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

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

**EXECUTIVE SUMMARY – THYSPUNT ALLIANCE**

Comments on the Second Draft of the Environmental Impact Assessment Report.

This document is an Executive Summary of some of the most important points we would like to highlight.

**Comment 1:**

Due to the fact that we only received the comments on our first submission at the same time that the second draft was issued we have not responded to each of your responses on the various documents that we presented. This should not be interpreted as a concession on our part that we accept the correctness of the response. On the contrary, unless otherwise indicated, the absence of a specific response to the EAP's comments indicates that we are of the opinion that our original arguments are still valid.

Please note that this document must be read with:

1. The comments submitted on behalf of the Thyspunt Alliance and its members in respect of the draft Environmental Impact Assessment Report ("DEIAR") on 30 June 2010 which are still applicable.
2. The comments on the revised DEIAR submitted by Earthlife Africa and Greenpeace in response to the revised DEIAR, which are endorsed by the Thyspunt Alliance and its member organisations.
3. Lengthy submissions with regard to individual assessment reports.

**Response 1:**

Your comment is noted.

**Comment 2:**

**1. GENERAL:**

## 1.1 Failure to allow for constructive engagement

We believe that the Public Participation Process for the Second Draft of the Environmental Impact Report has not allowed for constructive engagement. As an organisation we have undertaken to approach this EIA as unemotionally as possible and therefore we went out of our way to get specialists to review the various studies presented to us. This approach was followed to enable the Department to get a very clear view of all relevant issues. We specifically requested that the Key Focus Group meeting be held in time for our specialists to complete their reports. This opportunity was denied to us and constitutes a serious flaw in the process. The second draft should have been treated no differently from the first draft. We are not at fault that the first draft was riddled with mistakes and omissions. We are now presented with a so-called second draft where most of the mistakes were not rectified and attention was only given to a few of the more glaring holes in the report.

### Response 2:

A Key Stakeholder Workshop (KSW) that was attended by relevant specialists from the EIA Team requested by the Thyspunt Alliance during the review period for the **Draft EIR** was held on 25 May 2010. GIBB liaised with representatives of the Thyspunt Alliance in preparation for this workshop to ensure that the pertinent issues could be addressed.

With regards to this KSW it must be pointed out that direct engagement between interested and affected parties and EIA specialists is unusual in South African EIA practice. Much planning went into the arrangement of this Key Stakeholder Workshop, which was attended by specialists from seven different fields of specialisation. Whilst it may have been ideal to arrange a workshop earlier, it was practically impossible to arrange an earlier date on which all these specialists could be present in St. Francis simultaneously. These specialists are engaged on other projects as well and are often doing fieldwork, in South Africa or abroad, during which time they may not be contactable. One of the specialists is now resident in New Zealand. The logistics of getting all the specialists around the table on a single date was problematic, which accounts for the date of the KSW late in the comment period for the Draft EIR.

GIBB further acknowledged the request for a Key Focus Group Meeting during the review period for the Revised Draft EIR Version 1 as received from Ms. Trudi Malan on 12 May 2011 and responded to say that the request will be considered and that she would be notified as soon as a decision is reached in this regard. A decision in terms of this request was not reached. We would like to note however that a comprehensive round of public participation was undertaken during the review period for the Revised Draft EIR Version 1 where ample opportunity was provided to stakeholders and Interested and Affected Parties to interact with the Nuclear-1 EIA team as per the table below:

VENUE	DATE	TIME
Western Cape, Pretorius Hall, Main Road, Gansbaai	Monday 23 May 2011	17h00 - 18:00 Public Open House and 18h00 - 20h00 Public Meeting
Western Cape: Atlantic Beach Golf Club, Melkbostrand	Wednesday 25 May 2011	17h00 - 18:00 Public Open House and 18h00 - 20h00 Public Meeting
Sea Vista Community Hall, Sea Vista	Sunday 29 May 2011	14h00 - 17h00 Public Open House
Eastern Cape, Oyster Bay Hall, Oyster Bay	Monday 30 May 2011	17h00 - 18:00 Public Open House and 18h00 - 20h00 Public Meeting
Eastern Cape, St. Francis Links Golf Club, St. Francis Bay	Tuesday 31 May 2011	17h00 - 18:00 Public Open House and 18h00 - 20h00 Public Meeting
Eastern Cape, Sea Vista Community Hall, Sea Vista	Wednesday 01 June 2011	16h30 - 18h00 Public Open House and 18h00 - 20h00 Public Meeting

**Comment 3:**

**1.2 Failure to address shortcomings in the First DEIAR**

We believe that the second DEIAR has not sufficiently addressed the serious shortcomings of the first DEIAR. It is also apparent that all the specialists were not notified about the revised methodology for impact assessments as most of the specialist's studies still contain the same tables as in the previous DEIAR.

