

**ENVIRONMENTAL IMPACT ASSESSMENT
FOR THE
PROPOSED CONSTRUCTION OF A 765 KV EXTENSION OF THE
HYDRA SUBSTATION AND THE PROPOSED CONSTRUCTION
OF A 765 KV TRANSMISSION POWER LINE BETWEEN THE
PERSEUS AND GAMMA SUBSTATIONS, NORTHERN CAPE
PROVINCE**

Proposed Portion:

South East of De Aar to Gamma substation:
Approximately 130km in length



Public Participation Office

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THE PURPOSE OF THIS DOCUMENT

The purpose of this Background Information Document (BID) is to brief interested and affected parties (I&APs) regarding the Environmental Impact Assessment (EIA) that is being undertaken for the *Proposed extension of the 765 kV Hydra Substation and the proposed construction of an additional 765 kV Transmission power line between the Hydra Substation and Gamma Substation, connecting with the Perseus-Gamma 765 kV Transmission line* in the Northern Cape Province, as proposed by Eskom Transmission.

In addition to supplying information about the proposed extended Hydra Substation, the additional 765 kV Transmission power line and the EIA process, this BID also provides I&APs with the opportunity to:

- register as stakeholders in the public participation process; and
- make initial comments on and contributions to the proposed project.

YOUR COMMENTS AND PARTICIPATION IS IMPORTANT

Your comment(s) will ensure that all relevant issues are evaluated in the EIA. You are kindly requested to complete the enclosed Registration and Comment Form, write a letter, call or e-mail the public participation office in Kyalami (contact details on front page). You will then receive further information about the proposed project and the EIA process.

LIST OF ACRONYMS

BID	Background Information Document
DESR	Draft Environmental Scoping Report
EIA	Environmental Impact Assessment
EIR	Environmental Impact Report
EMP	Environmental Management Plan
RoD	Record of Decision
I&AP	Interested and Affected Party
NEMA	National Environmental Management Act
DEAT	National Department of Environmental Affairs and Tourism

BACKGROUND TO THE PROPOSED PROJECT

An Environmental Impact Assessment (EIA) for a 765 kV Transmission power line from Hydra Substation to Gamma Substation was previously undertaken in accordance with the EIA Regulations published in Government Notice R1182 to R1184 of 5 September 1997, in terms of Section 21 of the Environment Conservation Act (No 73 of 1989), as well as the National Environmental Management Act (NEMA; No 107 of 1998).

The environmental studies for the original project were undertaken in 2 phases, in accordance with the EIA Regulations i.e. an Environmental Scoping Study phase and an Environmental Impact Assessment Phase.

In undertaking the Environmental Impact Assessment, Bohlweki Environmental were assisted by a number of specialists in order to comprehensively identify both potential positive and negative environmental impacts (social and biophysical) associated with the project, evaluate the significance of the identified impacts, and propose appropriate mitigation measures, where required. The specialist team identified and evaluated the potential impacts for the initial proposed study area for the Gamma Substation and the 765 kV Transmission power line (in terms of their discipline). These specialists' studies included:

- Geology
- Flora and Ecology
- Avifauna
- Soils and agricultural potential
- Surface Water
- Heritage Impacts
- Visual aspects and aesthetics
- Tourism potential
- Social Environment

A comprehensive public participation process was undertaken as part of the EIA process, and involved the consultation of individuals and organisations throughout the broader study area representing a broad range of sectors and Interested and Affected Parties (I&APs). This consultation process included telephonic interviews, Focus Group Meetings, Key Stakeholder Workshops, Public Meetings, documentation distributed via mail, pamphlets and via the printed media throughout the process. Issues and concerns raised during the EIA process were recorded and captured within an Issues Trail.

In December 2005, Eskom Holdings Limited (Eskom) received a Record of Decision for the construction of a 765 kV Transmission power line between the existing Hydra Substation and the proposed new Gamma Substation. Since then there has been continued high growth in electricity demand in the Western and Eastern Cape Provinces. By using the planning processes in place, Eskom Transmission has established that there is a need to extend the 765 kV Hydra Substation and construct an additional 765 kV Transmission power line linking with the Perseus-Gamma proposed 765kV Transmission power line from the extended Hydra Substation to the Gamma Substation. An EIA process has now been initiated for the proposed project. The proposed additional 765 kV Transmission power line will run parallel to the Hydra-Gamma 765 kV Transmission power line, which received authorisation in December 2005.

In the process of negotiating a servitude with the affected landowners on the Hydra-Gamma 1 765kV Transmission power line, Eskom took the initiative to discuss with these affected landowners the possibility of securing an additional servitude for the Hydra-Gamma 2 proposed 765kV Transmission power line. These affected landowners have, in principle, agreed to a double servitude of 160m in width, and options for this double servitude have been signed.

In terms of the Environmental Impact Assessment (EIA) Regulations, Eskom Holdings Limited require authorisation from the National Department of Environmental Affairs and Tourism (DEAT) for the undertaking of the proposed extension of Hydra Substation and additional 765 kv Transmission power line. In order to obtain authorisation for all aspects of this project, comprehensive updated and current, independent environmental studies are required to be undertaken in accordance with the new EIA Regulations.

Eskom Holdings Limited has appointed Bohlweki Environmental, as independent consultants, to undertake the environmental studies to identify and assess all potential environmental impacts associated with the proposed new project. An environmental impact assessment is an effective planning and decision-making tool. It allows the potential environmental consequences of a proposed project to be identified up-front and managed through the planning process. As part of these environmental studies, all I&APs will be actively involved through a public participation process.

THE NEED FOR THE PROPOSED PROJECT

A continued high growth in electricity demand is experienced in the Western and Eastern Cape Provinces, and in order to reinforce this existing Transmission network and ensure a reliable electricity supply to this region, the extension of the Hydra Substation and the construction of the proposed additional 765 kV Transmission power line is being proposed.

