

Received 17/12/08

Joubert, Andre

From: Odendaal, Anelle
Sent: Monday, February 02, 2009 7:53 PM
To: Joubert, Andre
Subject: FW: Coal-fired power stations in the Western Bushveld of Limpopo

From: Equus Horse Safaris [<mailto:equus@equus.co.za>]
Sent: 17 December 2008 05:35 PM
To: Odendaal, Anelle; ashwin.west@shands.co.za; louise.corbett@shands.co.za
Subject: Coal-fired power stations in the Western Bushveld of Limpopo

Ashwin is apparently on leave until 12 January, so I am re-sending this to include Louise.

Dear Anelle and Ashwin and Louise,

Please register the Waterberg Nature Conservancy as an interested and affected party for the coal-fired power stations in Limpopo.

Please also send me via e-mail better versions of the maps of Figures 1-1, 3-1, 3-2, and 3-3 that are in the Draft Scoping Report of November 2008.

And Ashwin – what can I do to be sure Eskom, DEAT, Ninham Shand, and the media start identifying the project location correctly?

As for geography, your project is simply not in the Waterberg Mountains.

As for municipal boundaries, yes, the project is in the Waterberg District Municipality, but that is a very large area, extending well northeast of Lephalale, well south of Bela-Bela and well east of Modimolle.

I trust you see my point that the name Waterberg is not appropriate, actually inaccurate, and doesn't help to identify the location of the project. How about starting now to call it by some other name, such as:

Western Bushveld Project
Limpopo Western Bushveld Project
Western Limpopo Project
Lephalale Project

Again, what can I do to start a process that will change the name of the project?

Thank you.

John Miller
Chairman, Waterberg Nature Conservancy

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Received 09/01/09

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30 January 2009

**Comment on the Draft Scoping Report and Plan of Study for EIA for
Proposed Coal-fired Power Stations (Coal 3 & 4) in the Waterberg Area
Report No. 4793/402719**

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 - National Integrated Resource Planning (NIRP),
- Legislation and policy considerations
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Introduction

We understand that the purpose of the draft Scoping Report (SR) is to identify issues and we have therefore not provided an exhaustive view on the project, but reserve the right to make more substantive comments during the EIA Phase. It is the contention of WWF-SA that the SR has not adequately identified alternatives that should be assessed in the EIA.

We recognise the great national strategic importance of the project and the implications for the way in which the EIA should be undertaken, inter alia in light of the on-going development of national climate change response policy and efforts to increase private investment in energy and electricity supply infrastructure. The leading objectives of this submission are to:

- Secure the consideration of additional alternatives in the EIA process;
- Ensure that the impacts on existing service providers and customers are assessed.

It is our contention that the absence of information on and assessment of project / activity-level alternatives in the SR would fatally undermines the potential for informed decision-making and public participation within this EIA process.

Primary comment: reasonable and feasible activity-level alternatives

WWF-SA submits the following input in the interests of an efficient and effective EIA process. We are motivating that substantive work is required, additional to that currently within the scope of the proposed EIA process and plan of studies; work that we believe is essential to informed decision-making on the part of

the responsible authority, as well as informed public participation, and which could be accommodated in a reasonable time-scale.

It is our contention that there are reasonable and feasible activity-level alternatives for meeting the need that this project proposes to meet – i.e. meeting increasing energy service demand - that should be covered by this EIA process from the outset. Failure to do so would undermine and compromise the process (although this may be most demonstrable by the time of the full EIR). Ensuring a robust process is particularly important for a project with such profound implications for South Africa's economic competitiveness over the life-time of these projects, particularly under a post-2012 multilateral climate dispensation. We trust that due consideration of public comment will result in a more comprehensive approach to the work, beyond that provided for in the draft Scoping Report (DEAT Ref.: 12/12/20/1255).

Detailed below are:

- cases for reasonable and feasible activity/project-level alternatives – the leading contenders, particularly from a socio-economic perspective – and
- the short-comings of the energy supply and electricity industry planning processes that are referenced in an attempt to justify the proposal to limit consideration to Pulverised Fuel, Supercritical (PF SC) coal-fired generation plant.

Some additional comments, e.g. regarding the need for comprehensive assessment of end-of-pipe pollution-control technology options and their cost-benefit implications for the project option currently motivated, and the broader case for the consideration of the socio-economic impacts of activity alternatives within EIA processes, particularly for multi-billion Rand public investments, are followed by several annexures with background information in support of the key recommendations.

To limit the scope of an EIA to a discussion of site and impact remediation options of an activity pre-determined by the project proponent, without consideration of the several alternatives for meeting increasing energy service demand that are currently being considered in South Africa's energy and development planning processes, would be a fatal flaw in this process. Relevant provisions within NEMA are highlighted in Annexure A, e.g. Chapter 1 Principles 2. (4) (i) – and (b), (c) and (d) - & Part 2, Section 31. (1) (c)

Given the very large scale (more than a quarter of current national generation capacity), long life-span of the proposed plants (to be operational beyond 2050) and their huge footprint (particulate pollution from existing coal-fired plant has been tracked as far as the Serengeti Plains and acidification impacts noted in neighbouring countries), there is a need to look well beyond site-specific issues and to fully consider cumulative impacts, including in the socio-economic dimension. Consideration of the merits of activity-level alternatives should include greater opportunities for community commercial activity, even direct participation, higher employment rates offered by alternative means of meeting energy service needs and the impact on energy service costs (see LTMS, incl. modelling results showing that no new coal would be built if there were an escalating carbon tax. Consideration of project alternatives should also include assessment of the impacts of different options on shareholders – in this instance the South African public. It should also include assessment of the impacts on project developers currently planning to invest in the electricity supply industry.

Furthermore, it is essential that consideration of what is reasonable and feasible takes place in the broader context of Integrated Environmental Management, particularly in light of the fact that the Integrated Energy Planning process that would have informed decisions on how best to meet growing energy services demand, as required by the White Paper on Energy Policy for RSA (1998), was suspended by the DME in September 2006 and remains 'in abeyance'.

We suggest that the three leading reasonable and feasible activity/project-level alternatives that merit detailed assessment, including the option of a combination of the first and second, are:

- a) Energy Efficiency and Conservation, including solar water heating (beyond the target of the National Energy Efficiency Strategy);
- b) Renewable Energy Technologies (RET), with an emphasis on solar thermal technologies (beyond the 2013 target of the White Paper on Renewable Energy);
- c) Alternative coal technologies, particularly coal gasification.

This is borne out by work undertaken in terms of the Cabinet-mandated Long Term Mitigation Scenarios (LTMS) process and more recent research. It is also worth noting that the project proponent is already tasked by government to scale up its activities on demand side management (though delivery in this regard falls short even of the requirements of the National Energy Efficiency Strategy) and solar water heating deployment and acknowledges that it has been and is active in the field of renewable energy projects. It also presents itself as a world leader on 'clean coal' technologies and in particular on underground coal gasification.