We do not believe that the consultants are addressing the majority of the problems and queries that we have raised from the very beginning of the process. They seem to constantly be moving the goal-posts. The majority of the studies have not changed and most of our concerns were not addressed. The current report is still riddled with uncertainties, areas not covered and vague references.

The report still contains no detailed designs, cross sections or layouts for any of the planned new access roads, sea tunnels, pumping tunnels, the Open Cycle Gas Turbine, desalination plants or waste water works. We cannot comment on information that is not available to us and specialists cannot comment on possible impacts.

**Response 3:**

All specialists were comprehensively informed of the revised impact assessment methodology prior to revision of their reports for the Revised Draft EIR. All specialists were consulted prior to finalisation of the assessment criteria to ensure agreement regarding the definition of the criteria, and teleconferences were additionally held with all the specialists to ensure their understanding of the criteria once revision of the criteria was completed.

**Comment 4:**

**1.3 Final Rating Criteria Flawed**

We believe that the final rating criteria is flawed in favour of the developer and does not sufficiently consider the impact on the affected environments both from a social and biophysical sense. We request the following:

- Any future integration meetings be held independently of any Eskom involvement
- The names of the Arcus Gibb Project Team as well as the minutes of the Project Team Meeting where the final rating were done.

**Response 4:**

The key functions of an EIA integration meeting for Nuclear-1 were to:

- Facilitate communication between specialists so that alignments and potential conflicts in the recommendations of the specialists can be understood;
- Facilitate understanding of the key findings of the each of the specialists by the EAP and the applicant;
- Understand the key sensitive areas identified by the specialists on each site and determine whether there is alignment between the areas that each of the respective specialists identified as being sensitive or suitable.
- Seek consensus between specialists and the Environmental Assessment Practitioner (if possible) on the findings and recommendations of the EIA process, particularly with regards the recommended alternatives for issues such as access roads.

It is not effective to discuss these issues in the absence of the applicant. The applicant has information at hand on the technical viability of certain alternatives, and it is most effective to obtain feedback from the applicant as these issues arise. Three-way discussion between the applicant, the specialists and the EAP provides a way to deal with the issues in an effective and efficient manner.

On a practical note, arranging to have more than 20 different specialist teams<sup>1</sup> around the table simultaneously is difficult. For the EAP to have firstly met with the specialists without Eskom's attendance, for the EAP to secondly discuss the outcomes one-on-one with Eskom, and then thirdly for the EAP to return to the specialists with Eskom's response, and adapt the recommendations and design accordingly through further to and fro negotiations would have resulted in a virtually never-ending and open-ended exchange of information with little chance of a definitive outcome.

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 5:**

##### **1.4 Manipulation of process**

It becomes more and more obvious that the process is being manipulated in order to suit the outcome preferred by the developer. We object to statements made by representatives from the developer that they do not want to expose the specialists to the general public and from the consultant that it is a costly exercise to organise the Key Focus group meetings with the specialists.

#### **Response 5:**

Your comments are noted. Please refer to Response 2 above regarding the costs and logistics of arranging a Key Stakeholder Workshop.

#### **Comment 6:**

##### **1.4.1 Specialist Integration Meeting**

Further manipulation of the outcomes are clear from the notes of the Specialist Integration meeting held in November 2009. (See Addendum 1). Firstly we find it very strange that no minutes were taken at a meeting of this importance. We believe that it would have been far more transparent if these notes were included in the DEIAR. Secondly we find it unacceptable that at a meeting of the independent specialists there was a total of thirteen Eskom employees present.

#### **Response 6:**

Your comments are noted.

With respect to the issue of minutes, the Integration Workshop took place over two full days. To keep detailed minutes of such a long workshop would have defeated the object and would not have added value to the workshop. One of the primary outcomes of the workshop was a spatial definition of the sensitive areas of each of the alternative sites. Such information is portrayed on maps of the sites and cannot be communicated through minutes. The presentations of the findings and recommendations prepared by each of the specialists form a substantial part of the records of the Integration Meeting.

