

**APPENDIX E:**

**SITE NOTICES**

**PUBLIC PARTICIPATION PROCESS / OPENBARE DEELNAMEPROSES**  
**GROOTVLEI POWER STATION: RETURN-TO-SERVICE**  
**GROOTVLEI KRAGSTASIE: HERINDIENSSTELLING**

In order to meet the future demand for electricity, Eskom's Generation Division proposes the return-to service of Grootvlei Power Station in a phased approach, such that all of the 6 electricity production units at Grootvlei are refurbished and returned to service between 2006 and 2008. Activities for refurbishment are planned to begin in the latter half of 2004.

Notice is given in terms of section 28A of the Environment Conservation Act (No 73 of 1989) that Eskom Holdings have applied to the Mpumalanga Department of Agriculture, Conservation and Environment (M DACE) for exemption from undertaking an Environmental Impact Assessment for the above project.

**NOTICE OF PUBLIC PARTICIPATION PROCESS**

A public participation process is now underway in order to obtain input from all interested and/or affected parties (I&APs). To register as an I&AP, please submit your name, contact information and interest in the project to the contact person/s below.

**CONTACT DETAILS**

For further information, please contact (by 25 October 2004):

**Diana Welling at Bohlweki Environmental**  
Tel: (011) 466-3841  
Fax: (011) 466-3849  
E-mail: grootvlei@bohlweki.co.za

Ten einde aan die toekomstige behoefte aan elektrisiteit te voldoen, stel Eskom Kragontwikkeling die herindiensstelling van die Grootvlei Kragstasie voor. Die proses sal ingefaseer word sodat al 6 elektrisiteitsproduserende eenhede by Grootvlei tussen 2006 en 2008 opgegradeer en herindiens geneem kan word. Daar word beplan dat die opgraderingsaktiwiteite in die tweede helfte van 2004 sal begin.

Kennis word hiermee gegee in terme van artikel 28A van die Omgewingsbewaringswet (No 73 van 1989) dat Eskom Holdings by die Mpumalanga Departement van Landbou, Bewaring en Omgewing aansoek gedoen het om vrystelling van die Omgewingsimpakstudieproses rakende die bogenoemde projek.

**KENNISGEWING VAN OPENBARE DEELNAME PROSES**

'n Openbare deelname proses word tans onderneem om insette van alle geïnteresseerde en/of belanghebbende partye (G&BP) te kry. U word vriendelik versoek om u naam, kontakbesonderhede en belang by die projek te verskaf om sodoende as G&BP te registreer.

**KONTAK INLIGTING**

Vir verdere inligting kontak asseblief vir (voor 25 Oktober 2004):

**Diana Welling by Bohlweki Environmental**  
Tel: (011) 466-3841  
Faks: (011) 466-3849  
E-pos: grootvlei@bohlweki.co.za



**PUBLIC PARTICIPATION PROCESS**  
**GROOTVLEI POWER STATION: RETURN-TO-SERVICE**

In order to meet the future demand for electricity, Eskom's Generation Division proposes the return-to service of Grootvlei Power Station in a phased approach, such that all of the 6 electricity production units at Grootvlei are refurbished and returned to service between 2006 and 2008. Activities for refurbishment are planned to begin in the latter half of 2004.

Notice is given in terms of section 28A of the Environment Conservation Act (No 73 of 1989) that Eskom Holdings have applied to the Mpumalanga Department of Agriculture, Conservation and Environment (M DACE) for exemption from undertaking an Environmental Impact Assessment for the above project.

***NOTICE OF PUBLIC PARTICIPATION PROCESS***

A public participation process is now underway in order to obtain input from all interested and/or affected parties (I&APs). To register as an I&AP, please submit your name, contact information and interest in the project to the contact person/s below.

