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Thyspunt Alliance St Francis Bay Resident's Association St Francis Kromme Trust

Dear Mr Thorpe, Thyspunt Alliance and its members, the St Francis Bay Resident's Association and the St Francis Kromme Trust

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

THYSPUNT ALLIANCE

NUCLEAR 1 REVISED DRAFT ENVIRONMENTAL REPORT

COMMENT ON APPENDIX 18: SOCIAL IMPACT ASSESSMENT

Response compiled by T. Malan & H.Thorpe, and submitted on behalf of the Cape St Francis Civics, St Francis Bay Residents' Association, the St Francis Kromme Trust and the Thyspunt Alliance.

General Comment:

If anything illustrates the partisan stance and amateurish approach of the EIA, it is this report. It is so bad that it calls into question the independence and competence, not only of the specialist, but also that of the EAP.

General Response:

Your comment is noted.

Comment 1:

Our major objections are the following:

1. The Assessment remains purely philosophical, with little reference to facts.



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Response 1:

Your comment is noted. The Social Impact Assessment (Appendix E18 of the Revised Draft EIR Version1) makes extensive reference to available socio-economic data for the affected areas.

Comment 2:

2. The Assessment totally disregards Recommendation 2 in the Nuclear Site Investigation Programme, that "the small coastal resorts be left unaffected".

Response 2:

Your comment is noted. As indicated in separate Issues and Response Reports, the Nuclear Site Investigation Programme (NSIP) was a pre-feasibility study for the development of nuclear power stations. It is interesting to note that the Thyspunt Alliance completely discredits the site selection process in the NSIP due to it having been commissioned during the Apartheid era, with the notable exception of this particular recommendation.

Comment 3:

3. The social impact of the current proposal has been arbitrarily excluded from the list of nine decision-making factors identified on page 6 of the Executive Summary.

Response 3:

Contrary to your comment, the choice of decision factors used in the selection of the preferred site are made clear in Section 9.32 of the Revised Draft EIR Version 1.

Comment 4:

4. The revised impact assessment criteria found in Chapter 7, Table 7 – 16 have been ignored, with major implications for significance ratings.

Response 4:

The revised criteria have been applied in the Social Impact Assessment Tables (Appendix E18 of the Revised Draft EIR Version 1).

Comment 5:

5. Objections raised in the first draft have been completely ignored. No material changes have been made. The report remains entirely theoretical, playing down serious social impact issues as if they were pure speculation or simply perceptions. No serious attempt is made to address these issues.

Response 5:

Serious attention was given to each and every objection. Human behavior is difficult to predict and therefore provision must be made for the role of perceptions and sometimes speculation on what may happen in the future. The report is clear on the practical implications of the identified impacts with clear mitigation measures identified. Changes were made were facts supported the required change in the report.

Comment 6:

6. The Assessment feeds directly from the Transportation & Noise Assessments. These are equally inadequate. Our more detailed comments on these should be read in conjunction with this submission.

Response 6:

Your comment is noted. Responses to your comments on the Transportation and Noise Assessments are contained in separate Issues and Response Reports. It is also to be noted that the Transportation Assessment has been significantly revised so that heavy construction vehicles have been re-routed to the Oyster Bay road so that construction traffic through St. Francis along the R330 are avoided. The revised report will be made available for public comment and review as part of the Revised EIR Version 2.

Comment 7:

7. The demographics used in the assessment are out-dated.

Response 7:

Your comment is noted. The most up to date data available from various sources were used at the time of producing the report.

Comment 8:

8. Total failure to address the uncontrollable and unmitigable impact of increased unskilled and unemployed job-seekers arriving from elsewhere in the country; growth in informal settlements, and consequent social pathologies which will inevitably arise.

Response 8:

Your comment is noted. The influx of job seekers is a reality of most large construction projects and cannot be completely avoided, although it can be managed. It must also be noted, as indicated in the Social Impact Assessment, that people have a right to free movement in order to pursue economic opportunities. However, the need to mitigate this impact is recognised. Institutions such as the Coega Development Corporation have indicated their willingness to share their experience in this regard, as

they implemented what are widely regarded to be successful social and labour policies and procedures that restricted the inflow of people and prioritised employment for local residents.

Comment 9:

9. Completely inadequate assessment of the infra-structural and social services implications and costs for the Kouga Municipality

Response 9:

Your comment is noted. It is noted in the Revised Draft EIR Version 1, as well as in the Social Impact Assessment, that the Kouga Municipality has existing service backlogs and that infrastructure would not be able to cope with the additional influx of people that can be expected as a result of the construction of Nuclear-1 at Thyspunt. For this reason, it has been emphasised in the Revised Draft EIR Version 1 that infrastructure must be upgraded and that Eskom and the responsible authorities must agree on the apportionment of financial responsibility for such upgrades.

Eskom cannot, however, be expected to be solely responsible for infrastructure upgrades, as current infrastructure backlogs are the responsibility of the municipality. It is for this reason that it has been recommended that agreement must be reached between Eskom and the other role players regarding apportionment of financial responsibility for infrastructure upgrades.

Comment 10:

10. Mitigation measures proposed by the specialist are so naïve as to lack all credibility.

Response 10:

Your comment is noted.

