

# Scoping and Environmental Impact Assessment for the proposed development of Edison PV 100 MW Photovoltaic Facility

Our Ref: 8660



an agency of the  
Department of Arts and Culture

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CaseID: 8660

Date: Wednesday April 06, 2016  
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## Final Comment

**In terms of Section 38(8) of the National Heritage Resources Act (Act 25 of 1999)**

Attention: 29 Solar (Pty) Ltd

**29 Solar (Pty) Ltd (Reg. No. 2015/002969/07) (hereafter referred to as 29 Solar) is proposing to construct and operate five 100 megawatt (MW) solar photovoltaic (PV) facilities and associated electrical infrastructure over nine farms close to Dealesville, in the Free State province. The five projects and associated infrastructure is collectively referred to as the 29 Solar Dealesville Development and is situated approximately 50 km south-east of Boshof and approximately 70 km north-east of Bloemfontein.**

The proposed project entails the construction of the Edison solar photovoltaic facility and associated infrastructure on the remainder of the farm Cornelia 1550 and the remainder of the farm Modderpan 750. This application is part of a larger project of five such facilities and associated infrastructure over nine farms near Dealesville in the Free State Province. As requested in an interim comment from 27 November 2015, a Heritage Impact Assessment (HIA) and desktop Palaeontological Impact Assessment (PIA) were submitted to the application. Scoping and Environmental Impact Assessment was submitted with the application:

*Orton, J. February 2016. Heritage Impact Assessment: Scoping and Environmental Impact Assessment for the proposed development of the Edison PV 100 MW Photovoltaic Facility near Dealesville, Free State.*

The author found various Stone Age artifact scatters, historical ruins, graves and graveyards in the study area (see Table 1; locations are plotted in Figure 7). The following resources are of medium to high significance and should be avoided or recorded/mitigated: dolerite stone kraal (GPS No. 870), stone/brick/cement features (GPS No. 871), graveyard (GPS No. 883), farmhouse ruin (GPS No. 886).

Recommendations:

- Any significant archaeological sites that cannot be avoided with a buffer of at least 20 m should be mitigated well in advance of the start of construction. It should be noted that it is permissible for transmission lines to span archaeological sites, but any associated service roads and the facility access roads must avoid them;

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- All construction and operation activities must take place within the authorised construction footprint so as to minimise damage to nearby heritage resources;
- All graves should be avoided with a buffer of at least 5 m; and
- Earthy-coloured paint should be used on the built elements of the project so as to reduce the visual contrast in the landscape.

*Rossouw, L. January 2016. Palaeontological Desktop Assessment of 5 new Solar Photovoltaic facilities to be established over nine farms near Dealesville, Free State Province.*

The proposed area is underlain by the Tierberg Formation (Ecca Group), which is of moderate palaeontological sensitivity. Trace fossil assemblages, fragmentary fish remains and plant remains may occur. Unfossiliferous dolerite dykes and sills are common. Overlying sediments are highly significant along major water courses and spring and pan dune deposits.

## Recommendations:

A palaeontologist should be appointed to appraise the final development footprint and, if necessary, suggest any further measures that may be required to mitigate potential impacts.

## Final comment

The SAHRA Archaeology, Palaeontology and Meteorites (APM) Unit accepts the HIA and PIA and has no objection against the proposed development. The recommendations in the HIA and PIA (as outlined above) and the following conditions must be adhered to:

1. During line maintenance and cutting of grass below the lines, care must be taken around identified heritage sites. Additionally, when cables for the transmission lines are strung during the construction phase, the cables should not be allowed to drag through sites located between towers.
2. Should avoidance of the identified resources not be possible, they must be recorded and a mitigation permit must be applied for at SAHRA by a professional archaeologist or palaeontologist.

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3. Should any objects of archaeological or palaeontological remains be found during construction activities, work must immediately stop in that area and the Environmental Control Officer (ECO) must be informed.
4. The ECO must inform the South African Heritage Recourse Agency (SAHRA) and contact an archaeologist and/or palaeontologist, depending on the nature of the find, to assess the importance and rescue them if necessary (with the relevant SAHRA permit). No work may be resumed in this area without the permission from the ECO and SAHRA.
5. If the newly discovered heritage resource is considered significant a Phase 2 assessment may be required. A permit from the responsible heritage authority will be needed.
6. The above recommendations must be incorporated into the Environmental Management Programme (EMPr) for implementation.

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

Yours faithfully

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Ragna Redelstorff  
Heritage Officer  
South African Heritage Resources Agency

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Phillip Hine  
SAHRA Head Archaeologist (Acting)  
South African Heritage Resources Agency

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## ADMIN:

Direct URL to case: <http://www.sahra.org.za/node/341251>  
(DEA, Ref: 14/12/16/3/3/2/851)

## Terms & Conditions:

1. This approval does not exonerate the applicant from obtaining local authority approval or any other necessary approval for proposed work.
2. If any heritage resources, including graves or human remains, are encountered they must be reported to SAHRA immediately.
3. SAHRA reserves the right to request additional information as required.