Legal requirements for selecting alternatives

1. Chapter 5 of the National Environmental Management Act, 19989 (Act No. 107 of 1998) ("NEMA") sets out several provisions regarding the assessment of alternative activities to that which is proposed in the EIA process which is required to support an application for environmental authorisation. In this regard, one of the general objectives of integrated environmental management is to "*identify, predict and evaluate the actual and potential impact on the environment, socio-economic conditions and cultural heritage, the risks and consequences and alternatives and options for mitigation of activities, with a view to minimizing negative impacts, maximizing benefits, and promoting compliance with the principles of environmental management set out in section 2.*"¹ [emphasis added].

2. In view of these objectives, NEMA accordingly requires that the procedures that are established for the investigation and assessment of activities must provide for the –

"investigation of the potential impact of the activity and its alternatives on the environment and assessment of the significance of that potential impact;

...

*investigation of mitigation measures to keep adverse impacts to a minimum, as well as the option of not implementing the activity."*²[emphasis added]

3. It is clear from the above that the investigation and assessment of alternatives is a mandatory part of applications for authorisation in terms of Chapter 5. The requirements regarding that investigation and assessment are give more detailed effect in the Environmental Impact Assessment Regulations, 2006 ("EIA Regulations"). The EIA Regulations define "*alternatives*" as follows –

"... different means of meeting the purpose and requirements of the activity, which may include alternatives to -

(a) the property on which or location where it is proposed to undertake the activity;

(b) the type of activity to be undertaken;

(c) the design or layout of the activity;

(d) the technology to be used in the activity; and

*(e) the operational aspects of the activity"*³

4. It is noted that the mandatory assessment of alternatives required by NEMA and the EIA Regulations is aimed at ensuring that the best environmental option for a development is considered and that the competent authority is accordingly obliged to take "*any feasible and reasonable alternatives to the activity which is the subject of the application and any feasible and reasonable modifications or changes to the activity that may minimize harm to the environment*"⁴ into account when considering an application for environmental authorisation.

5. The EIA Regulations stipulate that only alternatives that are reasonable and feasible must be considered. The test for reviewing whether alternatives are correctly identified, or omitted from assessment, in an EIA therefore usually involves a factual enquiry as to whether the alternative is reasonable and feasible. The Regulations do not define these terms and the ordinary dictionary meaning must therefore be relied

¹ Section 23(2)(b)

² Section 24(4)(b)

³ Regulation 1

⁴ Regulation 8(b)(v)

on. The South African Concise Oxford Dictionary defines “feasible” as meaning “possible and practical to achieve easily or conveniently” and “reasonable” as meaning “fair and sensible; as much as is appropriate or fair; moderate.”⁵

The case for specific project alternatives

We do not suggest that the following adequately identifies alternatives, but the following sets out range of alternative activities that could meet the project objective with greater consistency with existing policy and significantly less negative environmental and socio-economic impacts:

a) Energy efficiency and conservation could deliver at least the equivalent of one of the proposed plants, with currently commercially available technologies and measures already under consideration by authorities and the project proponent, with very substantial cost savings to the state and society as a whole, even without consideration of extensive externalised costs. This has been well established and reported in detail in the Cabinet-mandated Long Term Mitigation Scenarios (LTMS) process. Furthermore, Eskom itself noted in 2006 (Andrew Etzinger presentation to the International Energy Agency (IEA)/DME Technology Assessment Workshops in Sandton), using conservative assumptions, that solar water heating alone could avoid 3000 MW of electricity demand just in the residential and commercial sectors. Eskom has for far longer been talking of a “virtual power station”, with the efficiency ‘product’ characterised as “negaWatts”, concepts again presented at the 2006 workshops. There is thus already well-developed precedent for consideration of demand-side management / efficiency and conservation interventions as an activity alternative to building generation plant.

b) Renewable Energy Technologies (RET) – While capacity ratings of different generation technologies are not directly comparable due to different availability factors, RE technologies are available and resources more than sufficient to produce the same amount of electricity as projected to be available from the two-coal-fired plants. RETs typically have shorter lead-times than coal-fired plant, are not exposed to risks associated with fuel supply and evolving environmental regulation, both nationally and internationally, and have recently gained a strengthened policy mandate. Dr Steve Lennon, head of strategy at Eskom, has publicly stated that concentrated solar power is suitable to provide base-load power, while the wind regime in the Western Cape is compatible with providing peak supply. A project developer has made a proposal to Eskom for solar thermal electricity supply at scale (4 800 MW) at a very reasonable cost (see Annexure J).

As detailed in the recent study “Costing a 2020 target of 15% electricity from renewable resources”, the optimal approach to meeting growing electricity demand, from both financial and sustainability perspectives, is a package of efficiency and renewable projects. In such a scenario, RETs would meet the electricity supply for which coal 3 & 4 are proposed. It should be noted that while the total capacity of each proposed coal-fired plant is large, it is proposed that they be built and enter into service incrementally, unit by unit, and thus it is not necessary that any one RET project (particularly from a site-specific perspective) or any single technology needs to be demonstrated to be a reasonable and feasible alternative to the total final generation capacity of a completed coal-fired plant. RETs are generally understood to include co-generation with biomass input (over 3000 MWe of co-generation potential has been identified in an Eskom tendering process), although some agencies cover this under demand-side management (as much such generation is for own use); this EIA Scoping process should consider whether assessment of co-generation potential is appropriate to this process.

c) Alternative / ‘clean coal’ technologies, particularly Integrated Gasification Combined Cycle (IGCC) plant, which is already commercially available and cost-competitive with PF SC plant meeting moderate pollution mitigation requirements (refs incl. World Bank ‘report’); a variation on IGCC would include Underground Coal Gasification (UGC), already being successfully piloted by the project proponent (at Majuba), to supply a combined-cycle plant. Gasification of coal prior to combustion can significantly improve plant efficiency, as well as reducing the costs and impacts of pollution control and improving performance. It would also greatly improve the prospects for adding carbon capture and storage (CCS), as the CO₂ emissions are immediately available at high concentration.

⁵ South African Concise Oxford Dictionary, Oxford University Press, 2002

Failure to justify the specification of the proposed technology and project option, including incomplete consideration of national planning processes

The need for the proposed project is motivated by reference to “Strategic planning processes by DME, NERSA and Eskom” i.e. IEP, NIRP and ISEP respectively, each of which are addressed below. We do not contest that there is a need to meet growing (as well as substantial currently unmet) energy service demand. We do submit that none of these processes justify the specification of PF SC coal-fired generation plant to meet these needs under current circumstances, much less under the conditions that may reasonably be expected to pertain for most of the proposed plants’ life-time.⁶ Not only are IEP and NIRP outdated and of limited relevance due to limitations of scope, but the existing plans and planning processes, particularly ISEP, are compromised by lack of transparency and accountability and therefore provide no justification for ignoring alternative activities within an EIA process, which does require public participation. Furthermore, the most recent energy modelling exercise, using the same models developed for DME’s IEP process, but with the most up-to-date input data and assumption and most participatory process for deliberating on such inputs, was undertaken within the Cabinet-mandated Long Term Mitigation Scenarios process. The research component and energy modelling work was approved by the multi-stakeholder Scenarios Building Team in October 2007 and by Cabinet in July 2008, so there is no justification for this work to be ignored by this EIA process. The ‘Required By Science’ scenario, the only scenario found to be viable for South Africa, clearly requires an early limit to coal-fired generation, consistent with stabilisation of emissions in 2020-2025.