Comment 11:

DETAILED DISCUSSION

1. Theoretical and non-factual nature of assessment

The SIA makes the following statement:

"Different people tend to view the realities of life differently and therefore the impact that may be perceived negatively by one individual or community could be perceived as the best and most positive impact by the next individual;"

To avoid this confusion about the realities of life it is necessary that the studies conducted as part of this EIA should be based on fact. The department will base their response not on perceptions and the specialist therefore has the responsibility to provide the department as well as I&AP's with a clear and

truthful description of the social situation as it is currently reflected in the affected environment. Whether people perceive Nuclear as good or bad has a very small role to play in the social impact assessment and although these perceptions can be recorded the social impact assessment should focus on the actual impact of a development of this size on the society at present.

Response 11:

Your comment is noted. The Social Impact Assessment deals with a reality fundamentally different to most of the other specialist studies, in that it deals with people's perceptions. Factual information has been provided on the socio-economic conditions of the affected environment. However, the impact that the development will have on the social environment is as much a function of the how the development will change access to social infrastructure as it is a function of how people perceive changes in their environment. Perceptions are therefore an important consideration in the Social Impact Assessment.

Comment 12:

Furthermore, where facts are given, they are contradictory. For example the background information in the SIA states:

Thyspunt site is located in the Eastern Cape, between Oyster Bay and Cape St. Francis, 20 km south of the town of Humansdorp, and approximately 50 km west of Port Elizabeth, as shown in Figure 1.02.

In the Transport Impact Assessment, Thyspunt is 80km west of Port Elizabeth, Humansdorp is 15km north of Thyspunt and 7km west of Oyster Bay. These inconsistencies are present throughout the DEIR. They highlight yet again one of the constant issues that we have been raising from the start. The most elementary facts are contradictory, and in each case, St Francis Bay and Sea Vista are ignored.

The section on Assumptions and limitations goes out of its way to dismiss input by the local community.

Response 12:

Your comment is noted. The discrepancies in distances between specialist studies are regrettable but do not affect the assessment of impacts. Each specialist study assesses the impacts on the potentially affected environment, which may differ from study to study, but which in most instances includes all the surrounding settlements. For the Thyspunt site, these settlements include Oyster Bay, Umzamuwethu, St, Cape St. Francis, St. Francis Bay, Sea Vista, Humandorp and Jeffrey's Bay.

Cape St. Francis, St. Francis Bay and Sea Vista are effectively a single settlement, and it would therefore serve no purpose to mention each of these components every time that the St. Francis area is discussed. Most people (including specialists) mention the names Cape St. Francis and St. Francis Bay interchangeably.

However, in cases where some components of the St, Francis area such as Sea Vista could be expected to experience more severe impacts than others (e.g. noise impacts due to the proximity of Sea Vista to the R330), impacts on the different components of an area like St. Francis have been treated separately.

Comment 13:

The DEA is requested to take note of this in considering any application for a ROD.

2. Recommendation 2

Recommendation 2 stated clearly that the coastal holiday resorts should be left unaffected by the development.

This was a clear recommendation, of which the Social Impact Specialist should be aware, and has been completely ignored. If he believes that having thousands of heavy-load trucks passing through St Francis Bay daily for nine years, together with a potential massive influx of unemployed job-seekers is leaving the resort "unaffected", then words have no meaning.

The DEA is requested to ask the EAP for reasons why Recommendation 2 of the Nuclear Siting Investigation Programme has been disregarded, and to consider whether this does not constitute a fatal flaw.

Response 13:

Your comment is noted. As indicated in Response 3, the NSIP was a preliminary pre-feasibility study for nuclear power station placement. The Nuclear-1 EIA is a project-specific and more detailed assessment of Nuclear-1 using current information and as such, the Nuclear-1 EIA provides a more current perspective on social and environmental conditions and some of the findings and recommendations of the NSIP may, based on current information and socio-economic realities, no longer be considered valid.

The Nuclear-1 EIA has not stated that St. Francis will be unaffected, but has found, for instance, with regards to tourism, that an initial negative impact on tourism will over the longer term change to zero net impact.

Comment 14:

3. Exclusion of the Social Impact from the nine decision factors used in weighting the various impacts

It is completely unacceptable that the Social Impact has been excluded from the nine "decision factors". The Social disruption caused by the selection of the R330 as the main access road will be massive, as will any expansion of the informal settlements which is inevitable if this route is selected.

One of the objections to this entire EIA is the arbitrary and secretive manner in which weightings have been given to different impacts. This is left to the EAP in conjunction with the various specialists. It is not a reliable process, since the specialists are only familiar with their own disciplines, and are not in a good position to evaluate impacts from other areas. It leaves the way open to the EAP to influence the process.

No minutes of the weighting meeting held prior to the First Draft have been made available, and no I & APs were present at that meeting. It appears to have been a brief and superficial meeting, at which major decision affecting the final outcome were taken.

It is our view that serious and unmitigable impacts are being deliberately relegated to insignificant weightings, or ignored completely, whilst less serious objections, which can be mitigated with some confidence, are promoted to high weightings.

The DEA is asked to require the EAP to give written reasons for the weightings which have been given; what the process was to determine these weightings; why social impact is not included; whether the process used is a credible one, or is open to manipulation; and whether the entire weighting process should not be re-done in a transpsarent, fair and reasonable manner. The responses to be made available immediately to I & APs.

