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Enquiries  
Imibuzo Melanie Webber/ Tammy Christie

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2009-12-17

*Departement van Omgewingsake en Ontwikkelingsbeplanning*  
*Department of Environmental Affairs and Development Planning*  
*ISEbe leMicimbi yeNdalo esiNgqongileyo noCwangciso loPhuhliso*



The Director  
Department of Environmental Affairs and Tourism  
Private Bag X447  
**PRETORIA**  
0001

Attention: Ms. L Grobbelaar

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Dear Madam

**COMMENTS: REVISED PLAN OF STUDY FOR ENVIRONMENTAL IMPACT ASSESSMENT FOR ESKOM' S PROPOSED NUCLEAR-1, -2 AND -3 POWER STATIONS AND ASSOCIATED INFRASTRUCTURE.**

The above document dated September 2009 and received by the Department on 22 October 2009, refers.

The Department would like to draw your attention to our comment dated 23 June 2009. The Department notes the responses to our comments, issued by Arcus Gibb and dated 2 September 2009.

The Department raised the concern, when commenting on the Scoping Report, that our original comments and responses to these comments were not included in the reports. We remain concerned about this as again our comments dated 23 June 2009 and the responses dated 2 September 2009 were not included in the revised plan of study ("POS") for environmental impact assessment ("EIA"). All other interested and affected party ("I&AP") comments, including CapeNature, were included in the revised POS for EIA with the responses from Arcus Gibb to each one. This Department is also an I&AP for this application and thus our comments should be included in the same way. Regulation 58(4) of GN. No. R. 385 states that any written comments received by the environmental assessment practitioner ("EAP") from a registered I&AP must accompany the report when the report is submitted to the competent authority. This has not been done and is thus a flaw in the application process. Furthermore, the Department's comments should be included/attached whether or not the EAP or applicant agree with the Department.

The Department would like to reiterate the comments below which were made previously on the POS for EIA but have not been adequately responded to:

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### **Alternative sites**

Based on the findings of the Scoping Report, the Brazil and Schulpfontein sites were not considered feasible for further assessment based on severe time constraints associated with Nuclear-1's development coupled with limited local demand and the lack of existing power corridors. Now that three nuclear power stations are being considered with the last envisaged to be constructed in 2016, it is argued that it may not be reasonable to exclude these two sites from the current EIA process. Furthermore, much needed specialist studies at these two sites may provide information to suggest that these sites are more appropriate for development than the other sites identified. It is this Department's view that the Brazil and Schulpfontein sites should be included in the EIA based on the fact that the reason for excluding them in the first place may no longer be valid.

With regard to the excluded Brazil and Schulpfontein sites, the National Department of Environmental Affairs ("DEA") have stated that "*these sites will be considered for future Nuclear projects*". If the sites are feasible enough to consider for future Nuclear projects then they should be feasible enough to consider as alternatives now. This Department is of the opinion that progressing with the application for the combined approval of all three of the other sites with no site alternatives to be assessed in the EIA phase is a major flaw in the application.

If the DEA have agreed in principle with Eskom's approach to submit a combined application, it is not understood why Eskom cannot pursue the proposed combined application at present i.e. why Eskom is waiting for the amended EIA regulations to be promulgated. Regulation 15(2) of GN No. R. 385 already allows for this.

### **Other Alternatives**

With respect to alternatives, the POS EIA is not clear about what types of alternatives will be assessed in the EIA other than plant layout options on the various sites. Power generation alternatives (dealt with in terms of need and desirability for the proposed developments), nuclear technology alternatives and nuclear fuel options are not mentioned and should form part of the EIA.

### **Decommissioning**

Impact methodology is presented for the construction and operation phases of the development. The decommissioning phase of the development seems to have been disregarded. Although this phase will only come onto effect after 60 yrs of operation making it practically difficult to assess all the impacts associated with this phase at present, there are impacts that must be assessed in the EIA. For example, the consequences for future land use options around the sites and the economic impacts related to the decommissioning phase must be assessed. These aspects must be assessed as part of the EIA as part of the assessment of the decommissioning phase. Page 9 of the revised POS for EIA mentions "*two main project phases (construction and operation)*". This should be three, including the decommissioning phase.

