ENVIRONMENTAL IMPACT ASSESSMENT (EIA) FOR A PROPOSED 400kV TRANSMISSION LINE BETWEEN PERSEUS SUB-STATION (DEALESVILLE) AND MERCURY SUB-STATION (VIERFONTEIN), FREE STATE PROVINCE

DRAFT MINUTES OF A FOCUS GROUP MEETING

07 AUGUST 2003 AT 10:00

SENWES HALL, WESSELSBRON

THESE MINUTES INCLUDE A PRESENTATION REGARDING THE PROPOSED DEVELOPMENT THAT WAS NOT GIVEN AT THE MEETING. THE REASON FOR THE INCLUSION IS IN ORDER THAT ATTENDANTS MAY HAVE THE MOST UP TO DATE INFORMATION REGARDING THE PROPOSED DEVELOPMENT.

DRAFT MINUTES FOR COMMENT

1. OPENING AND WELCOME

MS BERNADETTE VOLLMER (SEF)

Ms. Bernadette Vollmer of Strategic Environmental Focus (SEF) welcomed Messrs. Zeelie (Department of Agriculture) and Van Staden (DWAF: SandVet Water Scheme). She stated that most of the discussion will take place around the maps so that the EIA team and Eskom may get specific information regarding the situation on the ground.

Ms. Vollmer introduced the various representatives from Eskom and the consultants.

- From Eskom: Transmission:
  - Mr Levy Maduse – Project Leader;
  - Ms Carol Streaton – Public Participation Advisor; and
  - Mr Koos van der Merwe – Negotiator.
- From the Consultants:
  - Ms Marita Oosthuizen – Public Participation Consultant.

2. PURPOSE OF THE MEETING

MS BERNADETTE VOLLMER (SEF)

Ms. Vollmer explained that a need for a 400kV transmission line running from the Mercury to Perseus substations was identified by Eskom's Transmission Department. In accordance with

environmental legislation, an Environmental Impact Assessment (EIA) had to be conducted. Strategic Environmental Focus is conducting this study and has already completed the first phase, namely the Scoping Study. As part of this study, three potential alignment corridors were assessed (as indicated on the 1:50 000 maps at the meeting). The aim of a Scoping Study in terms of the EIA Regulations was to assess the bio-physical and social environment in an effort to identify the preferred alignment corridor as well as to identify aspects that may potentially have a significant impact on the environment. At the end of the Scoping Study, it was found that "alignment 1" (as indicated on the maps and in the Background Information Document (BID) proved to be the preferred alignment corridor.

During the second phase (the EIA Phase) of the study, this corridor and the aspects identified would be investigated in more detail.

The Chairperson confirmed that this meeting formed part of the EIA Phase that had started very recently. The main aim of the meeting was to discuss the potential impacts on the SandVet Water Scheme and also to identify the water ways (waterbane) that may be affected.

3. DISCUSSION

ALL

Please note that it proved very difficult to note down issues, questions and concerns raised around the map. If there are any pertinent issues that you would like to be noted, kindly contact Ms Marita Oosthuizen of Afrosearch (Fax: (012) 362-2463, Tel: (012) 362-2908 or marita@afrosearch.co.za) so that it may be included.

SANDVET:

Mr. Van Staden stated that there are between 400 and 500 km of canals that forms part of the SandVet Water Scheme. Roughly it streches from the Erfenis Dam to Klipput.

He noted that the biggest problem was the servitude rights. He explained that a servitude is registered for each canal. Each servitude is 8 m wide (4 m from the middle). Originally provision was made for two canals per servitude but it was unlikely that this would ever happen. Often, the servitude was wider on a turn. No tower for a transmission line could stand in these servitudes. There were servitude roads adjacent to the servitudes.

Mr. Van Staden explained that the servitudes are mapped. Maps can be obtained from the Chief Engineer (DWAF), Mr. Groenewald. His telephone number is (051) 430-3134. Mr. Groenewald will be able to provide the map numbers so that maps can also be bought from the Government Printer in Pretoria. Ms. Streaton agreed that Eskom could obtain the maps if they had the numbers.

According to Mr. Van Staden the proposed routes were acceptable, especially if the route could be adjusted to run along the "wenakkers". Eksom must ensure that no tower will stand in a canal.