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<sup>1</sup> Each team may consist of a number of members

Further outcomes of the workshop (e.g. key factors for decision-making) have been provided to the Thyspunt Alliance.

With respect to Eskom's attendance of the Integration Workshop, please refer to Response 4 above.

**Comment 7:**

**1.4.2 Independence of the consultants**

We would like to state that the fact that Eskom is paying for the EIA does not allow them to manipulate the process. The fact that the developer is responsible for appointing consultants to conduct an EIA is part of the NEMA and the whole notion that this allows the developer to have more say in the process than I&AP's should not be allowed. The consultants are responsible to keep the process independent. We do not believe that this is the case in this EIA. We are of the opinion that Eskom, as the developer, is too integrated into the EIA team and that the consultants have therefore lost control of the process.

**Response 7:**

We take note of your comments. It is within Eskom's rights as applicant to say what alternatives it prefers, as it is within the rights of all I&AP to say what alternatives they prefer. All applicants are involved in the EIA process, as it is by its very nature a process in which there is a constant flow of information between the applicant, the EAP and I&APs. Environmental recommendations for Nuclear-1 are based on the merits of the case.

**Comment 8:**

**1.4.3 ESKOM statements pre-empting outcome**

We would like to place on record that we object to statements made by senior Eskom officials at a recent public meeting held in St Francis to the effect that the "development is going ahead no matter what." This statement clearly indicates that senior officials in Eskom are of the opinion that the EIA is nothing more than a rubber stamp. The amount of disrespect this indicates for the constitution and the law of the country should not be tolerated.

**Response 8:**

The EIA is definitely a serious process; hence the duration of this current EIA running up to approximately 9 years which is indicative of the effort and time Eskom invested in this project to ensure extensive and constructive consultation. The current and previous EIR information does recommend Thyspunt as the site for Nuclear-1 and sometimes this is used as a basis in the debates. However, the EIA due process has not been concluded yet.

**Comment 9:**

**2. EUR'S & Generation III**

We believe that the use of the so-called EUR exclusion zones throughout the current document constitutes a clear bias towards the client. The European Utility requirements group was created in the early nineties by a small group of European utilities participating in the US advanced Light Water Reactor programme. Safety relevant requirements, though reflecting a common analysis and understanding of some safety issues, were never contemplated as substitutes to National Safety Authority Requirements. The EUR is not a regulatory body.

Eskom would have us believe that these emergency protection zones as proposed by them will be accepted by the National Nuclear Regulator. This is simply not true, in fact the zones proposed by Eskom are not used anywhere else in the world. The bias towards the client is clear when you consider that they are basing the EIR on an "envelope of information". The use of an "envelope of

information” allows the developer to dream about a Generation III Reactor but gives them enough leeway in case they have to accept a Generation II design. If they were to be allowed to use this approach, they should use either the planning zones currently relevant at Koeberg or follow the IAEA recommendations. It is clear that Eskom is allowed to manipulate the process to favour them and to the detriment of the communities who will be affected even in the “unlikely event of an accident.”

#### **Response 9:**

It is an assumption of the EIA process that the NNR will accept the EUR’s emergency planning zones. Initial indications provided by the NNR are that it is likely that the EPZ will be reduced. For instance, in a presentation to the Parliamentary Select Committee on Economic Development on 1 June 2010, the Chief Executive Officer of the NNR stated the following: *“One major outcome of these new designs is that the emergency planning zones, specifically the Urgent Planning Zone, which is the zone within which evacuation of the public has to be catered for, would in all likelihood be reduced from 16 km in the case of Koeberg, to a much smaller radius which could fall within the property owned by the holder ...”*

Should this prove not to be the case, one of the basic assumptions of the EIA would be invalid. Furthermore, as stated very clearly in the EIR and in all other publicly available information for the Nuclear-1 EIA process, it is a basic assumption of the EIA process that the proposed power station will be a Generation III plant. Should this assumption or any of the other key assumptions no longer be valid, it would imply that the EIA is no longer valid. An authorisation issued for a Generation III plant would not allow construction of a Generation II plant.