***CONTACT DETAILS***

For further information, please contact:

**Diana Welling at Bohlweki Environmental**

Tel: (011) 466-3841

Fax: (011) 466-3849

E-mail: [grootvlei@bohlweki.co.za](mailto:grootvlei@bohlweki.co.za)

## **OPENBARE DEELNAMEPROSES**

### **GROOTVLEI KRAGSTASIE: HERINDIENSSTELLING**

Ten einde aan die toekomstige behoefte aan elektrisiteit te voldoen, stel Eskom Kragontwikkeling die herindiensstelling van die Grootvlei Kragstasie voor. Die proses sal ingefaseer word sodat al 6 elektrisiteitsproduserende eenhede by Grootvlei tussen 2006 en 2008 opgegradeer en herindiens geneem kan word. Daar word beplan dat die opgraderingsaktiwiteite in die tweede helfte van 2004 sal begin.

Kennis word hiermee gegee in terme van artikel 28A van die Omgewingsbewaringswet (No 73 van 1989) dat Eskom Holdings by die Mpumalanga Departement van Landbou, Bewaring en Omgewing aansoek gedoen het om vrystelling van die Omgewingsimpakstudieproses rakende die bogenoemde projek.

#### **KENNISGEWING VAN OPENBARE DEELNAME PROSES**

'n Openbare deelname proses word tans onderneem om insette van alle geïnteresseerde en/of geaffekteerde partye te kry. U word vriendelik versoek om u naam, kontakbesonderhede en belang by die projek aan die kontakpersone hieronder genoem te verskaf om sodoende as geïnteresseerde en/of geaffekteerde party te registreer.

#### **KONTAK INLIGTING**

Vir verdere inligting kontak asseblief vir:

**Diana Welling** by **Bohlweki Environmental**

Tel: (011) 466-3841

Faks: (011) 466-3849

E-pos: [grootvlei@bohlweki.co.za](mailto:grootvlei@bohlweki.co.za)

**RETURN-TO-SERVICE:  
GROOTVLEI POWER  
STATION**

***OPEN DAY:***  
**TUESDAY 12 OCT 2004**  
**15H00 – 17H00**

***PUBLIC MEETING:***  
**TUESDAY 12 OCT 2004**  
**Starting at 17H30**

**VENUE: ESKOM HALL,  
GROOTVLEI**

***Please attend***



**APPENDIX F:**

**BACKGROUND INFORMATION DOCUMENT (BID)  
AND REGISTRATION AND COMMENT SHEET  
DISTRIBUTED TO I&APs**

# GROOTVLEI POWER STATION: RETURN-TO-SERVICE

## PUBLIC PARTICIPATION PROCESS BACKGROUND INFORMATION DOCUMENT

October 2004



### WHAT DOES THIS DOCUMENT TELL YOU?

This document provides you, as an Interested and Affected Party (I&AP), with information regarding the proposed return-to-service of the Grootvlei Power Station and the public participation process to be followed for this project. It further indicates how you can become involved in the project, receive additional information or raise issues that may concern and/or interest you.

As part of the process of sharing information, all I&APs are invited to attend the open day/public meeting on *12 October 2004* to be held in the Eskom Hall, Grootvlei. In order to ensure the transfer of information, and allow for interaction with the Eskom project team, the following has been allowed for:

- An open session from 15h00 to 17h00 (poster presentation and interaction with the project team).
- A formal public meeting from 17h30 to 19h30 (a meeting with a question and answer session).

This meeting will provide I&APs with information regarding the proposed project and will provide them with the opportunity to raise any issues and concerns regarding the proposed project.



## HOW FAR IS ESKOM'S PLANNING PROCESS FOR THIS PROJECT?

Eskom has identified the need for the return-to-service of the Grootvlei Power Station and is currently in the planning phase of this project. As part of this planning phase, Eskom is in the process of negotiating with suppliers and determining the final technologies and/or minor design changes which are required to be made. As interested and/or affected party, Eskom considers your input as an important part of the planning process, and your participation in the planning of this project is welcomed and encouraged.

As part of the project-planning phase, and in accordance with the Environmental Conservation Act (No 73 of 1989), discussions have been held with the Mpumalanga Department of Agriculture, Conservation and Environment (M DACE) and the Department of Water Affairs and Forestry (DWAFF). An exemption from undertaking an Environmental Impact Assessment (EIA) has been submitted to M DACE, and a public participation process initiated. Based on the outcome of the public participation process, M DACE will consider Eskom's exemption application and include the necessary conditions in the Record of Decision.