DEPARTMENT OF AGRICULTURE:

Mr. Zeelie stated that the biggest water problem was in the northern part of the study area, the area north of Bothaville.

Ms. Vollmer confirmed that the purpose of the water ways was to drain excess water and to leave it at safe places. Mr. Zeelie confirmed that water ways were this was the case. He noted that water ways were all grassed and were constructed with road graders.

Mr. Zeelie confirmed that it would not be possible to establish towers within the water ways. It would, however, be possible to build adjacent to water ways. The breadth of a water way is between 15 and 20 meters.

No servitudes are registered for water ways, but plans showing existing and planned water ways exist. These plans are with the department's agricultural technician in Parys. He is Mr. Theuns Botha and he can be reached at (056) 817-1094.

Ms. Vollmer wanted to know if a map would help the Department and Mr. Zeelie agreed that it would. Ms. Vollmer stated that she could e-mail a map. Mr. Zeelie stated that he did not have an e-mail address yet, but stated that he would contact Ms. Oosthuizen with an e-mail address that could be used in the meantime.

A MEETING between representatives from Eskom, the Consultants and the Department of Agriculture was arranged for Tuesday 09 September 2003 at 11:00 at the Department of Agriculture in Parys.

4. PRESENTATIONS[1]

Ms. Vollmer's (SEF) presentation was structured around the Environmental Impact Assessment (EIA) process with an emphasis on the proposed transmission line, while Ms. Streaton (Eskom) explained the rationale for the proposed project as well as Eskom's construction practices. She also outlined the basic negotiation process.

4.1 NEED FOR THE PROJECT

MS CAROL STREATON (ESKOM: TRANSMISSION)

From the outset, Ms. Streaton emphasised that transmission lines cost a great deal of money (in the region of R 1 to 2 million per kilometre depending on the receiving terrain) and that there had to be a very strong need for Eskom to decide that a new transmission line was required. Eskom only considers the construction of a transmission line after all other means of supplying power are exploited. Financing a 400kV transmission line like this one is a business decision. The finance, which is sought on the open marketm, and the return on investment plays an important role. Eskom aims to keep the cost of electricity as low as possible in an effort to support foreign investment and the creation of jobs. For this reason, Eskom did not construct new transmission lines if it was not absolutely necessary.

Following, Ms. Streaton explained why this specific transmission line was required. She indicated that part of the Eskom: Transmission system backbone that ran from the ALPHA sub-station (near Standerton) to the BETA sub-station (near Bloemfontein) was under severe constraint. She expanded on all the additional lines, which would be built to supply the Coega development, and the resulting network strengthening would be necessary.

Currently the Port Elizabeth area was experiencing rapid growth due to the Coega development. There was 670MW of electricity currently available to the area, but it was anticipated that a further 1 500MW would be needed (1 000MW for the proposed smelter and a further 500MW due to expected new industrial developments) and the 1.5% natural load growth.

The construction of the 400kV transmission line from Mercury to Perseus was part of Eskom's network strengthening programme and was necessary in an effort to balance the grid (It was

[1] (Information taken from Landowner Workshops held during the same period.)

explained that the electricity grid was like the water system in a home. As soon as a tap was opened the pressure in the system became weaker. It was therefore important to strengthen the network between the Mercury and Perseus sub-stations as an alternative supply to the to the planned supply to the Eastern Cape via Harding, Umtata East London and Port Elizabeth).

Ms. Streaton showed a series of slides indicating the various networks strengthening options investigated and the 400kV lines that were to be built in the near future as well as those planned for the long term. She also indicated which transmission lines Environmental Impact Assessment processes were underway.

Ms. Streaton concluded by stating that Eskom: Transmission had to start planning well in advance, since transmission lines had a very long lead time.

4.2 BACKGROUND TO THE STUDY AND THE ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

MS BERNADETTE VOLLMER (STRATEGIC ENVIRONMENTAL FOCUS - SEF)

A summary of Ms. Vollmer's presentation follows:

OVERVIEW OF THE PRESENTATION

Ms. Vollmer thanked everybody for the opportunity to make her presentation. She began with an overview of her presentation:

- Introduction and need for this study;
- Background to the project;
- Study area;
- The process
- The Public participation process; and
- Preliminary issues identified.