Integrated Energy Planning (IEP):

The process for the first Integrated Energy Plan (IEP1) was initiated in 2001 and the approved plan was published in 2004. Extensive shortcomings of the IEP (2004) are explicitly noted in its own final section, inter alia the failure to consider externalised costs, inadequate data regarding renewable energy technologies and an inadequate provisions for stakeholder participation. The process was essentially an application of a cost-optimisation model (MARKAL) to an assumed continuation of business as usual. The only alternative to coal-fired generation given substantive consideration was nuclear, based on highly speculative plant characteristics that have been discredited by subsequent developments.

The second IEP, that should have informed decisions from early 2008 on how best to meet growing energy services demand, as required by the White Paper on Energy Policy for RSA (1998), which provides for a 3-year IEP cycle, commenced in 2005. It was to include a study of externalised costs associated with different energy supply options, which was the subject of a tendering process up to the point of a meeting of a tender adjudication committee. Both the IEP 2 process and commissioning of the Externalties Study were suspended by the DME in September 2006 and remain ‘in abeyance’. The lack of a current IEP simply gives weight to the motivation for full assessment of alternatives.

Integrated Strategic Electricity Planning (ISEP):

This is an internal process of the project proponent. While key conclusions – the proposed plant build programme - have been presented to the media, the ISEP is not publicly available (not even modelling input assumptions⁷); in particular the costing methodology is not transparent (for example, apparently the costings applied to both Medupi and Kusile, do not provide for flue-gas desulphurisation, even though EIA Record of Decision conditions clearly indicate that this will be required for the plants to operate). The claim (Section 4) that Eskom is also investigating ...renewable energy options like wind and solar projects.”, particularly in light of repeated deferral of initiating the concentrated solar power (CSP) plant originally due to start

⁶ South Africa’s presentation to the international community at a special event at the 14th Conference of the Parties to the UNFCCC (December 2008), reiterating a presentation of Cabinet Lekgotla discussions of the LTMS made on 28 July 2008, noted that national plans are intended to stabilise national greenhouse gas emissions between 2020 and 2025, at a ceiling of about 550 Mt CO₂equivalent annually. This allows for an increase of no more than 20% on current emissions levels, and the EIAs for Medupi and Kusile (‘coal 1 & 2’) suggest that together they will increase national emissions in the region of 16%. It is therefore imperative to consider whether any further significant increase of emissions from the electricity supply industry will be feasible.

⁷ Such data was (after a lengthy process) availed to the research team of the Long Term Mitigation Scenarios process, but with confidentiality conditions; it was not shared with stakeholders on the Scenario Building Team.

The purpose of assessing alternatives is to ensure that the best environmental option for a development is considered. A key consideration in the identification of alternatives must therefore include alternatives that are likely to achieve the project objective whilst having lesser environmental direct and cumulative impacts. The EIA should therefore undertake a full comparative assessment.

Consideration of socio-economic impacts

The SR and Plan of Study for EIA do not clearly indicate how socio-economic impacts will be assessed. In its judgment in *Fuel Retailers Association of SA (Pty) Ltd v Director-General Environmental Management, Mpumalanga and 11 Others* [CTT 67/06, 7 June 2007, page 35, the Constitutional Court has made it clear that environmental authorities must consider socio-economic factors. In particular, the court went further to specifically address whether that consideration includes the potential impact on similar existing entities. In this regard, the court stated that -

"The cumulative effect of the proposed development must naturally be assessed in the light of existing developments. A consideration of socio-economic conditions therefore includes the consideration of the impact of the proposed development not only in combination with existing developments, but also its impact on existing ones." [see page 41 at para 72]

From the above it is now clear that the environmental departments must take socio-economic factors into consideration when making decisions and that the enquiry includes looking at the impact on existing activities, including efforts to bring independent operators and renewable energy technologies into the electricity supply sector and proposals to expand the utilization of coal for liquid hydro-carbon energy supply. The failure to do so may constitute a ground for initiating a review of the final decision by the courts. It follows that the EIA process must include a consideration of the potential impact of the proposed project on existing operators. The Scoping Report and Plan of Study for EIA should be revised to reflect this requirement.

Additional Issues

Resource, site selection and local development:

The Waterberg site was selected for its coal deposits. Site selection is pre-determined by first technology choice, and then resource availability (including clean air). The Limpopo Province and regions to its west have some of the world's best solar radiation in locations close to energy-intensive precious metals mining activity. Coal mining areas are spatially remote from precious metals areas. The former is environmentally destructive (particularly open-cast coal mining) and the latter the country's biggest export earner.

Dry cooling and pollution control technologies have energy / efficiency penalties that should be subject to detailed discussion, at a minimum providing a range of such penalties experienced at comparable plant for a range of fuel specifications and estimation of the cost implications. No information on the FGD water penalty is given, though this is promised "at a later stage". It should be specified that consideration of issues of such trade-offs, including between water consumption, FGD efficiency and resource efficiency (resulting from additional energy use in pollution control) will be assessed within this process.

It is stated (p.45): "Oxides of nitrogen (NOX) would be controlled through the installation of low NOX burners, which reduce concentrations of NOX emitted to the atmosphere. This is likely to result in emissions that comply with the applicable standards and therefore further NOX emission abatement technologies will not be considered in the study." This is not adequate – there needs to be assessment of whether proposed plant *will* conform to standards currently under consideration by authorities.

Limestone (for FGD) also has mining implications, which impacts of which should be considered as part of the project impact.

The 2007-2008 period has seen much change in the world, including in economic growth and the prices of commodities and electricity generation equipment. Alternatives to coal power have seen growth of greater

construction in 2005, does not obviate the need for these alternatives to be fully assessed within this EIA process.

National Integrated Resource Planning (NIRP), led by the national regulator:

Updating of the NIRP is behind schedule, thus reference is made to NIRP 2 of 2004, within which “Options are compared on the basis of 1 January 2003 prices (p.II of Executive Summary), even though NIRP 3 is essentially complete (but somehow stranded at NERSA). Costs have changed significantly over the past six years. Furthermore NIRP is not a public or transparent process, as argued in comment submitted to the regulator by civil society in 2004 regarding NIRP 2, which is attached as annexure XX. (A subsequent request, in 2008, for participation of civil society on NERSA Board, has been declined.) Of particular pertinence to the case for consideration of activity alternatives is the NIRP 2 primary assumption (p.II of Executive Summary) that there will be “Low DSM Penetration”

The White Paper on Energy Policy for RSA (1998) clearly calls for the consideration of externalised costs in energy planning and development, which has not taken place within the planning processes referred to in the SR and above. The repeated deferral by the DME of the Externalities Study cannot be used to justify a failure to recognise such externalised costs (See also the annexed ‘Sustainable Energy Briefing’). The White Paper on Energy Policy for RSA (1998) also mandates an equitable level of public investment in renewable energy. Both the The Energy Efficiency Strategy of the Republic of South Africa and the White Paper on Renewable Energy are overdue for review in terms of their own provisions.

