

Cape Town  
1 Century City Drive  
Waterford Precinct  
Century City  
7441

T +27 21 526 9400  
F +27 21 526 9500  
E capetown@aurecongroup.com  
W aurecongroup.com

PO Box 494  
Cape Town  
8000  
Docec: DX 204

10 Januarie 2013

E-pos: [simon.clark@aurecongroup.com](mailto:simon.clark@aurecongroup.com)

Geagte Heer / Dame

**TWEE BEOOGDE 132 KV TRANSMISSIELYNE VIR 'N GEFASEERDE WIND ENERGIE  
AANLEG BY DIE MAANHAARBERG EN DAMFONTEIN TERREINE (DE AAR 1) NABY DE  
AAR, NOORD-KAAP: BESKIKBAARHEID VAN DIE KONSEP BASIESE  
INVLOEDBEPALINGSVERSLAG VIR KOMMENTAAR LEWERING**

**DOS VERWYSSINGS NR: 14/12/16/3/3/1/787  
NEAS VERWYSSINGS NR: DEAE/EA/0001600/2012**

Met hierdie brief word u in kennis gestel van die beskikbaarheid van die Konsep Basiese Invloedbepalingsverslag (BIBV) vir die bogenoemde projek, en word u uitgenooi om enige bekommernisse, steun en / of kommentaar te lewer.

Die Konsep BIBV is beskikbaar vanaf **16 Januarie 2013** tot en met **24 Februarie 2013** vir oorsig en kommentaar by die De Aar Openbare Biblioteek (Stasie straat), by die Emthanjani Munisipaliteit geleë in Voortrekker straat, De Aar en vanaf Aurecon se webblad ([www.aurecongroup.com](http://www.aurecongroup.com) – stel die "Current locator" na Suid-Afrika en volg die "public participant"-skakel). Ter inligting, vind asseblief aangeheg die Uitvoerende Opsomming van die Konsep BIBV. Kontak asseblief vir Aurecon indien u die dokumentasie in 'n ander taal verlang.

Indien u enige kommentaar wil lewer op die Konsep BIBV, of as 'n Belanghebbende en Geëffekteerde Party (B&GP) tot die proses wil registreer, treë asseblief met **Simon Clark** van Aurecon in verbinding per Tel: (021) 526 9400, Faks: (021) 526 9500, E-pos: [simon.clark@aurecongroup.com](mailto:simon.clark@aurecongroup.com) of per pos: Posbus 494, Kaapstad, 8000 voor **24 Februarie 2013**.

Die uwe  
Aurecon



**SIMON CLARK**

Omgewings Praktisyn

Omgewings en Raadgewende Dienste

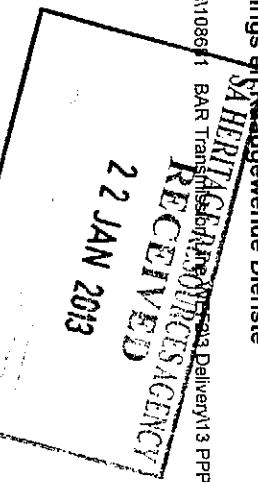
P:\Project\10861 BAR Transmissielynas\Deliver\3 PPT\Letter\De Aar 1\De Aar 1 Ltr IAPs re DBAR-kdb.doc



**KAREN VERSFELD** (Cand. Sci. Nat.)

Omgewings Praktisyn

Omgewings en Raadgewende Dienste



Aurecon South Africa (Pty) Ltd Reg No 1977/0031706Z ISO 9001 Certified  
Board of Directors (opynn) Member of CESA and ASAS  
B&H Tshe (Chairperson), PC Bierach, MG Dilla  
ZB Edrath, AB Geldenhuys, AN Gwagwa, SA le Roux,  
PC Lennard, AW Mohr, GI Ronde, DM Tregardt  
Silver Foundation Member of the  
Green Building Council of  
South Africa

\*Under license from Aurecon Group Brand (Pty) Ltd Reg no 2009203592H

Leading. Vibrant. Global.

Cape Town  
1 Century City Drive  
Waterford Precinct  
Century City  
7441

T +27 21 526 9400  
F +27 21 526 9500  
E capetown@aurecongroup.com  
W aurecongroup.com

# aurecon

PO Box 494  
Cape Town  
8000  
Doceex: DX 204

10 January 2013

Email: [simon.clark@aurecongroup.com](mailto:simon.clark@aurecongroup.com)

Dear Sir/ Madam

**TWO PROPOSED 132 KV TRANSMISSION LINES FOR A PHASED WIND ENERGY FACILITY ON THE MAANHAARBERG AND DAMFONTEIN SITES (DE AAR 1) NEAR DE AAR, NORTHERN CAPE: AVAILABILITY OF THE DRAFT BASIC ASSESSMENT REPORT FOR COMMENT**

**DEA REFERENCE: 14/12/16/3/3/1/787**

**NEAS REFERENCE: DE/MEIA/0001600/2012**

This letter serves to notify you that the Draft Basic Assessment Report (Draft BAR) for the above-mentioned project is available and to invite you to raise related comments or concerns.

The Draft BAR will be available from **16 January 2013** till **24 February 2013** for review and comment at the De Aar (Station Road) Public Library, the Emthanjeni municipal offices in Vootrekker Road, De Aar and accessible from the Aurecon website ([www.aurecongroup.com](http://www.aurecongroup.com) – change "*current location*" to South Africa and follow the "*public participation*" - link). Enclosed, please find the Executive Summary of the Draft BAR for your information. Please contact Aurecon should you require the documentation in another language.

