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Reg. no: 2012/099422/08



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Date: 28 May 2026

Comments and objection prepared on behalf of the Thyspunt Alliance

The Thyspunt Alliance submits these comments and objections on the Draft Scoping Report (DSR) and related specialist studies for the proposed Nuclear Power Station Strategic Environmental Impact Assessment (S&EIR) at the Thyspunt and Bantamsklip sites.

Project No: ZA0058322.7774

These comments are submitted without prejudice to any and all rights, remedies, objections, appeals, review proceedings, or further legal actions available to the Thyspunt Alliance and affected and interested parties in terms of the Constitution of the Republic of South Africa, the National Environmental Management Act 107 of 1998 (NEMA), the Promotion of Administrative Justice Act 3 of 2000 (PAJA), and any other applicable legislation.

The Thyspunt Alliance is a collaborative alliance of civil society organisations, non-governmental organisations (NGOs), industry groups, and individual members.

Participation in this public participation process and the submission of comments must not be construed as acceptance of the adequacy, legality, procedural fairness, scientific integrity, or substantive lawfulness of the Draft Scoping Report (DSR), the associated specialist studies, the site selection methodology, or the broader Strategic Environmental Impact Assessment (S&EIR) process.

The Thyspunt Alliance expressly reserves the right to supplement, amend, expand, or refine these submissions should additional information, specialist inputs, supporting documentation, underlying assumptions, or previously undisclosed reports become available during any subsequent phase of the process, including but not limited to the Environmental Impact Reporting (EIA) phase, appeals, or judicial review proceedings.

The failure to raise a specific issue at this stage must not be interpreted as a waiver of any rights or as limiting the scope of any future legal or administrative challenge.

Appendix 1:

Comments on Draft Scoping Reports G01: Dune Geomorphology and G09: Terrestrial Biodiversity.

Prepared by: Prof. Richard Cowling
Emeritus Distinguished Professor

Appendix 2:

Site specific comments and objections from a heritage perspective with regard to THYSPUNT as the preferred site for the construction of a Nuclear Power Plant (NPP).

Prepared by: Kobus Reichert

Appendix 3:

Comments on Heritage value of the Thyspunt Cultural Landscape

Prepared by: Dr. Curtis W. Marean.
Professor at the Institute of Human Origins at Arizona State University

Appendix 4:

Specialist Energy Objection to the Draft Environmental Scoping Report: The Unlawful Fragmentation of an Integrated Energy Project — Transmission Grid, Construction-Phase Power Supply, and Energy Alternatives.

Prepared by: Donald McGillivray
Pr Eng Pr CPM

Appendix 5:

Submission on the Failure to Resolve Nuclear Site Viability Prior to the Continuation of the EIA Process

Prepared by: Hilton Thorpe



19 May 2026

For attention:

WSP in Africa

Waterfall City, Midrand

PROPOSED NUCLEAR POWER PLANT EIA PROJECT.

COMMENTS ON DRAFT SCOPING REPORTS G01: DUNE GEOMORPHOLOGY AND G09: TERRESTRIAL BIODIVERSITY

Dune Geomorphology. Prepared by: Illenberger & Associates

Is the consultant sufficiently qualified to undertake this task?

The consultant has lengthy experience of research and observation of the site. However, he has not been actively involved in research for almost two decades. Furthermore, the consultant cites only his own research. Thus, there arises the concern that he does not keep up with developments in the literature. There is a very real danger of confirmation bias clouding his judgement.

Is the relevant literature cited?

As per the comment above, the answer is “no”. Astonishingly, the consultant has not considered the research of Elkington (2012), which demonstrates that the eastern sector of the Oyster Bay bypass dune is under fluvial control. The implications of this finding for the location of transport and other infrastructure need to be incorporated into the research. Furthermore, the consultant does not consider the report of de Wit (2016), which identifies significant seismic hazards associated with the site that will have major impacts on dune morphology. Other salient literature is not cited e.g. Claassen (2014) and Mothuba et al (2020).

Have climate change impacts been adequately considered?

Not really. The account boils down to a personal opinion. Relevant literature is not cited e.g. Fitchet et al (2016) and Knight and Grab (2024).

Conclusion

The consultant does not inspire confidence in this ability to assess the suitability of the Thyspunt site for a nuclear facility. The scoping report is biased in favour of his own understanding of the system and not the full picture provided in the literature.

Terrestrial Biodiversity Assessment. Prepared by: BioCensus (Pty) Ltd

Is the consultant sufficiently qualified to undertake this task?

No. His research prior to becoming a consultant was on the grassland of the north-eastern Eastern Cape. The report reveals ignorance of the flora and vegetation ecology of the Cape Floristic Region generally, and the study site in particular.

Is the relevant literature cited?

No. I can list about a dozen papers that focus on the ecology of the ecosystems undertaken adjacent to the site that have not been cited. This literature must be considered in an assessment of the site. We cannot rely on the consultants impressions gained during a brief site visit.

Have climate change impacts been adequately considered?

Not at all. The relevant literature needs to be assessed and its likely impacts discussed.

Other salient points

- It is not clear in the report whether the consultant is referring in his remarks to the entire study area of the specific site where the facility is located.
- There is confusion as to the use of SANBI vegetation types. Sometimes, the 2006 scheme is used, sometimes the 2018 scheme, and at others, the 2026 scheme.
- The endangerment rating arising from the 2026 scheme is imminent and needs to be incorporated into the report (see submission by Conservation Outcomes).
- The “no go” scenario advanced by the consultant is fallacious in that it contradicts land use changes in the region over the past few decades ((see submission by Conservation Outcomes).

Miscellaneous comments (respondents’ comments in *italics*, consultant’s comments copied from the document)

The survey timing was ideal for rainfall seasonality, which drives most ecological processes. *It was done in Dec, in the middle of summer when terrestrial ecosystems are most stressed and flowering is at a minimum.*

Protected areas and Priority Areas for expansion. *Lists only Rebels Rus and not Thula Moya, Rocky Coast Farm and the Sand River Reserve (plus Grand Comores offset). This is also pointed in spatial detail out in Conservation Outcomes report and I do refer to this in mine.*

There is no separate expansion strategy affecting the site, although the CBA, discussed in the section on “Critical Biodiversity Areas (CBAs) and Ecological Support Areas (ESAs)” above, serves this purpose. *What does this mean: no separate expansion strategy? Separate from what? Please look at the Garden Route and other relevant plans and plot the priority areas defined therein.*

Alien invasive plant encroachment *No mention of the massive clearing of aliens that has occurred in the area.*

Overall plant species richness recorded at Thyspunt reflects moderate diversity for a coastal site, with comparatively low recorded rare-species representation relative to other Cape coastal lowland landscapes. *What is the evidence for this statement? There is a paper (Grobler et al (2022) Quart Sci Rev that assesses area-adjusted regional plant diversity of coastal vegetation that should be consulted before making statement like this.*

The sites biodiversity significance and sensitivity are driven less by high plant endemism and more by the presence of irreplaceable process-linked features—particularly the mobile dune systems and

their associated wetlands—where disturbance can lead to long-term functional degradation that is difficult to reverse. *What evidence is there for this statement. There is a paper (Cowling et al 2019 PeerJ) that discusses the significance of the flora of the Greater Cape St Francis area immediately adjacent to the Thyspunt site. This must be consulted before any pronouncement can be made.*

Fynbos units (particularly Dune Fynbos and Limestone Fynbos) represent key biodiversity receptors typical of Cape coastal shrublands. *What is a key biodiversity receptor?*

However, overall rare plant representation at Thyspunt is comparatively lower than in some other Cape coastal lowland systems. *Where is the evidence for this statement?*

Confidence of rating Moderate. *From my experience, the quality of this report and its absence of evidence would suggest a confidence ranking of poor, at best.*

Southwestern Strandveld (previously called Overberg Dune Strandveld, listed as Endangered. Here the latest (2026) classification is used (SW Strandveld) which is ranked as Endangered. *This is not true. The endangerment assessment still needs to be done. So, I can only conclude that the allocated category is based on Overberg Dune Strandveld, which has a different footprint. This is misleading and downright incorrect. A consequence of this is that the Bantamsklip site is ranked above Thyspunt.*

A clear avoidance-led mitigation pathway is available: exclude the high-rarity inland portion (north of the R43) from development *This refers to mitigation at the Thyspunt site but is relevant to the Bantamsklip site. Sloppy!*

From a strictly terrestrial biodiversity risk perspective: Thyspunt would represent the lower regional ecosystem risk option for progression into the Nuclear EIA phase but has higher local ecosystem sensitivity and diversity. *This doesn't seem a reasonable conclusion, even when based on the information provided in this report. Bantamsklip emerges as less risky because of having an endangered ecosystem. However, as pointed out above, this assessment is incorrect. However, there is a much greater risk of disrupting ecological processes, and their knock-on effects, at Thyspunt than Bantamsklip. In the words of the consultant "Even with careful alignment and mitigation, Thyspunt retains a higher probability of unavoidable residual impacts to irreplaceable wetland and dune-process systems, with an elevated risk that impacts remain of high significance after mitigation". This statement contradicts the conclusions of the consultant's report. Conservation over the past few decades has increasingly focuses on processes than patterns of biodiversity. The consultant needs to provide a solid foundation in the literature for doing the opposite.*

Conclusion

The consultant has produced a sloppy report, riddled with vague statements rather than based on an understanding of the relevant literature, of which there is a great deal.