Key Information Regarding the Project:

- The proposed extension of the 765 kV Hydra Substation will take place adjacent to the existing Hydra Substation, on Eskom owned property.
- The proposed additional 756 kV Transmission power line to be constructed parallel to the existing Hydra-Gamma 765 kV Transmission power line, a distance of approximately 130 km.
- A study area (as indicated on the map) indicates the boundary for the identification of stakeholders and for specialists to verify the findings of previous studies undertaken for this proposed Transmission power line.
- Currently it is proposed that the compact cross-rope suspension tower will be used. This tower is approximately 50 m in height. The total footprint area required for each tower is 80 m x 50 m.
- The land beneath the overhead lines can be used, as normal, by the landowners. Eskom, however, require that no dwellings or vegetation/crops higher than 4 m be established within the servitude.

PROPOSED CONSTRUCTION SCHEDULE AND METHOD FOR THE EXTENTION OF THE HYDRA SUBSTATION AND THE ADDITIONAL 765 KV TRANSMISSION POWER LINE

Depending on the issuing date of the RoD, and should a positive RoD be issued by the National Department of Environmental Affairs and Tourism (DEAT), and to address the increasing demand for electricity, it is proposed that Eskom will commence with construction in May 2007. The construction period for the extension of the Hydra Substation and the proposed additional 765 kV Transmission power line is estimated to be 24 months in total. This includes the clearing of the servitude, construction of the towers and the stringing of the conductors. For the Hydra Substation extension an additional 200 m x 250 m, adjacent to the existing substation will need to be cleared and large construction vehicles transporting the transformers will require access to this site.

It is currently being proposed to start construction from Hydra Substation down to Gamma Substation, which will be a continuous construction period of the proposed 765 kV Transmission power line commencing at Perseus Substation.

Rehabilitation of servitude after construction

The appointed Eskom Environmental Control Officer on site will ensure that the contractor stabilises all disturbed areas as soon as possible after construction and the area is rehabilitated as close to the original condition as possible. Particular attention will be paid to slopes greater than 20° (1:5) and other areas prone to erosion, which should be appropriately vegetated. Rehabilitated areas that are susceptible to erosion due to their position in the landscape will be adequately protected by soil conservation measures.

The Re-vegetated areas will be monitored by the Environmental Control Officer until the vegetation is stabilised. This monitoring, on average, occurs at three-monthly intervals for the first twelve months, and once a year thereafter, and may only halt once the vegetation has been stabilised

Employment opportunities during construction

As the construction of Transmission power lines are highly skilled, and mainly constructed by the utilisation of machinery, it is not envisaged that additional labour force will be required for this proposed project. However, as part of Eskom's Social Responsibility Programme, the appointed construction company will be required to make use of local labour as and when required.

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

Eskom power lines are designed and built to comply with the Occupational Health and Safety (OHS) Act. As long as activities under the power line comply with the servitude conditions, they are therefore safe to undertake. EMF effects decrease as distance from the power line increases and any living quarters outside the servitude will not be affected by the power line and radiation from the power line is nil at the edge of the servitude.

THE ENVIRONMENTAL AUTHORISATION PROCESS

What is an Environmental Impact Assessment?

An Environmental Impact Assessment (EIA) is a process of collecting, organising, analysing, interpreting and communicating information that is relevant to the consideration for each particular application.

EIA's are used by planning authorities/developers to obtain an independent and objective view of the potential environmental (biophysical and social) impacts that could arise during the construction and operation of the proposed development, in this case a 765 kV Transmission power line and the extension of a 765 kV substation. This information needs to provide the competent Authority with a sound basis for their decision-making.

National Environmental Management Act (NEMA)

The EIA for the proposed additional 756 kV Transmission power line will be conducted in terms of the new EIA Regulations that were promulgated in terms of Section 24 (5) read with section 44 of the National Environmental Management Act (Act No. 107 of 1998).

Competent Authority

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

THE EIA PROCESS FOR THIS PROPOSED PROJECT

SCOPING PHASE

The aim of this phase is to form an initial assessment of the potential impacts of the proposed development. These potential impacts are identified on the basis of issues and concerns raised by stakeholders, as well as desk-top investigations by EIA specialists. These potential impacts are captured in a Draft Environmental Scoping Report (DESR), together with a description of the detailed studies to be undertaken during the impact assessment phase of the EIA. The DESR will be distributed to all stakeholders for comment. Once the stakeholders have sufficient opportunity to verify that their comments have been captured, the final DESR is then submitted to the Competent authority for review.



IMPACT ASSESSMENT PHASE

During this phase, detailed environmental detailed studies are undertaken to investigate the potential impacts identified during the Scoping Phase. Positive, as well as negative, impacts are investigated and these are rated in terms of their expected overall significance. Recommendations are made through these detailed specialists studies regarding measures that can be put in place to maximise positive impacts and to minimise negative impacts. All results and recommendations from the EIA phase are compiled into a Draft Environmental Impact Assessment Report which is made available for public comment. After comments have been received the report is finalised and issued to the competent authority, together with an Environmental Management Plan (EMP) for review and decision-making.



DECISION-MAKING PHASE

The Competent Authority reviews the EIR and consults with other key authorities. A *Record of Decision (RoD)* is then issued that states whether or not the proposed development can proceed. Stakeholders are then informed of the RoD, after which they may lodge an appeal within the specified period of time as set out by the Competent Authority.