Various vendor reactor suppliers have qualified their designs according to the EUR requirements. Hence if the designs comply with these requirements, the prescribed EPZs are justified and are still subject to regulatory approval from that specific country adopting a EUR qualified reactor. There are reactors under construction globally that comply with the EUR requirements. As such the basis for adopting the EUR by Eskom is that the EUR aims at ensuring that the design that is adopted has minimal impact on man and the environment

#### **Comment 10:**

### **3. Squid Industry**

In spite of the fact that we have alerted the consultants about the possible impacts of the development on the squid fishing industry as far back as the original scoping phase, they chose to ignore this industry until after the second draft of the EIR was issued. The first meeting with the Scientific Squid Working group only took place on 20 June 2011 with follow-up meetings on 8 July and 02 August 2011. The consultants are now expecting comments from this industry before 7 August 2011. We believe that this situation is completely unfair and smacks of manipulation.

#### **Response 10:**

The Marine Ecology Assessment (Appendix E15 of the Revised Draft EIR) was revised based on the comments of I&APs like the South African Squid Management Industrial Association (SASMIA) on the Draft EIR. Should any verified information indicate that the findings of any specialist report is incorrect, the EIA team would amend that report. However, information that has been supplied by the Squid Working Groups does not substantively change the findings of the Marine Ecology Assessment. Furthermore, data that SASMIA has indicated is in its possession since 2010 that would refute the findings of the Marine Ecology Assessment have to date not been provided.

**Comment 11:**

**4. Power Line Issue**

The very selective inclusion of the Power Lines in this DEIAR also needs some interrogation. Eskom chose to conduct a separate EIA for the 400KvA power lines as well as the 132KvA power line. We believe that this is in contravention of the NEMA regulations that clearly states that all related infrastructure should be included. Be that as it may, during the entire EIA both the consultants and Eskom selectively include the power lines if and when it suits them. This selective inclusion cannot be allowed.

In the final rating exercise Thyspunt scores the highest score due to the ease of integration into the national grid. This assumption is based on a 12 page document produced by Eskom in 2008. This means that an outdated 12 page document submitted by the developer carries more weight than any of the independent specialist reports that forms part of this DEIAR. One of the key assumptions and considerations in this Eskom report states:

*“No EIA fatal-flaws exist on any of the sites and associated corridors.”*

If the EIA for the power-lines is not even completed, how do they know that there are no fatal flaws?

Furthermore the document states the following:

Factor	Thyspunt Site	Bantamsklip Site	Koeberg Site
Line length required	500 km of 400 kV lines	990 km (400 kV and 765 kV combined)	190 km (400 kV line combined with Cable)
Infrastructure Cost (R' Billion)	5.3	12.72	5.1
EIA and Servitude difficulty	Medium	High due to extensive 765 kV network	Medium (but high between Acacia and Philippi)

We fail to understand how technical people with no knowledge whatsoever of the affected environment can make a statement that the EIA and servitude will only be of medium difficulty.

This report is not an independent report the fact that the consultants used this report as the basis for rating Thyspunt higher than the other sites clearly indicates bias towards the needs of the developer.

**Response 11:**

As indicated in previous responses, while it may be theoretically possible to integrate the EIA processes for all forms of infrastructure, it is practically not possible. Achieving complete integration of EIA process for all forms of infrastructure would mean that the Nuclear-1 EIA would have to be integrated with the public participation processes for the Duynefontein, Thyspunt and Bantamsklip transmission lines, as well as for other infrastructure such as roads, potentially new residential areas, etc. Each of these transmission line studies has very different issues and different stakeholder groups. That is why, for a practical point of view, EIA processes for power stations and their associated transmission lines have been kept separate. There is no EIA process in South Africa undertaken by Eskom where the studies for the power station and the transmission lines have been combined.

Please refer to Chapter 10 of the Revised Draft EIR Version 2 for an updated assessment on the proposed sites. This updated assessment no longer utilises the ranking / scoring system for the sites,

but rather considers the residual risks associated with the proposed Nuclear power station at the proposed sites.

The difficulty of acquisition of the transmission line is a relative indication of the issues likely to be encountered with land acquisitions. This is based on the experience of specialists responsible for the acquisition of power line servitudes with respect to other power lines in the respective areas.

#### **Comment 12:**

##### **5. Improved Conservation value:**

We would like to object to the very absurd notion in the DEIAR that placing a Nuclear Power Station in an area of critical biodiversity would raise the level of protection and conservation value.