BACKGROUND TO THE PROJECT

Eskom investigated several options to provide the necessary electricity to the Port Elizabeth region. Figure 1 (on the following page) shows the proposed alternative transmission lines that were investigated during the Scoping Phase. Of these, alternative 1 was identified as being the preferred alternative. This proposed transmission line would be 300 – 350km in length.

Ms. Vollmer showed a map depicting the study area (figure 1 – on the following page).

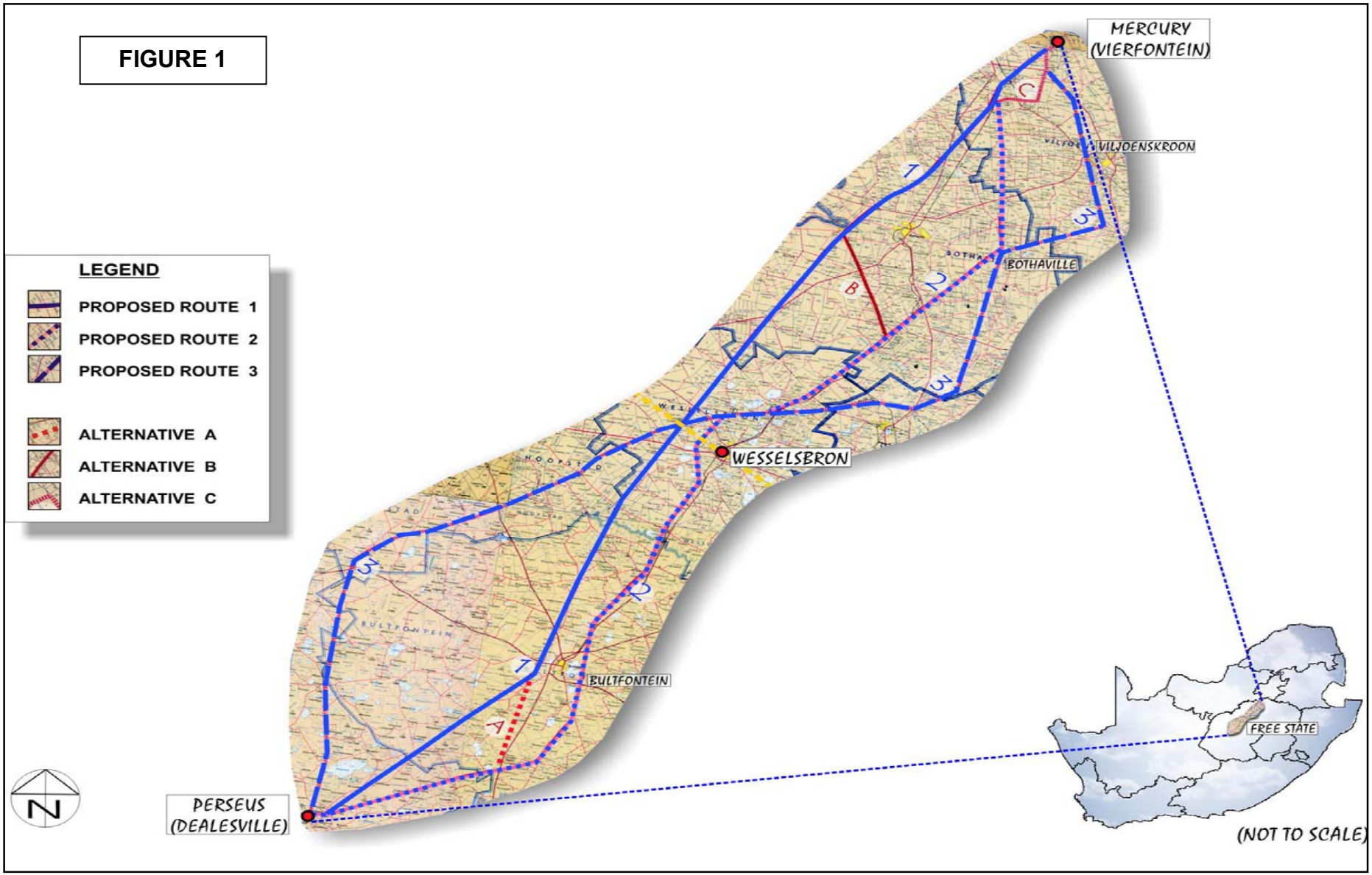

FIGURE 1: THE STUDY AREA WITH THE ALINGMENTS INVESTIGATED DURING THE SCOPING PHASE – OPTION 1 WAS CHOSEN AS THE PREFERRED ALIGNMENT AND IS UNDER INVESTIGATION IN THE EIA PHASE