## BACKGROUND TO THE PROPOSED PROJECT

Grootvlei Power Station is a coal-fired power station, situated on the farm Grootvlei, approximately 18 km south-west of Balfour in Mpumalanga Province. The power station comprises 6 coal-fired units, each of which is capable of producing electricity at a nominal capacity of 200 MW. The electricity produced is fed into the national electricity grid. There are 2 smoke stacks, each associated with 3 units. When coal is burnt in a power station to produce heat for electricity generation, two distinct products are produced, namely fine particulate matter and gaseous emissions. The flue gas carrying these products is passed through precipitators or bag filters to remove particulate matter, and is then discharged into the atmosphere through the stacks.

This power station was commissioned in 1969, with the original expected design lifetime being at least 30 - 40 years. This power station, however, ceased operations approximately 15 years ago (between 1988 and 1990) when the lower than expected growth in demand for electricity at that time resulted in surplus generating capacity within the electricity network. Therefore, Eskom decommissioned a number of older power stations (including Ingagane at Newcastle, and Kragbron at Vereeniging), and placed other power stations (including Grootvlei Power Station) in cold reserve storage (i.e. these were "switched off" and reserved for future use, when required).

## WHY IS THE RETURN-TO-SERVICE NEEDED?

Over the past few years, South Africa's demand for electricity has increased to the extent that the excess generating capacity available at the end of the 1980s has now been significantly reduced. Therefore, in order to meet future demand, plans to increase the operational generating capacity have been initiated. Eskom's Integrated Strategic Electricity-Plan (ISEP) is the means by which Eskom assesses the future electricity demand and determines how best to meet and manage this demand.

In terms of this plan, the return-to-service of three mothballed power stations (i.e. Camden, Grootvlei and Komati) has been identified as the most effective way of initiating the required increase in capacity, with Camden being the most optimal to be returned to service. The return-to-service of Camden is currently well in hand, with Grootvlei being the next power station to be returned to service. Eskom believes the return-to-service of Grootvlei Power Station will have positive benefits to both the community as well as to Eskom.

## WHAT DOES THE RETURN-TO-SERVICE ENTAIL?

Returning the Grootvlei Power Station to service is not merely a matter of dusting off the components and pressing the start button. The return-to-service will entail the refurbishment and servicing of all components within the power station, and the use of new technology and/or small-scale design changes, where appropriate, in order to reduce emissions and waste products from the power station, and to enable the plant to meet adjusted operating requirements.

The return-to-service operation will be similar to the historical operation mode, i.e. the power station will operate continuously. The units will be operated according to the power demand (i.e. operation at various loads, and perhaps not all units operating at the same time). The return-to-service will not entail a change in the power station structure itself, but will rather involve a change in the pollution abatement technology used. This will involve the following:

The replacement of some of the existing electrostatic precipitators with bag filters in order to decrease emissions of particulate matter and gases into the atmosphere. The precipitators of the remaining units will be refurbished to a satisfactory level. The implementation of improved water management practices at the water treatment plant, ash dams and coal stockpile area. This will result in improved water quality associated with run-off from these areas. Additional plant will be installed to treat cooling water blowdown to reduce effluent volume and improve effluent quality.

As part of Grootvlei's commitment to strive towards a Zero Liquid Effluent Discharge (ZLED) policy, the station's water management system will be optimised.

All industrial effluent and polluted stormwater from the station terrace (including the coal stockpile drains area) is currently pumped to pollution control dams situated outside the security fence to the south-east of the station.

Stormwater run-off will be diverted around polluted areas and the effluent collection system by means of a series of berms and canals to the surrounding area. The intention is to separate the coal stockyard run-off into a separate system, which is to be used for dust suppression only.