Response 14:

Your comment is noted. Based largely on the concern of local residents about traffic impacts through Humansdorp and St. Francis, the traffic impact assessment is being substantively revised, such that heavy construction traffic will completely bypass St. Francis and Humansdorp. A new interchange with the N2 is proposed to the west of Humansdorp to direct traffic along the Oyster Bay Road to the western access road to the Thyspunt site. Details of this traffic proposal will be included in the Draft EIR Version 2

Contrary to your comment, clear motivations have been provided for the way that weightings have been allocated to different decision criteria. Please refer to section 9.32 of the Revised Draft EIR Version 1 in this respect.

Your comments about the "weighting meetings" are noted. Minutes of the specialist integration meeting held in November 2009 were provided to the Thyspunt Alliance although this meeting was an internal team meeting and was never intended to be a public meeting. It is not the intention, neither is it a legal requirement, for all proceedings of an Environmental Impact Assessment to be subject to participation by interested and affected parties (I&APs). It is not practical to involve I&APs in all EIA activities such as site visits for field investigations, internal team meetings, authority meetings, etc. in the process of conducting an EIA. There are elements of the process that are open to the public and other elements where the Environmental Assessment Practitioner (EAP) and associated specialists must apply their minds in the investigation or potential impacts and preparation of an Environmental Impact Report.

Your comment about specialists only being familiar with their own disciplines is noted. That is the very reason why integration meetings are held during EIA processes: so that specialists can become familiar with the findings and recommendations of other disciplines and understand their own findings in the context of the findings of other studies.

Comment 15:

4. Changes in impact rating criteria

The criteria have been revised in response to comment in the Peer Review in Appendix H. These are outlined in Chapter 7 "Methodology". Table 7 – 16 in section 7.8.1 on p.7 -32 outlines very specifically the new criteria to be applied. The revisions are discussed in detail in our response to Impact Assessment Criteria, Ch 7. In our view there have been some improvements, but overall the criticisms remain.

Typically of this EIA, the criteria outlined are immediately contradicted by the accompanying notes below it, which revert to those used in the first draft. We have assumed that Table 7 - 16 is correct, and should be used by all the specialists in determining the significance of different impacts. This has clearly not been done in this particular case.

The DEA is requested to seek confirmation from the EAP that the impact rating criteria contained in Table 7-16 of Chapter 7 are correct, and to explain why the explanatory notes which follow have not been altered to conform with the Table.

The EAP should also be requested to confirm that all impact significance assessments have been done in terms of Table 7-16, and not in terms of Table 7 – 10 in the First Draft Impact Report. Should this not be the case, then all non-conforming specialist reports to be reviewed in terms of these criteria, and no ROD considered prior to this.

Section 3 of the Social Impact Report, from p.139 - 212 presents a number of impact analyses. In every single case the impact is clearly assessed in terms of the earlier criteria, and not those proposed in Table 7 – 16 of Chapter 7.

The DEA is requested to check that impacts in the Social Impact Report have been assessed in terms of the criteria outlined in Table 7 – 16 of the revised draft, and not in terms of table 7 -10 in the first draft, and to demand that impacts be re-assessed in terms of the revised criteria.

Response 15:

As you correctly state, impact assessment criteria were substantially revised in line with the recommendations of the independent peer review team and the results of this revision are indicated in Table -16. These revised criteria as per this table were also provided to all the Nuclear-1 EIA specialists. It is unfortunate that some of the text below Table 7-16 contradicts the table. However, the format in which the criteria were supplied to the specialists is strictly according to the table. Examination of the specialist studies will confirm that the criteria in the table were applied.

Your comment on Chapter 3 of the Social Impact Assessment (SIA) is noted, The Social Impact Assessment Tables were added as a separate document to the SIA, with a note that the significance values in these tables supersede the significance values in the report.

Furthermore, please note that the National Department of Environmental Affairs requested the EAP to review the impact assessment methodology used in the Revised Draft Environmental Impact Report (Version 1), so as to simplify the criteria for assessment of significance and identification of a preferred site. In response, an approach has been developed that identifies and describes key decision-making issues contained in the individual specialist studies. These decision-making issues apply to both the acceptability of the proposed Nuclear Power Station as well as to the preferred site.

Comment 16:

5. Failure to address objections raised in the First Draft

The Social Impact Assessment was severely criticized in the First Draft on the grounds of being highly theoretical, backed by an almost complete absence of relevant fact, and blatantly designed to play down the social impact of placing a nuclear plant at Thyspunt.

The original Social Impact Assessment has not changed in any way.

Response 16:

Your comment is noted.

Comment 17:

6. Transportation and noise assessments

The social impact is strongly influenced by the Transportation and Noise impacts. Unfortunately the Noise and Transportation Assessments are as weak as the Social Impact Assessment, and fail completely to indicate the impact on the Kromme River and St Francis Bay communities. This has given the Social Impact specialist a further opportunity to play down the real impacts.

It is clear from the Transport Impact Assessment that the impact on the communities of Humansdorp, St. Francis and Oyster Bay will be large. We fail to understand how the SIA can come to the startling conclusion that the impacts at Bantamsklip and Thyspunt would be similar.

The specialist appears to be blissfully unaware or unconcerned that, if the present plans to use the R330 for the main road access are approved, this would lead to a total, permanent and unmitigable change of sense of place for both Humansdorp and the Greater St Francis area. The impacts at Humansdorp, St Francis Bay & Sea Vista will be HIGH.

This contravenes the requirements of both Section 33 (1)of the Constitution, and the requirements of the Promotion of Administrative Justice Act that administrative actions must be fair and reasonable.

