

## **Comments on 2<sup>nd</sup> Draft Environmental Impact Report (DEIR): Nuclear 1 Thyspunt**

As we consider your reply to our submission to be inadequate and the second draft EIA even more so, we have chosen to resubmit our previous comments, with responses to your answers and a few additional comments.

The Supertubes Surfing Foundation (SSF) is a non profit (Section 21 Company) organization dedicated to the preservation of the dunes and beaches of Jeffreys Bay. It has been operational since 1999 and initiated by the local surf clubs, J Bay Boardriders and JBU. The SSF is a partner of the Thyspunt Alliance, a coalition of community-based organizations that are opposing the location of the facility at Thyspunt. We object on the following grounds:

Our comment (1):

Although this has not been discussed in the EIA and we have not been given the opportunity to debate the subject, our stance is that the government and Eskom should be investing heavily in renewable energy. We reject the assumption that the only choices for baseload power are either coal-fired or nuclear power stations. We believe that our country should make use of wind, solar, biogas and wave power and that these options haven't been explored adequately due to insufficient funding. It is frightening to note that between 1974 & 2007, 55% of all public research dollars (US 236 billion) were spent on Nuclear. This is six times more than the level of support to renewables. This trend is also apparent in South Africa. Between 2006/7 and 2009/10, the country allocated R7,2-billion for the development of the demonstration and fuel plants to prove the PBMR technology, while it allocated a further R1,73-billion in 2009/10 for the programme. This programme has now been shelved. Imagine if some of this money could have been channeled towards renewable research.

Your response (1):

**The energy mix for South Africa is an important issue, it is being thoroughly investigated through the Integrated Resource Plan (2), which will hopefully be released by the Department of Energy before the end of this year. Documentation is available on the DOE website but for ease of reference the introductory document has been attached to this response. This describes the factors which will be considered when determining the energy mix of the country. Eskom aligns itself with the IRP process and its outcomes. In order to avoid a possible electricity crises resulting from initiating the projects too late Eskom has initiated the EIA's for Nuclear, Coal, pumped storage, Combined Cycle Gas Turbines and wind. The outcomes of the IRP will determine which of these projects will be allocated to Eskom and IPP's and which technologies will be suitable to meet South Africa's needs.**

**Eskom has recognized the need for clean electricity in South Africa, more recently the Department of Energy reflected this through the development of the Refit tariff and allocation of renewable technologies in the Integrated Resource Plan (1). This is an important step for South Africa since it provides the beginning of a regulatory framework for the implementation of renewable technologies. All technologies are required to meet the current and future demand for electricity. Eskom obtained Environmental Authorisation for**

a 100MW solar thermal demonstration plant in Upington and 100MW wind facility in Vredendal, unfortunately these were delayed due to funding constraints. However, recently Eskom has been successful in sourcing funding for both of these projects and are confident that the construction of the wind facility will begin within the next year. Eskom recently initiated a process to investigate biomass co-firing, this will be largely dependent on the sustainability and availability of the resource. Eskom has been carrying out research on several other renewable technologies which are not yet commercially available such as ocean pumped storage, wave and current technology. Eskom has also initiated studies into cleaner coal technologies and is demonstrating Underground Coal Gasification near Volksrus.

***Our response (1):***

*Government policy leans towards large projects with great potential for corruption and towards protection of the Eskom monopoly. If Eskom were not a parastatal, but a private company, it would not pursue this most expensive and potentially dangerous method of generating electricity. If it truly wanted what was best for the country, it would be actively advocating renewables, which would provide both cheaper electricity and more jobs. We refer you to [www.energyblueprint.info](http://www.energyblueprint.info) information supplied by Greenpeace, which states that, by 2030, South Africa can generate 50% of its electricity from renewables, creating 150 000 new jobs.*

*To say that, of the projected 40,000MW additional energy required, authorization was given for 200MW (0,5%) in renewables is an insult.*

***Our comment (2):***

We believe that the public of Jeffreys Bay has been completely ignored during the current Draft Environmental Impact Assessment public participation process. No Public Meetings were held in Jeffreys Bay. We find this completely unacceptable and consider this a serious flaw in the public participation process.