If you would like to submit any comments or concerns on the Draft BAR or to register as an Interested and Affected Party for this process please contact **Simon Clark** of Aurecon on Tel: (021) 526 9400, Fax: (021) 526 9500, [simon.clark@aurecongroup.com](mailto:simon.clark@aurecongroup.com) or PO Box 494, Cape Town, 8000 before **24 February 2013**.

Yours sincerely  
Aurecon



**SIMON CLARK**

Practitioner: Environmental & Advisory Services  
P:\projects\106881 BAR Transmission Line WEF2\3 Delivery\13 PPT\letters\De Aar 1\De Aar 1 Lit 14Ps re DBAR.doc



**KAREN VERSFELD** (Cand. Sci. Nat).

Practitioner: Environmental & Advisory Services

Aurecon South Africa (Pty) Ltd Reg No 1977/00371/07  
Board of Directors (opzet)  
BMH Tshe (Chairperson), PC Bliersch, MG Dillea,  
ZB Ebrahim, AB Geldenhuys, NN Gwagwa, SA le Roux,  
PC Lombard, AW Mohr, GT Rohde, DM Tregardt

ISO 9001 Certified  
Member of CESA and ASAS  
Silver Founding Member of the  
Green Building Council of  
South Africa

\*Under license from Aurecon Group Brand (Pty) Ltd Reg no 2009035924

Leading. Vibrant. Global.



**MULLILO**  
RENEWABLE ENERGY

JANUARY 2013



**ENVIRONMENTAL IMPACT ASSESSMENT  
TWO PROPOSED 132 KV TRANSMISSION LINES FOR A PHASE  
WIND ENERGY FACILITY ON THE MAANHAARBERG AND  
DAMFONTEIN SITES (DE AAR 1) NEAR DE AAR, NORTHERN CAPE  
DEA REFERENCE: 14/12/16/33/1/787 AND NEAS REFERENCE: DEA/EIA/0001600/2011**

---

**EXECUTIVE SUMMARY: DRAFT BASIC ASSESSMENT REPORT**

**Background**

Mullilo Renewable Energy (Pty) Ltd (Mullilo) proposes to construct two 132kV overhead power lines in order to connect a two-phased Wind Energy Facility (WEF), to be developed to the west of De Aar in the Northern Cape, to the national grid. The proposed transmission lines would consist of a single servitude, approximately 25.6km in length, which would feed into Eskom's proposed Eskom/PV3 substation.

In terms of the National Environmental Management Act (NEMA) (Act 107 of 1998) as amended, the proposed project trigger General Notice (GN) 544 items 10, 11 and GN 546 item 12, which require authorisation from the competent environmental authority, namely the Department of Environmental Affairs (DEA), before they can be undertaken. DEA's decision will be based on the findings of this Basic Assessment process. Aurecon South Africa (Pty) Ltd (Aurecon) has been appointed by Mullilo to undertake the requisite environmental process.

**Proposed project**

The De Aar 1 WEF (DEA REF. NO. 12/12/20/1651), as authorised by the DEA on 18 August 2011, would consist of approximately 65 wind turbines with a generation capacity of 100MW. In order to connect the approved WEF with the PV3 substation, the construction of transmission lines are required. The proposed transmission lines would consist of two phases with the first line connecting the Maanhaarberg substation to a new Eskom/PV3 substation (Phase 1) and a second transmission line (two alternative routes) connecting the Damfontein WEF substation to the PV3 substation (Phase 2), via the Maanhaarberg (please refer to Figure 1). The new Eskom/PV3 substation is part of a new ring network proposed by Eskom as part of renewable energy projects in the De Aar area transmission grid.

The proposed transmission lines would consist of the following structures including poles, towers and structures:

- monopole structure including
- towers
- poles

and the statutory

**Purpose of this document**

This document provides a summary of the Draft Basic Assessment Report (DBAR), as required in terms of the National Environmental Management Act (No. 107 of 1998) (NEMA) Environmental Impact Assessment (EIA) Regulations (2 August 2010, as amended). This document provides an assessment of the potential environmental (socio-economic and biophysical) impacts associated with the proposed two 132kV overhead power lines in order to connect a previously approved Wind Energy Facility to the national grid. It further describes the public participation process undertaken to date, and the feasible and reasonable project alternatives that have been assessed.

Please review this Summary Document and, preferably, the full DBAR, and submit your comments on the proposed project by **24 February 2013**. All EIA documents will be available for review and comment at the De Aar Public Library, the Erithantien municipal offices and on the Aurecon website ([www.aurecongroup.com](http://www.aurecongroup.com) change "Current Location" to South African and follow the "public participation" link). To comment, write a letter call, fax or e-mail Aurecon:

Simon Clark / Karen Versteid  
P O Box 494, Cape Town, 8000  
Tel: (021) 526 6057/37  
Fax: (021) 526 9500  
Email: [simon.clark@aurecongroup.com](mailto:simon.clark@aurecongroup.com)  
[karen.versteid@aurecongroup.com](mailto:karen.versteid@aurecongroup.com)