Apart from the ludicrous proposal to take all the heavy & ultra-heavy loads down Saffery Street in Humansdorp, none of these reports have been revised in any way in the second draft, despite the criticisms made in the response to the first draft.

The DEA is requested to consider whether any of these reports pay adequate attention to the disruption which will be caused to the local communities by the volumes, size and noise of the proposed vehicle trips, or of the impact of the influx of unemployed job seekers into the area; and whether these should not be included in the list of decision factors and given a high significance rating in terms of the impact rating criteria set out in Table 7-16.

The same applies to road access. Every time a public meeting is held in connection with Thyspunt, a new road access plan is presented. The reality is that the Oyster Bay by-pass headland dune system makes access to Thyspunt extremely problematic.

Whichever way the access roads go, in the light of the volume of traffic expected, it will have massive environmental, social and impacts. Table 3-14 in Chapter 3 predicts over 400000 2-way (i.e.over 800000 single) trips during year 6. Even at this late stage, it has not been possible to ascertain what proportion and type of traffic will use the R330 and what the Oyster Bay road. This despite several requests for clarification (See appendix to Transportation Assessment). Nor is it clear whether all transport will be during daylight hours, or whether a shift system will operate 24 hours per day for 30 days per month. The public has been assured that all traffic will be during daylight hours, but Table C 12 of The Transport Assessment indicates that a shift system will be the case, which is directly contrary to what the public has been told. What is clear is that hundreds of thousands of trips will be involved, incorporating both commuter and heavy load traffic, over a period of nine or more years. The estimated traffic figures for the construction period, found in Table 3-14 of Chapter 3 (Project Description), which is itself riddled with errors, imply that traffic will continue for 30 days per month without break. Depending on the routes to be taken, all of this has massive potential social impact. This appears to have no significance to the specialist, who dismisses it all as speculation and perception.

The DEA is requested to refuse any application for an ROD until such time as a final decision has been taken on the access roads, and the full environmental impacts of this, and cost implications, have been determined and evaluated.

Response 17:

Your comments on the noise impact assessment and traffic impact assessment are noted.

As stated in responses above, the traffic impact assessment is being substantively revised, such that heavy construction traffic will completely bypass St. Francis and Humansdorp. Thus effect on St. Francis in terms of impacts such as traffics safety and noise would be greatly reduced,

Your comment regarding the problematic assess across the bypass dune system is noted. Please be aware that no road is proposed to pass through the bypass dune system, and that all roads proposed to be built for Nuclear-1 have been routed over stable vegetated dunes.

Comment 18:

7. Out-dated demographics

The International Atomic Energy Association (IAEA), to which South Africa is a signatory states in the Safety Standards Series No. NS-R-3 that:

"4.12. the most recent census data for the region, or information obtained by extrapolation of the most recent census data, shall be used in obtaining the population distribution. In the absence of reliable data, a special study shall be carried out."

It is clear that the data provided as part of this SIA is outdated and therefore a special study should be conducted to determine more exact figures. The use of 2001 census figures is not acceptable and more recent data should be used.

The biggest problem with the use of outdated data is that the decision-making authorities would never be able to get a clear picture of the current situation on the ground. As I&AP's residing in the described environment we are fully aware that the numbers are not just slightly skew, they are wrong to such an extent that it would be laughable if the situation was not so serious.

Table 2.61: population Gender per Suburb within 16 km from the Thyspunt Site (2001)				
Town	Male	Female	Total	
Cape St. Francis	83	85	168	
Kouga	2104	2001	4105	
Oyster Bay	172	170	342	
St. Francis Bay	1065	1133	2198	
Source - Statistics South Africa: Census 2001				

For example:

We would assume that the figure for St Francis Bay includes Sea Vista. The Eastern Cape Socio-Economic Consultative Council (ECSECC) reflected a total male population for the Kouga area in 2009 as 36 133 a discrepancy of 32 709 when compared with the figures above.

No attention is paid to the peak holiday influx, which can quadruple the normal resident population.

The DEA is requested not to grant an ROD until a thorough assessment of population figures in the Greater St Francis area, including peak holiday periods, has been completed and approved.

Response 18:

The population figures are within 16km from the Thyspunt Site as provided by Census 2001. Only a small part of Kouga is included in these figures. Population figures are clearly explained under 2.4.1.4 and Tourism Population and influx under point 2.4.1.6.

The Tourism Impact Assessment Study indicated that: "The tourist season at St Francis is extremely short, being concentrated into a ten-day period in December-January and over the Easter week-end. The normal population of 4,000 rises to 30,000 over Christmas and New Year and perhaps to 8,000 over Easter."

Comment 19:

8. Job creation

It is stated that 25% of the construction workers will be sourced locally. Even this is not guaranteed. No final decision has yet been taken on the vendor. Eskom has stated publicly in Sea Vista that this could be as little as 5% or 10%. If the vendor were to be Chinese, which is possible, experience elsewhere is that no local labour will be used. Estimates of direct local jobs opportunities have been hugely exaggerated. Eskom has been spreading the word that up to 8000 jobs will be created. This includes Eskom & the vendor's professional staff. The construction component us (sic) estimated to be about 5000. 25% of this is 1250, so a more realistic figure is a maximum of 1250 jobs, and then only in years 6 & 7. Spread over the whole of Kouga, it represents a fairly small number for each community. Once the higher number gets around, it is an absolute given that our locally unemployed will support the project, and that large numbers of unemployed people will flock to the area in the hope of obtaining jobs. With our present level of infra-structure, this simply cannot be supported.