ENVIRONMENTAL ISSUES TO BE INVESTIGATED DURING THE EIA

For the purpose of the Hydra Substation extension and additional 765 kV Transmission power line study some specialist studies are required to be updated from the previous studies undertaken. These studies include the following:

SPECIALIST STUDY	SPECIALIST UNDERTAKING THE STUDY
Visual Impacts	Lourens du Plessis of MetroGIS
Fauna and Flora Impacts	Joggie van Staaden of Bohlweki Environmental
Avifauna Impacts	Jon Smallie of Endangered Wildlife Trust
Heritage Impacts	David Morris of McGregor Museum
Tourism Impacts	Marga van der Merwe of Grant Thornton
Impacts on agricultural potential	Garry Paterson of ARC-Institute for Soil, Climate and Water
Socio-economic Impacts	Anita Bron of Master Q Research

PUBLIC PARTICIPATION PROCESS

Public participation is the cornerstone of any EIA and will also be for this proposed project. The principles of the National Environmental Management Act (NEMA), govern many aspects of EIAs, including public participation. This process will enable I&APs to influence the course of the investigation and to review the findings of the independent environmental studies which will be undertaken.

The key objective of public participation during this EIA is to provide I&APs with sufficient and transparent information on an ongoing basis. The public participation process also allows you the opportunity to comment on the findings of the EIA Report (Scoping and Impact Assessment) that will be made available for public review.

It is important that relevant I&APs are identified and involved in the public participation process from the outset of the proposed project, and your attention is drawn to the two *responsibility roles* which are as follows:

Your responsibilities

You, as an I&AP, have a right to participate in this process by requesting further information or by informing the consultant of your concerns regarding the environment and the proposed extension of the Hydra Substation and the proposed construction of an additional 765 kV Transmission power line between the extended Hydra Substation and Gamma Substation. To exercise this right, you are kindly requested to register with the public participation office, or you could register through someone/an organisation (e.g. tribal chief, farmers' association) who speaks for you or on behalf of your community. As an I&AP you also have a responsibility – to inform others whom you think may be interested and/or affected by the proposed development, and encourage them to register. You can register at any stage of the study, but it is important to register as early as possible.

Our responsibilities

You can contact us by telephone, cell phone, fax, e-mail, registration form or post using the contact details provided at the end of this BID. The following actions will be taken upon receiving any comments/queries/issues:

- the contact details provided by you will be entered into the project database and you will be sent all further information releases;
- if you send us queries or comments, we will respond in writing;
- if you call us, we will record your details and queries / comments. Should we not be able to answer your question immediately, we will provide an official response in due course.

To ensure effective public participation, the public participation process includes the following steps:

PHASE 1 – Scoping Phase

Primary purpose of this phase is to present the motivation for the proposed project to I&APs and to elicit comments from you.

Announcing the opportunity to comment: I&APs will be informed about the EIA and the proposed project by means of:

- letters to identified stakeholders;
- advertisement in local newspapers; and
- making the BID and invitation letters to participate in the EIA process available at selected public places that are easily accessible to I&APs

Issues to be evaluated:

- Focus Group Meetings will be conducted with groups of stakeholders along the proposed study area, including affected landowners.
- Stakeholder Workshop will be conducted with the relevant Provincial and local Authorities and Government Structures (e.g. WESSA)

The purpose of these meetings will be to brief I&APs about the proposed project and the EIA process. It will also provide another opportunity for stakeholders to submit any comments regarding the proposed project.

All issues raised, whether telephonically, by e-mail, post or meetings, will be captured in the Comments and Response Report.

Environmental Scoping Report: A draft ESR will be prepared, which will contain:

- a preliminary description of the proposed project;
- the potential impacts (positive as well as negative);
- a record of all comments and concerns raised by I&APs; and
- the Terms of Reference for the environmental specialist studies

The DESR, including the Comments and Response Report, will be made available for public comment. The comment period will be 30 consecutive calendar days. All registered I&APs will be notified by letter and advertisements will be placed in local newspapers. After the comment period, a final ESR will be compiled for submission to the Competent Authority and copies will be made available to stakeholders.

Progress feedback to I&APs

All registered I&APs will receive a personalised letter, giving feedback on the progress of the EIA and to thank those who commented to date, and to outline the next steps in the EIA process.

PHASE 2: Impact Assessment Phase

Primary purpose is to:

Draft EIR/EMP: After the various environmental specialist studies of the potential impacts have been completed, the results will be compiled into the draft EIR/EMP.

Public review of the draft EIR/EMP: The draft EIR/EMP will be made available for public review for a period of 30 consecutive calendar days. This provide I&APs an opportunity to verify that their comments and concerns raised, are adequately addressed, and to submit any further comments.

A second round of Focus Group Meetings and a Stakeholder Workshop will be held to review the draft EIR/EMP. Any comments raised by I&APs will be captured in the final EIR/EMP, which will be submitted to the Competent Authority.

Final correspondence/notification: Once the Competent Authority has issued the RoD, I&APs will be notified by personalised letters, of the Competent Authority's decision and of the procedure to follow should they wish to appeal the RoD.

A REFRESHER AS HOW TO PARTICIPATE

1. By responding (by phone, fax or e-mail) to our invitation for your participation, which will be advertised in local newspapers.

2. By mailing, faxing or e-mailing the attached Registration and Comment Form to Bohlweki Environmental.
3. By telephonically contacting us if you have a query, comment or require further project information.
4. By reviewing and commenting on the draft Environmental Scoping Report and the draft Environmental Impact Report within the 30-day review periods.

OMGEWINGSIMPAKSTUDIE

VIR DIE

VOORGESTELDE OPRIGTING VAN 'N 765 KV UITBREIDING
VAN DIE HYDRA SUBSTASIE EN DIE VOORGESTELDE
OPRIGTING VAN 'N 765 KV TRANSMISSIEKRAGLYN TUSSEN
DIE PERSEUS EN GAMMA SUBSTASIES, NOORD-
KAAPPROVINSIE

Voorgestelde Gedeelte:

Suid-oos van De Aar na Gamma substasie:



Openbare Deelnamekantoor

Nicolene Venter of Prashika Reddy

Tegniese navrae: OIS

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DIE DOEL VAN HIERDIE DOKUMENT

Die doel van hierdie Agtergrond-inligtingsdokument (AID) is om belangstellende en geaffekteerde partye (B&GP's) in te lig aangaande die Omgewingsimpakstudie (OIS) wat onderneem word vir die *Voorgestelde uitbreiding van die 765 kV Hydra Substasie en die voorgestelde oprigting van 'n bykomende 765 kV Transmissiekraglyn tussen die Hydra en Gamma Substasies wat aansluit by die Perseus-Gamma 765 kV Transmissielyn* in die Noord-Kaaprovinsie, soos voorgestel deur Eskom Transmissie.