Prof RM Cowling
Emeritus Distinguished Professor

Appendix 2:

OBJECTION TO THE DRAFT SCOPING REPORT FOR THE PROPOSED ESKOM NUCLEAR POWER PLANT (UP TO 5200 MW): THYSPUNT - KOUGA LOCAL MUNICIPALITY IN THE EASTERN CAPE PROVINCE / BANTAMSKLIP - OVERSTRAND LOCAL MUNICIPALITY IN THE WESTERN CAPE PROVINCE.



Compiled by: Mr. Kobus Reichert - B.Proc, BA (Hons) Archaeology.

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OBJECTION TO THE DRAFT SCOPING REPORT FOR THE PROPOSED ESKOM NUCLEAR POWER PLANT (UP TO 5200 MW): THYSPUNT - KOUGA LOCAL MUNICIPALITY IN THE EASTERN CAPE PROVINCE / BANTAMSKLIP - OVERSTRAND LOCAL MUNICIPALITY IN THE WESTERN CAPE PROVINCE.

SITE SPECIFIC COMMENTS AND OBJECTIONS FROM A HERITAGE PERSPECTIVE WITH REGARD TO THYSPUNT AS THE PREFERRED SITE FOR THE CONSTRUCTION OF A NUCLEAR POWER PLANT (NPP).

DISCLOSURE: The author of this objection is a member of the Thyspunt Alliance and does not have any direct business, financial, personal or other interest in the approval or refusal of the application.

EXECUTIVE SUMMARY

WSP Group Africa (Pty) Ltd (WSP) released a Draft Scoping Report (DSR) for public review on 1 April 2026 on behalf of Eskom Holdings SOC Limited (Eskom), for a proposed new Nuclear Power Plant (NPP) at Thyspunt in the Eastern Cape or at Bantamsklip in the Western Cape. WSP as the appointed Environmental Assessment Practitioner (EAP) for the project announced at the various Public Meetings held after the release of the DSR that Thyspunt in the Eastern Cape is the preferred site for the development of the NPP and that Bantamsklip in the Western Cape will no longer be considered as part of the current Environmental Impact Assessment (EIA) process.

A Heritage Impact Assessment (HIA) conducted by CTS Heritage forms part of the DSR that includes archaeological, palaeontological and cultural landscape assessments for both of the sites proposed by Eskom. The HIA for Thyspunt relied heavily on the results of a previous HIA conducted at the site (Hart 2012) and provided updated information aimed at meeting the requirements of the heritage authorities namely the South African Heritage Resources Agency (SAHRA) and the Eastern Cape Heritage Resources Authority (ECPHRA). SAHRA is the commenting authority for the heritage component that forms part of this application and ECPHRA will provide comments as an Interested & Affected Party (I&AP).

Thyspunt was also Eskom's preferred site for the development of a NPP in the previous process with Duynefontein in the Western Cape the alternative site after various other potential sites (that included Bantamsklip) were scoped out of the EIA process. Extensive public participation formed part of this process and various objections from the public as well as review comments by SAHRA with regard to Thyspunt were submitted as part of that process. It is common cause that Duynefontein eventually received an Environmental Authorisation (EA) from the Department of Environmental Affairs (DEA) in 2017. The DEA *inter alia* decided that: ***"the overall environmental impacts associated with the Duynefontein site are acceptable and materially lower than those at the Thyspunt site"*** (DEA 2017).

The current HIA has concluded that in comparison to Bantamsklip: ***"Thyspunt has emerged as the slightly less sensitive site from a heritage perspective, albeit with significant caveats"***. This conclusion played a role within the context of all the specialist studies conducted as part of the DSR to determine that Thyspunt is once again Eskom's preferred site for the proposed NPP. In order to reach this conclusion all the relevant heritage information related to Thyspunt that formed part of the previous EIA process needed to be evaluated and updated and this included a further site visit. The updated HIA therefore had to be objective and also needed to include more recent information with regard to Thyspunt and the wider area in general in order to inform the Department of Forestry, Fisheries and the Environment (DFFE) of the correct heritage sensitivities of the site.

It however appears that the conclusion reached by CTS Heritage in the HIA is incorrect because it ignored or failed to include the results of more recent Archaeological Impact Assessment (AIA's) conducted within and in close proximity to the Thyspunt area as well as relevant review comments from SAHRA and objections that formed part of the previous EIA process. The statement that Thyspunt is the

slightly less sensitive site in comparison to Bantamsklip is also contradictory to the findings of the previous HIA (Hart 2012).

The purpose of a scoping report is to provide the competent authority with a preliminary understanding of the project and the receiving social, economic and biophysical environment and how the project may impact on these systems. The HIA that forms part of the DSR fails to provide this understanding of the site and does not accurately reflect the impact the project will have on a site of national and international heritage significance. It provides Grade IIIA and Grade IIIB sensitivity zones for example within a cultural landscape that is currently provisionally protected as a Grade 1 Cultural Landscape in terms of Section 29 of the National Heritage Resources Act, No. 25 of 1999.

The Cultural Landscape Assessment that forms part of the HIA clearly states with regard to Thyspunt that: ***“the entire project site is located in areas of very high and high sensitivity in a natural landscape with very high archaeological and palaeontological significance which has been provisionally protected as a Grade I Cultural Landscape, and would be unable to be supported from a cultural landscape perspective”***. The attempt by CTS Heritage to downplay this statement and suggest “negotiations” with SAHRA about the demarcation should be rejected by the competent authority.

The objector request that the competent authority directs that the HIA in the Draft Scoping Report should be revised to reflect the additional data, information and reports that may have a material effect on the current conclusion reached in the HIA regarding the Thyspunt site. The competent authority is further requested not to accept the DSR in its current format until the flaws in the current report has been addressed.

HERITAGE SENSITIVITY OF THYSPUNT VS BANTAMSKLIP

Thyspunt was also Eskom’s preferred site for the development of a NPP in the previous process with Duiynfontein in the Western Cape the alternative site after various other potential sites (that included Bantamsklip) were scoped out of the EIA process. Extensive public participation formed part of this process and various objections from the public as well as review comments by SAHRA with regard to Thyspunt were submitted as part of that process. It is common cause that Duiynfontein eventually received an Environmental Authorisation (EA) from the Department of Environmental Affairs (DEA) in 2017. The DEA *inter alia* decided that: ***“the overall environmental impacts of associated with the Duiynfontein site are acceptable and materially lower than those at the Thyspunt site”*** (DEA 2017).

The current HIA has concluded that in comparison to Bantamsklip: “Thyspunt has emerged as **the slightly less sensitive site** from a heritage perspective, albeit with significant caveats”. This conclusion played a role within the context of all the specialist studies conducted as part of the DSR to determine that Thyspunt is once again Eskom’s preferred site for the proposed NPP. In order to reach this conclusion all the relevant heritage information related to Thyspunt that formed part of the previous EIA process needed to be evaluated and updated and this included a further site visit. The updated HIA therefore had to be objective and also needed to include more recent information with regard to Thyspunt and the wider area in general in order to inform the Department of Forestry, Fisheries and the Environment (DFFE) of the correct heritage sensitivities of the site.

The above statement related to Thyspunt is concerning because the determination by CTS Heritage is based on the results of the previous HIA as well as a one day site visit to confirm that very little has changed since the previous assessment. However in the previous HIA the following statement appears on p. 68 of the report: ***“Bantamsklip is almost as sensitive in terms of its heritage richness as Thyspunt, however mitigation measures stand a better chance of success than at Thyspunt since heritage sites are more visible and accessible”*** (Hart 2012). It is therefore difficult to understand how Thyspunt can now be regarded as a slightly less sensitive site and the specialist needs to explain how this is possible if very little has changed since the previous assessment.

The Department of Environmental Affairs also commented about the overall sensitivity rating given by the EAP to Thyspunt in the previous EIA within the context of all the specialist reports. In a letter to the EAP dated 10.05.2010 the DEA made the following statement: ***“from the above table, it is clear that Thyspunt is most sensitive and it therefore does not make sense that Thyspunt is recommended as the preferred site”*** (DEA 2010). This statement referred to the comparative impacts associated with Duynefontein, Bantamsklip and Thyspunt reported by the EAP at the time.