Alternatively, certain assumptions must be made. The decommissioning of a nuclear reactor is a separate listed activity which has not been applied for in the current application. It is thus assumed that a full assessment of the decommissioning of the nuclear facility(ies) will be done at a later stage. However, the public and authorities must be in a position to understand what the long term implications of the project on the

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environment and future land use will be and adequate forward planning must be done to ensure that the environment is protected for future generations. It is therefore important that, if decommissioning is not to be fully assessed as a third phase, assumptions must be made (and presented) regarding the future of the site(s) as this will effect the significance ratings of some environmental impacts e.g. the land use change and implications must be assumed to be permanent, thus affecting impact significance in terms of, amongst others, duration.

### **Emergency response**

The Department's original comment has been accommodated.

### **Nuclear safety and radiological issues**

With respect to the handling of matters pertaining to nuclear safety and radiological issues, it is acknowledged that although these issues will be reported on in the EIA, the DEA will not review this information but will refer this information to the NNR for consideration. This Department would, however, like to have the assurance that the NNR's findings of these aspects will be reported back to the public and that these findings will influence the DEA's final decision on the matter i.e. the safety case will have had to be finalised and reviewed by the NNR and approved before an environmental authorisation is issued. In any event, the construction of the plants will not be able to commence without the NNR's installation licence which follows the evaluation of the safety case.

The POS EIA is not clear regarding the link between the DEA environmental authorisation process and the National Nuclear Regulator (NNR) licensing process. The timing of these various decisions has also not been made explicit. The agreement between DEA and the NNR of 15<sup>th</sup> June 2006 on how to deal with these matters has also not been included in the report. A clear indication of how the co-operative arrangement between DEA and the NNR will work as well as the responsibilities of these two parties must be provided in a final POS EIA.

The above has not been adequately addressed in the "*Notification of statement issued by the Department of Environmental Affairs and Tourism regarding the consideration of matters pertaining to nuclear safety in environmental impact assessment processes on nuclear installations*".

### **Transport**

It has been indicated that the determination of emergency planning zones will form part of the NNR process. This aspect, however, has implications for future land use options as well as infrastructure upgrades or new infrastructure needed for safe evacuation and thus it should be evaluated as part of the EIA.

The response provided in the Arcus Gibb letter dated 2 September 2009 does not satisfy the above.

### **Nuclear waste management**

The issue of nuclear waste handling, management, storage and disposal does not seem to be covered explicitly by any of the specialist studies. The Department notes that the terms of reference for the specialist studies (Chapter 4.5, page 18) of the revised POS for

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EIA has been expanded to include radioactive waste management. The Department is of the opinion that a separate specialist study on radioactive waste management should be included in the EIA as the storage and disposal of radioactive waste has major long-term environmental implications.

**Peer review**

It is not clear whether or not the findings of the specialist reviewers will be included in the EIR. The findings of the specialist reviewers must be made public knowledge to ensure transparency and promote informed decision making.

The Department notes the response that a statement of quality from all peer review specialists will be included in the EIA Report, thus assuring the general public that the reports meet all scientific and objectivity requirements as per the requirements of the EIA. The Department supports this and requests that this be stated in Chapter 4.6, page 36 of the POS for EIA so that it is clear to the public.

As requested previously, please send two copies of all documentation regarding this application to this Department as the proposed sites fall within two different administrative regions and are being commented upon by two different officials. Their contact details are as follows:

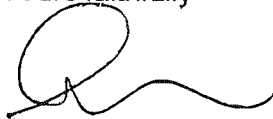
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This Department reserves the right to revise or withdraw comments or request further information from you based on any information received.

Yours faithfully



**ANTHONY BARNES**  
**DIRECTOR: INTEGRATED ENVIRONMENTAL MANAGEMENT (REGION B)**

COPIES TO:

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