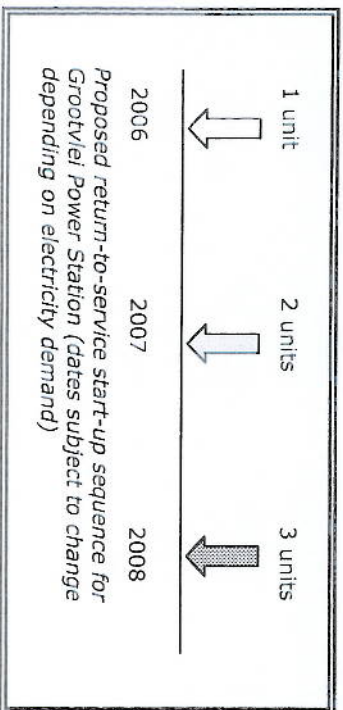
The oil skimming plant will be refurbished and optimised.

The ash water return dams situated towards the east of the power station will, as was the case when the station was generating, be used as an ash water seepage and ash water return (AWR) dam. Water from these dams is fed to the station to remove ash from the boiler and the precipitators into the ash sump, from where it is pumped in slurry form to the ash dam, ~2 km north-east of the power station.

Mitigation measures such as bunding around all transformers, and at the fuel and diesel plant to prevent oil pollution of the groundwater.



Grootvlei Power Station will be returned to service in a phased approach, such that all 6 electricity production units are refurbished and returned to service between 2006 and 2008. After re-commissioning, the commercial life-time of the power station is expected to be at least 20 years, that is until 2030.



**WHAT CHANGES WILL YOU SEE AT THE POWER STATION?**

In order to ensure that Grootvlei Power Station meets the requirements of current environmental legislation, major work is planned in the preparation for the return-to-service. The main focus areas in this regard include the reduction of particulate air emissions, improvement of water management practices, improvement of waste management practices and the fulfilment of the requirements of current environmental legislation. These improvements will reduce the environmental impacts historically associated with the Grootvlei Power Station.

**How much coal will be required to operate the refurbished power station?**

The planned operating mode for Grootvlei is two-shifting, which requires at least 1,5 million tonnes of coal per annum. If the cost of coal allows it, load following could be considered at a later stage. Load following would require 3,5 million tonnes per annum and base load 4,8 million tonnes.

**Where will the fuel come from?**

The coal used in Eskom's coal-fired power stations is supplied by local collieries which are owned and operated by independent mining houses. The coal supply to the Grootvlei Power Station has not been finalised at this stage of the project.

Eskom is in the process of advertising in the media Request for Proposals (RFP) for the supply of coal to the power station. All possible supply options in close vicinity to the power station would be considered. Coal could be supplied from underground or opencast mining operations, and could be delivered to the power station by either conveyor belt, trucking, or by rail.

**What will the impact on air quality be as a result of the Return-to-Service Project?**

In order to ensure a reduction in particulate air emissions from the stacks to meet standards as required by current environmental legislation, particulate abatement equipment will be installed within the power station. Each of the 2 stacks will be fitted with emission monitors, which shall be maintained in good working condition. As is the case for other power stations in South Africa, the results from the stack emissions will be sent to the Chief Air Pollution Control Officer (CAPCO) at the National Department of Environmental Affairs and Tourism as per the registration certificate requirements.

In addition, a monitoring station will be erected a short distance from Grootvlei Power Station to monitor ambient levels of fine particulate matter, sulphur dioxide and nitrogen oxides such that these levels of emissions can be maintained.

**What will happen to the waste from the power station?**

During electricity generation, coarse and fly ash are formed. These waste products will be deposited at the existing ash dam in the form of a slurry (i.e. a mixture of ash and water). Here the boiler ash and the fly ash will be separated, and the fly ash will be used to build the side walls of the ash dam. The boiler ash will be deposited in the middle area of the dam as slurry. The water from the slurry will be decanted to an ash water return dam and then pumped back to the station for re-use.

Domestic waste from the power station will continue to be collected by Dipaleseng Local Municipality for disposal at the local municipal waste disposal site.

**HOW WILL THIS PROJECT IMPACT ON THE LOCAL SOCIAL STRUCTURE?**

**How many jobs will be created during the refurbishment of the Grootvlei Power Station?**

It is estimated that there will be 400 – 500 temporary jobs created during the refurbishment of the power station. Activities for refurbishment are planned to begin in the latter quarter of 2004, and are to continue for approximately 5 years. It is intended that, where possible, the skilled and unskilled labour force for this phase will be drawn from residents in the surrounding area.