NEED FOR THE ENVIRONMENTAL IMPACT ASSESSMENT (EIA)

Ms. Vollmer explained that in terms of Section 26 of the Environment Conservation Act (Act 73 of 1989), the development falls within the ambit of listed activities (Section 1 of Government Notice R. 1183 of 05 September 1997) and is therefore subject to an Environmental Impact Assessment (EIA).

Government Notice R 1183, Schedule 1 clause 1a, states that EIAs need to be conducted for *"the construction or upgrading of facilities for commercial electricity generation and supply."*

THE LEGAL ENVIRONMENTAL PROCESS

Ms. Vollmer showed a slide depicting the EIA process (figure 2- following page). She noted that it was a two-tiered process that entails a Scoping Phase (Phase I), followed by an Environmental Impact Assessment Phase (EIA Phase or Phase II). The Scoping Phase entailed the identification of the possible impacts that the development might have on the environment and made a recommendation as to the preferred alignment. This phase has been completed.

The EIA Phase investigated, in greater depth, the environmental impact that the preferred alignment corridor would have on the environment and proposed a series of mitigation measures. During the EIA Phase, the preferred alignment corridor would also be refined in an effort to get to a preferred route.

In order to achieve these objectives, Ms. Vollmer explained, public involvement was of paramount importance.