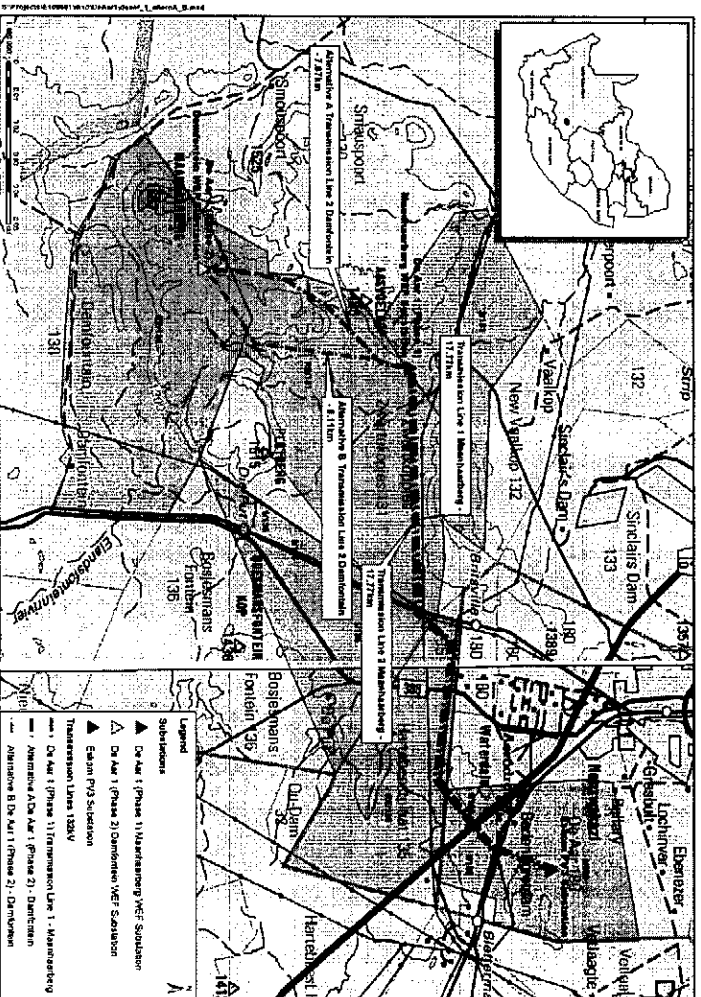


Figure 1: Locality map indicating the transmission line alternatives.

### Need and Desirability

The transmission line would facilitate the connection for the WEF to provide renewable energy to the national grid. The need for renewable energy is well documented and reasons for the desirability of wind energy include:

- Reducing the demand on scarce resources, such as water;
- Meeting nationally appropriate emission targets in line with global climate change commitments as the generation of electricity from the WEF produces no pollution per MW/h;
- Enhancing energy security by diversifying generation;
- Job opportunities and contribution to social upliftment; and
- Local economic development.

### Site description

Proposed transmission lines would run in parallel from the Maanhaarberg 132kV substation to the PV3 substation, which is located approximately 25km north-west of the WEF site. The lines would traverse the following farm portions to the Eskom/PV3 substation: Damfontein Re/138 (Remaining Extents), Zwartekopies Re/131 (Remaining Extents), Zwartekopies 2/131 (Remaining Extents), Fountain Rem/1/136 (Remainder Extents), Haartebeesplaat Re/135 (Remainder Extents), and Rem/1/180 (Refer to for Figure 1 and Appendix A for the Locality Map). The landowners have entered into agreements with Mulilo. These farms are zoned for agricultural use and are currently used for grazing sheep, goats and cattle.

### Project alternatives

The following feasible alternatives were assessed in the Draft BAR:

**Site alternatives:**

- **Phase 1**
  - Transmission line 1 (required for both Alternative A and B) Maanhaarberg (indicated in the locality map) is approximately 17.8km from the Maanhaarberg substation to the Eskom/PV3 substation.
- **Phase 2**
  - Alternative A transmission line 2 (indicated in dark blue on the locality map) is approximately 25.6km from the Damfontein substation via the Maanhaarberg substation to the Eskom/PV3 substation.
  - Alternative B (preferred) transmission line 2 (indicated in light blue on the locality map) is approximately 25.84km from the Damfontein substation via the Maanhaarberg substation to the Eskom/PV3 substation.

**Layout alternatives:**

- None were considered as the layout alternatives (i.e. pylon positions) will only be determined during implementation phase and would be dependent on the Independent Power Producer bid process approval as required by Eskom.

**Activity alternatives:**

- Transmission of electricity generated at the Wind Energy Facilities; and
- "No-go" alternative.

**Technology alternatives:**

- Single circuit Monopole 266 or Double circuit Monopole 277.