Benewens die verskaffing van inligting oor die voorgestelde uitgebreide Hydra Substasie, die bykomende 765 kV Transmissiekraglyn en die OIS-proses, bied hierdie AID die B&GP's ook die geleentheid om:

- te registreer as belanghebbendes in die openbare deelnameproses; en
- aanvanklike kommentaar en bydraes te lewer rakende die voorgestelde projek.

U KOMMENTAAR EN DEELNAME IS BELANGRIK

U kommentaar sal verseker dat alle tersaaklike vraagstukke in die OIS geëvalueer word. U word vriendelik versoek om die ingeslote Registrasie- en Kommentaarvorm te voltooi, 'n brief te skryf of om die openbare deelnamekantoor in Kyalami te skakel of te e-pos (kontakbesonderhede op voorblad). U sal dan verdere inligting oor die voorgestelde projek en die OIS-proses ontvang.

LYS VAN AFKORTINGS

AID	Agtergrond-inligtingsdokument
DESR	Konsep Omgewingsbestekopnameverslag
OIS	Omgewingsimpastudie
EIR	Omgewingsimpakverslag
EMP	Omgewingsbestuursplan
RoD	Rekord van Besluit
G&BP	Belangstellende en Geaffekteerde Party
NEMA	Nasionale Wet op Omgewingsbestuur
DEAT	Nasionale Departement van Omgewingsake en Toerisme

AGTERGROND TOT DIE VOORGESTELDE PROJEK

'n Omgewingsimpakstudie (OIS) is voorheen onderneem vir 'n 765 kV Transmissiekraglyn vanaf Hydra Substasie na Gamma Substasie. Dié evaluering is onderneem ingevolge die OIS-regulasies wat op 5 September 1997 in Staatskennisgewing R1182 tot R1184 gepubliseer is, ingevolge Artikel 21 van die Wet op Omgewingsbewing (No. 73 van 1989), sowel as die Nasionale Wet op Omgewingsbestuur (NEMA; No. 107 van 1998).

Die omgewingstudies vir die oorspronklike projek is in 2 fases onderneem, ingevolge die OIS-regulasies, naamlik 'n Omgewingsbestekopnamestudie-fase en 'n Omgewingsimpakstudiefase.

In die uitvoering van die Omgewingsimpakstudie is Bohlweki Environmental deur 'n aantal spesialiste bygestaan ten einde beide positiewe en negatiewe potensiële omgewingsimpakte (maatskaplik en biofisies) wat met die projek mag gepaardgaan, omvattend te identifiseer, die belangrikheid van die geïdentifiseerde impakte te evalueer en, waar nodig, toepaslike versagende maatreëls voor te stel. Die span spesialiste het die potensiële impakte vir die voorlopige voorgestelde studie-area vir die Gamma Substasie en die 765 kV Transmissiekraglyn geïdentifiseer en geëvalueer (in terme van hul kundigheidsvelde). Hierdie spesialisstudies het die volgende ingesluit:

- Geologie
- Plantegroei en ekologie
- Voëllewe
- Grond en landboupotensiaal
- Oppervlaktewater
- Erfenisimpakte
- Visuele aspekte en estetika
- Toerismepotensiaal
- Sosiale omgewing

'n Omvattende openbare deelnameproses is as deel van die OIS-proses onderneem en het konsultasie ingesluit met individue en organisasies vanuit die breër studieveld wat 'n wye spektrum van sektore en Belangstellende en Geaffekteerde Partye (B&GP's) verteenwoordig. Hierdie konsultasieproses het bestaan uit telefoniese onderhoude, Fokusgroepvergaderings, werksinkels vir sleutelbelanghebbendes, Openbare Vergaderings en die verspreiding van dokumentasie deur middel van pos, pamflette en die gedrukte media deur die hele proses. Vraagstukke en knelpunte wat gedurende die OIS-proses geopper is, is in 'n verslag van vraagstukke vasgelê.

In Desember 2005 het Eskom Holdings Beperk (Eskom) 'n Rekord van Besluit (RoD) ontvang vir die oprigting van 'n 765kV Transmissiekraglyn tussen die bestaande Hydra Substasie en die voorgestelde nuwe Gamma Substasie. Sedertdien is daar volgehoue hoë groei ondervind in die vraag na elektrisiteit in die Wes- en Oos-Kaapprovinsies. Deur van die bestaande beplanningsprosesse gebruik te maak, het Eskom Transmissie bevind dat daar 'n behoefte bestaan om die 765 kV Hydra Substasie uit te brei en om 'n bykomende 765 kV Transmissiekraglyn op te rig om aan te sluit by die Perseus-Gamma voorgestelde 765 kV Transmissiekraglyn vanaf die uitgebreide Hydra Substasie na die Gamma Substasie. Daar is nou met 'n OIS-proses begin vir die voorgestelde projek. Die voorgestelde bykomende 765 kV Transmissiekraglyn sal parallel loop aan die Hydra-Gamma 765 kV Transmissiekraglyn, wat in Desember 2005 goedkeuring ontvang het.

Tydens die onderhandelingsproses vir 'n serwituut vir die Hydra-Gamma 1 765 kV Transmissiekraglyn, het Eskom die inisiatief geneem om die moontlikheid om 'n bykomende serwituut vir die Hydra-Gamma 2 voorgestelde 765 kV Transmissiekraglyn te verseker, met hierdie geaffekteerde grondeienaars te bespreek. Hierdie geaffekteerde grondeienaars het in beginsel ingestem tot 'n dubbele serwituut van 160 m in wydte en opsies vir hierdie dubbele serwituut is geteken.

