EIA for 302 MW(t) PBMR DPP	Y	EIR Study for 302 PBMR
- Mountain fynbos	N	N/A	During the EIA for 302 MW(t) PBMR DPP	Y	EIR Study for 302 PBMR
- Renosterveld	Y	The PBMR DPP site is located within the Koeberg power station site, which is surrounded by the Koeberg Nature Reserve	During the EIA for 302 MW(t) PBMR DPP	Y	EIR Study for 302 PBMR
- Strandveld	Y	The PBMR DPP site is located within the Koeberg power station site, which is surrounded by the Koeberg Nature Reserve	During the EIA for 302 MW(t) PBMR DPP	Y	EIR Study for 302 PBMR
- Succulent Karoo	N	N/A	During the EIA for 302 MW(t) PBMR DPP	Y	EIR Study for 302 PBMR
A habitat that is essential for the conservation of threatened plant or animal species.	N	N/A	During the EIA for 302 MW(t) PBMR DPP	Y	EIR Study for 302 PBMR

Feature	Y/N	Distance (m)	How was it determined?	Verified	
				Y/N	By whom
Breeding sites or migration routes of animal species	N	N/A	During the EIA for 302 MW(t) PBMR DPP	Y	EIR Study for 302 PBMR
Any protected plant or animal species or species that is known to be threatened (e.g. listed as a Red Data species)	Y	Coastal zone next to the site	During the EIA for 302 MW(t) PBMR DPP	Y	EIR Study for 302 PBMR
Unique architectural area (e.g. Urban Conservation Zone)	N	N/A	During the EIA for 302 MW(t) PBMR DPP	Y	EIR Study for 302 PBMR
Cultural or historical sites (e.g., battle site, historical monument, graveyard, sites for burial, worship, initiation)	N	N/A	During the EIA for 302 MW(t) PBMR DPP	Y	EIR Study for 302 PBMR
Archaeologically or paleontologically significant area (e.g. fossils, rock art)	Y	The PBMR DPP site is located within the Koeberg power station site, which is surrounded by the Koeberg Nature Reserve	During the EIA for 302 MW(t) PBMR DPP	Y	EIR Study for 302 PBMR
Designated or proposed nature conservation area (e.g. nature reserve, conservancy, Biosphere Reserve, World Heritage Site, RAMSAR site)	Y	The PBMR DPP site is located within the Koeberg power station site, which is surrounded by the Koeberg Nature Reserve	During the EIA for 302 MW(t) PBMR DPP	Y	EIR Study for 302 PBMR

Feature	Y/N	Distance (m)	How was it determined?	Verified	
					Y/N
A green belt or public open space	N	N/A	During the EIA for 302 MW(t) PBMR DPP	Y	EIR Study for 302 PBMR
A formal or informal residential area	Y	Duynfontein Residential area located adjacent to the nature reserve surrounding the Koeberg power station site	During the EIA for 302 MW(t) PBMR DPP	Y	EIR Study for 302 PBMR
A community facility (school, hospital, sports hall/fields)	Y	At Blaawberg and Melkbosstr and	During the EIA for 302 MW(t) PBMR DPP	Y	EIR Study for 302 PBMR
A transition or buffer zone (e.g. urban edge, transition zone in a biosphere reserve)	N	N/A	During the EIA for 302 MW(t) PBMR DPP	Y	EIR Study for 302 PBMR
A scenic landscape	N	N/A	During the EIA for 302 MW(t) PBMR DPP	Y	EIR Study for 302 PBMR
Area or site of natural beauty	N	N/A	During the EIA for 302 MW(t) PBMR DPP	Y	EIR Study for 302 PBMR
A significant tourism route or scenic drive	N	N/A	During the EIA for 302 MW(t) PBMR DPP	Y	EIR Study for 302 PBMR

**2** Please provide additional information on the environmental features of the site or the surroundings if you wish to supplement the details given in the above table.

