

Our Ref:



an agency of the
Department of Arts and Culture

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CaseID: 10184

Date: Monday March 13, 2017
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Interim Comment

In terms of Section 38 of the National Heritage Resources Act (Act 25 of 1999)

Attention: Ms Jasandra Nyker
BioTherm Energy
BioTherm Energy (Pty) Ltd
PO Box 69408
BRYANSTON
2021

BioTherm Energy (Pty) Ltd has proposed the development of three Wind Energy Projects within the Western Cape and a portion of the Northern Cape. The wind energy developments will have a capacity of up to 250 MW. This application is specific to the Maralla East Wind Energy Facility. The facility is located on Farm Welgemoed RE/268, Farm Schalkwykskraal RE/204, and Portion of Farm Drie Roode Heuvels RE/180. This project is located within the Northern and Western Cape Provinces.

WSP| Parsons Brinckerhoff was appointed by BioTherm Energy (Pty) Ltd to conduct an Environmental Impact Assessment Process for the proposed Maralla East Wind Energy Facility near Sutherland, Northern Cape Province and Western Cape Province. A Draft Scoping Report was completed in term of the National Environmental Management Act, 1998 (NEMA) and the Environmental Impact Assessment (EIA) Regulations 2014. The proposed development will comprise the construction of a 250MW wind energy facility of up to 125 turbines covering approximately 200 ha. Turbines will be up to 120 m high and the foundations will be 20 m in diameter by 3 m deep. Associated infrastructure will include turbine transformers, operations and maintenance building assessment site, construction camp, laydown area, cement batching plant, internal roads (60 km), fencing, sewage systems, on-site substation, underground cables, powerlines, access roads, administration, control and warehouse buildings. The powerlines will be assessed through a separate Basic Assessment Processes.

It must be noted that SAHRA can only provide comments on the portion of the proposed development located within the Northern Cape Province. Comments regarding the portion of the development located within the Western Cape must be sought from Heritage Western Cape (HWC).

ACO Associates cc: Archaeology and Heritage Specialists and Natura Viva cc were appointed to conduct the Heritage Impact Assessment (HIA) and Palaeontological Impact Assessment (PIA) for the project respectively.

Halkett, D and Webley, L. 2017. Heritage Impact Assessment: Proposed construction of the Maralla East Wind



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Energy Facility near Lainsburg in the Western Cape Province.

A total of 31 heritage resources were identified within the proposed Maralla East (WEF). These heritage resources include historical structures, isolated artefact scatters, rock art, burials and stone kraals. The overall landscape has been rated as a landscape of Grade IIIa - IIIb cultural significance.

The following recommendations (pertaining to the Northern Cape only) were provided in the HIA:

- Highly sensitive areas have been identified and must be declared no-go areas during construction: A grave on the Komsberg River, Schalkwykskraal; and an historic stockpost on the Komsberg River.
- Since heritage resources are concentrated in the river valleys, such as the Venters River and Komsberg River valleys, it is important that access roads and underground cabling is carefully placed to avoid negative impacts. This will require a final walk down during the EMP phase, of all river crossings;
- No-Go areas must be avoided;
- If there are any significant changes to the layout of the wind turbines, then a walk down of the proposed facility is recommended as part of the EMPr;
- It is recommended that there is a walk down of all river crossings during the EMP phase of the project, once the final location of the access roads and cable crossings has been finalised of the EMPr, to ensure that no heritage resources are destroyed;
- If any archaeological remains, including human remains, are uncovered during construction, then work must stop in that area and the responsible heritage authorities (SAHRA or Heritage Western Cape) must be notified;
- The potential visual impacts of the proposed facility on the heritage resources of the area (i.e. the results of the VIA), must be integrated with the heritage study. It is assumed that a buffer will be required along the R354, as the road between Matjiesfontein and Sutherland is considered a scenic tourism route;
- Any abandoned farm buildings should be protected from vandalism during the operational phase of the wind farm. If there are any proposals for adaptive re-use of the building during the operational phase of the wind farm, then the provisions of the NHRA must be complied with regarding any restoration or renovation of the building;

Almond, J. 2016. Maralla Wind Energy Facility near Sutherland, Sutherland & Laingsburg Magisterial Districts, Northern and Western Cape: Palaeontological Heritage Assessment.

The proposed project area is underlain by the Abrahamskraal Formation which is overlain by Late Caenozoic



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superficial deposits. Fossil material recorded within the Maralla East WEF mainly comprises poorly-preserved, transported woody plant material (including petrified wood) associated with channel sandstones, casts of reedy plant stems and low-diversity invertebrate burrow assemblages. A few dark bony fragments of a possible amphibian were identified on Welgemoed 268 (Western Cape) in the vicinity of well preserved tetrapod trackway that is of considerable scientific interest and conservation value. A previously identified uranium ore anomaly on Schalkwykskraal 204 might be associated with fossil plant material, but this is unconfirmed. The Middle Permian bedrocks in the Maralla East WEF are generally of low palaeontological sensitivity. The overall impact significance of the construction phase of the proposed WEF is assessed as low in terms of palaeontological resources. Cumulative impacts of the various wind energy development projects in the area are assessed as medium without mitigation

The following recommendations (Northern Cape only) were provided in the PIA:

- A 20 m radius buffer for the uranium ore is recommended as a precautionary measure;
- The Environmental Control Officer (ECO) responsible for the WEF development should be made aware of the potential occurrence of scientifically-important fossil remains within the development footprint;
- During the construction phase all major clearance operations (e.g. for new access roads, turbine placements) and deeper (> 1 m) excavations should be monitored for fossil remains on an on-going basis by the ECO;
- Should substantial fossil remains -such as vertebrate bones and teeth, or petrified logs of fossil wood -be encountered at surface or exposed during construction, the ECO should safeguard these, preferably in situ. They should then alert the relevant provincial heritage management authority as soon as possible -i.e. SAHRA. This is to ensure that appropriate action (i.e. recording, sampling or collection of fossils, recording of relevant geological data) can be taken by a professional palaeontologist at the developer's expense;
- All South African fossil heritage is protected by law (South African Heritage Resources Act, 1999) and fossils cannot be collected, damaged or disturbed without a permit from SAHRA or the relevant Provincial Heritage Resources Agency (in this case SAHRA);
- The palaeontologist concerned with potential mitigation work will need a valid fossil collection permit from SAHRA and any material collected would have to be curated in an approved depository (e.g.museum or university collection);
- All palaeontological specialist work should conform to international best practice for palaeontological fieldwork and the study (e.g. data recording fossil collection and curation, final report) should adhere as far as possible to the minimum standards for Phase 2 palaeontological studies developed by SAHRA (2013); and

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- These mitigation recommendations should be incorporated into the Environmental Management Programme (EMPr) for the Maralla East WEF alternative energy project.

Interim Comment

SAHRA Archaeology, Palaeontology and Meteorites (APM) Unit cannot provide comment on the proposed development as not all documents have been submitted for review. The HIA references an Archaeological Impact Assessment (the HIA stated that it had been attached to the document), however no such document was submitted.

Please upload the AIA to the case application so that an informed comment can be issued.

Should you have any further queries, please contact the designated official using the case number quoted above in the case header.

Yours faithfully

Natasha Higgitt
Heritage Officer
South African Heritage Resources Agency

John Gribble
Manager: Maritime and Underwater Cultural Heritage Unit / Acting Manager: Archaeology, Palaeontology and Meteorites Unit
South African Heritage Resources Agency

ADMIN:

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Direct URL to case: <http://www.sahra.org.za/node/373749>
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