Kragtens die Omgewingsimpakstudie (OIS)-regulasies, verlang Eskom Holdings Beperk magtiging van die Nasionale Departement van Omgewingsake en Toerisme (DEAT) vir die onderneming van die voorgestelde uitbreiding van die Hydra Substasie en bykomende 765 kV

Transmissiekraglyn. Ten einde magtiging vir alle aspekte van hierdie projek te bekom, word vereis dat omvattende, opgedateerde en geldende, onafhanklike omgewingstudies onderneem word ingevolge die nuwe OIS-regulasies.

Eskom Holdings Beperk het Bohlweki Environmental as onafhanklike konsultante aangestel om die omgewingstudies te onderneem ten einde alle potensiële omgewingsimpakte verwant aan die voorgestelde nuwe projek te identifiseer en te evalueer. 'n Omgewingsimpakstudie is 'n doeltreffende beplanning- en besluitnemingswerktuig. Dit bring mee dat die potensiële nagevolge van 'n voorgestelde projek op die omgewing vooraf geïdentifiseer en bestuur word deur die beplanningsproses. As deel van hierdie omgewingstudies sal alle B&GP's aktief betrokke wees deur 'n openbare deelnameproses.

DIE BEHOEFTE VIR DIE VOORGESTELDE PROJEK

'n Voortgesette hoë vraag vir elektrisiteit word in die Wes- en Oos-Kaapprovinsies ondervind en ten einde hierdie bestaande Transmissienetwerk te versterk en 'n betroubare elektrisiteitvoorsiening vir hierdie streek te verseker, word die uitbreiding van Hydra Substasie en die oprigting van die voorgestelde bykomende 765 kV Transmissiekraglyn voorgestel.

Belangrike inligting rakende die projek:

- Die voorgestelde uitbreiding van die 765 kV Hydra Substasie sal plaasvind aangrensend die bestaande Hydra Substasie, op eiendom in Eskom se besit.
- Die voorgestelde bykomende 765 kV Transmissiekraglyn sal opgerig word parallel aan die bestaande Hydra-Gamma 765 kV Transmissiekraglyn, 'n afstand van ongeveer 130 km.
- 'n Studiegebied (soos op die kaart aangedui) toon die grense vir die identifisering van belanghebbendes en vir spesialiste om die bevindinge van vorige studies wat onderneem is vir hierdie voorgestelde Transmissiekraglyn, te verifieer.
- Tans word voorgestel dat die kompakte dwarstou-hangtoring gebruik word. Hierdie toring in ongeveer 50 m hoog. Die totale voetspoor-oppervlak wat vir elke toring benodig word is ongeveer 80 m x 50 m.
- Die grond onder die oorhoofse drade kan, soos gewoonlik, deur die grondeienaars gebruik word. Eskom vereis egter dat geen wooneenhede of plantegroei/gewasse hoër as 4 m binne die serwituut aangelê word nie.

VOORGESTELDE OPRIGTINGSKEDULE EN METODIEK VIR DIE UITBREIDING VAN DIE HYDRA SUBSTASIE EN DIE BYKOMENDE 765 KV TRANSMISSIEKRAGLYN

Afhangend van die datum van uitreiking van die RoD, en sou 'n positiewe RoD deur die Nasionale Departement Omgewingsake en Toerisme (DEAT) uitgereik word, en ten einde die toenemende vraag vir elektrisiteit aan te spreek, word voorgestel dat Eskom in Mei 2007 met die konstruksie begin. Die konstruksietydperk vir die uitbreiding van die Hydra Substasie en die voorgestelde bykomende 765 kV Transmissiekraglyn word geraam op altesaam 24 maande. Dit sluit in die skoonmaak van die serwituut, die oprigting van die torings en die bedrading van die geleiers. Vir die Hydra Substasie-uitbreiding moet 'n bykomende 200 m x

250 m wat grens aan die bestaande substasie, skoongemaak word en groot konstruksievoertuie wat die transformators vervoer, sal toegang tot hierdie terrein moet hê.

Daar word tans voorgestel dat konstruksie begin vanaf Hydra Substasie onder na Gamma Substasie toe, wat 'n deurlopende konstruksietydperk van die voorgestelde 765 kV Transmissiekraglyn is wat by Perseus Substasie begin.

Rehabilitasie van serwituut ná konstruksie

Die aangestelde Eskom Omgewingsbeheerbeampte op die terrein sal toesien dat die kontrakteur alle versteurde areas so gou moontlik na konstruksie stabiliseer en dat die area gerehabiliteer word so na moontlik aan die oorspronklike toestand. Spesifieke aandag sal geskenk word aan hellings groter as 20° (1:5) en ander gebiede wat geneig is tot verwering, wat behoorlik aangeplant behoort te wees. Gerehabiliteerde gebiede wat vatbaar is vir verwering weens hul posisie in die landskap, sal genoegsaam beskerm word deur grondbewaringsmaatreëls.

Die heraangeplante gebiede sal deur die Omgewingsbeheerbeampte gemonitor word totdat die plantegroei gestabiliseer is. Vir die eerste twaalf maande, vind hierdie monitering gemiddeld drie-maandeliks plaas, en eenmaal per jaar daarna en mag slegs gestaak word wanneer die plantegroei gestabiliseer het.

Werkgeleenthede tydens konstruksie

Aangesien die oprigting van Transmissiekraglyne hoë vaardigheid vereis en hoofsaaklik opgerig word deur van masjinerie gebruik te maak, word daar nie beoog dat bykomende arbeid vir hierdie voorgestelde projek benodig word nie. As deel van Eskom se Maatskaplike Verantwoordelikhedprogram, sal daar egter van die aangestelde konstruksiemaatskappy verlang word om, soos en wanneer nodig, van plaaslike arbeid gebruik te maak.