None of the specialist takes cognisance of the fragmentation impact of a project of this scale. It is only mentioned in the Vertebrate (sic) Faunal report. This notion would only hold truth if there was 100% certainty that the very dynamic, integrated system at work in the landscape would not be affected.

It is clear from most of the specialist studies that **no such an assurance can be provided.**

We highlight this with a few examples:

Dune Geomorphology:-

“Final recovery of the natural surface water & groundwater dynamics will probably take decades.”

“Special rehabilitation techniques may have to be developed to ensure that the wetlands, surface water & groundwater dynamics fully recover.”

Fresh Water Ecology:

*“4.4.9 Cumulative impacts associated with the NPS development at Thyspunt*

*The cumulative impact of the proposed NSP development and its associated pylons (within the site) and access roads, even assuming in each case that the alternative that is associated with the least ecological impact in terms of wetland systems is selected, would be high negative significance, resulting in loss of individual wetlands and net degradation of a wetland system of international conservation importance, that is considered a one-of-a-kind system.”*

Botany & Dune Ecology:

*“If compromising the functioning of the wetlands at **Thyspunt** cannot be avoided, then this is regarded as a fatal flaw, especially as these systems are endemic to this coast, and the Langefontein wetland is a “one-of-a-kind” system.”*

Vertebrate (sic) Faunal Assessment:

*“An important negative factor is the lack of definitive information on whether adequate engineering solutions are available to avoid serious negative impacts on groundwater flows and sensitive wetlands at Thyspunt.”*

*“These provided further evidence of the **ecological importance, as well as the richness and sensitivity of the coastal wetlands**. To our knowledge, the largest number of Cape Clawless Otters ever filmed together in the wild – six adults and juveniles – were filmed at Thyspunt”*

*“While the Leopard is not a Threatened species, its occurrence in coastal environments has become rare. **This species is symbolic of the wild, unspoilt nature of the site, and of an ecosystem that is intact and functioning in, or quite close to, its original condition.**”*

*“This has given rise to an ecosystem with a pattern of resource utilization that is atypical and unusual. These ecological patterns, quite apart from the species themselves, are rare, of scientific interest and ecologically important, and therefore should be viewed as conservation worthy and of high significance. The same logic applies to aquatic and semi-aquatic communities in the dune field.”*

### **Response 12:**

Your comment is noted. All biophysical specialists indicated the potential value of the conservation of the site, provided that the sensitive portions of the site are avoided.

The quotes from the specialist studies provided above by the Thyspunt Alliance must be interpreted in context. Specialists have, in most cases, based their assessments on a worst case scenario i.e. they have assessed the impacts as if the most sensitive of the resources on the site would be destroyed. Some of the quotes also do not take account of further information that has been generated to improve confidence in the assessments.

The following is an example from the Vertebrate Faunal Assessment (Appendix E13 of the Revised Draft EIR): *“An important negative factor is the lack of definitive information on whether adequate engineering solutions are available to avoid serial negative impacts on groundwater flows and sensitive wetlands at Thyspunt.”* This statement assumes a worst case scenario impact on the wetlands and does not take account of the extensive wetlands monitoring undertaken in 2010 (culminating in the Wetlands Monitoring Report – Appendix E12 of the Revised Draft EIR), which found that the Langefontein Wetland is not geo-hydrologically linked to the footprint of the power station and that impacts on this wetland can be mitigated. The statement also does not consider the fact that the placement of the power station and other infrastructure has specifically avoided sensitive wetland communities such as the dune slack wetlands within the headland Bypass Dune System and the Langefontein Wetland.

The following quote from the Botany and Dune Ecology Assessment refers: *“If compromising the functioning of the wetlands at **Thyspunt** cannot be avoided, then this is regarded as a fatal flaw, especially as these systems are endemic to this coast, and the Langefontein wetland is a “one-of-a-kind” system”*. The statement is conditional i.e. impact will be a fatal flaw **IF** the impact on wetland functioning cannot be avoided. As indicated in the response above, this impact can be avoided.