***Your response (2):***

The public participation process in terms of the Nuclear-1 EIA has been designed to reach as many directly impacted Interested and Affected Parties (I&APs) as possible. During the Scoping Phase of the EIA public meetings were held in Jeffrey's Bay but these were relatively poorly attended. The majority of registered I&APs are located within the St. Francis Bay area and many of the public participation initiatives during the EIA Phase of the EIA have thus been centred around this area. Public meetings have taken place in other areas such as Oyster Bay, Sea Vista and Port Elizabeth amongst others and a meeting with the Kouga (Jeffreys Bay) municipality was also undertaken.

***Our response (2):***

*The public meetings during the Scoping Phase of the EIA were held in 2007 – 4 years ago and information at the time was vague. More recent public meetings would have alerted the public in Jeffreys Bay that they will be severely affected by e.g. the social, transport and marine impacts of a*

*NPS at Thyspunt. The information shared during the meeting with Kouga municipality certainly was not made available to the public*

Our comment (3):

The environmental impact assessment contains many inaccuracies, such as the prevalent wind being Northwest and Vaalputs waste disposal site being closer to Thyspunt than to Bantamsklip. Vital information was omitted, such as the costs of upgrading roads from Port Elizabeth and the construction of transmission lines. Many figures referred to in the EIA do not appear therein.

**Your response (3):**

**Your comments are noted.**

**The wind direction, as used in the Draft EIR and described in the Air Quality and Climate Assessment Report (Appendix E10) is correct, and is consistent with the wind roses for the area.**

**The transport distances were reviewed and found to be incorrect and will be rectified in the revised Transportation Assessment.**

**The draft Environmental Impact Report (EIR) is currently being revised and a revised report will be made available for public review and comment. Any inaccuracies and omission in the first draft of the report will be rectified in the revised draft.**

***Our response (3):***

*We repeat, your information on wind direction is incorrect.*

*The transport distances obviously impact on the Economic Report, so this should also be adjusted.*

Our comment (4):

E22 Tourism assessment: Negative perceptions ignored on the basis that Koeberg has not affected tourism in Cape Town. This is an unacceptable extrapolation. Surf tourists are very aware of their environment and the SSF have a petition signed by thousands to the effect that they oppose the construction of a NPS near Jeffreys Bay. We find this report completely inadequate and unacceptable. The comment: *“Owing to budgetary cuts and time constraints, comprehensive surveys were excluded.”* All specialists' studies should be as comprehensive as possible and budgetary constraints should not just be affecting those studies that have more bearing on the affected communities and less on engineering solutions of a Nuclear Power Station.

**Your response (4):**

**Your comments are noted.**

Our comment (5):

E18 Social impact assessment: Kouga municipal area, and Jeffreys Bay in particular, does not have enough water, housing, jobs, clinics or sanitation to serve the current population. An influx of any number of jobseekers will have a serious, long-term negative impact.

**Your response (5):**

**The concern raised regarding local infrastructure is very relevant. Eskom will be required to engage with the local authorities prior to construction to determine and document responsibilities for this. Furthermore, Eskom will use desalination units to supply the power station with fresh water in order not to use the existing resources of the community. Eskom will also build a sewer plant on site for the same reasons. If the project is approved, Eskom intends proceeding with a study to determine the current level of skills of the unemployed in the area to plan for training of these people, as far as possible Eskom intends to use as much local labour as possible, this will be achieved by working with local communities and the voters roll. These initiatives along with others are intended to minimise the influx of job seekers.**

**Our response (5):**

*A desalination plant on the NPS site will not prevent thousands of jobseekers flocking to the area from using our water resources. The same goes for a sewer plant on site. It is impossible to restrict desperate people from moving into the area if they perceive a possibility of employment. By constantly trying to gain favour for the NPS with the public and government on the basis of job creation, you have already caused an influx.*

*Neither EIA factors in the costs of possible infrastructure upgrades being paid for or partly paid for by Eskom.*

*Please specify what "other initiatives" will be used to discourage people from moving to Kouga.*

Our comment (6):

E25 Transportation assessment: The additional traffic volumes in the area will have a further negative impact on tourism. We are also concerned by the increased risk of traffic accidents due to more vehicles on the road from Port Elizabeth. Many local surfers commute between Jeffreys Bay and Port Elizabeth daily.