Gesondheid (moontlike impakte van elektro-magnetiese velde – EMV's)

Eskom kragdrade word ontwerp en gebou om te voldoen aan die Wet op Beroepsgesondheid- en beroepsveiligheid (OHS). Daarom, solank bedrywighede onder die kragdrade voldoen aan die voorwaardes van die serwituut, is dit veilig om dit aan te pak. EMV-uitwerkings verminder namate die afstand vanaf die kragdrade toeneem en enige woonkwartiere buite die serwituut sal nie deur die kragdrade geraak word nie en bestraling van die kraglyn is nul by die rand van die serwituut.

DIE OMGEWINGSMAGTIGINGSPROSES

Wat is 'n Omgewingsimpakstudie?

'n Omgewingsimpakstudie (OIS) is 'n proses om inligting wat tersaaklik is vir die oorweging van elke spesifieke aansoek, in te samel, te organiseer, te ontleed, te vertolk en oor te dra.

OIS'e word deur beplanningsowerhede/ontwikkelaars gebruik om 'n onafhanklike en objektiewe siening te bekom van die potensiele omgewingsimpakte (biofisies en maatskaplik) wat kan opduik gedurende die oprigting en bedryf van die voorgestelde ontwikkeling, in hierdie

geval 'n 765 kV Transmissiekraglyn en die uitbreiding van 'n 765 kV substasie. Hierdie inligting moet die bevoegde Owerheid voorsien van 'n gesonde basis vir hul besluitneming.

Nasionale Wet op Omgewingsbestuur (NEMA)

Die OIS vir die voorgestelde bykomende 765 kV Transmissiekraglyn sal uitgevoer word ingevolge die nuwe OIS-regulasies wat afgekondig is kragtens Artikel 24 (5) gelees tesame met Artikel 44 van die Nasionale Wet op Omgewingsbestuur (Wet No. 107 van 1998).

Bevoegde Owerheid

Die Bevoegde Owerheid, soos beskryf volgens die nuwe OIS-regulasies, vir hierdie voorgestelde projek is die Nasionale Departement van Omgewingsake en Toerisme (DEAT).

DIE OIS-PROSES VIR HIERDIE VOORGESTELDE PROJEK

BESTEKOPNAMEFASE

Die oogmerk van hierdie fase is om 'n aanvanklike beraming te maak van die potensiële impakte van die voorgestelde ontwikkeling. Hierdie potensiële impakte word geïdentifiseer op die basis van vraagstukke en knelpunte wat deur belanghebbendes genoem word, asook lessenaarondersoeke deur OIS-spesialiste. Hierdie potensiële impakte word vervat in 'n Konsep Omgewingsbestekopnameverslag (DESR), tesame met 'n beskrywing van die gedetailleerde studies wat onderneem moet word gedurende die impakstudiefase van die OIS. Die DESR sal aan alle belanghebbendes versprei word vir kommentaar. Sodra die belanghebbendes genoeg geleentheid gehad het om te verifieer dat hul kommentaar vasgelê is, word die finale DESR by die Bevoegde Owerheid ingedien vir oorsig.

IMPAKSTUDIEFASE

Gedurende hierdie fase word gedetailleerde studies onderneem om die potensiële impakte wat gedurende die bestekopnamefase geïdentifiseer is, te ondersoek. Positiewe en negatiewe impakte word ondersoek en dit word geraam in terme van hul verwagte algehele belang. Aanbevelings word gemaak deur hierdie gedetailleerde spesialisstudies betreffende maatreëls wat in plek geplaas kan word om positiewe impakte te maksimaliseer en negatiewe impakte te minimaliseer. Alle resultate en aanbevelings van die OIS-fase word in 'n Konsep Omgewingsimpakstudie-verslag vervat wat beskikbaar gemaak word vir publieke kommentaar. Nadat kommentaar ontvang is, word die verslag gefinaliseer en aan die Bevoegde Owerheid uitgereik, tesame met 'n Omgewingsbestuurplan (EMP) vir oorsig en besluitneming.

BESLUITNEMINGSFASE

Die Bevoegde Owerheid hersien die Omgewingsimpakverslag (EIR) en raadpleeg met ander belangrike owerhede. 'n *Rekord van Besluit (RoD)* word dan uitgereik wat verklaar of die voorgestelde ontwikkeling kan voortgaan, al dan nie. Belanghebbendes word dan ingelig van die RoD, waarna hulle 'n appèl kan indien binne die bepaalde tydperk soos vasgestel deur die Bevoegde Owerheid.

OMGEWINGSVRAAGSTUKKE WAT TYDENS DIE OIS ONDERSOEK MOET WORD

Vir die doeleindes van die Hydra Substasie-uitbreiding en bykomende 765 kV Transmissiekraglyn-studie word verlang dat party spesialisstudies opgedateer word sedert vorige studies onderneem is. Hierdie studies sluit die volgende in:

SPECIALISSTUDIE	SPECIALIS WAT STUDIE ONDERNEEM
Visuele Impakte	Lourens du Plessis van MetroGIS
Diere- en Plantegroei Impakte	Joggie van Staaden van Bohlweki Environmental
Voëllewe Impakte	Jon Smallie van Endangered Wildlife Trust
Erfenisimpakte	David Morris van McGregor Museum
Toerisme Impakte	Marga van der Merwe van Grant Thornton
Impakte op landboupotensiaal	Garry Paterson van LNR Instituut vir Grond, Klimaat en Water
Sosio-ekonomiese Impakte	Anita Bron van Master Q Research

OPENBARE DEELNAMEPROSES

Openbare deelname is die hoeksteen van enige OIS en sal ook wees vir hierdie voorgestelde projek. Die beginsels van die Nasionale Wet op Omgewingsbestuur (NEMA) beheer baie aspekte van OIS'e, insluitend openbare deelname. Hierdie proses sal B&GP's in staat stel om 'n invloed te hê op die verloop van die ondersoek en om die bevindinge van onafhanklike omgewingstudies wat onderneem sal word, in oënskou te neem.

