

5 August 2015

Our Ref: J27035 / J31314
Your Ref: Email received 01 August 2011

Email: lldandbdg@mweb.co.za

Dear Ms Davies



Tshwane

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RE: ESKOM EIA CONCERNS FOR THE PROPOSED NUCLEAR POWER STATION AND ASSOCIATED INFRASTRUCTURE (DEA Ref. No: 12/12/20/944)

Comment 1:

Thank you for the opportunity to make my objections known on the above matter. I do hope that objections like mine are actually read and not simply pushed aside.

I am appalled that a Nuclear Plant is zoned for this pristine area. It is not in fact the Nuclear Plant itself which upsets me as much as the fact that it will take years to construct and the fact that the heavy duty vehicles will be travelling from Port Elizabeth to Thyspunt - (possibly 140km) every second of every day and night for years on end.

How on earth will that have little or no impact on the lives of the local population and on tourism?

Response 1:

Your comments are noted. The current state of the Thyspunt property is not entirely pristine and although the property is largely undeveloped, its categorisation as “natural” does not imply by any means that it is unimpacted.

Further the assessment of the significance of the impacts as a result of the proposed development of the Nuclear-1 Power Station has at no point stated that there will be “little or no impact”. Indeed many impacts have been identified, described and assessed, some of them of high significance. However a number of measures have been proposed to mitigate the impacts but the acceptability of these measures and the decision of the suitability of any of the proposed sites still fall within the ambit of the Competent Authority – the Department of Environmental Affairs.

Electricity supply is essential for economic development which in turn has a positive impact on the regional and local economy. Nuclear power stations are best placed along the coast so that they can use sea water for cooling and not the scarce water resources required for drinking and other life giving purposes. Coastal sites are generally sensitive; these sites have been selected subsequent to a rigorous process. According to the various specialists the building of a nuclear power station will be beneficial for South Africa.



GIBB Holdings Reg: 2002/019792/02
Directors: R. Vries (Chairman), Y. Frizlar, B Hendricks, H.A. Kavthankar, J.M.N. Ras
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A list of divisional directors is available from the company secretary.



Furthermore, please refer to the revised transportation assessment in Appendix E25 of the RDEIR version 2. The Thyspunt site requires transport route upgrades with regard to public roads, access and emergency evacuation during the construction phase. The recommended routes in Version 9 of Transport Report were revised after the Revised Draft EIR was provided for public comment in May 2011. Based on this revision, the R330 is now proposed to be used only for passenger vehicle traffic and abnormal load transport, and sections will require upgrading for this purpose. The Oyster Bay Road is now proposed to be upgraded to a surfaced road to be used during the construction and operations phases for staff access and heavy vehicle traffic and as an emergency evacuation route for areas such as Oyster Bay. The DR1762, which links the R330 and Oyster Bay Road is now proposed to be surfaced to provide improved east-west connectivity. Bypass roads to the east and west of Humansdorp are also now proposed to be constructed to reduce the traffic impact on central Humansdorp.

We do recognise that impacts will be experienced due to the increased traffic volumes during the construction period of the Nuclear-1 power plant. However, various mitigation measures have been incorporated (with input from the transportation specialist) into the Environmental Management Programme (EMP) for the proposed development in order to address and mitigate the increased traffic volumes.

Comment 2:

Surely the plant - if it has to be built at all in light of the Japanese disaster - should be built where transport to and from the site is kept to the minimum.

Response 2:

Your comment is noted. The Japanese disaster is indeed a stark reminder of the unpredictability of the natural environment. However it is well known that South Africa is located on a vastly more stable tectonic environment than that of Japan which is situated close to a major subduction zone within the Pacific Ocean.

Kindly refer to our response 1 provided above. Please note that various mitigation measures have been incorporated into the EMP for the proposed development in order to address and mitigate increased traffic volumes.

Comment 3:

The fact that we have not had a bridge for access to this area for the best part of 3 weeks is surely an indication that there is NO WAY a Nuclear Plant can be built in the vicinity. The mass exodus of the population should there be a Nuclear incident would not be possible.

Response 3:

Thank you for your comments. Site safety issues are considered on a high level in the Emergency Response and Site Control Reports (Appendix E26 and E27 of the Revised Draft EIR) and will also be dealt with in the NNR process. The revised Transport specialist study (which will be made available for public comment and review as part of the Revised EIR Version 2) acknowledges that the Thyspunt site requires significant transport upgrades with regard to public transport, access and emergency evacuation, during the construction phases. The R330 is now proposed to be used for light vehicle

traffic and abnormal load transport, and sections will require upgrading for this purpose. The Oyster Bay Road is now proposed to be upgraded to a surfaced road to be used during the construction and operations phases for staff access, light vehicle traffic, heavy vehicle traffic and as an emergency evacuation route for areas such as Oyster Bay. DR1762, which links the R330 and Oyster Bay Road, is now proposed to be surfaced to provide improved east-west connectivity. Bypass roads to the east and west of Humansdorp are also now proposed to be constructed to reduce the traffic impact on central Humansdorp.