In view of the above it makes even less sense that the current HIA as well as the DSR once again regard Thyspunt as the preferred site, while the Bantamsklip site is no longer considered as part of the current EIA process. This leaves no alternative site for the DFFE to consider, and it creates the impression that the DSR is biased towards a pre-determined outcome requested by Eskom.

SAHRA’s REVIEW COMMENTS

A Heritage Impact Assessment (HIA) conducted by CTS Heritage forms part of the DSR that includes archaeological, palaeontological and cultural landscape assessments for both of the sites proposed by Eskom. The HIA for Thyspunt relied heavily on the results of a previous HIA conducted at the site (Hart 2012) and provided updated information aimed at meeting the requirements of the heritage authorities namely the South African Heritage Resources Agency (SAHRA) and the Eastern Cape Heritage Resources Authority (ECPHRA). SAHRA is the commenting authority for the heritage component that forms part of this application and ECPHRA will provide comments as an Interested & Affected Party (I&AP).

There is no reference in the archaeological investigation (that forms part of the HIA) to SAHRA’s previous Review Comments with regard to the 2012 assessment. SAHRA, as the commenting authority with regard to heritage, consistently rejected the proposal that the NPP can be constructed at Thyspunt. SAHRA did not approve of the development *inter alia* because Thyspunt is a ***“highly significant cultural landscape”*** and ***“that the impact on the heritage resources will be too severe and that mitigation will not achieve the desired results”*** (SAHRA 2010).

SAHRA once again confirmed the fact that they did not approve of the development in their Review Comments on the Revised HIA dated 7 August 2011 by stating that: “Thyspunt is a sensitive terrain in terms of heritage resources as indicated by the 145 sites identified during this HIA process and additional sites recorded during other surveys” and “Thyspunt is considered a cultural landscape based on the cumulative significance of the sites which ***are illustrative of the evolution of human society and settlement over time, under the influence of the physical constraints and/or opportunities presented by their natural environment and of successive social, economic and cultural forces, both external and internal*** (Unesco Operational Guidelines for the Implementation of the World Heritage Convention from 2005)” and ***“for the reasons outlined in this review comment, mitigation is not considered an option by SAHRA”*** (SAHRA 2011).

SAHRA provided comprehensive reasons why they do not agree with the conclusions reached in the previous HIA with regard to the development of Thyspunt and in effect provided a no-go recommendation. The updated HIA should therefore have considered SAHRA’s Review Comments because of the fact that so much reliance is placed upon the previous HIA. The comments by SAHRA should at the very least formed part of the report and if the specialist disagreed with their reasons a response should have been included in the current HIA. While it is true that the current HIA will be reviewed by SAHRA as the commenting authority again, the previous negative recommendation by them should have been highlighted and responded to in the HIA as well as in the DSR again in order to inform the competent authority of the relevant facts. It simply not acceptable to reason that because this is a new EIA process that the previous heritage review comments are no longer applicable.

TEST EXCAVATION PROGRAMME

The HIA relies on a test excavation programme conducted by Tim Hart at Thyspunt to reach the conclusion that: ***“very little archaeological material is present between 500m to 1.2km from the***

shoreline”. This also forms the basis for the mitigation recommendations that CTS Heritage believes will reduce the impact on heritage resources. Dr. Johan Binneman (who is acknowledged as the person who has done by far the most detailed archaeological research at Thyspunt and the wider region) as well as Dr. James Brink (a quaternary palaeontologist who has also done research at the Thyspunt site) both rejected the results of the test excavation based on their knowledge of the site. These specialists provided comments about the test excavation programme in the previous EIA and indicated that it was based on a flawed methodology.

They also commented on various other matters relevant to the site and these comments formed part of a community objection submitted as part of the previous EIA (Gamtkwa Khoisan Council 2016). In summary the following comments by them are applicable to the Thyspunt site:

Dr. Johan Binneman :

- In his specialist opinion Thyspunt is a no-go area for development despite the changes made to the Revised HIA.
- He confirms the absence of a report on the trial excavations in terms of SAHRA’s permit conditions.
- He disputes the methodology used and conclusions reached based on the trial excavations, and
- He disagrees with the information contained in the Heritage Sensitivity Map.

Dr. James Brink:

- He confirms that an important palaeontological report was not included in the HIA.
- He explains the importance of the Oyster Bay Fossil site.
- He confirms that similar sites may be present within the development footprint
- He disputes the methodology and conclusions reached based on the trial excavations.
- He disagrees with the information contained in the Heritage Sensitivity Map.
- He describes the types of extinct species identified at Thyspunt and the nearby Gibson Bay Fossil site, and
- He explains why the methodology used for the trial excavations would not have located the Gibson Bay site.

The above information provided by experts in their respective fields clearly discredits the results of the test excavation programme and it also red flags the conclusions reached in the current HIA. It is further concerning that their comments were included in the Final EIA as part of the previous process, but that CTS Heritage seems to be unaware of vital information that should have been included in their report. The information provided by the specialists was obtained separately from the SAHRA Review Comments and serves as independent confirmation that Thyspunt is not suitable site for the development of a NPP from a heritage perspective.

HERITAGE REPORTS, MANAGEMENT PLANS & OTHER INFORMATION

The current HIA list previous heritage studies related to the wider Thyspunt study area, but it does not include other relevant studies and management plans that provides evidence of archaeological / palaeontological material that can be located within the proposed footprint for the NPP. The following reports are applicable to Thyspunt and the wider area:

Welgelegen:

A Khoekoen (or Khoikhoi) archaeological site was destroyed (that included a human burial) as a result of a sand mine operation that was approved by the Department of Mineral Resources (DMR) without any heritage studies being conducted. This site is located approximately 3 kilometers inland close to the proposed Thyspunt site. A Phase 1 Archaeological Impact Assessment (AIA) was conducted after the incident that describes the archaeological material that was present on the site (Booth 2018).

Indlovu Sand Application for the Prospecting of Sand

The company proposed the prospecting of sand over a wide area in the dune field that included the Thyspunt area. A Phase 1 AIA was conducted for this project and received a no-go recommendation from the specialist (Booth 2022). ECPHRA agreed with the recommendation and after further opposition from the local community the developer decided to withdraw the application.

Gibson Bay Fossilised Hyaena Occurrence

The site was discovered during the development of the Gibson Bay Wind Farm and it is located approximately 4 kilometers inland. The site was excavated by Dr. James Brink who compiled a report as part of the permit application (Brink 2015). This was a significant palaeontological site that was located within the same dune field as Thyspunt.

Brandewynskop Management Plan

Brandewynskop is part of the Gibson Bay Wind Farm area and located approximately 4 kilometers inland. SAHRA determined an exclusion zone in this area where no development is allowed. A Management Plan for this area was compiled with information about the area (Orten 2020).

Fossilised Blue Buck Skull

A fossilised blue buck skull (*Hippotragus leucophaeus*) was found in the Thyspunt area several years ago and is currently at the National Museum in Bloemfontein. This is an extinct species that used to be present in the area and can be considered as a significant find. The site was located approximately 1,3 kilometers inland (Gamtkwa Khoisan Council 2016).

The above information indicates that significant archaeological and palaeontological sites can be present within the proposed footprint of the NPP and it contradicts the statement that very little archaeological material can be expected within this area.



Figure 1. General view of Dr. James Brink excavating a fossilised hyaena occurrence at the Gibson Bay Wind Farm near Thyspunt.



Figure 2. General view of the area where an archaeological site was destroyed as a result of sand mining operations on the Farm Welgelegen 735 near Thyspunt (Booth 2018)



Figure 3. General view of the fossilised skull of an extinct blue buck (*Hippotragus leucophaeus*) discovered in the Thyspunt dune field.

CULTURAL LANDSCAPE ASSESSMENT

The Cultural Landscape Assessment that forms part of the HIA correctly concludes with regard to Thyspunt that: ***“the entire project site is located in areas of very high and high sensitivity in a natural landscape with very high archaeological and palaeontological significance which has been provisionally protected as a Grade I Cultural Landscape, and would be unable to be supported from a cultural landscape perspective”***. CTS Heritage regards this statement as heavily influenced by the current legal status of the site in terms of the provisional protection and questions the demarcation of the cultural landscape. The nomination that was submitted to SAHRA to motivate the declaration of the site is available as well as correspondence between SAHRA and the community that nominated the site. This information would have answered CTS Heritage’s concerns about the provisional declaration but for some reason no attempt was made to source the relevant information and to include it in the HIA.