Die belangrikste doelwit van openbare deelname gedurende hierdie OIS is om B&GP's op deurlopende grondslag van genoegsame en deursigtige inligting te voorsien. Die openbare deelnameproses bied u ook die geleentheid om kommentaar te lewer oor die bevindinge van die OIS-verslag (Bestekopname en Impakstudie) wat vir openbare oorsig beskikbaar gestel sal word.

Dit is belangrik dat tersaaklike B&GP's uit die staanspoor van die voorgestelde projek geïdentifiseer word en betrokke raak by die openbare deelnameproses en u aandag word gevestig op die twee *verantwoordelikhedsrolle*, naamlik:

U verantwoordelikhede

U, as 'n B&GP, het 'n reg om deel te neem aan hierdie proses deur verdere inligting te versoek of deur die konsultant in te lig van u knelpunte rakende die omgewing en die voorgestelde uitbreiding van die Hydra Substasie en die voorgestelde oprigting van 'n bykomende 765 kV Transmissiekraglyn tussen die uitgebreide Hydra Substasie en die Gamma Substasie. Ten einde hierdie reg uit te oefen, word u vriendelik versoek om by die openbare deelnamekantoor te registreer, of u kan deur iemand/'n organisasie (bv. Stamhoof, boere-unie) registreer wat namens u of u gemeenskap praat. As 'n B&GP het u ook 'n verantwoordelikheid om ander persone wat u dink belang kan stel in of geaffekteer kan word deur die voorgestelde ontwikkeling, in te lig en hulle aan te moedig om te registreer. U kan op enige stadium van die studie registreer, maar dit is belangrik om so gou moontlik te registreer.

Ons verantwoordelikhede

U kan ons telefonies, per landlyn of selfoon, faks, e-pos, registrasievorm of pos kontak deur die kontakbesonderhede aan die einde van hierdie AID te gebruik. Die volgende aksies sal geneem word wanneer enige kommentaar/navraag/vraagstukke ontvang word:

- Die kontakbesonderhede wat deur u voorsien word, sal in die projekdatabasis ingesleutel word en alle verdere inligtingsverklarings sal aan u gestuur word;
- Indien u aan ons navrae of kommentaar stuur, sal ons u skriftelik antwoord;
- Indien u ons skakel, sal ons u besonderhede en navraag/kommentaar aanteken. Sou ons nie in staat wees om u dadelik te antwoord nie, sal ons met verloop van tyd 'n amptelike antwoord verskaf.

Ten einde doeltreffende openbare deelname te verseker, sluit die openbare deelnameproses die volgende stappe in:

FASE 1 – Bestekopnamefase

Die primêre doel van hierdie fase is om aan B&GP's die motivering te bied vir die voorgestelde projek en om kommentaar deur u uit te lok.

Aankondiging van die geleentheid om kommentaar te lewer: B&GP's sal oor die OIS en die voorgestelde projek ingelig word deur middel van:

- briewe aan geïdentifiseerde belanghebbendes;
- advertensie in plaaslike koerante; en
- deur die AID en uitnodigingsbriewe om deel te neem aan die OIS-proses, beskikbaar te stel by geselekteerde openbare plekke wat maklik vir B&GP's toeganklik is.

Vraagstukke wat geëvalueer moet word:

- Fokusgroepvergaderings sal gehou word met groepe belanghebbendes in die voorgestelde studiegebied, insluitend geaffekteerde grondeienaars.
- 'n Werkswinkel vir belanghebbendes sal gehou word met die tersaaklike provinsiale en plaaslike owerheidstrukture (bv. WESSA)

Die doel van hierdie vergaderings is om B&GP's in te lig oor die voorgestelde projek en die OIS-proses. Dit sal ook nog 'n geleentheid bied vir belanghebbendes om enige kommentaar betreffende die voorgestelde projek in te dien.

Alle vraagstukke wat genoem word, hetsy telefonies, deur e-pos, pos of by vergaderings, sal in die Kommentaar en reaksieverslag vervat word.

Omgewingsbestekopnameverslag: 'n Konsep ESR sal saamgestel word, wat die volgende sal bevat:

- 'n voorlopige beskrywing van die voorgestelde projek;
- die potensiële impakte (positief en negatief);
- 'n rekord van alle kommentaar en vraagstukke genoem deur B&GP's; en
- die perke van ondersoek vir die omgewingspesialisstudies.

Die DESR, insluitend die Kommentaar- en Reaksieverslag, sal beskikbaar gemaak word vir openbare kommentaar. Die kommentaartydperk sal 30 opeenvolgende kalenderdae wees. Alle geregistreerde B&GP's sal per brief in kennis gestel word en advertensies sal in plaaslike koerante geplaas word. Na die tydperk vir kommentaar, sal 'n finale ESR opgestel word vir indiening by die Bevoegde Owerheid en afskrifte sal aan belanghebbendes beskikbaar gestel word.

Terugvoering oor vordering aan B&GP's

Alle geregistreerde B&GP's sal 'n persoonlike brief ontvang wat terugvoering gee oor die vordering van die OIS en om diegene te bedank wat tot op datum kommentaar gelewer het en om die volgende stappe in die OIS-proses te beskryf.

FASE 2: Impakstudiefase

Die primêre doel is die volgende:

Konsep EIR/EMP: Nadat die onderskeie omgewingspesialisstudies van die potensiële impakte voltooi is, sal die resultate in die konsep EIR/EMP vervat word.