**How many jobs will be created during the operation of the Grootvlei Power Station?**

Operating requirements for staffing the power station will be in the region of 270 permanent employees. A similar number of staff will be required for the provision of services to the power station. In order to ensure future skills, new operating staff will be recruited and trained until the staff requirements are met. A recruitment program will be implemented to fulfill these new staffing requirements.



**What will the impact be on the existing infrastructure around the power station?**

The infrastructure around the power station is well established and will be refurbished, where required. For example, some of the structures (such as offices in the power station) will be undertaken in order to accommodate changes in need during the refurbishment activities and the operation phase. In addition, increased need for accommodation and services may be required.

### **PUBLIC PARTICIPATION PROCESS**

It is important that all I&APs are identified and involved in the public participation process from the outset of the project. To ensure effective public participation, the process will be implemented in the following stages:

- STAGE 1:** Advertise Public Participation Process
- STAGE 2:** Identify I&APs
- STAGE 3:** Consultation with I&APs through Focus Group Meetings and one-on-one consultation with landowners and key stakeholders
- STAGE 4:** Hold Public Open Day/Public Meeting on 12 October 2004 at the Eskor Hall, Grootvlei
- STAGE 5:** Incorporate all issues and concerns raised within a Public Participation Report. This report will be submitted to Mpumalanga DACE.

### **HOW CAN YOU GET INVOLVED?**

1. By responding to our invitation for your involvement which has been advertised in local and national newspapers.
2. By mailing or faxing the attached comment form to the public participation consultants.
3. By attending the Public Open Day/Public Meeting to be held on 12 October 2004.
4. By contacting the public participation consultant if you have a query, comment, or require further project information.

If you consider yourself an I&AP for this project and/or are residing in the area adjacent to Grootvlei Power Station, we urge you to make use of the opportunities created by the public participation process to raise those issues and concerns which affect and/or interest you, and about which you would like more information.

By completing and submitting the enclosed form you automatically register yourself as an I&AP for this project, and are ensured that your concerns or queries regarding the project will be noted.

### **SUMMARY OF KEY FACTS**

Phase of project	Planning Phase
Beginning of refurbishment activities	Latter part of 2004
Return-to-service of all 6 electricity production units	Between 2006 and 2008
Lifespan of power station after refurbishment	At least 20 years
Quantity of coal required	Between 1,5 and 4,8 million tonnes per annum
Supply of coal	Not finalised at this stage.
Impacts on air quality	Decrease emissions of particulate matter and gases from historic levels
Waste management - ash	Dispose of at the existing ash dams
Water management - surface and groundwater	Improve pollution control at water treatment plant, ash dams, coal stockpile, transformers, and fuel and diesel plant
Waste management - general waste	Collected by Dipaleseng Local Municipality
Jobs created during refurbishment activities	400 - 500 temporary jobs
Jobs created during operation	270 permanent jobs and a similar number for services
Impacts on local infrastructure	Increased need for accommodation and services

### **OPSOMMING VAN SLUTTELAASPEKTE**

Fase van die projek	Beplanningfase
Begin van opgraderingsaktiwiteite	Laaste gedeelte van 2004
Herindiensstelling van al 6 elektrisiteitsproduserende eenhede	Tussen 2006 en 2009
Lewensduur van kragstasie na opgradering	Ten minste 20 jaar
Hoewelheid steenkool wat benodig sal word	Tussen 1,5 en 4,8 miljoen tonne per jaar
Lewering van steenkool	Nog nie op hierdie stadium gefinaliseer nie
Impak op lugkwaliteit	Vermindering van historiese vlakke van emissies van partikulêre deeltjies en gas
Afvalbestuur - as	Wegdoening by die bestaande asdamme
Waterbestuur - oppervlakk- en grondwater	Verbetering van besoedelingsbeheer by die asdamme, steenkoolvoorraadstapels, transformators, asook petrol en diesel aanleg
Afvalbestuur - algemene afval	Insameling deur Dipaleseng Plaaslike Munisipaliteit
Werkverskaffing gedurende opgraderingsaktiwiteite	400 - 500 tydelike werksgeleenthede
Werkverskaffing gedurende operasionele fase	270 permanente werksgeleenthede en die selfde hoeveelheid vir diens lewering
Impak op infrastruktuur	Verhoogde behoefte vir verblyf en diens lewering