#### IV INITIAL IDENTIFICATION OF ENVIRONMENTAL ISSUES

Please describe the environmental issues/concerns that have been identified in relation to the project. Environmental issues/concerns can be identified on the basis of the following:



- (a). The characteristics of the environment that could be affected by the activity (refer to information given in Section III).
- (b). Materials that are being used in the project during construction and operation (i.e. project inputs) (refer to information given in Section I).
- (c). Products, emissions (gaseous and liquid) and wastes produced by the project (i.e. project outputs) (refer to information given in Section I).

It should be noted that it is not necessary to assess the significance of these issues. The purpose of this question is to provide descriptive information on the environmental issues/concerns that are evident or known at this stage. Hence, it is sufficient to identify the environmental issue and to describe why it is of concern.

<b>Environmental Issues/Concern</b>	<b>Y/N</b>	<b>Explanation/Comments</b>
Geology	Y	The geotechnics are required for the design basis of the PBMR DPP. Information was obtained via the EIA studies for the 302 MW(t) PBMR DPP.
Soils	N	
Topography	Y	These characteristics are required for the design basis of the PBMR DPP. Information was obtained via the EIA studies for the 302 MW(t) PBMR DPP.
Surface water (rivers, wetlands)	Y	This characteristic is required for the design basis of the PBMR DPP. Information was obtained via the EIA studies for the 302 MW(t) PBMR DPP.
Groundwater	Y	This characteristic is required for the design basis of the PBMR DPP. Information was obtained via the EIA studies for the 302 MW(t) PBMR DPP.
Coastal features	N	
Marine environment	N	
Sensitive ecosystems/habitats	Y	Information was obtained via the EIA studies for the 302 MW(t) PBMR DPP.
Sensitive plant species and communities	N	Information was obtained via the EIA studies for the 302 MW(t) PBMR DPP
Sensitive animal species or communities	Y	Information was obtained via the EIA studies for the 302 MW(t) PBMR DPP
Cultural or Historic features	N	Information was obtained via the EIA studies for the 302 MW(t) PBMR DPP
Archaeological / Palaeontological features	Y	Information was obtained via the EIA studies for the 302 MW(t) PBMR DPP
Land use (site and surroundings)	Y	This characteristic is required for the design basis of the PBMR DPP. Information was obtained via the EIA studies for the 302 MW(t) PBMR DPP.

Environmental Issues/Concern	Y/N	Explanation/Comments
		DPP
Conservation areas	N	N/A
Scenic landscapes	N	N/A
Agricultural land	N	N/A
Traffic and access	Y	Information was obtained via the EIA studies for the 302 MW(t) PBMR DPP
Local community	Y	Information was obtained via the EIA studies for the 302 MW(t) PBMR DPP. A Social Impact Assessment was undertaken in the EIA phase for the 302 MW(t) PBMR DPP.
Site of religious or spiritual importance	N	N/A
Aesthetics	Y	A Visual Impact Assessment was undertaken in the EIA phase for the MW(t) PBMR DPP.
Air quality	Y	Meteorological information was obtained via the EIA studies for the 302 MW(t) PBMR DPP
Water quality	Y	See hydrology and geo-hydrology.
Solid waste (general and hazardous)	Y	Information was evaluated for the 302 MW(t) PBMR DPP.
Noise, light, radiation, vibration	Y	A Noise Impact Assessment was undertaken for the 302 MW(t) PBMR DPP.
Infrastructure services (water, electricity etc.)	Y	Information was obtained via the EIA studies for the 302 MW(t) PBMR DPP
Economic activity	Y	Economic information was obtained via the EIA studies for the 302 MW(t) PBMR DPP
Other: Tourism	Y	Tourism information was obtained via the EIA studies for the 302 MW(t) PBMR DPP

**PLEASE NOTE:** The Department will evaluate the information given in the application form and checklist and may:

1. **Indicate that the application may be considered for a decision in terms of Regulation 6 of GN No R1183 of 5 September 1997, as amended, and that additional scoping tasks will not be required.** This decision will be based on the information provided in the application form and checklist and is dependent on whether the Department deems this to fulfil the requirements of a final scoping report. In the case of an authorisation being considered, the proponent/developer may be required to advertise this in accordance with the Department's Guideline on Public Participation for EIA, September 2001. The final decision about whether or not to grant an authorisation will be made having given due consideration to the response to the advertisement.