### Identified Impacts

During this assessment the following potential significant environmental impacts have been identified:

• **Construction phase impacts on the biophysical and socio-economic environments:**

- Impact on Ecology
- Impact on avifauna
- Impact on Freshwater
- Impact on Agriculture
- Impact on Heritage resource
- Impact on Transport
- Impact on Dust
- Impact on Visual

• **Operational phase impacts on the biophysical environment:**

- Impact on Ecology
- Impact on avifauna
- Impact on Freshwater
- Impact on Agriculture
- Impact on Heritage resource
- Impact on Transport
- Impact on Dust
- Impact on Visual
- Socio-economic
- Recreation

**Table 1: Significance rating of potential impacts that might occur during the construction phase**

Impact	Significance rating	
	Without mitigation	With mitigation
<b>Alternative A and B (Phase 1 and 2)</b>		
<b>Construction phase</b>		
<b>Impact on Ecology</b>		
• Direct impact	Low- Medium (-)	Very low (-)
• Indirect impact- <i>none identified</i>		
• Cumulative impact- <i>none identified</i>		
<b>Impact on Avifauna</b>		
• Direct impact	Medium- High (-)	Medium (-)
• Indirect impact - <i>none identified</i>	-	-
• Cumulative impact- <i>none identified</i>		
<b>Impact on Freshwater</b>		
• Direct impact	Low (-)	Very low (-)
• Indirect impact	Low (-)	Very low (-)
• Cumulative impact	Low (-)	Very low (-)
<b>Impact on agricultural potential</b>		
• Direct impact	Very low (-)	No mitigation possible
• Indirect impact - <i>none identified</i>	-	-
• Cumulative impact - <i>none identified</i>	-	-
<b>Impact on heritage resources</b>		
• Direct impact	Low- Medium (-)	No mitigation possible
• Indirect impact - <i>none identified</i>	-	-
• Cumulative impact - <i>none identified</i>	-	-
<b>Impact on transport</b>		
• Direct impact	Low (-)	Low (-)
• Indirect impact - <i>none identified</i>	-	-
• Cumulative impact - <i>none identified</i>	-	-
<b>Impact on dust</b>		
• Direct impact	Low (-)	Very low (-)
• Indirect impact - <i>none identified</i>	-	-
• Cumulative impact - <i>none identified</i>	-	-
<b>Impact on Visual</b>		
Direct impact	Low (-)	Low (-)
Indirect impact - <i>none identified</i>	-	-
Cumulative impact	Medium (-)	Low (-)
<b>No-Go option:</b>		
• Direct Impact	High (-)	High (-)
• Indirect Impact	High (-)	High (-)
• Cumulative impact	High (-)	High (-)
<b>Timing of potential impacts that might occur during the operational phase</b>		
Impact	Significance rating	
	Without mitigation	With mitigation
<b>Impact on Ecology</b>		

• Direct impact	Medium (-)	Very low (-)
• Indirect impact - <i>none identified</i>	-	-
• Cumulative impact - <i>none identified</i>	-	-
<b>Impact on Avifauna</b>		
• Direct impact	Medium- High (-)	Medium (-)
• Indirect impact - <i>none identified</i>	-	-
• Cumulative impact- <i>none identified</i>		
<b>Impact on Freshwater</b>		
• Direct impact	Low (-)	Very low (-)
• Indirect impact - <i>none identified</i>	-	-
• Cumulative impact- same as in construction phase	-	-
<b>Impact on agricultural potential</b>		
• Direct impact	Very low (-)	Very low (-)
• Indirect impact - <i>none identified</i>	-	-
• Cumulative impact - <i>none identified</i>	-	-
<b>Impact on heritage resources</b>		
• Direct impact	Low- Medium (-)	No mitigation possible
• Indirect impact - <i>none identified</i>	-	-
• Cumulative impact - <i>none identified</i>	-	-
<b>Impact on Visual</b>		
• Direct impact	Low (-)	Low (-)
• Indirect impact - <i>none identified</i>	-	-
• Cumulative impact	Medium (-)	Medium (-)
<b>Impact on socio-economic</b>		
• Direct impact	Medium (+)	Medium (+)
• Indirect impact	Medium (+)	Medium (+)
• Cumulative impact	Medium (+)	Medium (+)
<b>Impact on economic (Energy Generation)</b>		
• Direct impact	Low (+)	Low (+)
• Indirect impact - <i>none identified</i>	-	-
• Cumulative impact	High (+)	High (+)
<b>Impact on climate change</b>		
• Direct impact	Low (+)	Low (+)
• Indirect impact	Low (+)	Low (+)
• Cumulative impact	Medium (+)	Medium (+)

measures are recommended to manage the identified impacts associated with the proposed construction and operation phases and is described in the Draft BAR.

### How you can get involved

This is a key component of this EIA process and enables Interested and Affected Parties (IAPs) to provide input into the EIA process. IAPs include: affected landowners; national-, provincial- and local authorities; environmental NGOs; and communities), to identify their issues and concerns, relating to the proposed project. The public participation process will be conducted through the following aspects:

- In the local newspapers, the *Volksblad* and *The Echo*, on 15 and 18 February 2013 and on the website of the project.
- In the broader public of the initiation of the EIA and inviting the public to provide input into the EIA process.
- From 2013 till 24 February 2013;

- The Draft BAR was lodged for review and comment at the De Aar (Station Road) F&E and the Emthanjeni municipal offices in Vootrekker Road, De Aar.
- All documentation was made available from the Aurecon website ([www.aurecongroup.co.za](http://www.aurecongroup.co.za)) change "current location" to South Africa and follow the "public participation" link).
- Potential I&APs were notified of the period available to submit their comments or concerns on DBAR by means of letters sent by post, fax or e-mail. I&APs have 40 days, **24 February 2013**, to submit their written comments on the DBAR. Cognisance will be taken of all comments in compiling the final report, and the comments, together with the project team and proponent's responses thereto, will be included in the Final Basic Assessment Report (FBAR).

### Way forward

All written comments can be submitted to Aurecon (a Response Form is attached, for your convenience). All issues raised via written correspondence will be summarised into a Comments and Response Report with responses from the project team and will be included as an annexure to the FBAR.