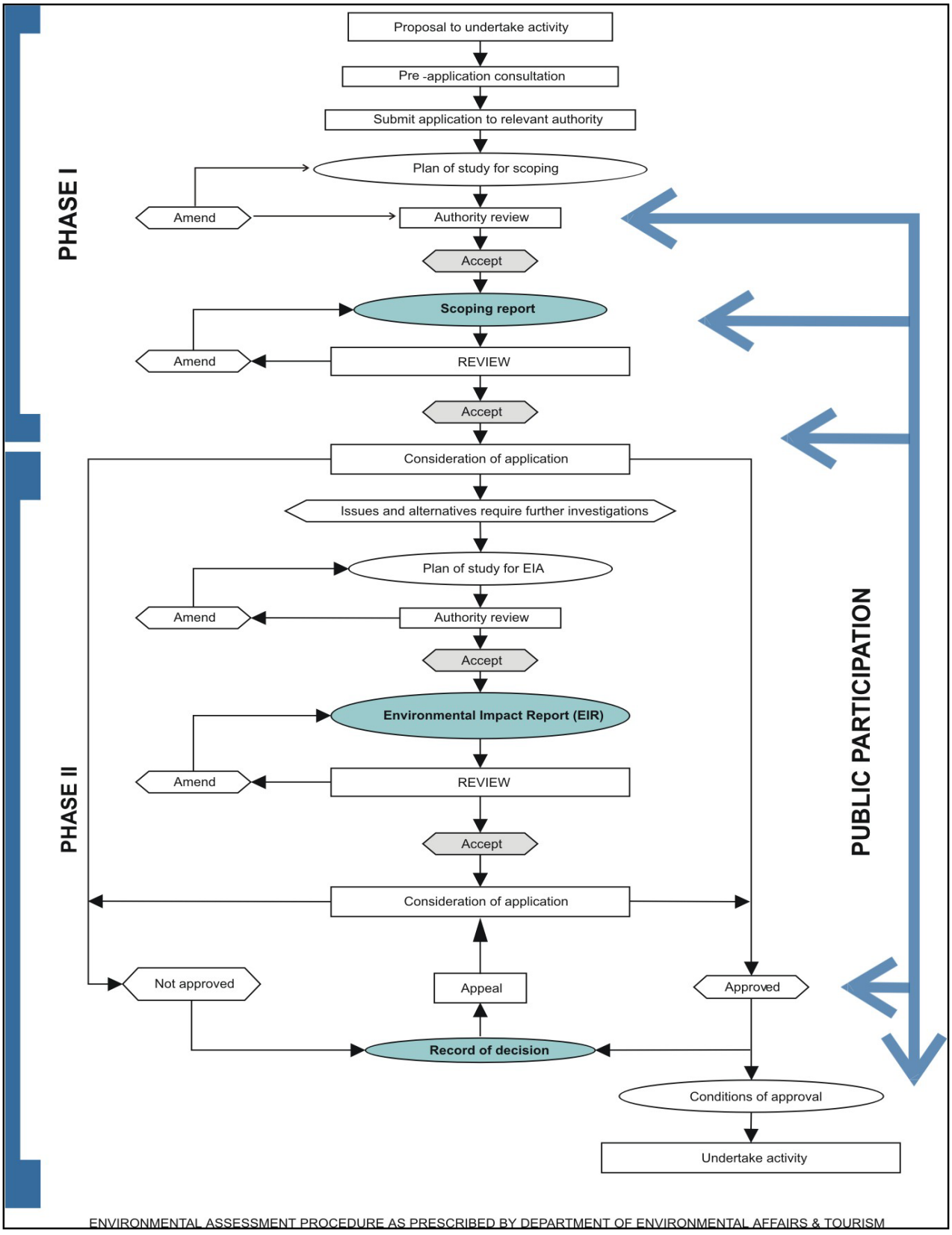

FIGURE 2: THE ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

PUBLIC PARTICIPATION

Not much time was spent on the Public Participation process at the meeting. The following section is included to provide Interested and Affected Parties (I&APs) with background to the Public Participation Process.

In order to actively participate, I&APs need to understand the nature and objectives of Public Participation. Ms. Vollmer touched on the following:

WHAT IS PUBLIC PARTICIPATION?

A process leading to informed decision-making through the joint effort of:

- Interested and Affected Parties (I&APs);
- The proponent;
- Technical experts; and
- Authorities.

…who work together to produce better decisions than if they had acted independently (Greyling, 1999).

OBJECTIVES OF PUBLIC PARTICIPATION

To provide stakeholders with information on:

- The background and purpose of the proposed project;
- The technical and participatory processes to be followed;
- The way in which the contributions of the I&APs will be incorporated; and
- The anticipated environmental impacts of the proposed project.

Allow I&APs the opportunity to provide their inputs (issues, concerns, questions and suggestions) into the EIA and to provide stakeholders with an opportunity to assist in determining issues that should receive attention in the report.

THE PROJECT SPECIFIC PROCESS

THE ESKOM PROCESS

Ms. Vollmer indicated that Eskom had taken the following actions prior to appointing an independent EIA Consultant:

1. The first step in the process was to identify various alternatives to accomplish the said objective.
2. This lead to the creation of a study area.

Thereafter an independent Environmental Consultant was appointed. It was the task of this Consultant to conduct an EIA in terms of current environmental legislation. (The company PD

Naidoo (consultants), in association with Strategic Environmental Focus (SEF) won the tender to conduct the EIA and appointed Afrosearch (Pty) Ltd. to conduct the Public Participation Process for the EIA).

1. Project registration with Department of Environmental Affairs and Tourism (DEAT) and the Free State Department of Tourism, Environment and Economic Affairs (DTEEA):
    - 27 February 2003.
2. Approval of Plan of Study for Scoping:
    - 12 March 2003.
3. Public participation process:
    - April 2003
        - Newspaper advertisements were placed in relevant newspapers between 07 and 11 April 2003;
        - Focus Group Meetings – 15 and 16 April 2003 *(as well as 14 May 2003 and 07 August 2003*);
        - Open Days and Public Meetings – 23 and 24 April 2003; and
        - Availability of Draft Scoping Reports for public comment – May 2003.
    - BID, newspaper advertisement and letters to I&APs:
        - Continual.
    - May to June 2003:
        - The Draft Scoping Report was available for review between 26 May 2003 and 12 June 2003.
4. The Final Scoping Report were submitted to the authorities on 25 June 2003. This report carried the recommendation that "alternative 1" be investigated as the preferred alternative.
5. The Landowner Workshops (this workshop) - 06 and 07 August 2003.