The attempt by CTS Heritage to downplay the Cultural Landscape Assessment statement by suggesting “negotiations” with SAHRA about the demarcation should be rejected by the competent authority. The provisional protection appears in Government Gazette No. 5803 dated 31 January 2025 and is not a matter for further negotiations.

CONCLUSION

The purpose of a scoping report is to provide the competent authority with a preliminary understanding of the project and the receiving social, economic and biophysical environment and how the project may impact on these systems. The HIA that forms part of the DSR fails to provide this understanding of the site and does not accurately reflect the impact the project will have on a site of national and international heritage significance. It provides Grade IIIA and Grade IIIB sensitivity zones for example within a cultural landscape that is currently provisionally protected as a Grade 1 Cultural Landscape in terms of Section 29 of the National Heritage Resources Act, No. 25 of 1999.

The objector request that the competent authority directs that the HIA in the Draft Scoping Report should be revised to reflect the additional data, information and reports that may have a material effect on the current conclusion reached in the HIA regarding the Thyspunt site. The competent authority is further requested not to accept the DSR in its current format until the flaws in the current report has been addressed.

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Dr. Curtis W. Marean, Virginia M. Ullman Professor of Natural History and the Environment,
Foundation Professor, Institute of Human Origins

19 May 2026

To whom it may concern,

I was asked by Prof Richard Cowling to comment on the archaeological significance of the Oyster Bay and Thyspunt dunefields and the broader Thyspunt property earmarked for the installation of a nuclear power plant. I am a professor in the world-renowned Institute of Human Origins at Arizona State University, widely considered the world's premier research institute on human origins. My research specialty is the archaeology of modern human origins in Africa and specifically South Africa, where I started and have continuously led the research at the Pinnacle Point Site Complex, which was declared a World Heritage Site in 2024. I have over 40 years of archaeological field experience and I directed all the excavations at Pinnacle Point. I have visited the Oyster Bay and Thyspunt dunefields and the broader Thyspunt property and examined closely the archaeological record there.

The dunefields have an extremely rich, perhaps uniquely rich and well-preserved, open-air archaeological record. Moreover, the dense array of archaeological sites is located in a pristine landscape and seascape that continues to support the resources used by hunter gatherers and, as such, is recognized by the Eastern Cape heritage authority as a cultural landscape.

Archaeological sites are densely distributed across the landscape, often presenting at the base of dunes as those dunes move and expose the sediments below. The sites that I saw range from the Acheulian (dating from 1.9 million years ago maximum to 300,000 years ago), Middle Stone Age (MSA, dating from 300,000 to 40,000), and Later Stone Age (LSA, dating from 40,000 to the colonial period). The Acheulean sites are rare, while the MSA and LSA are abundant.

South Africa is world renowned for having one of the most important MSA records in the world. This is the time when we, modern humans, evolved and eventually spread across the world. The South African record is precious to this scientific research topic, and for that reason sites like Pinnacle Point and others have received World Heritage Site recognition. Most of the sites currently studied are caves and rockshelters where people sheltered.

The Oyster Bay and Thyspunt dunefields support rare, well-preserved, and understudied open-air sites that represent the activities of people out on the landscape. During my visit, I saw rich MSA sites with fossil fauna and stone tools eroding directly out of



stratified deposit, where the remains will be in their original context. This is exceedingly rare and important and warrants careful preservation and scientific study.

Destruction of these sites and the impact of a huge development on the cultural landscape of the region will create a terrible loss of crucial heritage and scientific information that is rare and irreplaceable worldwide.

Sincerely,

Curtis W. Marean, Ph.D.

THE THYSPUNT ALLIANCE

Specialist Energy Objection to the Draft Environmental Scoping Report

The Unlawful Fragmentation of an Integrated Energy Project — Transmission Grid, Construction-Phase Power Supply, and Energy Alternatives

Proposed 5,200 MW Nuclear Power Plant, Thyspunt, Eastern Cape

EIA Reference	ZA0058322.7774 · Our Ref 2025-10-0003 · WSP Group Africa (Pty) Ltd · April 2026
Proponent	Eskom Holdings SOC Limited
Prepared by	Donald McGillivray — Energy Specialist, for the Thyspunt Alliance
Submitted to	WSP Group Africa (Pty) Ltd and the Department of Forestry, Fisheries & the Environment
Scope of this objection	Grid, transmission and energy aspects of the DSR. Complements, and should be read with, the Alliance’s principal formal submission.
Status	Specialist objection / scoping comment — for incorporation into the Alliance’s formal lodgement

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1. Introduction, capacity and scope

1.1 Capacity

This objection is submitted by Donald McGillivray, acting as Energy Specialist for the Thyspunt Alliance, a coalition of interested and affected parties registered in the public participation process for the proposed Thyspunt Nuclear Power Plant. The Alliance and its members are I&APs within the meaning of the EIA Regulations and are directly affected by the matters raised.

1.2 Scope and relationship to the principal submission

This is a specialist objection. It addresses only the energy and electrical-infrastructure dimensions of the DSR. It supplements the Alliance's principal formal submission and, in particular, develops and deepens the grounds there identified concerning alternatives (A.1), the Plant Parameter Envelope (A.3), the absent levelised-cost comparison (E.3), the artificially narrow project boundary (E.5) and project splitting of transmission infrastructure (D.7). Nothing here should be read as withdrawing or narrowing any other ground of objection.

1.3 The central contention, in one sentence

THE OBJECTION IN ONE SENTENCE

WSP has drawn the boundary of the assessment (the “battery limits”) at the on-site high-voltage yard, and in doing so has excised from environmental assessment three activities that are functionally inseparable from the power station: (i) the permanent transmission network of up to 1,400 km of 400 kV and 765 kV lines required to evacuate the plant's output; (ii) the power supply and temporary electrical infrastructure required to construct the plant over some fifteen years; and (iii) a genuine, quantified assessment of energy alternatives. None of these can be lawfully or rationally assessed in isolation from the generation facility, and the DSR's own text repeatedly confirms as much.

1.4 Why “separate but dependent” is the wrong frame

WSP's position throughout the DSR and the public participation process is that the transmission lines are the responsibility of a different applicant (the National Transmission Company of South Africa, NTCSA) and will be the subject of a separate EIA at an unspecified future date. The difficulty is not that two applicants may be involved. The difficulty is that a **single, indivisible development** — a nuclear power station that exists only in order to put electricity onto the grid — has been carved into pieces for assessment, with the largest environmental footprint and the decisive cost and timing variables placed outside the boundary. A power station that cannot evacuate its output is not a power station; it is a stranded structure. The generation facility and its evacuation network are one project. They must be assessed as one project.

2. Summary of grounds

This objection advances five linked grounds. Each is developed in Section 4 and reduced to specific questions in Section 5.

CODE	GROUND	SUBSTANCE	CLASSIFICATION
EG-1	Permanent transmission network excised	The up-to-1,400 km of 400/765 kV evacuation lines — the single largest land and ecological footprint of the whole development — are excluded from the EIA as a notional “separate” process.	Procedural / Fatal
EG-2	Construction-phase power supply unassessed	The DSR lists “electrical power” as a core construction activity yet never defines or assesses the temporary power supply or distribution infrastructure needed to build the plant.	Material Gap
EG-3	Energy-alternatives comparison structurally biased	Nuclear’s enormous transmission burden is excluded from its footprint, while the renewable alternative is dismissed for lacking a “discrete footprint.” The comparison is rigged by the boundary.	Methodologically Fatal
EG-4	Cumulative impacts unassessable	With connected and enabling activities outside the boundary, the cumulative-impact assessment NEMA requires cannot be performed.	Critical Deficiency
EG-5	Internal contradictions on grid integration	The DSR states both 450 km and 1,400 km for the same lines, relies on transmission feasibility to choose the site while excluding transmission from scope, and presents no system or load-flow study.	Adequate-information failure

3. What the DSR itself discloses — the documentary record

The grounds that follow do not depend on external evidence or on the Alliance's own analysis. They are established by the proponent's own documents. The following extracts — reproduced in substance with references — are the evidentiary spine of this objection. Where two extracts contradict one another, both references are given so that the contradiction can be verified directly.