2. **Request additional information on particular issues.** If limited additional information is required, it is in the interests of the developer/proponent to forward this timeously to expedite decision-making in terms of Regulation 6, without additional scoping requirements.
3. **Request that additional scoping tasks be undertaken.** In such cases a Plan of Study for Scoping may be required. The Plan of Study for Scoping must describe how these tasks will be undertaken. The Department may either authorise or refuse authorisation of the proposed activity in terms of Regulation 6 on the basis of the results of the scoping process.
4. **Require an EIA.** Having considered the final scoping report the Department may decide that an EIA is required before a decision about whether or not to authorise the activity can be made. Depending on the outcome of the EIA, the Department may authorise or refuse the application.
5. **Make the authorisation subject to conditions.** Any "Conditions of Authorisation" that are issued by Department are legally binding and **the applicant is responsible for ensuring compliance with these conditions.** Monitoring of compliance with the conditions by an independent party appointed by the proponent/developer may be required by the Department. Failure to comply with these conditions may result in withdrawal of the authorisation in terms of Section 22(4) of the ECA.

I \_\_\_\_\_ have read the completed application form and scoping checklist and hereby confirm that the information provided is to the best of my knowledge true and correct.

Applicant's signature \_\_\_\_\_ Date: \_\_\_\_\_

I \_\_\_\_\_ certify that the information provided is to the best of my knowledge true and correct and I acknowledge that I understand the authorisation process as outlined above

Consultant's signature \_\_\_\_\_ Date: \_\_\_\_\_  
 (Please attach relevant professional registration or certification)

Department of Environmental Affairs and Tourism (Updated 3 July 2002)

**Government Notice No. R. 1182**

Government Gazette No.18261, Pretoria, 5 September 1997

ENVIRONMENT CONSERVATION ACT, 1989 (ACT No. 73 OF 1989)

**THE IDENTIFICATION UNDER SECTION 21 OF ACTIVITIES WHICH MAY HAVE A SUBSTANTIAL DETRIMENTAL EFFECT ON THE ENVIRONMENT**

[Amended by GN R 1355 of 1997-10-17, GN R 448 of 1998-03-27, GN R 670 of 2002-05-10 and GN R 782 of 2002-06-07]

I, Zweledinga Pallo Jordan, Minister of Environmental Affairs and Tourism, after consultation with the Minister of each department of State responsible for the execution, approval or control of such activities, the Minister of Finance and the competent authorities of the provinces, hereby under section 21 of the Environment Conservation Act, 1989 (Act No. 73 of 1989), identify the activities in Schedule 1 in general as activities which may have a substantial detrimental effect on the environment.

I further determine that this notice will commence in respect of different activities on the dates indicated in Schedule 2: Provided that this notice is not applicable to an activity that was commenced with before the date of commencement fixed in respect of that activity as indicated in the said Schedule.

Z. P. JORDAN  
Minister of Environmental Affairs and Tourism

**SCHEDULE 1**

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;
  - (b) nuclear reactors and facilities for the production, enrichment, processing, reprocessing, storage or disposal of nuclear fuels and wastes;
  - (c) with regard to any substance which is dangerous or hazardous and is controlled by national legislation-
    - (i) infrastructure, excluding road and rails, for the transportation of any such substance; and
    - (ii) manufacturing, storage, handling, treatment or processing facilities for any such substance;
  - (d) roads, railways, airfields and associated structures;
  - (e) marinas, harbours and all structures below the high-watermark of the sea and marinas, harbours and associated structures on inland waters;
  - (f) above ground cableways 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;
  - (h) racing tracks for motor-powered vehicles and horse racing. But not including indoor tracks;
  - (i) canals and channels, including structures causing disturbances to the flow of water in a river bed, and water transfer schemes between water catchments and impoundments;
  - (j) dams, levees and weirs affecting the flow of a river;
  - (k) reservoirs for public water supply;
  - (l) schemes for the abstraction or utilisation of ground or surface water for bulk supply purposes;
  - (m) public and private resorts and associated infrastructure;
  - (n) sewerage treatment plants and associated infrastructure;
  - (o) buildings and structures for industrial, commercial and military manufacturing and storage of explosives or ammunition or for testing or disposal of such explosives or ammunition