The “Hierarchy of policy and planning documents” proposed in the Draft Scoping Report (Figure 2.4, p.24) proposes that the EIA process is subservient to or constrained by an internal planning process of the project proponent (i.e. ISEP). We do not consider this to be supported by the provisions of NEMA or EIA Regulations. While the regulator’s NIRP does provide some valuable contextual background for the EIA process, it would also be inappropriate for a planning document completed 4 years prior to the EIA process to be used to constrain the process, particularly in light of shortcomings noted at the time of publication. (see also Annexure H)

Legislation and policy considerations

The EIA Regulations require that relevant legislation and policy be taken into account. The SR is superficial in this regard particularly regarding the United Nations Framework Convention on Climate Change, legislation and policy (including cabinet decisions). The White Paper on Energy Policy for the Republic of South Africa (1998) specifically calls for diversification of energy supply. Eskom has set itself a target for reducing dependence on coal, as noted in the SR: “reduce coal’s current approximately 90 % share of the energy mix to below 70 % by 2026”.

The White Paper also stipulates that the process of externalised costs should be taken into account in energy planning and development. It further stipulates (section 7.7):

“Government policy on renewable energy is thus concerned with meeting the following challenges:

- ensuring that economically feasible technologies and applications are implemented;
- ensuring that an equitable level of national resources is invested in renewable technologies, given their potential and compared to investments in other energy supply options; and
- addressing constraints on the development of the renewable industry.”

This is taken up in the July 2008 statement calling for:

“Laying the basis for a net zero-carbon electricity sector in the long term.” and

“Setting similar targets for electricity generated from both renewable and nuclear energy sources by the end of the next two decades.”

Given the context of the target (at that time) of 20 000 MW of nuclear plant by 2025 within a total capacity of 80 000 MW, this means a renewable target similar to a quarter of total supply in 2028.

than 50% a year since 2004 while coal power stations are now facing global opposition and even civil unrest which has been found defensible in courts.

Conclusion

The discussion above has highlighted alternatives which are both reasonable and feasible. WWF-SA submits that there is no justification for omitting the assessment of these alternatives in the EIA and accordingly requests that the SR and Plan of Study be revised to include both the identification of these alternatives and the process for assessing them. In addition to this, the failure to identify potential socio-economic impacts on existing activities is a fatal flaw in the process and WWF-SA submits that the SR and Plan of Study for EIA must be revised to indicate how these socio-economic impacts will be assessed. We believe this requires a specialist study that embraces alternative activities for providing energy services.

Attachments

Annexure A: Extracts from NEMA, with highlights

Annexure B: Marquand, A., Mervin, B., and Tyler, M., (2008) *Costing a 2020 Target of 15% Renewable Electricity for South Africa*, Energy Research Centre, University of Cape Town

Annexure C: Sustainable Energy Briefing: When will Renewable Energy be the CHEAPER option for electricity generation?

Annexure D: Sustainable Energy Briefing: 'What does our energy supply really cost? Who is paying? Who knows? - Quantifying externalised costs of electricity supply

Annexure E: Sustainable Energy Briefing: The employment potential of renewable energy in South Africa

Annexure F: Holm, D., Banks, D., Schäffler, J., Worthington, R., and Afrane-Okese, Y. (2008) *Potential of Renewable Energy to contribute to National Electricity Emergency Response and Sustainable Development*, Trade and Industry Policy Studies

Annexure G: Government statement of 28 July, following the Cabinet Lekgotla that considered the LTMS Scenarios Document

Annexure H: Comments on NIRP 2, May 2004

Annexure I: Mark Z. Jacobson (2008) *Review of solutions to global warming, air pollution, and energy security* Stanford University, Stanford, California

Annexure J: Proposal to Eskom for solar thermal electricity supply by CULLINAN ENERGY SOLUTIONS

Annexure K: Long Term Mitigation Scenarios, Technical Report

N I N H A M  S H A N D

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CONSULTING SERVICES

Note that due to the large size of WWF's Annexures A - K these are only available in electronic format by request.

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Received 20/01/09

Joubert, Andre

From: Odendaal, Anelle
Sent: Tuesday, January 20, 2009 10:37 AM
To: Joubert, Andre; ashwin.west@shands.co.za; louise.corbett@shands.co.za
Subject: FW: ENVIRONMENTAL IMPACT ASSESSMENT (EIA) FOR TWO PROPOSED NEW COAL-FIRED POWER STATIONS IN THE WATERBERG AREA, LIMPOPO: PUBLIC REVIEW PERIOD EXTENDED

Dear colleagues

Please see comments attached – we will work it into the IRR.

Kind regards

Anelle

From: Luke Perkins [<mailto:wessa@limpopomail.co.za>]
Sent: 20 January 2009 09:26 AM
To: Odendaal, Anelle
Subject: FW: ENVIRONMENTAL IMPACT ASSESSMENT (EIA) FOR TWO PROPOSED NEW COAL-FIRED POWER STATIONS IN THE WATERBERG AREA, LIMPOPO: PUBLIC REVIEW PERIOD EXTENDED

Dear Anelle

Thank you for the cut off date of the 31st January and for the opportunity to comment. Below are my comments on this development:

Comments from WESSA Limpopo on the two proposed new coal-fired power stations in the Waterberg

1. WESSA recognizes the need for increased electricity production if economic opportunities are to be provided for the disadvantaged in the country.
2. The environmental destruction from coal mining and from electricity generation in Mpumalanga are of concern to WESSA, and we demand that the best available new technologies are used in the Waterberg to mitigate pollution from the power stations, to extract coal in a far more environmentally-sensitive way, and to improve mine closure techniques so that chemical spills post-closure do not pose a threat to the environment as has been the case in Gauteng and Mpumalanga (and please note, continues to be the case, and that certain leaching effects post-closure cannot be halted and will continue indefinitely).
3. The construction of these two proposed new coal-fired power stations will very likely result in the

formation of a new town along the lines of Lephalale. The EIA must take into account the full likely impact of such a new town in the Waterberg, with increased population, increased water usage, sewage, solid waste disposal, landfills etc.

4. ESKOM must liaise with the Limpopo Water Catchment Management Agency and seek input from them on the likely impact on water resources in the catchment area. ESKOM must calculate what the likely water usage will be, both of the power stations and of the supporting infrastructure for the power stations, and communicate this information to the CMA and to DWAF. After this the likely impact on agriculture, on the water table and on the broader environment must be assessed and this assessment must be communicated by ESKOM to the competent authority who will be making the final decision on the go-ahead for these power stations.

5. WESSA believes that the sooner South Africa moves towards sustainable energy use, the better. We support the moves that ESKOM has already made in researching and developing alternative energies. ESKOM should take note that Germany's generation capacity from wind alone is equivalent to South Africa's entire generation capacity. Therefore, while these proposed "old technologies" are under construction, we request at least a doubling of funding to the wind and solar development that ESKOM has already embarked on, and a rapid roll-out of these technologies to provide electricity into the future.

Luke Perkins, Limpopo Office, Wildlife and Environment Society of South Africa.