DSR / APPENDIX REFERENCE	WHAT THE PROPONENT'S OWN DOCUMENT DISCLOSES
DSR §4.1.3, pp. 105–106; Appendix G22 §3.3.3	The exclusion. Transmission lines and transmission corridors “beyond the on-site HV Yard” are expressly excluded from the battery limits and are “not authorised through this ESIA.” Also excluded: external access roads, water-use and discharge authorisations, off-site construction camps, off-site staff accommodation and off-site emergency-planning infrastructure.
Public Participation Report (Part 04), responses 97, 98, 161, 162, 293	WSP's stated position. In answer to direct questions (“How can transmission not be included in the assessment?”), WSP repeatedly states that the EIA is limited to the generation facility and its connection to the HV yard, and that transmission lines will be handled by a separate applicant (NTCSA) under a separate EIA.
DSR §4.2.2.25, p. 133 – versus – DSR §6.4.2 & Table 6-5, pp. 177–179	The line-length contradiction. Chapter 4 states that “around 450 km of 400 kV lines will be required” for Thyspunt and that “no delay... is expected.” Chapter 6 states that “around 1,400 km of 765 / 400 kV lines will be required.” The same report gives two figures differing by a factor of three for the same infrastructure.
DSR site-comparison table, p. 175; Table 6-5, p. 178	Transmission used to choose the site. Transmission feasibility is an express discriminator in selecting Thyspunt over Bantamsklip: Thyspunt's connection is rated “achievable before 2039,” Bantamsklip's “unlikely... due to complex and sensitive terrain.” Transmission is therefore decisive to the preferred-site finding.
DSR CCIA scope, p. 731	The climate-assessment contradiction. The Climate Change Impact Assessment commits to consolidating emissions from “all interdependent project components, including... associated grid connection and project-enabling transmission infrastructure.” WSP's own methodology therefore treats transmission as an interdependent component of this project — for greenhouse-gas purposes only.
DSR Table 10-1, p. 485; Table 11-4, p. 709	Construction power named, not assessed. The construction phase is defined to include “the creation of surface infrastructure, access and electrical power” and “Utilities (water, electricity, communications).” Yet no construction power-supply strategy is described or assessed. Table 11-4 already fixes the “Preferred Energy Alternative” as “Nuclear.”
DSR infrastructure / plant-population table (Ch. 4)	The workforce admission. Eskom's own staffing figures include 700 off-site workers — expressly “300 substations, 400

DSR / APPENDIX REFERENCE	WHAT THE PROPONENT'S OWN DOCUMENT DISCLOSES
	transmission.” The proponent thus budgets a 700-strong off-site workforce for transmission and substation works that it says are outside the project.
Appendix G22 §3.4.2.27	Temporary distribution lines disclosed. “Distribution power lines” are listed among the temporary and permanent services to be routed parallel to on-site access roads — confirming construction-phase electrical infrastructure exists, while its source, capacity and impact remain unassessed.
DSR §6.4.2.2 (Corridor)	The grid is admittedly constrained. WSP records that the transmission network in the Western, Eastern and Northern Cape is “severely constrained” and “would require substantial strengthening” — i.e. the evacuation network does not yet exist and must be built.

4. Grounds of objection

Each ground identifies what the DSR does, why it is a shortcoming, and — consistently with the purpose of a scoping comment — the specific matters the EIA must address.

EG-1	The permanent transmission network — the project's largest footprint — has been excised from assessment	PROCEDURAL / FATAL
DSR / SOURCE	DSR §4.1.3 (pp. 105–106); §6.4.2 (pp. 176–179); Public Participation Report Pt 04	LEGAL ANCHOR NEMA s 2(4)(b); s 24; EIA Regs GNR 982/2014; cumulative-impact principle

The proposed plant requires up to five 400 kV lines to the Grassridge substation and two 765 kV Gamma–Grassridge lines — some 1,400 km of high-voltage transmission — to evacuate its output. The existing Melkhout–Grassridge 132 kV corridor (of the order of 150–300 MVA, built for local load and wind connection) is wholly inadequate for nuclear evacuation. By fixing the battery limits at the on-site HV yard, the DSR places this entire network outside the assessment and characterises it as a future NTCSA process.

Why this is a shortcoming.

- The transmission network is, in all probability, the **largest single land-take, vegetation-clearance, avifaunal-collision and visual footprint** of the entire development — 1,400 km of servitude across the Eastern Cape. Excluding it removes the dominant environmental impact from view.
- The plant has **no purpose and no function** without evacuation. Generation and transmission are not “associated” activities in some loose sense; the one is the reason for the other. They are a single activity for assessment purposes.
- Deferring transmission to a “separate”, later, differently-applicant EIA is the textbook description of **project splitting (segmentation / “salami-slicing”)**, which defeats the integrated-management duty in NEMA and the cumulative-impact requirement, and which is precisely the mischief the holistic-assessment line of authority (e.g. the Constitutional Court in *Fuel Retailers*) was decided to prevent.
- WSP cannot consistently maintain that transmission is outside scope while **relying on transmission feasibility to select Thyspunt over Bantamsklip** (DSR p. 175). If transmission is material enough to decide the site, it is material enough to assess.

NOTE WSP'S OWN CONCESSION

Admission against interest: WSP's own Climate Change Impact Assessment (DSR p. 731) commits to assessing “associated grid connection and project-enabling transmission infrastructure” as an “interdependent project component.” WSP therefore concedes that transmission is an interdependent component of this project. There is no rational basis for including it for greenhouse-gas purposes while excluding it from biodiversity, avifauna, heritage, visual, freshwater and socio-economic assessment.

EG-2	The construction-phase and temporary-works power supply — the “temporary construction grid” — is an undisclosed, unassessed, grid-dependent activity	MATERIAL GAP
DSR / SOURCE	DSR Table 10-1 (p. 485); Appendix G22 §3.4.2.27; DSR §4.2.2 (water/desalination)	LEGAL ANCHOR NEMA s 24; EIA Regs GNR 982/2014 — adequate information

The DSR expressly defines the construction phase to include “the creation of surface infrastructure, access and electrical power,” and lists “Utilities (water, electricity, communications)” among site-preparation activities (Table 10-1). Appendix G22 confirms that “distribution power lines” will run parallel to on-site access roads. Yet **nowhere does the DSR describe, let alone assess, how the construction of the plant will be powered.**

Why this is a shortcoming.

- Building a 5,200 MW nuclear plant over roughly fifteen years involves an enormous, sustained construction load: a 6,500-strong vendor construction workforce, a 24.3 ha concrete-batching and temporary-works area, sand-pumping pipelines, aggregate conveyors, dewatering, and a temporary desalination plant running **continuously during earthworks at up to 11,700 m³/day**. Desalination and large-scale pumping are electrically intensive.
- That construction power must come from somewhere. Either it is drawn from the existing 132 kV network — which the DSR itself admits is “severely constrained” — requiring **temporary grid reinforcement and distribution infrastructure that is nowhere assessed**; or it is generated on site (the parameter tables disclose auxiliary steam boilers and 676 m³ of diesel storage), with the associated air-quality, greenhouse-gas and fuel-logistics impacts over a fifteen-year construction — again unassessed as an electrical-supply strategy.
- The “temporary construction grid” is therefore a **real, named, but undefined activity**. The DSR cannot list “electrical power” as a construction activity and simultaneously leave its source, capacity, routing, footprint and impacts entirely blank.

This gap is independent of EG-1. Even if the permanent evacuation network were (wrongly) treated as a separate process, the construction-phase power supply is an on-project, in-corridor activity that the DSR itself places inside the construction definition. It must be scoped and assessed in this EIA.

EG-3	Excising the grid burden makes the energy-alternatives comparison structurally biased and incapable of lawful completion	METHODOLOGICALLY FATAL
DSR / SOURCE	DSR §6.4.4 & Table 6-7; Table 11-4 (p. 709); §5 (Need & Desirability)	LEGAL ANCHOR NEMA s 24(4)(b); EIA Regs GNR 982/2014; GN 792/2012; DEA Guideline 5

The DSR fixes the “Preferred Energy Alternative” as nuclear at the scoping stage (Table 11-4) and dismisses the renewables-with-firming alternative on the stated ground that it “does not have a discrete footprint... that can be meaningfully assessed within a project-level EIA.” No levelised-cost comparison appears anywhere in the 744-page report.

Why this is a shortcoming — the asymmetry.

THE FATAL ASYMMETRY

The renewable alternative is rejected for lacking a “discrete footprint.” Yet the **nuclear option’s own footprint has been deliberately shrunk** by placing its 1,400 km transmission network, its construction power supply, its access roads and its off-site works outside the boundary. The proponent has, in effect, **compared a fully-costed, fully-footprinted renewable portfolio against an artificially truncated nuclear project** — and then declared the renewable portfolio too diffuse to assess. The comparison is biased by the very boundary decision challenged in EG-1.

Further shortcomings.

- A “discrete footprint” is not a recognised screening criterion under NEMA, the EIA Regulations or DEA Guideline 5. Feasibility and reasonableness are the tests; complexity is not a lawful basis for exclusion.
- Fixing “Nuclear” as the preferred energy alternative **before** any comparative assessment predetermines the outcome and reduces the alternatives exercise to confirmation of a chosen activity — the precise failure the DSR’s own text (pp. 162–163) warns against.
- The Need-and-Desirability chapter contains no quantified cost, no tariff-impact analysis and no comparison of competing options — so the constitutional affordability dimension of need and desirability (GN 792; Constitution ss 24 and 27) is unaddressed.