Job-seekers from outside will be competing with the genuine locals, and every job awarded to an outsider (who will present himself as local) will be at the expense of a genuine local. This can only lead to a xenophobic reaction. This is dismissed by the specialist as speculation – something which "could" happen.

On the other hand there is the distinct possibility of the chokka industry, based at St Francis Bay, moving to Port Elizabeth or Mossel Bay if Eskom persists with its plan to place 6 million cubic metres of spoil on the sea bed in the prime chokka spawning ground in the country. This established industry employs 4000 people on a permanent basis.

The very presence of a nuclear plant could have a major negative impact on the surfing world, which flocks to Jeffreys Bay, as one of the best surfing venues in the world, but which has shown itself to be highly sensitive to the perceived dangers of nuclear power. If this were to happen one of the Eastern

Cape's major tourism attractions would have gone, and with it one of the mainstays of tourism in Jeffreys Bay.

The entire job-creation scenario should be treated with great circumspection, and should certainly not be rated too highly in the weightings of pros and cons for Thyspunt. An analysis of the likely actual direct job creation potential for the Kouga area is given below. It indicates that the direct jobs at Thyspunt, whilst not insignificant, will be much smaller than Eskom has suggested to the local communities, and would be short-term.

Based on the assumption that the majority of direct job opportunities will be during the construction period; will be limited to construction staff of 5000; and will constitute a maximum (unconfirmed) 25% being recruited locally; the maximum number is 1250. These will be recruited from the whole of the Kouga region. However, these requirements will fluctuate from year to year and this will only apply to year 6.

An approximate estimate of plant construction jobs for the whole Kouga region will read as follows:

Year	1	2	3	4	5	6	7	8	9
	220	275	450	670	825	1250	900	750	600

Bearing in mind that this submission is concerned mainly with the social impact on the St Francis community, including Sea Vista, the fact that a maximum of 25%, and possibly much less than this, of construction staff will be recruited locally, and that "local" covers the entire Kouga area, based on population figures for PDIs contained in the current Kouga Spatial Development Framework, it can be predicted that the job opportunities for the Sea Vista community will amount to approximately the following:

Year	1	2	3	4	5	6	7	8	9
	10	13	23	33	45	56	46	38	31

Against this should be placed the likely competition from the influx of job-seekers from outside the area, whose identification is highly problematic, and the potential loss of jobs in the chokka industry, which is by far the leading employer in Sea Vista.

The optimization measures proposed for the securing of local labour are highly idealistic and probably optimistic, unless they are incorporated as a condition of approval. Even with this, they will be difficult to apply.

In view of all this, the positive rating of employment opportunities as "high" in Table 3.08 on p.152, and repeated in the Summary Table for Thyspunt, is optimistic. So far as Sea Vista is concerned, it is more likely to be highly negative.

There would, of course, be indirect job creation in the form of construction of the various accommodation villages & roads, and in ancillary business opportunities, and these are not to be

scoffed at, but they must be viewed in proportion to other impacts which will occur. To state that local labour should be used for the building of the vendors and construction staff village is easier said than done. For large construction projects like this it is very difficult for local operators to provide the necessary financing and guarantees for large scale projects like the proposed project.

The DEA is requested to demand a much more accurate picture of the direct job opportunities likely to be available to the local population in the event of Nuclear 1 going ahead at Thyspunt, with reasons given, and to evaluate this in relation to the negative impacts which will accompany a site at Thyspunt.

Response 19:

Your comments regarding construction labour are noted.

Whilst the makeup of the vendor's labour force cannot be guaranteed, Eskom has stated its commitment to including targets for the use of local labour in its construction contract. Requirements for the use of local labour for construction would, therefore, be enforced upon contractors. Such requirements for use of local labour would also be entrenched as conditions in the authorisation (assuming an authorisation is issued).

Your comments on the impact on the chokka industry are noted. Extensive response to the claims of a catastrophic impact on the chokka industry has been provided directly to the SA Squid Management Industry Association (SASMIA) and to yourselves. Only the salient points of this response are repeated here. SASMIA's claims of an impact of up to 30% or more on its catches around the Thyspunt site are poorly motivated. The EIA team has consulted extensively with the Squid Working Group, which advises the Department of Agriculture Forestry and Fisheries (DAFF) on matters relating to the commercial exploitation of squid. The 30% figure claimed by SASMIA appears to have been calculated using only four selected vessels - a gross under-representation of the chokka squid fleet. Independent data for the same area provided by DAFF (i.e. the commercial database) showed that 14.7% of total catches are taken in the wider area (two guarter degree squares of approximately 22 x 27 km each¹) around the proposed site – itself a much larger area what will in fact be impacted. In this regard, it must also be noted that the total area affected by a temperature increase of 3°C or more (the magnitude of temperate increase that is predicted to result in a reduction in squid activity) will be less than 1km². While still under review, the percentage impacts that have been calculated based on commercial figures provided by the DAFF range from 2.86% (worst-case scenario) to 2.53% (leastcase scenario) to the fishery in the local area under question, and between 0.42% and 0.37% for the fishery as a whole.