20 January 2009

From: Mosupye, Wilheminah [<mailto:WMosupye@Zitholele.co.za>]

Sent: 03 December 2008 03:45 PM

To: Mary Leslie; Mariette Liefferink; Donald Lithole; Joekie and Ria Lombard; Louis Loots; Willie Loots; Peter Lukey; Mazwi Lushaba; Donald Mabada; Dolly Mafa; Matume Makgoba; Steve Makua; Melanie Malan; Calvin Mamabolo; Meisie Manthata; Lerato Maregele; Coenie Maritz; Frederick Maritz; Tshepho Maselela; Hazel Mashaba; Shibe Mashao; Thapelo Mathekga; Silas Mathunyane; Joy Matshoge; Allison Matthys; Alson Matukane; Zama Mbense; Jan Meiring; Queen Melato; Mphumelelo Mhlalisi; Prince Mkhonto; Bernice Mnisi; Roshina Mogotlane; Eric Mohlodine; Moses Mokala; Phillimon Molebaloa; Victor Monyepao; Andrew Motha; Lucus Motlokoa; Mvuyelwa Mtwa; Tendani Mufamadi; Azwi Mulaudzi; Catchlife Mutshavi; Johanna Ndoweni; Avhashoni Nefale; Percy Ngidi; Peter Ngoasheng; Kaya Ngqaka; Jan Oberholzer; Odendaal, Anelle; Nic Opperman; Luke Perkins; Tshepo Phukubye; Walter Rachidi; Modjadji Rangwato; Grace Rasesepe

Cc: Odendaal, Anelle; Joubert, Andre; Rambuda, Florence; Mosupye, Wilheminah

Subject: ENVIRONMENTAL IMPACT ASSESSMENT (EIA) FOR TWO PROPOSED NEW COAL-FIRED POWER STATIONS IN THE WATERBERG AREA, LIMPOPO: PUBLIC REVIEW PERIOD EXTENDED

Importance: High

Dear Stakeholder

- **Public review period of the Draft Scoping Report is extended**

At the beginning of November 2008 we communicated that the Draft Scoping Report of the Environmental Impact Assessment for the proposed new coal-fired stations in the Waterberg area is available for review.

Kindly be advised that the public review period has been extended until **30 January 2009** due to requests by interested and affected parties.

Should you require any additional information or assistance regarding this project, please do not hesitate to contact our team at the details below.

Regards

Anelle Odendaal/Andre Joubert

Zitholele Consulting
Tel: 011-254 4855/4901
Fax: 011-805 2100

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Plaas asseblief hierdie skrywe op rekord.

Dankie

Jaco du Bruyn (M.J.)

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Louise Corbett

Subject: FW: EIA for the proposed coal fired powerstations: Access to landowners' farms by consultants and minutes of meetings

From: pauline.strydom@za.pwc.com [mailto:pauline.strydom@za.pwc.com] **On Behalf Of** hein.boegman@za.pwc.com
Sent: Monday, January 26, 2009 4:36 PM
To: Odendaal, Anelle
Cc: ashwin.west@shands.co.za; Joubert, Andre
Subject: Re: EIA for the proposed coal fired powerstations: Access to landowners' farms by consultants and minutes of meetings

Dear Anelle

I refer to our meeting on Saturday, 24 January 2009, where I agreed to give you comments on behalf of landowners on the interaction with your consultants. In the interests of trying not to be negative or destructive during the meeting, I agreed to provide you with comments outside the meeting.

The following behaviour/conduct by the appointed consultants has been of concern:

- According to landowners, Dr Tim Partridge has not attended a number of appointments he has made.
- According to Mr Alan Pugh, Dr Partridge entered the Farm Minnaarspan without the necessary permission or without prior arrangements having been made. This amounts to trespassing and Mr Pugh confronted Dr Partridge to this effect.
- Mr Leitch of the Farm Witkop was contacted by a lady representing the "Agricultural Economists" (?). This person insisted on seeing Mr Leitch during the week, whereas Mr Leitch indicated that he is only available over weekends on the farm to which the consultants responded that weekends do not suit them. Your consultants need to fit into the programmes of the landowners, as agreed.
- Mr Fanie Greyling of the Farm Zandheuwel was asked by one of the consultants for permission to insert equipment down the Zandheuwel boreholes for certain tests to be conducted. This sounds pretty intrusive to me and the body of landowners. You asked for permission for non intrusive/visual EIA access. I guess it is a question of opinion, but landowners are not comfortable to grant permission for this level of access until such time as Eskom procures the land. This is not in the spirit of what was presented to landowners when "reasonable access" was requested.
- I received a call at 20:20 on Sunday night (yesterday) from a consultant whom I assume to be the same person referred to by Mr Greyling. He requested permission to enter Mooipan this morning. I object to being subjected to calls on a Sunday evening to set up access for 12 hours later. Your consultants should set up these meetings well in advance so that access can be arranged with the farm foreman or alternative arrangements can be made.

I give you this information in an effort to be constructive and to facilitate ongoing cordial relationships between landowners and your consultants.

I confirm that it was agreed at the meeting on Saturday that you would amend the minutes of the meeting held in Steenbokpan in October 2008 to be a factual record of what was discussed. You indicated that you would be recording the proceedings at the beginning of the meeting (as you did on Saturday). Please refer to these records as well as the detailed submission I sent of my perceived shortcomings of your record of proceedings. I also confirm that we will receive minutes of last Saturday's meeting no later than close of business on Wednesday this week.

Regards

Hein Boegman
PricewaterhouseCoopers - Southern Africa
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ROUTLEDGE MODISE

In association with



Zitholele Consulting (Pty) Ltd

Att: Andre Joubert

Per e-mail: AndreJ@zitholele.co.za

Date 30 January 2009

Your ref

Our ref Adam Gunn/I19469

Direct dial (27 11) 286-6900

Direct fax 011 286 6901

janineturner@eversheds.co.za

Docex 7 Sandton Square

Dear Sir

COMMENTS ON THE DRAFT SCOPING REPORT AND ENVIRONMENTAL IMPACT ASSESSMENT ("EIA") FOR THE TWO PROPOSED COAL FIRED POWER STATIONS IN THE WATERBERG AREA LIMPOPO FOR ESKOM – DEAT REF NO: 12/12/20/1255

1. Introduction

- 1.1 We refer to the above EIA that you are undertaking on behalf of Eskom and to your letter dated 3 December 2008 whereby comments on the draft scoping report were extended until 30 January 2009.
- 1.2 Our client, the Limpopo Environmental Action Forum ("**LEAF**") hereby submits the following comments regarding the draft scoping report.

2. Authorisation by Eskom to proceed with the project

- 2.1 There are a number of conflicting statements made by Eskom regarding whether the coal fired stations will in fact proceed. As recently as 27 January 2009, the CEO of Eskom, Mr Jacob Maroga is quoted in the press as saying that Eskom, might proceed with coal fired stations.
- 2.2 Please provide us with the Eskom board resolution whereby the proposed developments of Coal 3 and 4 are approved.

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3. **Failure by Eskom and government to consider policy implications**

- 3.1 The decision by Eskom to construct the next of its base-load power stations as a coal fired station is a massive one affecting not only South Africa and many of its citizens, due to the environmental impact, but also the entire world because of its effects on climate change and global warming. Nowhere in this EIA have we seen any evidence to suggest that this policy decision has in fact been debated and that a sound, well-reasoned decision has been taken to motivate the decision behind building this base-load coal fired power station.