Comments can be sent to Aurecon via telephone, fax, email or post to the following contact persons:

**Table 3: Contact details of the project team**

Basic Assessment project team: Transmission Lines- De Aar 1	
	Simon Clark
Tel	(021) 526 6034
Fax	(021) 526 9500
Email	<a href="mailto:simon.clark@aurecongroup.com">simon.clark@aurecongroup.com</a>
Postal address	PO Box 494, Cape Town, 8000
	Karen Versfeld
	(021) 526 5737
	(021) 526 9500
	<a href="mailto:karen.versfeld@aurecongroup.com">karen.versfeld@aurecongroup.com</a>
	PO Box 494, Cape Town, 8000

On completion of the public comment period, the Basic Assessment Report will be finalised and all comments received from I&APs will be incorporated into the final report. Registered I&APs will have 21 days to comment on the FBAR. The FBAR will be submitted to DEA for their review and decision regarding acceptance of the report. The DEA will review the FBAR, who must, do one of the following:

- Accept the FBAR;
  - Notify the applicant that the report has been referred for specialist review;
  - Request amendments to the report; or
  - Reject the report if it does not materially comply with regulations.
- If the report is accepted, DEA must within 45 days:
- Grant authorisation in respect of all or part of the activity applied for; or
  - Refuse authorisation in respect of all or part of the activity.

DEA issues their decision on the proposed project, all registered I&APs on the project database will be notified of the outcome of the decision, as well as the Appeal process, within 12 calendar days of the decision should an Environmental Authorisation be issued.

### List of Acronyms

DBAR	Draft Basic Assessment Report
DEA	Department of Environmental Affairs
EIA	Environmental Impact Assessment
FBAR	Final Basic Assessment Report
I&AP	Interested and Affected Party
kV	Kilovolt
MW	Megawatts
NEMA	National Environmental Management Act



**TWEE BEOOGDE 132 KV TRANSMISSIELE YNE VIR 'N GEFASSEerde  
WIND ENERIE AANLEG BY DIE MAANHAARBERG EN DAMFONTEIN  
TERREINE (DE AAR 1) NABY DE AAR, NOORD-KAAP**

DOS VERWYSSINGS NR: 14/12/16/3/3/1/787 EN NEAS VERWYSSINGS NR:

DEA/EIA/0001600/2012



JANUARIE 2013



**UITVOERENDE OPSOMMING: KONSEP BASIESE  
INVLOEDBEPALINGSVERSLAG**

Agtergrond

Mullilo Hernubare Energie (Edms) Bpk (Mullilo) beoog om twee 132kV oortooise transmissieelyne op te rig om die gefasseerde Wind Energie Aanleg (WEA) ontwikkeling, wat Wes van De Aar in die Noord-Kaap beplan word, te verbind met die nasionale netwerk. Die beoogde transmissieelyne sal 'n enkele serwituut bestaan, ongeveer 25,6km lank, wat sal aansluit by Eskom se beplande Eskom / PV3 substasie.

In terme van die Wet op Nasionale Omgewingsbestuur (WNOB) (Wet nr 107 van 1998) soos gewyssid, het die beoogde ontwikkeling Goewernment Kennisgewing (GK) 544 Aktiwiteit Nr.10 en 11, en GK 546 Aktiwiteit Nr. 12 tot gevolg, en benodig dus goedkeuring van die bekwame owerheid, naamlik die Nasionale Department van Omgewingssake (DOS), voordat die aktiwiteite onderneem mag word. Die DOS se besluit sal gebaseer word op die uitkoms van hierdie Basiese Invloedbepalingsproses. Aurecon Suid-Afrika (Edms) Bpk (Aurecon) is aangestel deur Mullilo om die bogenoemde proses te onderneem.

**Voorgestelde projek**

Die De Aar 1 WEA (DOS Verw. Nr. 12/12/20/1651), soos goedgekeur deur die DOS op 18 Augustus 2011, sal bestaan uit ongeveer 65 wind turbines met oortooise kapasiteit van 100MW. Om hierdie beoogde WEA te verbind met die PV3 substasie, word daar transmissieelyne benodig. Die bestaende transmissieelyne sal bestaan uit twee 132kV oortooise transmissieelyne wat oortooise die eerste lyn wat die Maanhaarberg verbind met die nuwe Eskom / PV3 substasie sal verbind en die tweede transmissieelyne (tweede roetes) wat die Damfontein WEA verbind met die Eskom / PV3 substasie die Maanhaarberg Substasie (sien Skema 1.1). Die nuwe Eskom / PV3 substasie sal oortooise die ringnetwerk voorgestel deur die De Aar area, te verbind met die oortooise netwerk.