Steps still to follow:

1. Public Meetings for the EIA Phase - 10 and 11 September 2003.
2. The Draft EIA Report would be made available for public review and comment and the final EIA report would be submitted to the DEAT and DTEEA for decision-making.
3. Upon receipt of the Record of Decision (RoD) from the DEAT, Eskom would start with the negotiation process and secure a servitude for the transmission line.

THE ENVIRONMENTAL IMPACT ASSESSMENT (EIA)

Ms. Vollmer informed attendants that a team of specialists were appointed to assist the environmental consultants in conducting the EIA. For this project, the following specialists have been appointed:

- Geo-Technical;
- Soils (Pedologist);
- Bird Specialist (Ornithologist);
- Aquatic;

- Visual Impact;
- Heritage (including history and archaeology);
- Tourism; and
- Social Impact.

The following issues were to be investigated by the specialists:

- Physical & biological environment:
    - Soils, Geo-Technical Aspects,Topography etc.;
    - Hydrology; and
    - Fauna & Flora.
- Social environment:
    - Social assessment;
    - Tourism; and
    - Heritage Resources.

Ms. Vollmer noted that the following potential impacts have already been identified:

- Contamination of surface water;
- Disturbance of riverine habitats;
- Impacts on bird life;
- Increased surface water run-off;
- Increased erosion along river banks;
- Floral disturbance;
- Faunal displacement and disturbance;
- Visual intrusion;
- Health, safety and security risks;
- Impact on land with a historical value and heritage resources; and
- Increased ambient noise levels (during construction only).

She said that the natural pans were highlighted as being particularly sensitive. The pans were unique and had an ecological integrity that needed to be maintained due to:

- Their unique biodiversity brought about by the physical environmental conditions;
- Habitat for a variety of fauna and flora (important for breeding and feeding); and
- The fact that pans are sensitive ecological systems (symbiotic relationships).

4.3 ESKOM'S CONSTRUCTION PRACTICES

MS CAROL STREATON (ESKOM: TRANSMISSION)

A summary of Ms. Streaton's presentation follows:

OVERHEAD VS. UNDERGROUND

To construct a 400kV transmission line underground, would require a 60m wide piece of land. Within this servitude, all trees, bushes, buildings and structures would have to be removed and remain so even after construction. This would mean that the land would be sterile as no developments can be undertaken in the servitude.

One of the main problems of an underground power line is cooling. Conductors would have to be either air cooled (with air conditioners) or oil cooled. Cooling of the conductors does not present a problem when power lines are constructed overhead, as they are cooled by the natural flow of air.

An underground power line costs in the region of 20 times more than an overhead power line (R 20 million as opposed to R 1 million per kilometer.)

SERVITUDE RESTRICTIONS

Eskom does not allow people to live within the servitude and tall trees would be removed. *(Eskom prefer not to have centre pivot irrigation systems within the servitude, although a strategy could be established to accommodate this type of irrigation.)*

Activities such as grazing and crop planting can continue normally.

GATES

Eskom would identify all places where gates were needed in terms of accessing the servitude. A-grade gates would be erected. Eskom does take cognizance of the type of gate required, for instance, if there is a jackal proof fence, a jackal proof gate would be erected.

ACCESS ROADS

Construction activities do not require that an actual road be built adjacent to the power line. The road 'develops' as a result of the construction vehicles moving up and down this strip over the construction period.

Access roads are only erected under special circumstances to gain access to the servitude for construction and maintenance purposes. Such instances would be discussed with the landowner.

BUSH CLEARING

The whole servitude area (55m) will not be cleared of vegetation. Construction activities require that a 4m wide strip be cleared in the middle of the servitude for stringing purposes and the area where the foundation for the tower needs to be constructed will be cleared.

In sensitive areas such as valleys, endemic vegetation or by special agreement between a landowner and Eskom vegetation would not be removed. Alien plants such as Sekelbos, Lantana and Port Jacksons are removed and treated with herbicide.

CAMPS

For a power line of this length (300 – 350 km) it is anticipated that two construction camps would be necessary. Each camp could house about 300 or more construction workers at any given time.