EG-4	Cumulative and connected-activity impacts cannot be assessed within the artificial battery limits	CRITICAL DEFICIENCY
DSR / SOURCE	DSR §4.1.3–4.1.4; §10–11	LEGAL ANCHOR NEMA s 2(4)(vii) cumulative impacts; s 2(4)(b) integrated management

NEMA requires that the cumulative effects of an activity and its connected and enabling activities be considered. The DSR acknowledges (§4.1.4) that excluded activities “may influence the environmental acceptability” of the plant and undertakes to “identify” interfaces — but identifying an interface is not assessing an impact.

Why this is a shortcoming.

- With the transmission network, the construction power supply, the access roads, the off-site camps and the off-site emergency infrastructure all outside the boundary, the universe of activities whose impacts could be **aggregated** has been hollowed out. A cumulative-impact assessment of a fragment is not a cumulative-impact assessment.
- The 700-strong off-site workforce for substations and transmission (Eskom’s own figure) generates its own housing, water, sanitation, traffic and socio-economic footprint — connected impacts that the DSR neither quantifies nor assigns to any assessment.
- Cumulative coastal, freshwater and avifaunal effects of the plant **plus** its evacuation corridors **plus** its construction works can only be understood when those components sit within one assessment. The current boundary makes the statutory cumulative-impact enquiry impossible to perform.

EG-5	The DSR's grid-integration claims are internally contradictory and unsupported by any system or load-flow study	ADEQUATE-INFORMATION FAILURE
	DSR / SOURCE DSR §4.2.2.25 (p. 133) vs §6.4.2 (pp. 177–179); p. 175; §6.4.2.2	LEGAL ANCHOR EIA Regs GNR 982/2014 — adequate, accurate information; s 24

Contradiction 1 — line length.

For Thyspunt, Chapter 4 states “around 450 km of 400 kV lines” with “no delay... expected,” while Chapter 6 and Table 6-5 state “around 1,400 km of 765 / 400 kV lines.” For Bantamsklip the same report gives both “1,000 km” (Ch. 4) and “2,211 km” (Ch. 6). These are not roundings; they differ by a factor of roughly three and materially change the cost, timeline, footprint and feasibility of evacuation.

Contradiction 2 — transmission is decisive but excluded.

The DSR uses transmission feasibility as an express criterion to prefer Thyspunt (achievable before 2039) over Bantamsklip (not achievable), yet treats the same transmission as outside the assessment. A factor cannot be both determinative of the outcome and beyond the scope of enquiry.

Missing study.

The DSR admits the regional network is “severely constrained” and “would require substantial strengthening,” but presents **no power-system study, no load-flow or stability analysis, and no transmission-development programme, cost or servitude position** to substantiate that a 5,200 MW injection can in fact be evacuated on the stated timeline. The reader is asked to accept feasibility on assertion. That does not meet the adequate-information standard the EIA Regulations require.

5. Schedule of questions the EIA must answer

Consistent with the function of a scoping comment, the Alliance places the following questions on the record. We ask that each be answered, with supporting documents and data, in the Final Scoping Report and the EIA. They are grouped by theme.

A. The permanent transmission / evacuation network

- Q1.** On what legal basis is a power station severed from the transmission network that is its sole reason for existing, for the purpose of environmental assessment?
- Q2.** Will the EIA assess the full 400 kV and 765 kV evacuation network (route options, servitudes, land-take, vegetation clearance, avifaunal collision risk, visual and heritage impacts) as part of this project? If not, why not?
- Q3.** How can the transmission network be excluded from this EIA when transmission feasibility is an express criterion used to select Thyspunt over Bantamsklip (DSR p. 175)?
- Q4.** Why does the Climate Change Impact Assessment (DSR p. 731) treat transmission as an “interdependent project component” for greenhouse-gas purposes, while every other specialist study excludes it? On what principled basis is the inclusion selective?
- Q5.** What is the current status of any NTCSA EIA, servitude acquisition, funding and construction programme for the 1,400 km of lines, and what is the consequence for the plant if that network is delayed or refused?
- Q6.** Will the Final Scoping Report commit to a single, integrated assessment (or formal consolidation) of generation and transmission, and if not, how will cumulative impacts be lawfully assessed across the split?

B. Construction-phase and temporary-works power supply

- Q7.** What is the construction power-supply strategy for the plant, and what is the peak and average electrical demand during site establishment, earthworks and main construction?
- Q8.** Will construction power be drawn from the existing (admittedly “severely constrained”) 132 kV network? If so, what temporary reinforcement, substations and distribution lines are required, where, and with what impacts?
- Q9.** If construction power is to be generated on site, what is the installed diesel/gas capacity, fuel throughput, and the resulting air-quality and greenhouse-gas impact over the full construction period?
- Q10.** What is the electrical load of the temporary desalination plant (running continuously during earthworks at up to 11,700 m³/day) and of construction dewatering, sand-pumping and aggregate-conveying systems?
- Q11.** What is the routing, footprint and environmental impact of the “distribution power lines” disclosed in Appendix G22 as running parallel to on-site access roads?
- Q12.** Why is “electrical power” listed as a defined construction activity (Table 10-1) yet given no power-supply description or impact assessment anywhere in the DSR?

C. Energy alternatives and need & desirability

- Q13.** Under which provision of NEMA, the EIA Regulations or DEA Guideline 5 is the absence of a “discrete footprint” a lawful basis for excluding a feasible and reasonable alternative from comparative assessment?

- Q14.** How can a renewable alternative be rejected for a diffuse footprint while the nuclear option's own 1,400 km transmission footprint, construction power and off-site works are excluded from the nuclear footprint? Will the EIA correct this asymmetry?
- Q15.** Where in the 744 pages is the levelised-cost-of-energy comparison between the nuclear option and a firm renewable portfolio? If absent, will it be provided in the EIA, on what cost basis, and for what dates?
- Q16.** On what basis is "Nuclear" fixed as the "Preferred Energy Alternative" (Table 11-4) before any comparative environmental or cost assessment has been undertaken?
- Q17.** How does the Need-and-Desirability assessment address affordability to end users and tariff impact (GN 792; Constitution ss 24 and 27) without a single quantified cost figure?
- Q18.** Will the no-go alternative be assessed as a genuine baseline, including the consequences of redirecting equivalent capital and grid capacity, rather than dismissed as "not feasible" at scoping?

D. Cumulative and connected-activity impacts

- Q19.** How will the cumulative-impact assessment required by NEMA s 2(4)(vii) be performed when the transmission network, construction power supply, access roads, off-site camps and off-site emergency infrastructure are all outside the boundary?
- Q20.** Where will the socio-economic, water, sanitation, traffic and housing impacts of the 700-strong off-site substation and transmission workforce (Eskom's own figure) be assessed?
- Q21.** How will cumulative coastal, freshwater and avifaunal effects of the plant together with its evacuation corridors and construction works be assessed if those components are never brought within one assessment?

E. Internal consistency and supporting studies

- Q22.** Which figure is correct for the Thyspunt evacuation network — the "450 km" of DSR §4.2.2.25 or the "1,400 km" of §6.4.2 — and how is the threefold discrepancy in the same report to be reconciled?
- Q23.** Likewise for Bantamsklip: which is correct, "1,000 km" (Ch. 4) or "2,211 km" (Ch. 6)?
- Q24.** Will the EIA disclose the power-system study, load-flow and stability analysis underpinning the claim that 5,200 MW can be evacuated, and the basis for the "achievable before 2039" timeline?
- Q25.** What is the transmission-development cost, and how is it treated in the cost and need-and-desirability analysis of the project, given the admitted requirement for "substantial strengthening" of the regional network?

6. Relief sought

On the energy and grid grounds set out above, and as a contribution to the relief sought in the Alliance's principal submission, we ask the following from WSP and the competent authority:

1. **Integrated assessment.** That generation and the transmission evacuation network be assessed within a single, integrated environmental assessment process — by amendment of this EIA's scope, or by formal consolidation with the NTCSA transmission EIA. A parallel, unconsolidated process is not acceptable, because it cannot deliver the cumulative-impact assessment NEMA requires.
2. **No EIA phase until the boundary is corrected.** That the DSR not be accepted, and the EIA phase not commence, until the battery limits are redrawn to include the transmission network, the construction-phase power supply and the other connected enabling activities presently excluded.
3. **Construction-power assessment.** That a defined construction power-supply strategy be scoped and assessed, including any temporary grid reinforcement, distribution lines and on-site generation, with their air-quality, greenhouse-gas and ecological impacts.
4. **Genuine alternatives comparison.** That the energy-alternatives assessment be reopened on a like-for-like basis — nuclear (with its full transmission and enabling footprint) against a firmed renewable portfolio — with a published levelised-cost comparison, before any preferred energy alternative is fixed.
5. **Reconciliation of contradictions.** That WSP reconcile, on the record, the 450 km / 1,400 km and 1,000 km / 2,211 km contradictions, and disclose the power-system study underpinning its evacuation and timing claims.
6. **Disclosure.** That the NTCSA transmission EIA status, servitude position, funding and programme be disclosed and brought within the I&AP process, so that affected parties are not required to register afresh for a severed component of the same development.

