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Attention:

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THE PLANNING & ENVIRONMENT PORTFOLIO COMMITTEE OF THE CITY OF CAPE TOWN

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:

PLAN 07/06/10

1 PROPOSED ESKOM NUCLEAR-1 POWER STATION AND ASSOCIATED INFRASTRUCTURE: CITY COMMENT ON THE DRAFT ENVIRONMENTAL IMPACT REPORT

Mr Keith Wiseman introduced this matter; he gave a brief background on the process thus far.

Mr Wiseman elaborated on Eskom's Nuclear Site Investigation Programme and informed the meeting that the two Northern Cape sites (Brazil, Schulpfontein) were removed from further consideration at the end of the Scoping Phase of the EIA and therefore the current draft EIR addresses the three alternative sites: Thyspunt, Bantamsklip and Duynefontein (Koeberg). The following decision factors were selected by the EIA consultants:

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

Your comment (1)

Mr Wiseman expressed his concerns over the assumptions made on reduced population exclusion zones namely 800 m and 3 km from the established 16 km and 5 km existing at KNPS. Mr Wiseman noted that the only the NNR has the authority to approve radii of exclusion zones and expressed serious concern with these assumptions given that the NNR would only apply their minds during the Nuclear Licensing process i.e. after the process of site selection during the EIA has been concluded.

Response (1)

Your comment is noted. Internationally, exclusion zones associated with the form of technology being considered for Nuclear-1 are 800 m and 3 km, and Eskom is therefore motivating to the National Nuclear Regulator (NNR) for this to be the case for the Nuclear-1. It is assumed that an 800 m radius Protective Action Zone (PAZ) and a 3 km radius Urgent Protective Zone (UPZ) will be defined around the power station. No private development will be allowed within the former and restrictions of densities of development planning for emergencies will apply in the latter. The final decision regarding the size of the exclusion zone, however, lies with the NNR, as per the National Nuclear Regulator Act, 1999 (Act No. 47 of 1999). These zones differ from those put in place for older technology reactors such as those currently in use at Koeberg.

Your comment (2)

Lastly Mr Wiseman stated that housing, facilities and transport for workers at the proposed site was also not addressed and that it will have an impact on tourist accommodation and accommodation prices will be increased.

Response (2)

As stated above the scope of the current application for the nuclear power station does not include these developments. Information about these requirements is, however, provided in the Draft EIR for information purposes.

It is Eskom,'s preference to make use of existing accommodation in the area surrounding the site as far as possible. This may particularly be the case at Duynefontein, since it is situated close to the Cape Town metropolitan area. However, where necessary, an employee village will be established within or as close as possible to existing towns in the vicinity of the power station site to cater for the greater part of the expected 7 000 to 8 000 workers who will be active on site during the peak of construction (a period of approximately 3 years). The 1 400 operational staff will either buy existing properties in these areas, build new accommodation or rent. Exact numbers of construction staff cannot be confirmed at this stage and will be dependent on the appointed vendor. Eskom has, however, followed a conservative approach in the consistent dataset and specified maximum number of construction and operational staff that they expect would need to be accommodated.

The potential impacts that the power station activities (e.g. transport, influx of people, housing of staff) will have on the areas surrounding the site have been assessed in the relevant specialist reports (e.g. the Noise Assessment, Social Impact Assessment, Transport Assessment and Air Quality Assessment).

Your comment (3)

Members submitted the following concerns/comments:

Expressed grave concerns over the split EIA/NNR Nuclear licensing process.

Response (3)

The agreement between the DEA and the NNR indicates that the DEA would not “make a pronouncement on the acceptability” of radiological safety issues, and that this issue falls firmly within the ambit on the NNR licensing process. However, at the DEA’s request, information relevant to radiological safety issues has been included in the Draft EIR.

Your comment (4)

Growth/expansion of the City not considered as a decision-making factor by the EIA consultants.

Response (4)

We take note of your comments. Whilst future growth and expansion of Cape Town is not discounted, the factors that have been selected as key decision factors include technical and cost considerations (which are ultimately of importance not only for Eskom but also for South African citizens, since Eskom is a state-owned enterprise), as well as impacts on dune geomorphology, wetlands, vertebrate and invertebrate fauna and positive conservation impacts. These key decision factors were identified in consultation with the specialist team appointed in terms of the assessment.

Your comment (5)

Emergency Evacuation plan and procedures.

Response (5)

The emergency preparedness report falls within the ambit of the NNR licensing process and the public will be granted insight into further details about emergency planning through the public hearing process that forms part of this process.

Your comment (6)

Responsibility for additional infrastructure and roads.

Response (6)

It is recommended that Eskom must agree with the relevant local authority on the apportionment of responsibility for the upgrading of infrastructure, before the commencement of construction for Nuclear-1. Eskom will be accountable for the costs of access roads onto the site and relevant upgrading of roads to accommodate the turning space of large vehicles. The upgrading of provincial roads to the site would need to be discussed and agreed with the local authority..

Your comment (7)

Lack of clear lines of communication with the National Nuclear Regulator.

Response (7)

The NNR’s licensing process does make provision for public hearings and is subject to the provisions of the Promotion of Administrative Justice Act, 2000 (Act No. 3 of 2000), as are all authorisation processes to which the public has access. The NNR’s process is therefore required to be an open and transparent process.

Your comment (8)

Queried the rating process of the different sites.

Response (8)

The impact assessment at Thyspunt as a result of the construction and operation of the Nuclear Power Station did indeed identify significant impacts on the floral, dune, wetland, tourism and marine environments amongst others. The impacts on the Biophysical and Physical environment has been identified and assessed by a number of specialist studies attached to Appendix E of the Draft EIR and incorporated in the Draft EIR in Chapter 9 and Chapter 10. A number of mitigation measures have also been suggested and included in a draft Environmental Management Plan in order to mitigate the impact of the Nuclear Power Station on the Environment.