The report further noted that a section of R330 across Sand River was destroyed by flood and debris flow in July 2011. The box culvert was severely damaged and inhibited traffic flow between Humansdorp and St. Francis Bay while it was being repaired for a few days. Bridges and culvert are generally designed for 1:100 year floods. The flood experienced in 2011 was, however, considered to be a flood with much greater scale than designed for. Construction and operation of Nuclear-1 may be affected should the flood occur again during the construction and operations phase of the proposed nuclear plant. It is, therefore, suggested, subject to project approval from Government, that a Stormwater Assessment Plan should be undertaken for the flooding situations of Sand River at the R300 crossing. Design specification of the bridge should be reviewed and mitigation measures, such as embankment protection, should be implemented.

Comment 4:

Access to the proposed site will severely impact on all the Residential areas in the vicinity of the proposed Nuclear Plant at Thyspunt. How on earth are mere mortals supposed to get from this area to Humansdorp, Jeffrey's Bay or Port Elizabeth on a daily basis with the number of Plant based vehicles using the roads -quite astounding as there would be wall to wall heavy vehicles! The accident rate would be horrendous.

Response 4:

Your comments are noted. Kindly refer to our Response 3 above.

Comment 5:

The fact that other countries are giving considerable thought to maintaining their nuclear plants while yet others are closing down plants since the disaster in Japan is surely indication enough that South Africa should not be attempting to build a nuclear plant.

Response 5:

Thank you for your comment. The South African government through the Integrated Resource Plan process has considered various alternative technologies. To meet the increasing demand of electricity all available energy sources are required, Nuclear has the benefit of being a low carbon technology which would lower the carbon intensity of South Africa's energy supply.. The national justification for nuclear has been undertaken under the public process leading to the gazetting of the IRP2010. However, as indicated above and in in previous responses, the decision whether or not nuclear generation should form a part of South Africa's electricity future is not a decision taken in this EIA process, but is a decision that was taken at a strategic level. The Nuclear-1 EIA has no mandate to bring into question the strategic government decisions and hence, the potential impacts on electricity

prices brought about by an in principle decision to include nuclear in the generation mix is outside the scope of this EIA process

Comment 6:

Agriculture will be adversely impacted. This is a dairy producing area and cows are not inclined to give a good milk supply when disturbed - which they will be.

Tourism will most certainly be severely affected - who on earth would want to attempt to travel on roads which are clogged with huge trucks every 90 seconds.

Even the rest of the Garden Route will be affected with overseas tourists travelling that route to visit our local game parks etc.

Response 6:

Your comments are noted. The Agricultural Assessment (Appendix E21 of the Revised Draft EIR) states that at Thyspunt there will be a short term negative impact on agriculture in terms of dust during the construction phase. However, there is potential for a positive impact on production by increasing the size of the local market for fresh produce as a result of the influx of population (Nuclear-1 employees and their families as well as construction workers) to the area.

The Tourism Assessment found that at Thyspunt there will be a small-scale, short-term, negative discernible impact on tourism with no overall discernible long-term impact on tourism.

GIBB however welcomes any independently researched scientific documentation to the contrary.

Comment 7:

The noise level in the entire area will be incredible with the drone of hundreds of heavy duty vehicles going up and down the roads.

Response 10:

Your comments are noted. The Noise Assessment report (Appendix E23 of the Revised EIR Version 1) found that no noise impact associated with the construction of new roads to the alternative sites (Thyspunt, Bamtamskip or Duynefontein) was anticipated, excepting the western access road to the Thyspunt site that would pass within 230 m of the Umzamowethu Township. In the latter instance the following recommendations are made:

- Construction processes and machinery/vehicles with the lowest noise emission levels available are utilised;
- A well planned and co-ordinated "fast track" procedure is implemented to complete the total construction process in the shortest possible time; and
- Construction work near residences only takes place during normal daytime working hours.

The report further found that the transportation of materials and equipment to site would impact on a small number of residences in the nearest informal settlements along the R330 at Sea Vista near the

Thyspunt site would be medium. In all instances no noise mitigation would be required in terms of the Noise Control Regulations (NCR).

The transportation of heavy machinery on extra-heavy-duty vehicles travelling very slowly on roads within 1000 m of residences is likely to result in a noise impact of medium intensity but of very short duration. Little can be done to reduce the levels of noise emitted by extra-heavy-duty vehicles. In order to minimize the noise impact on affected communities it is recommended that they be informed prior to any such transportation taking place.

Comment 11:

The housing for the hundreds of drivers and their families is simply not available and once the plant is completed nor will the jobs then required, be available. This will lead to an increase in burglaries and an un-safe neighbourhood.

Response 11:

Influx of large numbers of unemployed and unskilled workers would definitely pose challenges if not managed properly. The focus is not on the prediction of an accurate number of possible job seekers, or at what point it will become unmanageable, but on the management of the realities before the development starts, at the beginning and throughout the construction period. Job seekers will flow into the area. Those who do not find employment will move on or some will stay behind hoping to find work in time. The focus of the proposed mitigation measures is to limit and manage growth in informal settlements and the prevention of any illegal squatting by unemployed job seekers. The social report is clear about the additional pressure placed on social and community services to address growth in population numbers. Clear mitigation measures are recommended to address these inadequate services and facilities. Different role players must take responsibility for the challenges including Eskom as stated in the report.

Comment 12:

Please take note of the pleas of the “man on the street” – we should matter!

Response 12:

Your comments and concern are noted and will and be added to the Issues and Response Report which will form part of the Final EIR to be submitted to the Department of Environmental Affairs for decision making purposes.

Should you have any queries with respect to the above please do not hesitate to contact GIBB.

Yours faithfully
for GIBB (Pty) Ltd



The Nuclear-1 EIA Team