4. **Failure to properly list and evaluate the real impact of the project**

- 4.1 The manner in which the EIA is conducted is not appropriate to a project of this nature for the following reasons:

4.1.1 The way in which the EIA is structured is very much the way in which a mine or other large infrastructure project would be undertaken. However, this project cannot be compared to a mine or other large infrastructure project because of its size and because of its massive impact on the environment, South Africa's economy and the global impact due to the effect of the emission of greenhouse gases on the Earth's climate.

4.1.2 It is submitted that the only legally correct way to deal with this project is to examine the total combined impact that this project will have. The precise figures of how much coal will be burnt, exactly where this coal will be mined, how much fauna and flora needs to be destroyed in order to mine this coal, what the impacts of the mining of this coal as well as the impacts that the transportation, if necessary, of the mined coal will have on the environment must be set out in the EIA.

4.1.3 The current draft scoping report gives the false impression that the major impact of a coal fired station is in fact the impact of the station itself, which is its footprint, its air emissions and its water usage. This is completely false. Massive impacts are associated with the coal mining, which is an integral part of the supply of coal to the power station. The same could be said of the water impacts of the mines.

5. **Failure to deal with the emission of greenhouse gases and the potential climate change effects**

- 5.1 The failure of the project to deal with the emission of greenhouse gases ("GHG's") may be decisive.

5.2 The draft scoping report concludes that, because there is no obligation imposed by the Kyoto Protocol on South Africa as a non-annexure I country to reduce GHG's there is no obligation to consider the effects of this project and climate change in the EIA. It is submitted that this is legally incorrect.

6. **Lack of proper data on which to base its supply side projections**

- 6.1 The need for increased supply of electricity is firmly based on the Integrated Strategic Electricity Programme ("ISEP"), as calculated and published by Eskom, and the National Integrated Resource Plan ("NIRP"), as calculated and published by the National Energy Regulator of South Africa ("NERSA"). There are however two problems associated with this:

- 6.1.1 Firstly, both strategic plans not only deal with the total increase of supply of energy that is necessary, but also deal with the energy mix that is required for South Africa to achieve a sustainable supply of energy. Both the NIRP and the ISEP are based on the assumption that nuclear energy will still be a part of South Africa's energy mix in the medium-term.
- 6.1.2 Secondly, in December 2008 Eskom indicated that nuclear power will not form part of Eskom's short- or medium-term plans. Therefore, all of the information presented by these plans and presented by Eskom as part of this process is fictitious and outdated as the real planned energy mix in the short- and medium-term no longer includes nuclear energy. This has the effect of distorting the data presented in the draft scoping report. For example, Eskom has pointed out that GHG emissions will decrease because of the introduction of more nuclear power into the base-load grid. This is no longer the case and the absolute percentage of coal fired energy in the grid will increase and, as a result, this will lead to an increase in GHG emissions (either as a percentage or on an absolute basis). These errors have not been corrected in the draft scoping report.

7. **Waste of public funding on inappropriate infrastructure spending**

Inaccurate and rushed decisions could therefore lead to inappropriate and wasteful decisions being made. Due to the magnitude of these projects, if an error such as this is made then the resultant waste of public funding could be enormous and the consequences far-reaching.

8. **Receiving environment for the proposed plant and mining operations**

The nature of the receiving environment must be emphasised. The area under threat from the project comprises the bushveld as well as the Waterberg, which is an international biosphere.

9. **Coal as the preferred energy source**

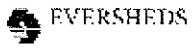
- 9.1 The draft scoping report is also based on the presumption that coal is the preferred option for South Africa and that it is the cheapest source of energy. Please supply the figures and calculations that indicate that this has been conclusively considered and proved by Eskom.
- 9.2 As indicated above, the EIA does not explore alternatives at all as is required by the National Environmental Management Act, 107 of 1998 ("**NEMA**").

10. **Issues raised in the background information document**

Based on the background information document, our client submitted certain comments for consideration in the EIA process. Many of these issues have not yet been addressed. We attach a copy of this correspondence for your ease of reference and trust that these queries will be addressed going forward in the EIA process (Annexure "A").

Yours faithfully

For ROUTLEDGE MODISE



cc: AOdendaal@zitholele.co.za
ashwin.west@shands.co.za
louise.corbett@shands.co.za

Enclosures

ROUTLEDGE MODISE

In association with



EVERSHEDS

Zitholele Consulting (Pty) Ltd

Att: Andre Joubert

Per e-mail: AndreJ@zitholele.co.za

Pages: 3

Date 23 October 2008

Your ref

Our ref Adam Gunn/mvdh

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Docex 7 Sandton Square

Dear Sir

ENVIRONMENTAL IMPACT ASSESSMENT FOR THE PROPOSED COAL FIRED POWER STATION IN THE WATERBERG AREA, LIMPOPO – DEAT REF NO: 12/12/20/1255

1. Introduction

- 1.1 We act on behalf of the Limpopo Environmental Action Forum ("**LEAF or our client**").
- 1.2 LEAF was formed in order to participate in the abovementioned Environmental Impact Assessment ("**EIA**") in order to ensure that the interests of the broader environment are taken into consideration. Thus our client does not represent specific landowner's interests but represents a diffuse, broad environmental interest group.
- 1.3 Please register my client as an Interested and Affected Party ("**IAP**") in the above matter and send all correspondence in the matter to my offices marked for my attention.

2. Comments on the Project and request for information

- 2.1 The enormity of the project and the fact that my client has only been provided with the information on 10 October 2008 makes it impossible at this stage to comment comprehensively on all aspects of the project. However there are certain issues which my client would like you to address.

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INTERNAL ACCOUNTANT Teresa Otto
OFFICE MANAGER May-Elaine Thomson

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- 2.1.1 Has the Department of Environmental Affairs and Tourism ("**DEAT**") approved the EIA to cover two projects in one EIA process?
- 2.1.2 Does the applicant believe that it is complying with its legal obligations both in terms of South African domestic law and international obligations such as the Kyoto Protocol by building 10 800 megawatts of coal fired energy generation?
- 2.1.3 What technology will be employed to reduce the discharge of pollution into the atmosphere – both gaseous and particulate? In particular will any attention be paid to the implementation of flue-gas desulphurisation to remove sulphur dioxide and oxides of nitrogen.
- 2.1.4 What efforts have been made to reduce the need to generate more pollution in South Africa? It was recently reported that only 20 households in Gauteng had been granted solar water heating subsidy by Eskom. Yet the power stations would not be required at all if greater use was made of this obvious, clean and renewable resource! What percentage of its annual expenditure is Eskom investing on clean power?
- 2.1.5 Regarding greenhouse gas emissions, what technology will be used for the capture of CO, CO₂ and CH₄ gasses? Is carbon sequestration or carbon capture being considered by the applicant as a viable option?
- 2.1.6 What emission monitoring instrumentation will be employed? E.g. continuously recorded differential optical absorption spectroscopy. Will this be independently calibrated and monitored and the results publicly available on-line?
- 2.1.7 Where will the water for cooling and other uses at the power stations come from? What will the impact on water resources be? Both in terms of quantity and quality.
- 2.1.8 The applicant is required by law to consider alternatives in the EIA process. What alternatives have been considered for this project? Specifically, have renewable energy sources been thoroughly considered?
- 2.1.9 Please provide a breakdown of where the energy produced by the proposed stations would be used. Is it primarily to be used by smelters or is it for the benefit of the broader population? Has the applicant considered rationing power to the huge energy consumers such as the aluminium smelters (which provide very little benefit to the people of South Africa) and have massive negative environmental impact?
- 2.1.10 What is the estimated cost of the power stations and which financial institutions are being approached for funding? Do these financial institutions comply with the Equator Principles or any other environmental standards?
- 2.1.11 Regarding the location of the station, is it really an assessment of alternatives to assess sites within very close proximity (1 or 2 km) of each other? In the case of coal fired stations where the impact on air emissions and water are particularly severe, should other more remote sites not have been carefully considered?
- 2.1.12 Has the option of railing coal to other parts of the country closer to the source of the demand been considered? Although this may not alleviate

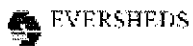
the air emissions problems it would generate substantial savings in the need for transmission lines and the huge environmental impact associated therewith.