Openbare oorsig van die konsep EIR/EMP: Die konsep EIR/EMP sal vir openbare oorsig beskikbaar gestel word vir 'n tydperk van 30 opeenvolgende kalenderdae. Dit bied B&GP's 'n geleentheid om te verifieer dat hul kommentaar en knelpunte wat hulle geopper het, na wense aangespreek is en om enige verdere kommentaar te lewer.

'n Tweede rondte Fokusgroepvergaderings en 'n Belanghebbende werkswinkel sal gehou word om die konsep EIR/EMP te hersien. Enige kommentaar wat deur B&GP's geopper word, sal in die finale EIR/EMP vervat word, wat by die Bevoegde Owerheid sal ingedien word.

Finale korrespondensie/kennisgewing: Sodra die Bevoegde Owerheid die RoD uitgereik het, sal B&GP's deur persoonlike briewe in kennis gestel word van die Bevoegde Owerheid se besluit en die prosedure om te volg, sou hulle teen die RoD wil appelleer.

'N OPFRISSING OOR HOE OM DEEL TE NEEM

1. Deur te reageer (per telefoon, faks of e-pos) op ons uitnodiging vir u deelname wat in plaaslike koerante geadverteer sal word.
2. Deur die aangehegte Registrasie- en Kommentaarvorm aan Bohlweki Environmental te pos, te faks of te e-pos.
3. Deur ons telefonies te kontak indien u 'n navraag of kommentaar het of enige verdere projekinligting verlang.
4. Deur die konsep Omgewingsbestekopnameverslag en die konsep Omgewingsimpakverslag binne die 30-dae oorsigtydperk te hersien en daaroor kommentaar te lewer.

ENVIRONMENTAL IMPACT ASSESSMENT

PROPOSED EXTENSION OF THE 765 KV HYDRA SUBSTATION AND THE PROPOSED CONSTRUCTION OF AN ADDITIONAL 765 KV TRANSMISSION POWER LINE BETWEEN THE PROPOSED EXTENDED HYDRA SUBSTATION AND GAMMA SUBSTATION, NORTHERN CAPE PROVINCE

(linking south east of De Aar with the proposed Perseus-Gamma 765kV
Transmission power line - approximately 130 km in length)



REGISTRATION AND COMMENT FORM

YOUR COMMENTS AND QUERIES WELCOME

Please **complete** this Comment Form in full and return to:

Nicolene Venter **or** Prashika Reddy

PO Box 11784, Vorna Valley, MIDRAND, 1686

E-mail: hydra-gamma2@bohlweki.co.za

Phone: (011) 466 3841

Fax: (011) 433 3849

TITLE (Prof/Mr/Mrs)		FIRST NAME	
SURNAME			
CAPACITY (e.g. Secretary/Director)			
ORGANISATION			
POSTAL ADDRESS		POSTAL CODE	
TEL. NO.: ()		CELL NO.:	
FAX NO.: ()		E-MAIL ADDRES:	

Please list the environmental, social and economic issues you would like to be addressed by the EIA process
(use additional pages, if required)

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PLEASE REGISTER THE FOLLOWING PERSON(S) ON THE PROJECT DATABASE:

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IF YOU WISH NOT TO RECEIVE ANY FURTHER INFORMATION REGARDING THIS PROPOSED PROJECT, AND
PREFER TO BE REMOVED FROM THE PROJECT'S DATABASE, PLEASE SIGN BELOW AND RETURN THE FORM
TO THE PUBLIC PARTICIPATION CONSULTANTS WHO'S CONTACT DETAILS ARE PROVIDED ABOVE

SIGNATURE:



(Sien keersy vir Afrikaans)

OMGEWINGSIMPAKEVALUERING

VOORGESTELDE UITBREIDING VAN DIE 765 kV HYDRA-SUBSTASIE EN DIE KONSTRUKSIE VAN 'N ADDISIONELE 765 kV TRANSMISSIE KRAGLYN TUSSEN DIE VOORGESTELDE UITGEBREIDE HYDRA-SUBSTASIE EN GAMMA-SUBSTATIE: NOORD-KAAPROVINSIE

(met 'n suid-oostelike verbinding by De Aar met die voorgestelde Perseus-Gamma
765kV Transmissie kraglyn - ongeveer 130 km in lengte)

REGISTRASIE- EN KOMMENTAARVORM



ONS VERWELKOM U KOMMENTAAR EN NAVRAE

Voltooi asb die Kommentaarvorm **volledig** en stuur terug aan:

Nicolene Venter **of** Prashika Reddy

✉ Posbus 11784, Vorna Valley, MIDRAND, 1686

☎ Foon: (011) 466 3841

✉ E-pos: hydra-gamma2@bohlweki.co.za

✉ Faks: (011) 433 3849

TITEL (Prof/Mnr/Mev)		NOEMNAAM	
VAN			
POSBENAMING (e.g. Sekretaresse / Direkteur)			
ORGANISASIE			
POSADRES		POSKODE	
TEL. NO.:		SEL NO.:	
FAKS NO:		E-POS ADRES:	

Lys asb die omgewings-, sosiale- en ekonomiese aspekte wat u voel deur die OIS proses aangespreek moet word. (U is welkom om addisionele bladsye aan te heg)

REGISTREER ASSEBLIEF DIE VOLGENDE PERSOON/PERSONE OP DIE PROJEK SE DATABASIS:

Naam:	Organisasie:		
Kontakinligting:			
Adres:			
Tel.:	Faks:	Sel:	
E-pos:			

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EN U VERLANG DAT U INLIGTING VAN DIE PROJEK-DATABASIS VERWYDER MOET WORD, WORD U
VRIENDELIKE VERSOEK OM DIE VORM TE ONDERTEKEN EN TE STUUR AAN DIE OPENBARE DEELNAME
KONSULTANTE WIE SE KONTAKINLIGTING BO-AAN VERSKYN

HANDTEKENING:



(See reverse side for English)