The camps are controlled and monitored by the Environmental Officer according to the requirements set out in the Environmental Management Plan (EMP). The EMP typically makes the following recommendations: construction camps have to be fenced, no live animals may be kept, and fires are only allowed in designated areas. Rehabilitation measures that need to be carried out once construction is complete are stated.

ENVIRONMENTAL MANAGEMENT PLANS (EMP) AND THE ENVIRONMENTAL OFFICER

The EMP covered a number of generic aspects with regard to the general conditions relating to the protection of the environment during the construction phase. It may include specific stipulations as requested by each landowner during the negotiation phase. The EMP forms part of the legal contract that Eskom has with the contractor and is therefore enforceable.

An environmental officer would be available throughout the construction phase and all affected landowners would have his/her contact details. In the case of any irregularities, the environmental officer should be contacted to resolve the matter.

TOWER TYPES

Eskom uses a variety of tower types for the construction of transmission lines. On this line, cross-rope suspension towers would be used for the straight stretches, while self-supporting towers (so-called bend or strain towers) would be used on bends. Eskom tries to keep bends to a minimum. Because the strain towers use more steel, they are far more expensive and are visually more intrusive.

CONSTRUCTION

It is anticipated that construction could take approximately 2 years. Construction is a cyclical process, all the gates are erected first, followed by bush clearing, the digging of foundations, the erection of the towers and finally stringing. The implication of this is that over the two-year construction period landowners would have construction workers on their property intermittently.

Construction equipment is very large. Towers were assembled on site, except in cases where there was not enough space. In sensitive areas construction activities are undertaken mostly by hand (digging of foundations) and helicopters are used to place the towers.

Foundation holes were covered to prevent humans and animals from falling into the holes.

Crop planting can go on as normal. If crops were destroyed during construction, Eskom compensates the farmer according to the market value of the crop.

Vegetation usually re-establishes itself once construction has been completed, however, additional rehabilitation will be done where necessary.

STRINGING

Stringing is a specialized activity. The conductors need to be kept under tension during the stringing process because they get damaged when they touch the ground. Stringing is usually done by a machine, but could also be done by hand or helicopter.

Camps would be established in areas negotiated with the landowner where various materials such as cable drums etc. could be stored. All construction waste would be removed once the construction of the transmission line is complete.

LABOUR

The construction activities relating to the construction of transmission lines are specialized and therefore skilled labour is required. For this reason very few local labour opportunities exist.

Ms. Streaton noted that Eskom does not construct their own transmission lines, but made use of a contractor.

IMPACTS GO BOTH WAYS

The environment also has an impact on the transmission lines. Examples are veld fires, lightning, bird streamers (excretion) and birds flying into the earth wires.

Eskom has done a lot of work on managing the impact of birds on power lines. Bird guards are erected in areas where there are insulator strings and conductors. “Bird flappers” are placed on the line where the ornithologist anticipate that the power lines cross flight paths.

INDICATORS ON POWER LINES

Ms. Streaton explained that, where required, the line is marked. Instances where markers would be used are:

- Places where there is aircraft activity;
- In bird flight paths (as indicated above); and

- Stays are marked upon request from a landowners, e.g. in cash crop farming areas.

ARCHAEOLOGICAL AND HISTORICAL SITES

Once the final alignment for the transmission line has been decided on, the archaeologist and botanist walk the entire line to identify sites of historical importance or ecological sensitivity.

SUB-STATION CONSTRUCTION

Both sub-stations would be upgraded. It should be noted that the property on which the substation occurs is big enough and would not need to be extended.

MAINTENANCE

Maintenance is usually done bi-annually and can be done by helicopter, on foot or by means of a 4X4 vehicle depending on the type of maintenance required.

In the contract that the Eskom negotiates with the landowner, the landowner can specify his/her requirments, e.g. that the landowner should be contacted prior to maintenance teams entering the property.

It is not necessary for the maintenance road to run alongside or underneath the power line, for the most, existing routes are used.

NEGOTIATION

Eskom does not buy the land, only the rights to convey electricity across the land within the agreed servitude.

An individual contract is negotiated between Eskom and each affected landowner and this results in the signing of an option. Eskom has one year to exercise the option.

An independent valuator assists in the valuation process to ensure that a fair price is obtained by the landowner.