BOTTOM LINE

Summary for counsel. The unifying defect is one boundary decision. By drawing the battery limits at the on-site HV yard, WSP has removed the largest footprint (transmission), an admitted construction activity (electrical power) and the integrity of the alternatives comparison from assessment — while its own climate methodology, its own site-selection reasoning and its own workforce figures all treat transmission as part of the project. The proponent cannot have it both ways. The remedy is integration of scope; the questions in Section 5 are the matters that integration must answer.

Appendix A — Documentary cross-reference schedule

For ease of verification, the key references relied upon, and the contradiction each establishes, are tabulated below. All references are to the proponent's own documents.

GROUND	REFERENCE	POINT ESTABLISHED
EG-1	DSR §4.1.3, pp. 105–106; App. G22 §3.3.3	Transmission beyond the HV yard expressly excluded from battery limits.
EG-1	PPR Pt 04, resp. 97/98/161/162/293	WSP states transmission is a separate NTCSA EIA.
EG-1	DSR p. 175; Table 6-5, p. 178	Transmission feasibility used to prefer Thyspunt over Bantamsklip.
EG-1	DSR CCIA, p. 731	WSP concedes transmission is an “interdependent project component.”
EG-2	DSR Table 10-1, p. 485	“Electrical power” / “Utilities (...electricity...)” defined as construction activities.
EG-2	App. G22 §3.4.2.27	Temporary “distribution power lines” disclosed along access roads.
EG-2	DSR §4.2.2 (desalination)	Continuous temporary desalination at up to 11,700 m ³ /day during earthworks.
EG-3	DSR §6.4.4; Table 11-4, p. 709	Renewables dismissed for “no discrete footprint”; “Nuclear” fixed as preferred.
EG-3	DSR §5 (Need & Desirability)	No LCOE, no tariff impact, no cost comparison in 744 pages.
EG-4	DSR §4.1.4; plant-population table	Connected impacts (incl. 700 off-site transmission/substation workers) unassessed.
EG-5	DSR §4.2.2.25 vs §6.4.2	450 km vs 1,400 km (Thyspunt); 1,000 km vs 2,211 km (Bantamsklip).
EG-5	DSR §6.4.2.2	Network “severely constrained”; no system/load-flow study disclosed.

Prepared by Donald McGillivray, Energy Specialist, for the Thyspunt Alliance.

OBJECTION TO THE DRAFT SCOPING REPORT FOR THE PROPOSED NUCLEAR 2 POWER STATION AT THYSPUNT

Submission on the Failure to Resolve Nuclear Site Viability Prior to the Continuation of the EIA Process

Prepared on behalf of the Thyspunt Alliance
Prepared by Hilton Thorpe
20 May 2026

1. INTRODUCTION

The Thyspunt Alliance (“TA”) hereby submits this objection to the Draft Scoping Report (“DSR”) for the proposed Nuclear 2 Power Station at Thyspunt.

At the centre of this submission is a fundamental issue that has remained unresolved for more than two decades: whether the Thyspunt site is viable from a nuclear safety and emergency planning perspective.

The current Scoping and EIA process proceeds on the assumption that Thyspunt remains a potentially suitable site despite:

- the historic failure of the Nuclear-1 process;
- the refusal of the National Nuclear Regulator (“NNR”) to issue a final decision on the Thyspunt Nuclear Site Licence application;
- unresolved concerns regarding population growth and evacuation feasibility;
- the absence of a completed probabilistic risk assessment available for public scrutiny;
- the absence of a clearly identified reactor technology;
- and major departures from international best practice regarding emergency planning and site viability.

The TA submits that it is irrational, premature, procedurally unfair and financially irresponsible for Eskom to continue with a large-scale Environmental Impact Assessment process before the fundamental question of nuclear site viability has been resolved by the competent nuclear safety authority.

This concern is not theoretical. It has already materially affected the previous Nuclear-1 process and remains unresolved today.

2. HISTORY OF THE THYSPUNT NUCLEAR SITE LICENCE PROCESS

2.1 The Nuclear-1 Process

The current process is effectively a continuation and repackaging of the previous Nuclear-1 proposal.

Importantly, the Department of Environmental Affairs did not select Thyspunt as the preferred site in the previous process.

The present Draft Scoping Report attempts to create the impression that historical investigations progressively strengthened the case for Thyspunt. This is not an accurate reflection of the regulatory history.

The previous NNR process instead demonstrated that:

- major concerns remained unresolved;
- the site viability question remained open;
- and the NNR itself was unwilling to conclude the licensing process.

2.2 Failure to Integrate the NNR During the Previous EIA

A major defect in the Nuclear-1 process was the practical exclusion of the NNR from meaningful participation during the environmental assessment phase.

Although a Co-operative Governance arrangement existed between the environmental and nuclear authorities, the EIA process proceeded without the NNR resolving the key nuclear safety concerns associated with the site.

This created a fundamentally irrational process sequence:

1. Eskom pursued extensive environmental studies and expenditure;
2. the EIA process advanced despite unresolved nuclear viability concerns;
3. only afterwards did the NNR fully engage the viability issue;
4. and the Nuclear Site Licence process then stalled due to unresolved safety concerns.

This sequence represented a serious governance failure and resulted in substantial fruitless and wasteful expenditure.

The current process appears to repeat the same mistake.

2.3 Historic NNR Concerns Regarding Thyspunt

The Thyspunt Alliance has consistently argued for more than 25 years that the viability of the Thyspunt site should be determined before large-scale EIA expenditure proceeds.

This concern was repeatedly raised during:

- the Nuclear-1 EIA process;
- subsequent public participation processes;
- and the NNR public hearings relating to the Thyspunt Nuclear Site Licence application.

Critically, the NNR did not issue a final approval for the Thyspunt site.

Instead, the process stalled because the NNR identified fundamental deficiencies, including:

- outdated population statistics;
- the absence of an adequate risk assessment;
- unresolved emergency planning concerns;
- and insufficient information to conclude the site licence process.

The NNR subsequently allowed Eskom additional time to address these deficiencies.

The required information was not satisfactorily resolved and the application ultimately lapsed.

This history is critically important.

The current Draft Scoping Report itself references a “Site Safety Report (SSR) 2025”, indicating that major nuclear safety and site-related investigations are still ongoing.

At multiple public meetings during the current Scoping process, Eskom representatives have further stated that Eskom is still busy with aspects of the Nuclear Site Licence Application process.

Despite this, the public has not meaningfully been included in the current Nuclear Site Licence investigation process in the same manner as the environmental Scoping process.

This creates a serious procedural concern.

The Draft Scoping Report therefore appears to rely on an evolving and partially undisclosed nuclear safety and site investigation process while simultaneously advancing a major public environmental authorisation process.

The public is effectively being asked to comment on the environmental acceptability of the project without access to the full and current nuclear site safety basis underpinning the viability of the Thyspunt site.

This undermines:

- transparency;
- informed public participation;
- procedural fairness;

- and the credibility of the Scoping process itself.

The current Draft Scoping Report largely presents Thyspunt as a mature and viable nuclear site while failing to meaningfully acknowledge that the previous Nuclear Site Licence process was never concluded positively.

3. FAILURE TO RESOLVE EMERGENCY PLANNING VIABILITY

3.1 Emergency Planning Remains the Central Viability Question

The primary unresolved issue remains whether safe and realistic evacuation of the broader St Francis area is possible under severe accident conditions.

This includes:

- St Francis Bay;
- Sea Vista;
- Cape St Francis;
- surrounding rural areas;
- tourism populations;
- seasonal peak populations;
- and vulnerable road users.

The TA maintains that there is no realistic possibility of safely evacuating the broader St Francis region under worst-case conditions.

This concern is amplified by:

- limited road access;
- constrained evacuation corridors;
- coastal bottlenecks;
- seasonal population spikes;
- tourism pressures;
- ageing infrastructure;
- and the likely need for simultaneous sheltering and evacuation measures.

The Draft Scoping Report fails to meaningfully confront this issue.