- 2.2 Many of the issues raised above require specialist technical and or legal knowledge. However my clients believe that they are appropriate even in this early stage of the project. Please indicate whether you have access to resources to answer the questions meaningfully. They are strategic questions which have been carefully selected by my client and your informed response is important for the EIA.
3. My clients have further, more technical questions but these will be addressed to you as the project progresses at the appropriate time.
4. My client's aims are not necessarily to stop the project in its entirety (unless the applicant's intention is to forge ahead regardless) but to find the best solution using technology, best international practice and drawing on experience and knowledge from South Africa and other parts of the world.
5. We look forward to your response hereto.

Yours sincerely

Adam Gunn
Director

For ROUTLEDGE MODISE



cc: LEAF members by e-mail
DEAT Project Manager by e-mail

Received Date: 02/02/09

McLACHLAN & CO INC

ATTORNEYS, NOTARIES & CONVEYANCERS

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TELEFAX 012 998 1743
086 677 2567

Our reference: Mr McLachlan/

Your reference:

Ninham Shand (Pty) Ltd,
Telefax 021 424 5588

30 January 2009

Sirs,

PROPOSED COAL-FIRED POWER STATIONS IN THE WATERBERG COMMENT ON DRAFT SCOPING REPORT

We act on behalf of 21 (out of 25) of the owners of the properties in Sites A, B and C identified in the Draft Scoping Report. The following comments on the Draft Scoping Report are being submitted to you on behalf of the land-owners directly affected by the proposed power station development.

A UNCOORDINATED PLANNING

- 1 It seems as if Eskom's planning in respect of its expansion programmes is done on an *ad hoc* basis. Instead of following a holistic approach, Eskom seems to plan its generation and transmission requirements on a piece-meal basis, and subsequent developments are often contradictory with its own prior planning. A case in point is the planning of the route of the Mmamabula-Delta power lines before the location of Delta sub-station has been decided upon. While planning the Mmamabula - Delta sub-station, Eskom would have been in the process of planning Coal 3 and 4. However, the planning decisions seem at odds with each other.
- 2 As part of the EIA, clear consideration of the compounded effects of all known or potential developments should be taken into account. Simply looking at the two proposed power stations in isolation without proper assessment of the role this will play in the whole, will not only be the

DIRECTOR: R McLACHLAN BA HONS LL.M (UP) ASSOCIATE J S PANSEGRUW BA (UP) B PROC (SA)



responsibility of DEAT, but also Eskom. While it is known that other developments in the area are under consideration, eg the SASOL plant, these developments are ignored. In the end the authorities having to assess the applications will be faced with an impossible task of balancing conflicting needs without the benefit of holistic planning.

- 3 The economic necessity and the responsibility of Eskom to increase its electricity generation capacity, is accepted. However, the lack of co-ordination leaves uncertainty as to whether the chosen options are the best options. In particular, the question remains whether the damage that will be caused to the environment in this almost pristine area has been properly balanced against the need for developing additional power stations.

B **ISOLATING ENVIRONMENTAL IMPACT**

- 1 If there is one positive vision that gains the consensus of all South Africans it is that tourism is or should be a mainstay of the South African economy. The natural environment is one of South Africa's strongest marketing assets and Government policy has recognised that visitor satisfaction is closely connected with the nation's physical and social heritage. It has afforded equal acknowledgement to tourism as a powerful source of job creation which, in turn, plays a pivotal role in contributing to economic growth. This is particularly true in areas, such as Steenbokpan, that are economically challenged and where historically disadvantaged communities may benefit from what is the heritage of all in that region. Maintaining the history of the past, along with the pristine character of the landscape, should be the central priority of all.

- 2 The area North east of the Matlabas river, west of the Mogol rivers and up to the Botswana boundary has been one of the last remaining truly remote bushveld areas, which has managed to escape large scale development and industrialisation. The area is sparsely populated and is ideal for game farms and conservation. For many years, visitors and

families alike came to the area to share and experience the solitude provided by this unique, simple and beautiful area. Since the development of the first power station in Lephalale the solitude of this area has slowly but surely been eroded. Somehow the Steenbokpan area managed to escape this development and remained as one of the last truly remote typical bushveld retreats that, once destroyed, can never be replaced. Unfortunately development will inevitably destroy the essential remoteness and wilderness of the area.

3 There can be no doubt that the building of two power stations, with attendant features such as coal yards and ash dumps in the heart of the Bushveld will be an eye-sore in the area, and will destroy the essential character of the area forever. It is submitted that, should permission be granted to Eskom to proceed with its proposed power stations, it is the responsibility of the the authorities granting such permission to limit the damage by imposing suitable obligations on the applicant.

4 It can be accepted that the power stations will attract diverse development, and one can envisage a creeping industrialisation in the area. This will add to the destruction of the bushveld.

5 The land use of the area south of the Eenzaamheid fault was recently considered in the context of Eskom's application consent to erect the Mmabula-Delta power line and the development of the Delta distribution station.

6 In the Margen Industrial Environmental Impact Assessment Report dated October 2007 (p. 34 Section 6.1) the following is stated:

"A key outcome of the Mmamabula-Delta 4 x 400kV power line EIA study is that the future potential of the different areas of the study area needs to be preserved as much as possible."

The recommendations and concluding remarks on p. 44 Section 8 of the same document included the following:

"Eskom has accepted the need to preserve the eco-tourism area south of the Eenzaamheid's fault line"

DEAT and Eskom readily accepted that the area south of the Eenzaamheids fault must be preserved for eco-tourism and be kept intact for its development as wildlife management area and to ensure that it develops its eco-tourism potential.

7 **PROPOSAL: AN EXTENDED BUFFER ZONE AND PROTECTED NATURE CONSERVATION AREA**

In the Draft Scoping Report some mention is made of a buffer zone around the residential areas of Steenbokpan. It is felt, however, that this provision is not sufficient to limit the damage to be done by Coal 3 and 4. Since Eskom will be destroying a major nature area and resource, Eskom should consider it to be its duty to isolate its intrusive power stations from the much larger bushveld area by creating a suitable buffer zone around the power stations and works, in which no development would be allowed. To prevent creeping industrialisation, the buffer zone must be declared a protected nature area. Eskom should be compelled to acquire adjacent land to ensure that such land can be used for no purpose other than natural development. Such area should be big enough to minimise the visual impact of the proposed works. The land should be declared a nature conservancy protected by legislation in this regard. In this way the land damaged by the power stations will be isolated from the rest of the bushveld and the damage limited.

