

Our Ref: J27035

21 December 2011

Attention: MAYORAL COMMITTEE OF THE CITY OF CAPE TOWN

**Johannesburg**

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Dear Sir

**ESKOM ENVIRONMENTAL IMPACT ASSESSMENT (EIA:12/12/20/944) FOR A PROPOSED NUCLEAR POWER STATION AND ASSOCIATED INFRASTRUCTURE: COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT ASSESSMENT REPORT**

Your correspondence to Ms. Bongji Shinga of Acer (Africa) refers.

Arcus GIBB acknowledges receipt of the above-mentioned letter. We thank you for your valuable comments and your participation in the Eskom Nuclear Power Station (NPS) Environmental Impact Assessment (EIA) process to date. Your questions and comments concerning the Nuclear-1 have been noted.

Responses to your comments / questions are as follows:

Your comment (1)

**MC 08/06/10 PROPOSED ESKOM NUCLEAR-1 POWER STATION AND ASSOCIATED INFRASTRUCTURE: CITY COMMENT ON THE DRAFT ENVIRONMENTAL IMPACT REPORT**

An extract from the minutes (PLAN 07/06/10) of the meeting of the Planning & Environment Portfolio Committee held on 1 June 2010 was tabled, a copy of which is attached as **Addendum "A"** to the official Mayco minutes.

The Executive Deputy Mayor and Mayco Member for Finance, Ald. I Neilson, expressed grave concern that the City's comment on the draft Scoping Report, which addresses a number of strategic issues, was excluded from the Environmental Impact Report released recently. Ald. Neilson was of the view that it would be appropriate to call for reasons for the omission from the relevant authorities.

It was proposed that the comments formulated on the matter by the Planning & Environment Portfolio Committee at its meeting held on 1 June 2010 together with the comments from the relevant services units as set out in the report on the agenda be endorsed as the City's comment on the Nuclear-1 draft Environmental Impact Report.

The above proposal was duly supported.

**RESOLVED** that:

- (a) the contents of the report, comments from the relevant service units for submission to the Department of Environment Affairs and the National

Nuclear Regulator, as well as the comments formulated by the Planning & Environment Portfolio Committee at its meeting held on 1 June 2010 be endorsed as the City's comment on the Nuclear-1 draft Environmental Impact Report

- (b) the Nuclear-1 Environmental Impact Assessment (EIA) address all of the City's previous comments in order that the issues raised by the City of Cape Town can be considered in the EIA decision
- (c) the evaluation criteria used in the EIA to compare the alternative sites be amended to include the impact on population, emergency planning and disaster risk management costs
- (d) the Nuclear-1 EIA assess the potential impacts of the Nuclear-1 installation on the future spatial expansion of Cape Town along the West Coast development corridor in terms of the established National Nuclear Regulator exclusion and emergency planning zones of 5km and 16km.

### **Response (1)**

a. Your comments are noted.

b. The requirements of the Section 58(4) of GN R 385 of 2006 are that "*Any written comments received by the EAP from a registered interested and affected party must accompany the report when the report is submitted to the competent authority*". Further, the public participation guidelines for the regulations specify that if a written comment is received within the specified timeframe, that comment must accompany the report submitted to the authority. Regulation 59 of GN R 385 of 2006 specifies that "*The EAP managing an application for environmental authorisation must ensure that the comments of interested and affected parties are recorded in reports submitted to the competent authority in terms of these Regulations*". Thus it is not a requirement of the regulations or the accompanying guidelines that copies of the actual comments must be included.

GIBB includes all written comments received verbatim in the Issues and Response Reports (IRR) that accompany the Environmental Impact Report. As such the response to the City of Cape Town is attached in the Issues and Response Report as was received during the Scoping Phase.

c. The comparative assessment of the three alternative sites by Arcus GIBB was based on the following:

- Results of the specialist studies: specialists have indicated the relative significance of potential impacts with mitigation at each of the three alternative sites;
- An integration workshop, involving all specialists, on 24 and 25 November 2009, where potential impacts and ranking of the alternative sites was discussed;
- Costs; and
- Transmission integration requirements.

The impacts of high and medium significance after mitigation were considered important for decision-making. These impacts were further filtered to a manageable number of key impacts for the purpose of decision-making. The following decision factors were selected as most important for decision-making:

- Transmission integration factors;

- Seismic suitability of the sites;
- Impacts on dune geomorphology;
- Impacts on wetlands;
- Impacts on vertebrate fauna;
- Impacts on invertebrate fauna; and
- Economic impacts.

Population and emergency planning is therefore not considered as decision factors of high significance in terms of the decision making process. Economic impacts and costs related to the proposed Nuclear Power Station have been assessed as part of the Economic Impact Assessment, but since the probability of a disaster occurring was assessed as low, the increase in the costs related to disaster management was not considered as significant. It is, however, recommended in Chapter 10 of the draft EIR that Eskom negotiate and agree with Local Municipalities in terms of the costs incurred by said municipalities (for instance, for upgrading of services) related to the construction and operation of the Nuclear Power Station and that agreement must be reached on the between Eskom and the local authority on the apportionment of costs for these services.

d. Your comments are noted. However the impact on spatial planning does not form part of the scope of the current application and was therefore not assessed as part of the Draft EIR. Emergency planning zones required for the new generation nuclear reactors are significantly smaller when compared to the zones that currently exist for most operating nuclear power reactors in the world.

The existing zones were established in the mid 1970's and are as follows:

- Precautionary Action Zone (PAZ) = 5 km
- Urgent Protective Action Planning Zone (UPZ) = 16 km
- Long Term Protective Action Planning Zone (LPZ) = 80 km

Eskom has committed to the following Emergency Planning Zones for new sites in South Africa:  
PAZ = 0 km, UPZ = 0.8 km and LPZ = 40 km

These zone sizes are similar to the European Union requirements. The emergency plans for modern nuclear plant with their additional safety features are therefore less sensitive to the population density factor. These zones will apply to any reactor technology  
Should you have any queries with respect to the above please do not hesitate to contact Arcus GIBB.

Yours faithfully  
For Arcus GIBB (Pty) Ltd



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Jaana-Maria Ball  
Nuclear-1 EIA Manager