Instead, the report appears to assume that emergency planning can simply be addressed through later mitigation or operational planning.

That approach is inconsistent with international nuclear siting principles.

3.2 International Best Practice Requires Demonstrable Emergency Planning Feasibility

International nuclear safety practice does not treat emergency planning as a secondary operational issue.

It is a core site viability criterion.

The International Atomic Energy Agency (“IAEA”) site selection framework requires that:

- population distribution;
- evacuation feasibility;
- infrastructure capacity;
- emergency response capability;
- and long-term demographic trends

must form part of the early determination of site suitability.

IAEA guidance specifically requires consideration of:

- current and projected population growth over the operational lifetime of the facility;
- realistic evacuation capability;
- transport network limitations;
- meteorological conditions;
- and the ability to implement protective measures under severe accident conditions.

International best practice further recognises that emergency planning cannot rely on optimistic assumptions or theoretical evacuation scenarios disconnected from actual local conditions.

The Thyspunt Alliance is particularly concerned that the broader St Francis region may effectively rely on a highly constrained evacuation network with limited redundancy.

While the IAEA may not prescribe a simple numerical rule requiring multiple evacuation roads, international nuclear safety practice requires that emergency evacuation arrangements be demonstrably feasible, resilient and implementable under severe accident conditions.

A nuclear emergency evacuation strategy that depends substantially on a single outbound transport corridor for the broader St Francis population raises profound concerns regarding whether protective actions could realistically be implemented for populations within the emergency planning area.

This concern becomes significantly more serious when considering:

- potential downwind severe accident scenarios;
- peak seasonal tourism populations;
- evacuation congestion;

- road blockage risks;
- simultaneous inward emergency response traffic;
- adverse weather conditions;
- flooding or infrastructure disruption;
- and the evacuation of vulnerable populations.

The Thyspunt Alliance submits that international best practice would normally require:

- multiple evacuation route options;
- redundancy in transport infrastructure;
- realistic traffic modelling;
- dynamic evacuation simulations;
- severe weather contingency analysis;
- and independent validation of evacuation assumptions.

Following the Fukushima Daiichi disaster, international regulators became increasingly cautious regarding evacuation assumptions because real-world evacuation conditions proved substantially more difficult and chaotic than theoretical planning models had anticipated.

The Draft Scoping Report does not convincingly demonstrate that the broader St Francis region could be safely evacuated under realistic severe accident conditions over the operational lifetime of the proposed facility.

This unresolved issue directly affects the viability of the Thyspunt site itself.

3.3 Population Growth and the 60–100 Year Planning Horizon

The Thyspunt proposal is not a short-term project.

A nuclear power station and associated radioactive waste management obligations may influence land use and emergency planning requirements for well over 60 years and potentially close to a century.

Any assessment of site viability must therefore consider:

- future urban expansion;
- tourism growth;
- retirement migration;
- secondary residential growth;
- infrastructure pressures;
- and cumulative regional development.

The St Francis region has experienced substantial growth since the original apartheid-era Nuclear Site Investigation Programme.

The historic population assumptions underpinning the original site selection process are therefore no longer reliable.

The failure to comprehensively reassess long-term demographic realities fundamentally undermines the credibility of the current process.

4. FAILURE TO IDENTIFY A SPECIFIC REACTOR TECHNOLOGY

The Draft Scoping Report proceeds without Eskom identifying the precise Pressurised Water Reactor ("PWR") technology to be used.

This is a fundamental deficiency.

Without a defined reactor technology:

- realistic accident modelling cannot be completed;
- realistic evacuation planning cannot be undertaken;
- realistic radiological risk assessments cannot be performed;
- and site suitability cannot be conclusively evaluated.

International best practice does not support the advancement of major nuclear licensing processes based on undefined reactor technologies combined with broad "technical envelopes".

The absence of a defined reactor technology therefore undermines the scientific credibility of the current Scoping process.

5. INTERNATIONAL BEST PRACTICE ON NUCLEAR SITE VIABILITY

5.1 Defence-in-Depth Requires Conservative Siting

Modern nuclear safety philosophy is based on the principle of defence-in-depth.

This includes:

- conservative site selection;
- minimisation of off-site emergency consequences;
- realistic protective action capability;
- and the avoidance of sites where emergency response measures may not be credible.

International regulators increasingly recognise that:

- severe accidents can exceed design assumptions;
- emergency planning zones may need rapid expansion;
- evacuation routes may fail under real conditions;
- and population vulnerability can dramatically increase consequences.

5.2 Emergency Planning Zones and International Norms

The TA notes with concern that Eskom has shifted from a previously proposed 3 km emergency planning approach to a 10 km approach.

Even this expanded zone appears substantially below many international precautionary planning approaches.

In many jurisdictions, detailed emergency planning measures extend well beyond 10 km.

Following Fukushima, numerous countries reviewed evacuation assumptions and expanded consideration of:

- ingestion pathways;
- relocation planning;
- wider protective action zones;
- and long-distance contamination scenarios.

The TA is particularly concerned that the current planning assumptions appear conveniently configured in a manner that excludes major urban settlements within the St Francis region.

This creates the appearance that emergency planning boundaries are being shaped around administrative convenience rather than realistic nuclear safety planning.

5.3 Long-Term Site Viability Must Include Climate and Infrastructure Resilience

International best practice further requires assessment of:

- long-term climate resilience;
- infrastructure reliability;
- transport resilience;
- cumulative regional development;
- and the ability to sustain emergency response capability over many decades.

The Draft Scoping Report does not convincingly demonstrate that these issues have been comprehensively addressed.

6. THE CURRENT EIA PROCESS IS PREMATURE

The TA submits that the current EIA and Scoping process is fundamentally premature because the core issue of site viability remains unresolved.

The correct regulatory sequence should have been:

1. identification of a specific reactor technology;
2. updated population and demographic analysis;

3. comprehensive probabilistic risk assessment;
4. realistic emergency evacuation assessment;
5. determination by the NNR regarding nuclear site viability;
6. and only thereafter commencement of a full EIA process.

Instead, Eskom once again seeks to proceed with extensive environmental processes before the central nuclear safety question has been resolved.

This repeats the same flawed sequencing that characterised the previous Nuclear-1 process.

FINANCIAL AND GOVERNANCE CONCERNS

The continuation of a massive EIA process before resolution of the site viability issue raises serious concerns regarding:

- rational decision-making;
- procedural fairness;
- public participation integrity;
- and potential fruitless and wasteful expenditure.

If the NNR ultimately determines that the Thyspunt site is not viable, then the substantial expenditure associated with the present process will have been unnecessary.

This risk was foreseeable from the outset given the unresolved historic concerns.

The TA therefore submits that the continuation of the current process without prior resolution of viability concerns is irresponsible and inconsistent with sound administrative governance.

8. REQUESTED ACTIONS

The Thyspunt Alliance accordingly requests that:

1. The current Scoping and EIA process be suspended until the NNR viability issues have been resolved.
2. Eskom be required to identify the specific reactor technology proposed for Thyspunt.
3. Eskom be required to produce updated population projections for:
 - St Francis Bay;
 - Sea Vista;
 - Cape St Francis;
 - surrounding rural areas;
 - tourism populations;
 - and projected long-term demographic growth.

4. Eskom be required to undertake and publicly disclose a comprehensive probabilistic risk assessment linked to the proposed reactor technology.
5. A realistic and independently reviewed evacuation feasibility assessment be undertaken using worst-case seasonal population scenarios.
6. The NNR first determine whether the Thyspunt site is viable from a nuclear safety and emergency planning perspective before further EIA expenditure proceeds.
7. The Department of Forestry, Fisheries and the Environment (“DFFE”) recognise that unresolved nuclear safety viability concerns materially affect the rationality and credibility of the entire Scoping process.

9. CONCLUSION

For more than 25 years, the Thyspunt Alliance has consistently warned that the viability of the Thyspunt site must be resolved before large-scale environmental and financial commitments proceed.

Those warnings were effectively validated when:

- the previous Nuclear Site Licence process stalled;
- the NNR identified major deficiencies;
- and the Thyspunt Nuclear Site Licence process failed to reach final approval.

The current Draft Scoping Report fails to adequately acknowledge this history.

Instead, it attempts to proceed as though the central viability question has already effectively been resolved.

It has not.

The TA submits that:

- unresolved emergency planning concerns;
- outdated historical assumptions;
- the absence of a defined reactor technology;
- and the lack of a completed nuclear viability determination by the NNR

render the continuation of the current EIA process premature, irrational and potentially wasteful.

The Thyspunt Alliance therefore objects to the continuation of the current process until the NNR has determined whether the Thyspunt site is in fact viable under modern nuclear safety standards and international best practice.