**Doel van hierdie dokument**

Hierdie dokument is 'n opsomming van die Konsep Basiese Invloedbepalingsverslag (BIBV), soos veries in terme van die Wet op Nasionale Omgewingsbestuur (WNOB) (Wet nr 107 van 1998) Omgewingsinvloedbepaling (OIB) Regulasies (2 Augustus 2010), soos gewyssid). Hierdie dokument ondersoek die potensiele omgewings (sosiale, ekonomiese en biologiese) impakte geassosieer met die voorgestelde twee 132kV oortooise transmissieelyne om die reeds goedgekeurde WEA te verbind met die nasionale netwerk. Dit beskryf verder ook die proses van openbare deelname tot dusver, asook 'n lys van moontlike en redelike projek-alternatiewe wat ondersoek is. Lees asb. hierdie Opsomming Dokument, en verkieslik die volledige Konsep BIBV deur en dien u kommentaar op die beoogde projek teen **24 Februarie 2013** in. Alle OIB-dokumentasie is beskikbaar vir oorsig en kommentaarlewering by die De Aar Openbare Biblioteek, die Erftreangeri Munisipale Kantore en op Aurecon se webblad ([www.aurecongroup.com](http://www.aurecongroup.com) - verander "Current Location" na "South Africa" en volg die "Public Participation"-stakeel). Lewer kommentaar deur 'n brief te skryf, te bel of 'n e-pos aan [Aurecon](mailto:Aurecon) te stuur.

**Simon Clark / Karen Versfeld**

Posbus 494, Kaapstad, 8000

Tel: (021) 528 6034/37

Faks: (021) 528 9500

E-pos: [simon.clark@aurecongroup.com](mailto:simon.clark@aurecongroup.com)

[karen.versfeld@aurecongroup.com](mailto:karen.versfeld@aurecongroup.com)

- 132kV staal enkelpaal strukture insluitend fondasies en isoleerders
  - Toegangspaaie; en
  - Die skoonmaak van die lyn en serwitut om die wetlike vereistes na te kom.
- Figuur 1 : Liggingkaart wat die transmissielyn alternatiewe aandui.**

### **Behoeftes en Wenslikheid**

Die transmissielyn sal die konneksie vir die WEA verskat sodat hernubare energie verskat kan word aan die nasionale netwerk. Die behoefte aan hernubare energie is goed gedokumenteer en redes vir die behoefte vir wind energie sluit in:

- Verminder druk op skaars hulpbronne, soos byv. water;
- Bereik nasionale gepaste besoedeling vermindering doelwitte wat in lyn is met die globale klimaatsverandering verpligtinge aangesien die opwek van krag deur die WEA geen besoedeling per MW/h produseer nie;
- Werksgeleenthede en bydrae tot sosiale verryking; en
- Plaaslike ekonomiese ontwikkeling.

### **Terrein beskrywing**

Die twee voorgestelde transmissielyn sal parallel loop tot mekaar vanaf die Maanhaarberg 132kV substasie na die Eskom / PV3 substasie, wat ongeveer 25km noord-wes van die WEA geleë is. Die serwitute sal die volgende plaas gedeeltes kruis op pad na Eskom / PV3 substasie: Damfontein RE/138 (Restant); Zwartekopies RE/131 (Restant); Zwartekopies 2/131, Bosjesmans Fountain 1/136 (Restant); Hartebeesplaat RE/135 (Restant); en De Aar 1/180 (sien asselief Figuur 1 vir die Liggingkaart). Die grondeienaars van die plase wat die serwitut sal kruis, het reeds ooreenkomste met Mullio gesluit. Hierdie plase is gesoneer vir Landbou en word tans gebruik vir weivelde deur skape, bokke en bees.

### **Projek alternatiewe**

Die volgende wesenlike alternatiewe was geassesseer in die Konsep BIBV:

#### **Terrein alternatiewe:**

- **Fase 1**
  - Transmissielyn 1 (benodig vir beide Alternatief A en B) Maanhaarberg (aangedui in rooi op die liggingkaart) is ongeveer 17.8km van die Maanhaarberg substasie tot by Eskom / PV3 substasie.
- **Fase 2**
  - Alternatief A transmissielyn 2 (aangedui in donker blou op die liggingkaart) is ongeveer 25.6km van die Damfontein substasie via die Maanhaarberg substasie na die Eskom / PV3 substasie.
  - Alternatief B (voorkeur) transmissielyn 2 (aangedui in ligte blou op die liggingkaart) is ongeveer 25.6km van die Damfontein substasie via die Maanhaarberg substasie na die Eskom / PV3 substasie.

Die plase wat deur die serwitute gekruis word, is as in die figuur 1 aangedui. Die plase wat was oorweeg nie aangesien die spantoring posisies eers bepaal sal word. Die serwitute sal die volgende plase gekruis. Die spantoring posisies sal deur Eskom.

- "Geen-ontwikkeling" alternatief.

**Technologie alternatiewe:**

- Enkel stroombaan enkelpaal 266; of
- Dubbel stroombaan enkelpaal 277.

**Identifiseerde impakte**

Tydens hierdie assessering was die volgende potensiele beduidende omgewingsimpakte geïdentifiseer:

- **Konstruksie fase impakte op die biofisiese en sosio-ekonomiese omgewings:**
  - Impak op ekologie
  - Impak op voëllewe
  - Impak op varswater
  - Impak op landbou potensiaal
  - Impak op erfenishulpbronne
  - Impak op vervoer
  - Impak op lugkwaliteit
  - Visuele impak
- **Operasionele fase impakte op die biofisiese omgewing:**
  - Impak op ekologie
  - Impak op voëllewe
  - Impak op varswater
  - Impak op landbou
  - Impak op erfenishulpbronne
  - Impak op vervoer
  - Impak op sosio-ekonomie
  - Impak op kragopwekking
  - Impak op klimaatsverandering