With respect to the issue of raising the conservation value of the Thyspunt site: As indicated in the revised Draft EIR, a maximum area of approximately 280 ha is required for the power station. The land currently owned by Eskom at Thyspunt is approximately 3828 ha. Thus, if 280 ha were to be used for development, it would leave approximately 93% of the site undeveloped. At Duynefontein, where the Eskom owned property is 2928 ha, even a larger proportion of the site is undeveloped and dedicated to nature conservation. All biophysical specialists have indicated that the conservation value of the site could be improved, provided that impacts on the sensitive biophysical features on the site are avoided. Every EIA process must examine the merits of the particular project, which in this instance do not involve indiscriminate development and fragmentation of the site. Development of the nuclear power station is proposed to be focused on a concentrated footprint, which has been defined for its low environmental sensitivity, leaving more than 90% of the property free for conservation. In the absence of any significant efforts to establish conservation areas along the affected stretch of coastline (with the exception of the Rebelrus conservancy) and the vigorous alien vegetation encroachment throughout the St. Francis region, the possibility of the undeveloped area being managed as a nature conservation area is considered to be a significant benefit for conservation.

### **Comment 13:**

#### **5. The “land sale threat”**

We object to the statement by the majority of the specialists that if Eskom is not allowed to build the Nuclear Power Station at Thyspunt, the land will be sold off and there will be no control over

development. Any developer will have to conduct an EIA for any development on the site and we would be as rigorous in our oversight as we would be for this EIA.

Furthermore the new Integrated Coastal Management Act combined with the overreaching NEMA regulations will make it very difficult to for any developer to have a development of the size and impact of a Nuclear Power Station, especially if you consider the cumulative impacts.

No consideration is given to the possibility of establishing a National Park. The establishment of a national park will not only protect a system that is deemed to be of global importance and situated within an area of critical bio-diversity, but it would also protect the heritage value of the site. This will allow for long term gain from tourism development instead of the possible short term gain from a power station (60 years).

### **Response 13:**

As the Thyspunt Alliance has stated in much of its correspondence, the St. Francis region has been developed as a tourist area for high-end tourism. The development of Cape St. Francis, St. Francis Bay and other more recent tourism developments in this region (e.g. the St. Francis Links Golf Estate) are indications of the attraction of this area for tourism development. The coastline is a tourism draw card and further development along the coastline is therefore a very feasible scenario in the absence of a nuclear power station. The dramatic growth of Jeffreys Bay in the last decade is a further indication of the pressure for residential on this stretch of coastline.

Housing, as a form of development, is arguably more environmental destructive than the development of a nuclear power station. Residential development has the potential to transform the landscape completely. In the case of the proposal for Nuclear-1, the power station development is located on the least sensitive portion of the site, with more than 80% of the site, including valuable ecosystems like the Langefontein Wetland, remaining undeveloped. Given these alternatives, it is not unrealistic to come to the conclusion that, on balance of probabilities, the development of a power station with a surrounding nature reserve would provide greater security for the long-term conservation of the site. It must also be borne in mind that the power station would have an Emergency Planning Zone with a radius of at least 800 m, within which no development would be permitted for the lifespan of the power station and after decommissioning a review of the EPZ would have to be done.

The Botany and Dune Ecology Assessment (Appendix E11 of the Revised Draft EIR) does not come to the conclusion that the Thyspunt site is of “global importance” or situated in an area of “critical biodiversity”. The potential impact on the transverse dune system at Duynefontein is rated to be of higher significance than the botanical impacts at Thyspunt. Should you have any published information to dispute the findings of the botanical assessment, we would gladly consider this.

It is unlikely that the Thyspunt site would be considered for expansion of the National Parks network. The focus of the National Protected Area Expansion Strategy<sup>2</sup> is on for large, intact and unfragmented areas. The Thyspunt site is situated between two developed areas (St. Francis and Oyster Bay) and is completely isolated from other natural areas further inland by extensively transformed dairy farming regions. The above-mentioned strategy does not indicate that any areas within the St. Francis region are considered for inclusion in a protected areas network.

Therefore, the development of a formal conservation area has not been considered. However it has been recommended in Chapter 10 of the Revised Draft EIR Version 2 that Eskom should enter into negotiations with a statutory conservation body such as SanParks upon decommissioning of the power station.

### **Comment 14:**

## **6. Heritage**

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<sup>2</sup> Government of South Africa. 2010. *National Protected Area Expansion Strategy for South Africa*. Government of South Africa. Pretoria.