C **EMISSIONS, DUST AND DISPOSAL OF ASH**

- 1 By Eskom's own admission, the Medupi EIA did not properly address the abovementioned issues. The ROD to construct Medupi instructed Eskom to further develop environmentally defensible solutions to these very real issues. Yet, in defending Eskom, insistence to have the Delta sub-station at Zandnek and not right next to Medupi, Eskom argues that it expects the environment around Medupi to "pay the price" of pollution while they want a fresh area some 20 kms away that they can sterilize for other economic uses. They admit that they intend trashing the area around

Medupi to such an extent that they have little choice but to locate Delta out of harm's way!

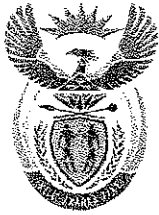
- 2 Will the Coal 3 and 4 EIA also simply brush over these factors that will destroy the environment for many kilometers south west/down wind of Coal 3 and 4? The EIA consultants will need to carefully look at dispersion models, ashing solutions and emissions in general. Medupi EIA was rushed through in "national interest" with little regard for the environment - does the Coal 3 and 4 planned timeline suggest the same approach? It is submitted that detailed studies will be necessary to come up with an environmentally defensible emission, dust and ash disposal solution and appropriate conditions be imposed on Eskom in the ROD.

Yours faithfully,

R McLachlan
McLACHLAN & CO INC
per



DIRECTOR: R McLACHLAN BA HONS LL M (UP) ASSOCIATE J S PANSENGROUW BA (UP) B PROC (SA)



agriculture

Department:
Agriculture
REPUBLIC OF SOUTH AFRICA

Private Bag X120, Pretoria (Tshwane), 0001
Delpen Building, C/o Annie Botha & Union Street, Riviera, 0084

From: Directorate Land Use and Soil Management
Tel: 012-319-7678 Fax: 012-329-5938 E-mail: Subdivision@nda.agric.za
Enquiries: Helpdesk Ref: 2009_01_0078

Zitholele Consulting Ltd
P O Box 6002
HALFWAY HOUSE
1685

Dear Sir/Madam

2009-02-04

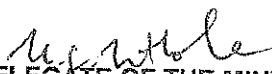
PROPOSED NEW COAL-FIRED POWER STATION IN THE WATERBERG AREA, LIMPOPO PROVINCE

Your letter dated 3 November 2008 refers.

Eskom is a statutory body and is therefore excluded in terms of Section 2 of the Subdivision of Agricultural Land Act, Act 70 of 1970, from the provision of the said Act. You can therefore approach the Register of Deeds to register the Servitudes without the Minister's Consent.

I hope you will find the above in order.

Yours faithfully


DELEGATE OF THE MINISTER: LAND USE AND SOIL MANAGEMENT

Received 30/03/09



SOUTH AFRICAN HERITAGE RESOURCES AGENCY

17A LANDROS MARE STREET POLOKWANE, 0700
P. O. BOX 1371, POLOKWANE, 0700
TEL: 015 291 1804. FAX: 015 291 1819

DATE: 09 March 2009
ENQUIRIES: Mrs Vhonani Ramalamula
E-mail: pramalamula@lp.sahra.org.za
Web site: www.sahra.org.za

YOUR REF: 9/2/281/0002
OUR REF: xxxxx

Attention: Ms Anelle Odendaal
Zitholele Consulting (Pty) Ltd
P.O. Box 6002
Halfway House
1685

By Fax: 011 805 2100

Dear Madam

**RE: ENVIRONMENTAL IMPACT PROPOSED COAL-FIRED POWER STATIONS
AND ASSOCIATED INFRASTRUCTURE IN THE WATERBERG, LIMPOPO
PROVINCE**

Thank you for your indication that development is to take place in this area.

We request that HIA report done by Dr J van Schalkwyk be forwarded to us for our comments. We trust that you will submit such report in due course to avoid inconveniences that may be caused as a result of delay.

Should there be any queries, please do not hesitate to contact the undersigned.

Yours sincerely

Vhonani Ramalamula
Cultural Heritage Officer
For the Manager
SAHRA Limpopo Office

Received 30/03/09



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17A LANDROS MARE STREET POLOKWANE, 0700

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YOUR REF: 9/2/266/0002

OUR REF: xxxxx

Attention: Ms Anelle Odendaal
Zitholele Consulting (Pty) Ltd
P.O. Box 6002
Halfway House
1685

By Fax: 011 805 2100

Dear Madam

**RE: ENVIRONMENTAL IMPACT ASSESSMENT FOR THE TWO PROPOSED
COAL-FIRED POWER STATION IN THE WATERBERG AREA, LIMPOPO, FOR
ESKOM, LIMPOPO PROVINCE**

Thank you for your indication that development is to take place in this area.

You indicated that a draft Scoping report is available for comments. We request that such report is submitted to our office for our comments. We also request that an HIA study be conducted as part of an EIA Process.

Should there be any queries, please do not hesitate to contact the undersigned.

Yours sincerely

Vhonani Ramalamula
Cultural Heritage Officer
For the Manager
SAHRA Limpopo Office

received 3/04/09

0147636278 (Tel)
0147632274 (Faks)

JPJ VAN BAALEN
Posbus 6904
ONVERWACHT
0557

2009.02.03

AAN WIE DIT MAG AANGAAN

PLAAS : WITKOP – 287 LQ

Ek, JPJ en SM van Baalen is die eienaars van bogenoemde plaas.

Hierdie grond wil ons nie graag verkoop nie, want hierdie is ons pensioen-aftree plan.

Die grond-eiendom is geleë ongeveer 5,6 km anderkant Steenbokpan, aan weerskante van die teerpad. Die eiendom is omhein met wildwering. Daar is een windpomp met 'n boorgat, een boorgat met 'n dompelpomp en een handpomp aan die oorkant van die pad.

Die eiendom is direk onder beskikbare Eskom-kraglyn. Daar is 'n antieke ou huis wat in 1938 gebou is. Die huis is toegerus met elektriese krag en water.

Dit is relatief goeie landbougrond. Dit is moontlik om daar gewasse te verbou waar ek en my familie kan oorleef. Met ongeveer 10 skape en 2 beeste en 'n paar varke en hoenders kan ek oorleef en 'n bestaan voer.

Tans is ons besig om veranderinge aan te bring, soos bv. 'n Lapa, swembad, huis te verbeter en nog 'n boorgat te boor.

Hierdie eiendom word gebruik met my kinders en familie en is vir ons van baie waarde.

Soos ek alreeds genoem het, wil ek nie graag die grond verkoop nie, want dit is 'n plek waar ek kan oorleef, maar sal bereid wees vir 'n ruiling van 'n ander stukkie grond met ongeveer die soortgelyke toestande en ongeveer 20 km radius om Lephale (Ellisras) met geen grondeise nie.

Geteken te Lephale Ellisras op hierdie 3de dag van Februarie 2009.


JPJ VAN BAALEN
5406105086084

2009/ 0203


SM VAN BAALEN
5906220025087

2009/ 0203