**Tabel 1: Beduidendheids waarde van maontlike impakte wat kan plaasvind tydens die konstruksie fase**

Alternatiewe A en B (Fase 1 en 2)	Impak	Beduidendheids waarde	
		Met mitigasie	Sonder mitigasie
<b>konstruksie fase</b>			
<b>Impak op ekologie</b>			
• Direkte impak		Laag- Medium (-)	Baie laag(-)
• Indirekte impak - geen geïdentifiseer			
• Kumulatiewe impak - geen geïdentifiseer			
<b>voëllewe</b>			
• Direkte impak		Medium- Hoog (-)	Medium (-)
• Indirekte impak – geen geïdentifiseer		-	-
• Kumulatiewe impak – geen geïdentifiseer			
<b>varswater</b>			
<b>Impak op varswater</b>			
• Direkte impak		Laag (-)	Baie laag (-)
• Indirekte impak		Laag (-)	Baie laag (-)
• Kumulatiewe impak		Laag (-)	Baie laag (-)
<b>Impak op landbou potensiaal</b>			
• Direkte impak		Baie laag(-)	Geen maontlik mitigasie

• Indirekte impak – geen geïdentifiseer	-	-
• Kumulatiewe impak – geen geïdentifiseer	-	-
<b>Impak op erfensishulpbronne</b>		
• Direkte impak	Laag- Medium (-)	Geen mitgasie moontlik
• Indirekte impak – geen geïdentifiseer	-	-
• Kumulatiewe impak – geen geïdentifiseer	-	-
<b>Impak op vervoer</b>		
• Direkte impak	Laag (-)	Laag (-)
• Indirekte impak – geen geïdentifiseer	-	-
• Kumulatiewe impak – geen geïdentifiseer	-	-
<b>Impak op lugkwaliteit</b>		
• Direkte impak	Laag (-)	Bate laag (-)
• Indirekte impak – geen geïdentifiseer	-	-
• Kumulatiewe impak – geen geïdentifiseer	-	-
<b>Visuele Impak</b>		
• Direkte impak	Laag (-)	Laag (-)
• Indirekte impak – geen geïdentifiseer	-	-
• Kumulatiewe impak	Medium (-)	Laag (-)
<b>Geen- ontwikkeling opsie</b>		
• Direkte impak	Hoog (-)	Hoog (-)
• Indirekte impak	Hoog (-)	Hoog (-)
• Kumulatiewe impak	Hoog (-)	Hoog (-)

Tabel 2: Beduidendheids waarde van moontlike impakte wat kan plaasvind tydens die konstruksie fase operasionele fase

	Beduidendheids waarde	
	Met mitgasie	Sonder mitgasie
<b>Alternatiewe A en B (Fase 1 en 2)</b>		
<b>Operasionele fase</b>		
<b>Impak op ekologie</b>		
• Direkte impak	Medium (-)	Bate laag (-)
• Indirekte impak – geen geïdentifiseer		
• Kumulatiewe impak – geen geïdentifiseer		
<b>Impak op voëllewe</b>		
Direkte impak	Medium- Hoog (-)	Medium (-)
Indirekte impak – geen geïdentifiseer	-	-
Kumulatiewe impak – geen geïdentifiseer		
<b>Impak op varswater</b>		
• Direkte impak	Laag (-)	Bate laag (-)
• Indirekte impak – geen geïdentifiseer	-	-
• Kumulatiewe impak- selfde as in konstruksiefase	-	-
<b>Impak op landbou potensiaal</b>		
• Direkte impak	Bate laag (-)	Bate laag (-)
• Indirekte impak – geen geïdentifiseer	-	-
• Kumulatiewe impak – geen geïdentifiseer	-	-
<b>Impak op erfensishulpbronne</b>		
• Direkte impak	Laag- Medium (-)	Geen mitgasie moontlik
• Indirekte impak – geen geïdentifiseer	-	-

• Kummatiewe impak – geen geïdentifiseer	-	-
<b>Impak op lugkwaliteit</b>		
• Direkte impak	Laag (-)	Bate laag (-)
• Indirekte impak – geen geïdentifiseer	-	-
• Kummatiewe impak – geen geïdentifiseer	-	-
<b>Visuele impak</b>		
• Direkte impak	Laag (-)	Laag (-)
• Indirekte impak – geen geïdentifiseer	-	-
• Kummatiewe impak	Medium (-)	Laag (-)
<b>Geen-ontwikkeling opsie</b>		
• Direkte impak	Hoog (-)	Hoog (-)
• Indirekte impak	Hoog (-)	Hoog (-)
• Kummatiewe impak	Hoog (-)	Hoog (-)
<b>Impak op sosio-ekonomie</b>		
• Direkte impak	Medium (+)	Medium (+)
• Indirekte impak	Medium (+)	Medium (+)
• Kummatiewe impak	Medium (+)	Medium (+)
<b>Impak op ekonomie (Energie Opwekking)</b>		
• Direkte impak	Laag (+)	Laag (+)
• Indirekte impak – geen geïdentifiseer	-	-
• Kummatiewe impak	Hoog (+)	Hoog (+)
<b>Impak op klimaatverandering</b>		
• Direkte impak	Laag (+)	Laag (+)
• Indirekte impak	Laag (+)	Laag (+)
• Kummatiewe impak	Medium (+)	Medium (+)

Mitigasiemaatreëls word voorgestel om die bogenoemde geïdentifiseerde impakte, geassosieer met die beoogde transmissielyne tydens konstruksie en operisionele fase, aan te spreek en word beskryf in die Konsep BIBV.