Your comments on the impact on surfing are noted. An assessment of the impact on surf breaks (Appendix I of the Revised Draft EIR) concluded that, as long as a deep disposal site is used for the marine disposal of spoil, the impacts on surf breaks will be negligible and that, at most, the sea bottom could be raised by a few cm over time due to the movement of sand from its offshore disposal site.

¹ Two quarter degree squares amount to a total area of approximately 1188km².

Comment 20:

9. Influx of job-seekers and growth of illegal dwellings

How can the impact of job seekers be evaluated in the absence of any numbers? There is a vast difference between 100, 1000 & 5000 job seekers, but this is not even mentioned, nor is there any attempt to evaluate the possible impacts based on numbers. Nor is there any mitigation measure that can address this.

The SIA makes the following statement:

"These job seekers, including those from areas outside the "local" area, enter the area with the hope of securing employment. When they do not secure employment, the potential exists that they will add to the usual difficulties related to informal settlement, pressure on existing resources, services and infrastructure. The possibility also exist that "new" job seekers may contribute towards crime and other social problems such as alcohol abuse and prostitution. Even if particular instance of crime are not as a result of the job seekers, these may still be attributed to them by local communities."

The impact goes further than this. These "job seekers" have the right to services like housing, schooling, police and medical services as well. At present the local community is under-serviced in most of these departments. Development should be sustainable and therefore current backlogs should first be addressed before an added load is heaped onto the authorities.

The inescapable conclusion is that illegal dwellings will mushroom in proportion to the influx. This will lead to all the social pathologies identified in the report, but for which no effective mitigation measures exist.

The social impact of this will be worst for the population of Sea Vista, but almost as bad for the town as a whole. The complacency with which this is addressed in the Social Impact Assessment is breath-taking. No attempt is made to assess the intensity of this impact in terms of specific numbers, and proposed mitigation measures are completely inadequate. The local authority is incapable of catering for the needs of the existing informal settlement at Sea Vista. Competition for the limited number of jobs is bound to lead to xenophobic reaction.

The mitigation measures for the prevention of more illegal dwellings states:

"Cooperate with local authorities to ensure that all legislation preventing illegal settlement, is enforced at all times; and"

This is unbelievably complacent and impractical. We would like to see a more practical and workable solution to this problem. Thus far the local authority could not prevent the erection of illegal dwellings. It is therefore doubtful that they will now suddenly succeed. It must be clearly stated who must cooperate with the local authority and what this cooperation will entail. There will be a cost to the local authority to appoint more enforcement officers. These issues should be discussed in more detail.

To lower the impact in one pen stroke to a impact of low significance is not only unacceptable but the mitigation measures are untested. We believe that the SIA practitioner should provide examples of where these mitigation measures have been successfully implemented.

Nobody objects to a natural growth of job-seekers in proportion to the natural growth of a town, but this is a completely artificial growth, which will place huge strain on both the local authority and on the existing population. The Social Impact Specialist virtually ignores it.

It is our view that this is a fatal flaw. The only solution to it is to avoid bringing any access road through St Francis Bay.

The DEA is requested to require the specialist to determine the actual impacts of jobseekers from outside the municipal area, in terms of specific numbers (e.g. 100, 1000, 5000), and to assess the significance of each level; and to consider whether any road access should be permitted through St Francis Bay , in view of recommendation 2 of the NSIP that the coastal resorts should be left unaffected.

Response 20:

Your comment in the inability of Kouga Municipality to deal with the expected influx of people into the Kouga municipal area is noted. It is also acknowledged in the Revised Draft EIR there are severe service provision backlogs and that the Kouga Municipality does not have sufficient funds of its own for the necessary upgrades. Thus, the following is recommended in Section 10.3.1 of the revised Draft EIR:

"Eskom must enter into negotiations with local authorities and other relevant authorities well before the start of construction to identify how it can be ensured that municipal services are capable of providing sufficient capacity for the expected influx of people into the affected area. Agreement must be reached between Eskom and these bodies on the apportionment of financial responsibility for infrastructure upgrades."

Eskom cannot, however, be expected to be solely responsible for infrastructure upgrades, as current infrastructure backlogs are the responsibility of the municipality. It is for this reason that it has been recommended that agreement must be reached between Eskom and the other role players regarding apportionment of responsibility for the necessary upgrades.

Your comment regarding the access road is noted. Please refer to the previous responses in this regard, which indicate that heavy vehicle construction traffic will no longer be routed along the R330.

Comment 21:

10. Social pathologies

These are listed in the assessment, but simply not addressed. They include crime &increased risk of HIV/AIDS. This in a community which is already seriously under-staffed in law-enforcement provision.

The community is not just concerned about the possibility of the increase in criminal activities. They are concerned about the level of service that they currently receive and the impacts of an increased population on the provision of these services. This impacts particularly strongly on Sea Vista Township.

The mitigation measures suggested are again all "nice to have" but do not address the practical implementation of service delivery on the ground. If the SAPS does not have the budget to provide a larger staff contingent, we can have as many Community Monitoring Committees as we want, it will not deal with the actual situation. No police vehicles, staff shortages, no lock-up facilitities – these are facts at present. No pie in the sky perceptions and paper based solutions. These impacts and cost implications must be addressed.

HIV/AIDS is not just a risk – it is a certainty, as is increased prostitution. As with everything else in the SIA, it is simply raised and then breezed over.