## WHO SHOULD YOU CONTACT?

**Direct all comments, queries or responses to:**

**Bohlweki Environmental**

✉ PO Box 11784,  
Vorna Valley,  
Midrand, 1686

**Karen Kück or Diana Welling**

☎ Phone: (011) 466 3841  
☎ Fax: (011) 466 3849  
✉ E-mail: grootvlei@bohlweki.co.za

## WIE KAN U KONTAK?

**Rig u kommentaar, vrae en antwoorde aan:**

**Bohlweki Environmental**

✉ Posbus 11784,  
Vorna Valley,  
Midrand, 1686

**Karen Kück of Diana Welling**

☎ Telefoon: (011) 466 3841  
☎ Faks: (011) 466 3849  
✉ E-pos: grootvlei@bohlweki.co.za



# GROOTVLEI POWER STATION: RETURN-TO-SERVICE

## REGISTRATION AND COMMENT FORM FOR THE PUBLIC PARTICIPATION PROCESS

October 2004

KINDLY COMPLETE THIS FORM IN DETAIL AND RETURN BY 25 OCTOBER 2004:

Karen Kück or Diana Welling

Bohlweki Environmental

PO Box 11784

Vorna Valley, MIDRAND

1686

E-mail: grootvlei@bohlweki.co.za



Telephone: 011 466 3841

Facsimile: 011 466 3849

### PERSONAL DETAILS:

Title: ..... Initials: ..... First Name: .....

Surname: .....

E-mail: .....

Telephone: ..... Fax: .....

Organisation (if applicable): .....

Capacity (e.g. Chairperson, member, etc): .....

Physical Address: .....

Town: ..... Code: .....

Postal Address: .....

Town: ..... Code: .....

1. What is your main area of interest with regards to the proposed project?

.....  
.....  
.....  
.....

2. Do you have any concerns regarding the proposed project?

If "yes", please list your main areas of concern in point form:

YES/NO

.....  
.....  
.....

3. Do you have any additional questions regarding the project which you would like to discuss with the consultants and/or Eskom?

.....  
.....  
.....

Please add more pages if necessary



# GROOTVLEI KRAGSTASIE: HERINDIENSSTELLING

REGISTRASIE-EN KOMMENTAARVORM VIR DIE OPENBARE DEELNAME PROSES  
Oktober 2004

VOLTOOI ASSEBLIEF DIE VORM EN BESORG DIT TERUG VOOR 25 OKTOBER 2004

Karen Kück of Diana Welling  
Bohlweki Environmental  
PO Box 11784  
Vorna Valley, MIDRAND  
1686  
E-pos: grootvlei@bohlweki.co.za



Telefoon: 011 466 3841  
Faks: 011 466 3849

## PERSONLIKE DETAILS:

Titel: ..... Voorletters: ..... Noemnaam: .....

Van: .....

E-pos: .....

Telefoon: ..... Faks: .....

Organisasie (indien van toepassing): .....

Hoedanigheid (bv. Voorsitter, lid, ens.): .....

Fisiese adres: .....

Stad: ..... Kode: .....

Posadres: .....

Stad: ..... Kode: .....

1. Wat is u hoofbelang met betrekking tot die projek?

.....  
.....  
.....  
.....

2. Het u enige aspekte van kommer rakende die voorgestelde projek?

JA/NEE

Indien "ja", lys asseblief puntsgewys u kommentaar:

.....  
.....  
.....

3. Het u enige addisionele vrae, rakende die projek wat u graag met die konsultante en/of Eskom wil bespreek?

.....  
.....  
.....

U is welkom om nog bladsye aan te heg indien nodig