### Hoe kan u betrokke raak

Publieke deelname is 'n sleutel komponent van hierdie OIB-proses en stel Belanghebbende en of affekteerde Partye (G&BPe) (bv. Direk geaffekteerde grondeienaars; nasionale-, provinsiale- en plaaslike owerhede; omgewingsgroepe; burgerlike verenigings; en gemeenskappe) in staat om hul kommentare en ontvattende kwessies en bekommernisse met betrekking tot die voorgestelde aktiwiteite, wat hul voelings en belangings spreek moet word in die OIB proses, te lig.

Die volgende aspekte was onderneem tot op hede as deel van die openbare deelname proses:

• Die eerste openbare konsultasie was geplaas in plaaslike koerante, die *Volksblad* en *The Echo*, op 15 Januarie 2013 en 18 Januarie 2013 onderskeidelik, om die wyer publiek van die aanvang van die OIB proses in kennis te stel en hul uit te nooi om hulself te registreer as B&GPe vanaf **16 Januarie 2013** tot en met **1 Februarie 2013**;

• Die tweede openbare konsultasie is geplaas by Emthanjeni plaaslike munisipaliteit en De Aar Openbare Konsultasie Sentrum.

• Die konsep BIBV was beskikbaar gestel vir oorsig en kommentaarlewering by die De Aar (Stasie) Openbare Konsultasie Sentrum, die plaaslike biblioteek en die Emthanjeni munisipale kantore in Vootrekker Straat, De Aar. Die konsep BIBV was ook beskikbaar gemaak vanaf die Aurecon webtuiste ([www.aurecon.co.za](http://www.aurecon.co.za)) deur middel van die verander "Current Location" na "South Africa" en volg die "Public Comment" knoppie.

• Die tweede en derde periode beskikbaar vir indiening van kommentaar is die tydperk van 15 Januarie 2013 tot 1 Februarie 2013, per pos, faks of e-pos, hul kommentaar indien.

B&GPe het 40 dae, tot en met **24 Februarie 2013**, om hul geskrewe kommentaar op die BIBV in te dien. Alle kwessies wat skriftelik onthang word, sal in ag geneem word in die finale verslag van die Finale BIBV. Alle kommentaar, tesame met die projekspan se antwoorde daarop, sal gesluit word in die Finale BIBV.

#### **Pad Vorentoe**

Alle geskrewe kommentaar kan gestuur word aan Aurecon ('n terugvoeringsblad is hierby aangeheg vir u gemak). Alle kommentaar geïg sal opgesom word in 'n Kommentaar-en-Antwoordblad met terugvoer van die projek span en sal aangeheg word aan die Finale BIBV.

Kommentaar kan gestuur word aan Aurecon via telefoon, faks, e-pos of pos aan die volgende persone:

**Tabel 3: Kontakbesonderhede van die projekspan**

<b>OIB projek span Transmissielyne - De Aar 1</b>		
<b>Tel</b>	<b>Simon Clark</b> (021) 526 6034	<b>Karen Versteid</b> (021) 526 5737
<b>Faks</b>	(021) 526 9500	(021) 526 9500
<b>E-pos</b>	<a href="mailto:simon.clark@aurecongroup.com">simon.clark@aurecongroup.com</a>	<a href="mailto:karen.versteid@aurecongroup.com">karen.versteid@aurecongroup.com</a>
<b>Pos adres</b>	Postbus 494, Kaapstad, 8000	Postbus 494, Kaapstad, 8000

Na afloop van die openbare kommentaar tydperk, sal die Finale BIBV gefinaliseer word, en alle kommentaar vanaf B&GPe sal in die verslag opgeneem word. Geregistreerde B&GPe sal 21 dae hê om kommentaar op die Finale BIBV te lig. Die Finale BIBV sal dan daarna by die DOS ingedien word vir oorsig en 'n besluitneming. Die DOS sal na die oorsig van die Finale BIBV, een van die volgende doen:

- (i) Die Finale BIBV aanvaar;
- (ii) Die aansoeker in kennis stel dat die verslag verwys is na 'n spesialis vir oorsig;
- (iii) Aanpassings aan die verslag vereis; of
- (iv) Die verslag afkeer indien dit nie voldoen aan die Regulasies nie.

Indien die DOS die verslag aanvaar, moet hul binne 45 dae:

- (a) Goedkeuring vir die hele projek of 'n gedeelte van die aktiwiteit waarvoor aansoek gedoen word uitreik; of
- (b) Weier om goedkeuring uitreik vir die hele projek of 'n gedeelte daarvan.

Indien die DOS hul besluit op die beoogde projek geneem het, sal alle B&GPe op die projek databasis in kennis gestel word van die uitkoms van hul besluit, sowel as die appèl prosedure, binne 12 kalender dae na die datum van die besluitneming, indien die DOS besluit om 'n Omgewingsmagtiging uitte reik.

#### **Lys van Afkortings**

B&GP	Belanghebbende en Geatfekteerde Party
DOS	Departement van Omgewingsake
FBIBV	Finale Basiese Invloedbepalingsverslag
KBIBV	Konsep Basiese Invloedbepalingsverslag
km	Kilometer
kV	Kilovolt
MW	Megawatt
OIB	Omgewingsinvloedbepalingswet
WNOB	Wet op Nasionale Omgewingsbestuur