It is however important to remember that in terms of the current application a comparative assessment of the sites were also undertaken. The comparative assessment of the three alternative sites by 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 the 24th and 25th November 2009, where potential impacts and ranking of the alternative sites was discussed;
- Costs; and
- Transmission integration requirements.

Although there are obvious differences between the significance of the potential impacts of the three alternative sites, all specialists agreed that there are no fatal flaws at any of the sites (provided appropriate mitigation is implemented). The specialist further collectively agreed that all three alternative sites are suitable for development of a nuclear power station in time, given sufficient mitigation of impacts.

In terms of the above Thyspunt has a considerably lower seismic risk profile, as well as being more favourably located in terms of Eskom's requirements for integration with the transmission system. The Thyspunt site is therefore recommended for authorisation in terms of this application.

Therefore although it is acknowledged that Thyspunt would experience environmental impacts of high significance, we still maintain that the conservation of the remainder of the site through access control and responsible long-term conservation management are significant positive impacts associated with this site. Mitigation of identified potential negative impacts recommended by the specialists and in this EIR must be ensured.

Your comment (9)

Status of Koeberg Nature reserve.

Response (9)

The status of the Koeberg Nature Reserve will remain unchanged. It is registered as an official Nature Reserve.

Your comment (10)

Security at the proposed site and reference to the Green Peace incident 2004.

Response (10)

All power stations in South Africa are classified as Key Points in terms of the National Key Points Act, 1980 (Act No. 102 of 1980) In terms of this Act, Eskom is obliged to put in place specified security measures at its power stations. Various security restrictions over and around the site would apply e.g. overfly height restriction and a coastal exclusion zone.

Your comment (11)

Storage of Nuclear waste at Koeberg should be addressed by the EIA.

Response (11)

A nuclear waste management specialist study has been included in the Revised Draft EIR. The impacts of handling and storage of radioactive waste is a matter that is firmly within the ambit of the NNR and the newly established National Radioactive Waste Disposal Institute. The disposal of low and intermediate level radioactive waste will be undertaken at a facility that is licensed for this purpose (Vaalputs waste disposal site) and the impacts of disposal are therefore adequately managed within legally accepted criteria. This disposal site is audited on a regular basis against legal requirements.

Your comment (12)

Responsibility for insurance for surrounding residents/ businesses in case of an incident at Koeberg.

Response (12)

South Africa has not signed the Vienna Convention [on Civil Liability for Nuclear Damage]. The Act of Parliament in South Africa [the NNR Act section 29] requires Eskom to make financial provision. Regulations that are issued by the Minister of Energy stipulate how much financial provision must be made (Regulation promulgated in Government Notice No. R 581 of 2004). Section 29 of the NNR Act also allows for the Minister to require additional financial provision beyond what is stipulated by the Regulation. Section 33 of the NNR Act also makes provision for the Minister to go back to Parliament to appropriate more funds if this is required. The current figure stipulated in GN R 581 of 2004 is R2.4 billion. Eskom makes the financial provision through insurance obtained from the international nuclear insurance pools. This is in dollar denomination, resulting in a current financial provision in excess of R3 billion. Every year Eskom has to provide proof that the financial provision (insurance) has been obtained.

Your comment (13)

As the impact of the Economic and Social impact on the City of Cape Town were not comprehensively assessed and there was a lack of sufficient information the EIA process should not be supported.

Response (13)

The Economic and Social Impact Assessment reports are underscored by robust site investigation and report writing. GIBB stands by the results of the reports and believes the reports to contain sufficient information in terms of making a decision with respect to the application for Environmental Authorisation.

Your comment (14)

Responsibility for Evacuation Management plan which was negatively received by all structures within Council.

Response (14)

Section 6.3.12 of the Revised Draft EIR deals with responsibilities for disaster management. The National Disaster Management Act, 2002 (Act No. 57 of 2002) [DMA], does not provide clear guidelines for the provision of funding for disaster risk management, with the exception of Chapter 6, which deals with funding of post-disaster recovery and rehabilitation. In order to give effect to the requirements of the Act, four key performance areas and three enablers have been identified in the disaster risk management framework to guide the implementation of the DMA. Accordingly, funding from a range of sources for the different aspects of disaster risk management outlined in the key performance areas and enablers will be required. Enabler 3 builds on the recommendations made by the Financial and Fiscal Commission on funding arrangements in its Submission on the Division of Revenue 2003/04, and describes the disaster risk management funding arrangements for organs of state in the national, provincial and local spheres of government.

The Department of Energy prepared the National Nuclear Disaster Management Plan in response to section 25 of the DMA. The Plan indicates that the DoE is responsible for coordination and management of matters related to nuclear disaster management at the national level of government. Although the NNRA requires the holder of a nuclear authorisation to enter into an agreement with the relevant municipal and provincial authorities to establish an emergency plan, the nuclear emergency planning provisions of the NNRA are applicable to the holder of the nuclear authorisation only and not directly to the three spheres of government. By contrast, the DMA is directly applicable to all spheres of government.

Your comment (15)

Responsibility for provision of additional roads for evacuation purposes.

Response (15)

It is recommended that Eskom reach agreement with the relevant local authority on the apportionment of responsibility for the upgrading or additional infrastructure required prior the commencement of construction for Nuclear-1.

Your comment (16)

That the possibility be explored to utilise exclusion zones for cemetery/internment/burial purposes.

Response (16)

Your comment is noted

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



Jaana-Maria Ball
Nuclear-1 EIA Manager