The mitigation measures are all aimed at the workers. The impact that this proven increase will have on the present population is not discussed. The workers will be dealt with most probably at an Eskom clinic. What will happen to the people not employed by Eskom? There are several on-going education campaigns on the prevention of HIV and AIDS and more campaigns would always be welcome. Unfortunately it again does not address the true situation on the ground. The impact of HIV & Aids on any community cannot be described as medium-term; those infected will have to go on lifelong treatment the impact is also not just local. The impact is National as most of these patients will become move on, as well as being reliant on social grants.

The DEA is requested to consider whether the impact of social pathologies arising from a major influx of outsiders has been adequately addressed in the SIA.

Response 21:

Your comments regarding the potential increase in social pathologies and on service delivery are noted. Please refer to Response 21 regarding this impact.

Further in order to ensure effective and efficient service delivery the better capacitation of the SAPS is needed to address the challenges that goes hand in hand with growth in population numbers.HIV/AIDS is a national challenge and all parties involved need to work together to address this challenge. It is also the responsibility of the individual to take responsibility for his/her lifestyle and choices made.

Comment 22:

11. Inadequate coverage of municipal infra-structural & social service requirements

The project description states that: "The infrastructural requirements associated with the proposed nuclear power station will be similar to that of the Koeberg nuclear power station

located in Duynefontein, Western Cape Province." This statement is simply not true as Nuclear 1 will be at least 3 times the size of the Koeberg plant. The two situations are entirely different.

The same applies for the SIA discussions about Municipal Infrastructure. The SIA is little more than a copy of the Kouga IDP 2009 – 2012 and the Kouga Spatial Development Framework. Although these documents can be used as a baseline for the SIA it is important that the specialist compares the documents with the reality on the ground. This has not been done for this SIA.

This is one of the biggest social impacts and yet again most of the information contained in this SIA is copied from the Kouga IDP. Nowhere in the SIA is a table or indication provided of the possible costs of this development to the Local Authority. We have requested that these possible cost implications for the Local Authority should be included to provide a full overview. At present a large amount of emphasis is placed on the positives. We find this unacceptable as the local ratepayers are in the end going to bear the brunt of these costs. No mention is made of the provision of Emergency Services as per the Disaster Management Act. Eskom is responsible for Disaster Management on the site but the Local Authority is required to have a standard level of service available in case of a disaster.

In the description of impact the SIA notes:

"It is probable that the new nuclear power station and residential development will place strain on municipal services such as water, sanitation, roads, waste and refuse removal."

It is not probable, it is a fact. Furthermore the SIA focuses all the attention on the residential development with little or no consideration of the added burden due to population influx. Although Eskom is willing to invest in the upgrade of infrastructure such as sewerage treatment facilities, this does not solve or alleviate the back log problems currently experienced in the area. The 2011 Green Drop Report gives the Kouga Municipality an overall Municipal Green Drop Score of only 36.3%. The maximum risk rating for Humansdorp, Jeffreys Bay and St. Francis indicates that all of these plants are already a high-critical or critical risk that warrants urgent attention.

The SIA reports that:

"When considering the backlog, the municipality has taken cognizance of an additional element, viz. the ability to maintain the existing infrastructure. Subsequently, operational budget to attain effective repairs and maintenance programmes has been allocated."

The current municipal budget does not reflect the operational budget to effect the repairs and maintenance programme. These issues should have been investigated by the practitioner and the impacts should have been recorded.

The mitigation measures suggested are again theoretical and do not provide detailed solutions to ageold problems. There are no specific actions listed, no responsible parties nominated and again no discussion of cost implications. There is no discussion in the SIA about the current road conditions, again just a theoretical rehash of the Transport Impact Assessment.

Response 22:

Your statements regarding the infrastructural requirements for Nuclear-1 are noted. Koeberg Nuclear Power Station (KNPS) employs approximately 1,200 people², which is similar in number to the estimated 1,400 operational personnel for Nuclear-1, in spite of the difference in power generation capacity. It is not correct to state that Nuclear-1 will be at least three times the size of the KNPS. The KNPS had a capacity of 1,800 MW, and although the application for Nuclear-1 is nominally 4,000 MW, this is the theoretical maximum that would be developed. Depending on the chosen vendor, Nuclear-1 could be made up of a number of smaller units or two larger units, with the potential to generate up to approximately 3,700 MW (i.e. approximately double that of the KNPS).

Lastly special reference is made to point 3.8. Municipal Services: "It is generally accepted fact that local municipalities have limited capacity and resources to cope with the growing demand, and therefore additional support and investment is needed when large projects are initiated.

The costs of providing local services would be part of the costs associated with the normal incremental growth of a town. Municipalities are responsible for providing specific services, but these costs are covered by user charges (the monthly municipal bills to householders and firms. New houses would have to pay municipal rates which would result in an enhanced revenue stream to the municipality. In addition to this, Eskom is willing to invest in the upgrade of infrastructure such as sewerage treatment facilities."

Details of such nature can only be progressed with the specific municipality, once the EIA decision authorization for the specific site is obtained

Your comments on the current service backlogs are noted. Whilst this is noted, it also has to be stated that the purpose of an EIA is not to solve current problems, but to provide an indication of the impacts that can be expected due to a proposed development and to ensure that these (potential future) impacts can be mitigated to acceptable levels. An EIA, as an environmental planning tool, is unable to address current service backlogs. However, these existing backlogs must be acknowledged (as they have been) in order to understand the context in which expected future potential impacts will be experienced.