One of the new studies in the revised draft is a Heritage Mitigation study. In the introduction to the study the following statement is made: *"We have however conducted significant amount of consultation with respect to mitigation of archaeological sites"*. We find it unacceptable that none of the specialist or affected parties in the Eastern Cape was even invited to this discussion and we therefore does not consider this consultation as significant.

The days where academics can sit in conference rooms and make decisions on the protection afforded to the heritage of a nation, without involving the affected parties on a national level, is over. We have alerted the consultants that the KhoiSan structures in the country must be involved in this assessment on a national level and not just on a local level, it would seem that they have chosen to ignore this recommendation.

We further contest the following statement: ***"Both Arcus GIBB and ACO have indicated to SAHRA (as reflected in the EIA report) that the Thyspunt site is not well understood, and that there remains a possibility that a minimal damage scenario may exist"***

This statement is untruthful and should be treated with the necessary contempt. The mere fact that Arcus Gibb and ACO can even make a statement like this indicates clear bias to the developer.

We are of the opinion that there should be no difficulty in understanding the Thyspunt site. In actual fact it is fairly easy to understand – **THE SITE IS OF INTERNATIONAL HERITAGE VALUE AND SHOULD BE AFFORDED THE PROTECTION OF AN UNESCO WORLD HERITAGE SITE."**

We have a copy of a written response from the Minister of Arts and Culture, Parliamentary file number 7/1/2/B to written question number 360. This states that: "As indicated above, the HIA (Heritage Impact Assessment) is not approved by SAHRA (South African Heritage Resource Agency), so the development will not proceed." We are greatly concerned that Eskom and the EAP appears to assume that they are above the law and are carrying on as if this ministerial decision is of absolutely no value or consequence.

It is clear from the Heritage Assessment that allowing any development of this magnitude on this site will be a continuation of the disregard for the KhoiSan heritage. We believe that the conservation of this area would not only create more job opportunities, but would also safeguard the heritage of the "First Nation". We believe that the area should be declared a National Heritage site and that a Coastal Cradle of Humankind Centre should be established as part of the KhoiSan Heritage Route.

#### **Response 14:**

The Nuclear-1 EIA process has included numerous opportunities for input into the EIA process. Specialist studies, including the Heritage Impact Assessment, were included in the documentation that has been provided for review of Interested and Affected Parties (I&APs). In addition, meetings with specific heritage role players (e.g. individuals and groups claiming to represent the Gamtkwa "First Nation") were convened at their request. Refer, for example, to the minutes of the meeting with the Gamtkwa Council on 27 August 2010.

In response to the requests by groups such as the Thyspunt Alliance to interact directly with the EIA specialists after the Draft EIR was provided for I&AP comment, a specialist workshop was convened in St. Francis on 25 May 2010. The Thyspunt Alliance made significant inputs into the agenda for the workshop and the list of specialists that were requested to attend this workshop.

Furthermore, your quote above from the Heritage Impact Assessment is related specifically to *"mitigation of archaeological sites"* and should be understood in that context. The specific consultations mentioned were of a technical nature and focused on organisations and individuals involved professionally in the management of archaeological sites.

We take note of your objection. However, recent additional monitoring of archaeological sites at Thyspunt (undertaken during the 2<sup>nd</sup> half of 2011 and therefore not yet reflected in the Revised Draft EIR Version 1 from 2011) indicate that there are very few archaeological sites within the proposed footprint of the power station and that these sites are of poor quality compared to the concentration of well-preserved archaeological sites along the coastline.

The statement by the Minister of Arts and Culture was made prior to any formal application by Eskom for excavation of the heritage sites at Thyspunt. A formal application for excavation of the site at Thyspunt has not yet been lodged. As indicated above, further test excavations at Thyspunt have revealed there will be minimal heritage impacts within the recommended power station footprint. SAHRA can only make a formal response to this issue once all the facts have been placed at their disposal.

Your comment regarding the establishment of a “Coastal Cradle of Humankind Centre” is noted. One of the key recommendations made in Section 10.3.4 of the Revised Draft EIR is the following: “*On-site curation and interpretation facilities need to be provided and sufficient resources need to be provided for the ongoing maintenance of these facilities throughout the operational life span of the proposed power station.*” Funding of such a centre by Eskom, as part of its mitigation responsibilities, provides a secure mechanism for development and funding of an interpretation centre. Recent examples of offset mitigation measures by Eskom (e.g. the creation of a 9000 ha wetland conservation area at the Ingula pumped storage scheme) indicate that large-scale mitigation measures, undertaken in conjunction with the development of a large infrastructure project, are feasible and can be enforced.