Once Eskom decided to exercise the option, the servitude is registered against the title deed attached to the property at the deeds office. At that stage the compensation is paid out with interest (the interest will be paid from the time the option contract was entered into, until the servitude is registered.)

5. THE WAY FORWARD

NOT DISCUSSED DURING THE MEETING – INCLUDED FOR YOUR INFORMATION

The discussion never reached this stage as the meeting adjourned after the session around the map. Listed below, please find a summary of the way forward:

- The meeting would be minuted and questions, issues and concerns taken up in an Issues Register;
- Technical studies by the various specialists are underway;
- Further public meetings would be held on 10 – 11 September 2003 to give feedback to I&APs (see details below);
- Meetings would be minuted and concerns raised addressed in the EIR;
- A Draft EIA Report would be made available for public comment for a period of 14 days. (Copies would be available at the following places:
    - libraries / public places:
        - Dealesville Public Library;
        - Bultfontein Public Library;
        - Hertzogville Public Library;
        - Hoopstad Public Library;
        - Wesselsbron Public Library;
        - Allanridge Public Library;
        - Bothaville Public Library;
        - Viljoenskroon Public Library; and
        - Vierfontein Police Station.
    - on the internet at http://www.eskom.co.za/eia and
    - on CD-Rom (CD-Roms would only be available from Afrosearch by arrangement).
- At the end of the comment period, responses would be incorporated into the EIA Report and a final report will be submitted to the national and provincial environmental departments;
- A final record of decision would be obtained from DEAT (national). and
- The record of decision would be advertised (anticipated to be in January 2004).

Please take note of the dates of the Public Meetings during the EIA Phase:

- BULTFONTEIN: 10 September 2003 at 14:00 at the Bultfontein Town Hall (3 Bosman Street); and
- BOTHAVILLE: 11 September 2003 at 14:00 at the Bothaville Commando Hall

AFROSEARCH
Marita Oosthuisen
Tel: (+27 12) 362 2908
Fax: (+27 12) 362 2463
E-mail: marita@afrosearch.co.za
Web site: http://www.eskom.co.za/eia

6. CLOSURE

MS BERNADETTE VOLLMER (SEF)

Ms. Vollmer thanked the attendants for attending and for their valuable inputs.

The meeting adjourned at approximately 11:00.

7. ATTENDANCE REGISTER

The attendance register for the Focus Group Meeting at Wesselsbron is attached.

ATTENDANTS (07 AUGUST 2003)					
NAAM EN VAN **NAME AND SURNAME**	**ORGANISASIE EN POSISIE** **ORGANISATION AND POSITION**	**TELEFOONNOMMER** **TELEPHONE NO.**	**FAKSIMILE** **FAXIMILEE**	**POSADRES** **POSTAL ADDRESS**	**E-POS** **E-MAIL**
Streaton, Carol (Ms)	Eskom: Transmission (Public Participation Advisor)	(011) 800-5411 (W) 083 633 1545 (C)	(011) 800-3917	PO Box 1091 JOHANNESBURG, 2000	carol.streaton@eskom.co.za
Van der Merwe, Koos (Mr)	Eskom: Transmiossion (Land and Rights)	082 805 7605 (C)	(011) 800-3917	PO Box 1091 JOHANNESBURG, 2000	jjvdm@reskom.co.za
Maduse, Levy (Mr)	Eskom: Transmission (Project Leader)	(011) 800-2630 (W) 082 805 7367 (C)	(011) 800-3917	P. O. Box 1091 JOHANNESBURG, 2000	levy.maduse@eskom.co.za
Vollmer, Bernadette (Ms)	Strategic Environmental Focus	(012) 349-1307 (W)	(012) 349-1229		bernadette@sefsa.co.za
Oosthuizen, Marita (Ms)	Afrosearch	(012) 362-2908 (W) 082 378 4903 (C)	(012) 362-2463	PO Box 13540 HATFIELD, 0028	marita@afrosearch.co.za
Van Staden, Chris (Mr)	DWAF: SandVet Water Scheme Acting Area Manager	(057) 352-7381 (W) (057) 352-7375 (H)	(057) 352-8047		
Zeelie, Johan (Mr)	Department of Agriculture	(051) 861-2209 (W) 082 413 1796 (C)	(051) 861-1024		