Since there is a dedicated Transport Impact Assessment that considers road conditions, the focus of the SIA was not on providing an independent assessment of road conditions.

² http://www.eskom.co.za/c/75/the-koeberg-experience/

Comment 23:

Accommodation of Staff and Construction workers:

Although the SIA makes it clear that the accommodation arrangements have not yet been finalised and that an exact location has not yet been established the practitioner states that : "Provision for future residential development has been made in the Kouga Spatial Development Plan (2009), in and around Sea Vista, Cape St. Francis, Oyster Bay and Humansdorp."

Yet there is no discussion about the fact that these future plans were actually to serve the **current** population of the Kouga area. At present we are dealing with not only a backlog in the provision of housing but also with the problem of land and infra-structure available to add these developments. If the areas identified as future residential developments are now used for Nuclear 1, this will mean that people who have been residing in the area for years, will now have to step back. The current back-log in infrastructure provision in the Kouga has already delayed several housing projects in the area. Even if Eskom promises to provide their own sewerage treatment plant, the land actually earmarked for the community at present will be lost to this development.

This aspect is completely ignored in the SIA and the impacts on the community are not discussed at all.

This, of course, will involve major infra-structural factors such as water, electricity and sewerage, schools and clinics, etc., etc. all of which are operating at capacity at this stage. Quite how any social impact can be assessed in the absence of this information is not clear.

The DEA is requested to reject any application for an ROD until such time as the siting of the various accommodation villages has been determined, backlogs have been addressed; and the environmental impact and infra-structural requirements of these has been fully addressed in terms of Table 7 – 16.

Response 23:

Your comments the accommodation of staff and construction workers refers. The SIA does not state that the areas allocated for residential development in the Kouga Spatial Development Plan are allocated to Nuclear-1. It is a simple statement of fact that an allocation has been made for future residential development. There is no suggestion in the SIA that people on current waiting lists for housing would have to "step back" for Nuclear-1 employees.

Eskom has stated repeatedly that it will enter into detailed negotiations with the relevant local authorities once a decision has been taken on the location of Nuclear-1, and that its preference would be to integrate the housing requirements for Nuclear-1 as far as possible into existing development, thus making use of existing housing stock as well as new developments proposed by local developers. The DEA has accepted the approach of this EIA that housing developments for Nuclear-1 will be assessed through separate EIA processes, should these be required.

Comment 24:

Hospitals

The SIA states under the heading Hospitals that:

"Humansdorp:

Humansdorp Hospital is a Public Private Partnership Hospital with 33 private beds and 70 general bed facilities. There are about 35 nurses and 15 doctors on the staff. Humansdorp Hospital is about 20 kms from the proposed Thyspunt Nuclear Power Station. It is the only hospital for patients from Oyster Bay, Cape St. Francis, St. Francis Bay, Jeffrey's Bay and the rural areas."

The dream for Humansdorp Hospital may be to have 15 doctors on the staff, but this has not been true for a very, very long time. This illustrates the problem with desktopstudies, we can all access relevant government information and this SIA made full use of this information. It is however very unfortunate that the specialist did not verify this information to ensure that the real social impacts can be discussed and considered.

Response 24:

Your comment is noted. It is not possible for the Social Impact Assessment specialist to ground-truth all information for all educational, safety and security, health, utilities and other state-financed institutions in each of the study areas and reasonable reliance is therefore placed upon publicly published information.

Comment 25:

12. Mitigation measures

Much depends on mitigation measures which are proposed to deal with the multitude of social impacts and pathologies which would arise from a decision to proceed with Thyspunt. These completely fail to stand up to any kind of scrutiny. In general those proposed in this report are little more than talk shops, designed to address problem areas after they have arisen, and with no teeth. By this time it will be too late to correct anything meaningfully. These have to be anticipated and addressed at the decision making stage. Those proposed have no prospect of even reducing, let alone addressing the issues raised. Once again, these measures reflect the extreme complacency of the Social Impact Specialist, and place a question mark over his impartiality

The DEA is requested to look very critically at the proposed mitigation measures in connection with the social impact, and to determine whether these address the problem areas identified.

Response 25:

Your comment is noted. The mitigation measures in the Social Impact Assessment are only one set of a suite of mitigation measures proposed by the range of specialists. The mitigation measures have

been integrated into a comprehensive Environmental Management Plan (EMP) – Appendix F of the Revised Draft EIR Version 1). The EMP stresses the fact that many of the proposed mitigation measures will have to commence well before the start of construction. It is further emphasized in the this EMP that civil society involvement is key in the monitoring of the implementation of mitigation measures, through a proposed Environmental Management Committee - a body comprising authorities, Eskom, independent environmental monitors, representatives of local communities and non-governmental organisations.

Comment 26:

13. CONCLUSION

In the Impact Identification and Assessment section of the SIA most of the recommended mitigation measures cannot be accepted as they are too vague, there is no responsibility attached to the mitigation measure and the implementation of some of these measures is debatable.

The Social Impact Assessment is complacent, partial, lacking in factual content and totally inadequate. It should be rejected out of hand.

Response 26:

Your comment is noted. Responsibility for implementation of mitigation measures is allocated in the EMP (Appendix F of the Revised Draft EIR Version 1).

Yours faithfully for GIBB (Pty) Ltd

The Nuclear-1 EIA Team