**Your response (6):**

**Growth in economic active areas is unavoidable. The same applies to Jeffreys Bay area. Development and increase in traffic flows steadily increased through the years without the existence of the power station. Traffic is directly related to the number of inhabitants in an area. The following information was obtained from the Kouga Spatial Development Framework (December 2009):**

- 847 houses was completed in Jeffrey's Bay during the year with a further 359 under construction
- According to the census of 2001, the population of Jeffrey's Bay was 16 178 people. The CDM survey of 2005 shown a population of 40 203. The population of Jeffrey's Bay is expected to be 62 434 in 2015. The totality of the Nuclear-1 project will at maximum be approximately 7000 in the entire area of Kouga (some of the 7000 jobs will be local people). It is estimated that approximately 2000 of these staff will reside in Jeffrey's Bay (out of the existing 62 434).
- The population in the entire Kouga municipality (2005) was estimated at 88 793

Please note that these figures do not include the Nuclear-1 power station staff. There will of course be an additional increase in the traffic due to the construction activities. Traffic maximums will occur during the mornings and afternoons when construction staff goes to work (estimated at a maximum of 320 vehicles per hour). Eskom will use busses to reduce the number of individuals travelling to work on a daily basis. A revised transportation specialist report has been produced and will form part of this revised DEIR.

***Our response (6):***

*We would argue that during the construction period of the proposed NPS, transport would not be directly related to the number of inhabitants in the area, since many of the construction vehicles transporting building materials would be making round trips, some types as many as 7,953 per year.*

*Even if you are able to minimize the influx to just two people for every one of the 7,000 jobs and fewer than half of those have a partner (and/or children) there could easily be an additional 20,000 people in the greater municipal area – equivalent to the projected growth of Jeffreys Bay over 10 years. Two thirds of these people would be unemployed or take jobs from the current residents, leaving them unemployed.*

*These 7,000 jobs are of course not available concurrently over the entire construction period, are temporary and will leave the Kouga municipality with an even greater burden after construction is completed.*

*Please note that our concern is not so much the 1,300 staff who would be permanently employed after completion of the proposed NPS. They would be able to pay rates and taxes which would hopefully contribute to upgrading of necessary infrastructure.*

***Our comment (7):***

E15 Marine impact assessment: We are vehemently opposed to the discharge of 6,37 million tons of spoil into the ocean at any rate or with any mitigating measures. We believe that the sediment and the resulting turbidity would have a negative impact on the marine life and on the squid in particular. As many local surfers are also involved in the squid industry, this would affect their income and probably lead to job losses. It is inconceivable to us how, in a country with high unemployment rates, a very lucrative, 6,000-job industry can be put at risk.

**Your response (7):**

**Your comments are noted. The Marine Assessment specialist found that the temporal and spatial limitations of the impacts associated with the disposal of spoil on the chokka squid at Thyspunt will have limited impact on the overall squid stock, when taken within the context of the extensive area over which the species spawns.**

***Our response (7):***

*According to SASMIA (the South African Squid Management Industry Association), between 28 and 37% of all squid catches in the squid industry occur within 10 nautical miles East and West of the proposed NPS. The construction of the cooling water uptake and release pipes, the disposal of 6,3 million cubic metres of spoil on the ocean floor and resulting increase in turbidity from an average of 3mg/l to 26mg/l will combine to do irreversible damage to thousands of square metres of prime squid breeding grounds. Although it is true that squid is found along almost the entire SA coastline, the area around Thyspunt is clearly very concentrated.*

**Our comment (7) (sic):**

E2 Dune geomorphology: We object to the building of roads across a mobile, soft dune system which behaves in unpredictable ways. We believe that this will damage the unique ecosystem and biodiversity of the area and therefore contravene the Biodiversity act of NEMA.