2. The change of land use from-
  - (a) .....
  - (b) .....
  - (c) agricultural or zoned undetermined use or an equivalent zoning to any other land use;
  - (d) use for grazing to any other form of agricultural use; and
  - (e) use for nature conservation or zoned open space to any other land use.
3. The concentration of livestock, aquatic organisms, poultry and game in a confined structure for the purpose of commercial production, including aquaculture and mariculture.
4. The intensive husbandry of, or importation of, any plant or animal that has been declared a weed or an invasive alien species.
5. The release of any organism outside its natural area of distribution that is to be used for biological pest control.
6. The genetic modification of any organism with the purpose of fundamentally changing the inherent characteristics of that organism.
7. The reclamation of land, including wetlands, below the high-water mark of the sea, and in inland waters.
8. The disposal of waste as defined in section 20 of the Act, excluding domestic waste, but including the establishment, expansion, upgrading or closure of facilities for all waste, ashes and building rubble.
9. Scheduled processes listed in the Second Schedule to the Atmospheric Pollution Prevention Act, 1965 (Act No. 45 of 1965).
10. The cultivation or any other use of virgin ground.
11. In these Regulations, unless the context indicates otherwise -

“relevant authority” means a relevant authority as defined in regulation 1 of Government Notice No. R.1183 of 5 September 1997, as amended by Government Notice No. R. 1645 of 5 December 1998;

“road” means -

- (a) any road determined to be a national road in terms of section 40 of the South African National Roads Agency Limited and National Roads Act, 1998 (Act No. 7 of 1998), including any part of such road;
- (b) any road for which a fee is charged for the use thereof;
- (c) any provincial road administered by a provincial authority;
- (d) any arterial road or major collector street administered by a metropolitan or local authority;
- (e) any road or track in an area protected by legislation for the conservation of biological diversity or archaeological, architectural or cultural sites or an area that has been zoned open space or an equivalent zoning; or
- (f) any road or track in an area regarded by the relevant authority as a sensitive area.

“upgrading” means the expansion beyond its existing size, volume or capacity of an existing facility, installation or other activity referred to in this Schedule, but does not include regular or routine maintenance and the replacement of inefficient or old plant, equipment or machinery where such does not have an increased detrimental effect on the environment;

“virgin ground” means land which has at no time during the preceding 10 years been cultivated.

## SCHEDULE 2

Item number in Schedule 1	Date of commencement
1 (a) (b) (d) (e) (f) (h) (m); 7	8 September 1997
1 (g) (o); 3; 4; 5; 6	5 January 1998
1 (c) (i) (j) (k) (l) (n); 8; 9	2 March 1998
2 (a) (b) (c) (d) (e)	1 April 1998

*\*Note: 2(a) and 2(b) have been repealed and therefore the EIA Regulations do not apply to these activities.*

**DECLARATION OF INDEPENDENCE BY THE ENVIRONMENTAL CONSULTANT**

I/We **ARCUS GIBB (PTY) LTD.** as Environmental Consultants to:

Proponent: **Eskom Holdings Limited**

Project: Proposed 400 MW(t) PBMR Demonstration Power Plant on the Koeberg power station site in the Western Cape

do hereby declare the following interests:

1. This consultancy **is not** a subsidiary, legally or financially, of the proponent/s.

Details Non.

2. Remuneration for services by the proponent in relation to this proposal **is not** linked to approval by any decision-making authority responsible for permitting this proposal

Details ARCUS GIBB (Pty) Ltd has not entered into any contract which requires remuneration of services for the approval of this application.

3. My/our consultancy has the following interest in secondary or downstream developments as a result of the authorisation of this project.

Details None

**I hereby declare that I am fully aware of my responsibilities in terms of Government Notice No.R.1183 of 5 September 1997, as amended.**

Consultant (Full names): **Jaana – Maria Ball**

Signature: .....Date: .....

Witness 1:..... Date:.....

Witness 2:..... Date:.....