#### **Comment 15:**

#### **7. Dune Geomorphology**

We will be submitting a report conducted by Prof Fred Ellery with regard to the Dune Geomorphology report and the possible impacts of the very dynamic system on infra-structure. It is clear that both the consultants and Eskom are not willing to take a “whole systems” view, instead they divide the study area into a western and eastern system - with the site for the nuclear power station site in the western watershed, and dismissing the eastern watershed section.

We are of the opinion that the complexity of this very dynamic system is understated in the DEIAR.

#### **Response 15:**

We take note of your comments and will consider any scientifically verifiable facts provided in the submission by Prof. Ellery.

#### **Comment 16:**

#### **8. Specialist studies of concern:**

We believe that the following assessments should be rejected and re-done:

- Agricultural Assessment
- Social Assessment
- Marine Ecology Assessment
- Economic Assessment
- Transport Assessment

These studies does (sic) not provide all the relevant information, contains outdated information and does not reflect all the relevant impacts. The shortcomings of these studies will be discussed in lengthy submissions.

#### **Response 16:**

Your comments are noted. We will respond to the claimed shortcomings of these studies in the lengthy submissions.

**Comment 17:**

**8.1 Social Impact Assessment**

We believe that this study is a flawed study based on out-dated information and filled with perceptions and assumptions without any realistic discussion of facts and impacts. The SIA contains long descriptive paragraphs, some copied directly from the Kouga Draft IDP, but very little ground truthing. Most of the mitigation measures suggested are theoretical in nature but not practical at all. Alerting the Education Department to the shortage of schools is not a mitigation measure. The current social conditions in the Thyspunt area are not reflected in this SIA at all and therefore the real impact of adding more strain onto a system that is already far over-capacity is not recorded. The SIA does therefore not address the principles of sustainable development.

Nowhere in the SIA is any mention made of the impacts related to loss of employment. We maintain that the development of Nuclear 1 at Thyspunt poses a serious threat to the viability of the Squid Industry. The Economic Impact Assessment clearly states that there will be an expected drop in tourism figures during the construction phase. The impacts of these possible job losses should be discussed as part of the SIA.

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 both 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 as 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 17:**

Potential job losses in the tourism sector and in the fisheries sector are discussed in the Marine Ecology Assessment, the Economic Impact Assessment and the Tourism Assessment (respectively Appendices E15, E17 and E22 of the Revised Draft EIR). Potential job opportunities arising from construction and operation of the power station are likewise addressed.

The data used in the Social Impact Assessment (Appendix E18 of the Revised Draft EIR) are the latest official and verifiable information for the study area.

A social impact assessment is by nature an assessment of the impact on people and how they perceive their environment and the influences on their environment. Ignoring people's perceptions and focusing only on “facts” would defeat the purpose of a social impact assessment.

**Comment 18:**

**9. Peer Review:**

The only Peer Review in the revised draft report is reflected in App H, which makes it clear in its very first paragraph that it is only concerned with the process, and not with the specialist reports:

*“It is principally a process review and is not intended as a means of verifying the scientific accuracy or completeness of the specialist studies that were prepared for the investigation. Specialist reviews have been undertaken for that purpose.”*

We find it unacceptable that, according to a recent verbal communication between the EAP and a member of the Alliance, no peer reviews of specialist reports have taken place in this EIA since the earliest draft stage in 2008. The EAP specifically stated that she relies on I&APs for this kind of monitoring. This totally overlooks the fact that the “specialist reports” are just that, and that it will not often be the case that I&APs are sufficiently well-informed to monitor these reports. Under these circumstances, therefore there is no adequate monitoring of the scientific accuracy or completeness of the specialist studies. This has to be a fatal flaw in the process.

**Response 18:**

Peer review of specialist reports were undertaken in late 2008 to early 2009. The EAP’s statement is correct, in that one of the functions of I&AP involvement is monitoring the correctness of the EIA process. I&APs do not necessarily have to be subject specialists to provide valuable information. It is often so that local people with local knowledge provide valuable information that would not normally be available to the EIA Team.

Yours faithfully

A handwritten signature in black ink, appearing to be a stylized 'S' or 'J' with a flourish.

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The Nuclear-1 EIA Team