**Your response (7) (sic):**

**Your comments are noted. The impact of the Nuclear Power Station on the mobile dune system has been assessed in the Dune Geomorphology Assessment (Appendix E2 of the Draft EIR) and the impacts are described in sections 5.3 and 6 of the report in more detail. It is recommended, irrespective of which site is chosen, that a team of specialists (including the botanical, wetlands, vertebrate and invertebrate fauna, heritage and visual specialists) must determine the detailed positioning of infrastructure on site prior to detailed design of the power station and associated infrastructure.**

***Our response:***

*Our concern referred to in this comment is not with the flora and fauna of the area, but with the building of roads to carry radioactive waste across a headland bypass dune system, which behaves in unpredictable ways, such as recently demonstrated by the washing away of the Sand River bridge (twice).*

**Our comment (8):**

E12 Wetlands: We live in a water-scarce area and having just experienced the worst drought in 132 years, we object to any disturbance of the Langefonteinvelei wetlands on the Thyspunt site.

**Your response (8):**

**Your comments are noted. The Wetlands will be avoided, potential indirect impacts resulting during construction are being thoroughly investigated (continuous monitoring and assessment over the past 18 months by independent specialists) and will ensure that the wetlands are not impacted.**

***Our response (8):***

*Why then does Appendix E12 state:*

*“The zone of dewatering (0,1 m drawdown) could extend to a maximum of 1,8 km from the footprint boundary when dewatering the entire (approximately 27 ha) footprint. The dewatering would intersect flows in the mobile dune, affecting both wetlands in the Oyster Bay dunefield and the Langefonteinvlei itself. “*

***Our comment (9):***

Minutes: We strongly object to the fact that the minutes of various recent meetings, such as the one held at the St. Francis Links on 25 May 2010, were only available nearly a month afterwards. We believe that the late publication of minutes is purposely frustrating our efforts to present our response to the Draft EIA. We therefore reserve our right to challenge the procedural fairness of this EIA process on the grounds that crucial and important information is supplied late and these actions do not allow us sufficient time to include the information which was presented at the meetings in our final comments.

***Your response (9):***

**Your comments are noted. Interested and Affected Parties were given 14 days to comment on draft minutes. As previously stated you will be afforded with additional time to submit comments when the Revised Draft EIR is made available for public review.**

***Our response (9):***

*Our concern is not with the 14 days afforded to comment on the minutes, but the fact that the minutes were not made available sooner after various meetings. This is still a problem, eg. Minutes for the meeting held on 31 May 2011 were only sent out on 21 June 2011.*

**New comments following publication of the Second Draft Environmental Impact Assessment and subsequent public meetings and open days**

1. We object to the fact that you have not agreed to have Key Focus Group Meetings with anyone but the Squid Industry and a dissident KhoiSan group. We consider this “Second Revised” DEIR to be a new document and as such require your specialists to be available to explain their findings to their peers if necessary.
2. We object to the fact that the technology for the proposed NPS has still not been identified and therefore the emergency planning zones cannot be specified by the National Nuclear Regulator.

3. We object to the fact that the National Nuclear Regulator, according to them, has to date not been approached by Eskom.
4. We object to the fact that Eskom is continuing to purchase land in the area as if the project has already been approved. This has the effect of leading the public to believe that opposing the project would be a futile exercise and putting pressure on the government to give a positive Record of Decision because of the amount of money which has already been spent.
5. We object to weightings given to various specialist reports in order to ensure that Thyspunt is declared the preferred site whilst being the most environmentally sensitive.
6. We object to the fact that Eskom have completely ignored the South African Heritage Resource Agency (SAHRA)'s input on this proposed project.
7. We object to European Utility Requirements being used to define emergency planning zones. These standards are not recognized by the International Atomic Energy Association not by the National Nuclear Regulator.

Finally, as the Supertubes Surfing Foundation, we believe that the Thyspunt area is of immeasurable value to the human race and the planet as a whole. It should be declared a UNESCO World Heritage Site and preserved for future generations.

Yours faithfully,

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