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29 May 2019

Surina Laurie  
**CSIR**  
P.O. Box 320  
Stellenbosch  
7599

Dear Surina

**HERITAGE COMMENT:**

**SUBSTANTIVE AMENDMENT APPLICATION FOR A REVISION TO TURBINE AND HUB SPECIFICATIONS OF THE ALREADY AUTHORISED SUTHERLAND WIND ENERGY FACILITY (WEF), SUTHERLAND 2 WEF AND RIETRUG WEF, LOCATED NEAR SUTHERLAND, NORTHERN AND WESTERN CAPE PROVINCES.**

SAHRA case numbers: Sutherland WEF: **10500**; Sutherland 2 WEF: **10498**; Rietrug WEF: **10499**  
HWC Case number (Sutherland WEF): **16113003AS0207E**

**Introduction**

South Africa Mainstream Renewable Power Developments (PTY) Ltd (hereinafter referred to as Mainstream) has already obtained an Environmental Authorisation (EA) for the above three WEFs. Their hub height and rotor diameters have been amended to 150 m with the latest Environmental Authorisations (EAs) issued on 25 August 2017. They have the following reference numbers:

- Sutherland WEF: 12/12/20/1782/2/AM2
- Sutherland 2 WEF: 12/12/20/1782/3/AM2
- Rietrug WEF: 12/12/20/1782/1/AM2

**Proposed authorisation amendment**

Due to improvements in the technology of wind turbines it has now been proposed to once more amend the authorisation to allow for larger turbines to be constructed at all three facilities. The proposed new hub height and rotor diameter of the turbines would be 200 m. It is important to note that no changes to the layout are proposed and the presently authorised road and turbine layouts will be retained. However, some turbines may not be required and would not be constructed. In such instances the relevant sections of the layout would simply remain unbuilt.

The farm portions on which the projects will be constructed are as shown in the table below. It should be noted that most farm portions lie within Northern Cape with only one – which is part of the Sutherland WEF – being in Western Cape as indicated in the table.

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WEF project	Farm portions
Sutherland WEF	<ul style="list-style-type: none"> <li>• Schietfontein 179/1</li> <li>• Beeren Valley 150/1</li> <li>• Beeren Valley 150/remainder</li> <li>• Nooitgedaght 148/remainder</li> <li>• Boschmans Kloof 9/1 (WC)</li> </ul>
Sutherland 2 WEF	<ul style="list-style-type: none"> <li>• Tonteldoosfontein 152/1</li> </ul>
Rietrug WEF	<ul style="list-style-type: none"> <li>• Beeren Valley 150/1</li> <li>• Beeren Valley 150/remainder</li> <li>• Nooitgedaght 148/remainder</li> </ul>

### Discussion of impacts

Although the turbines for the Sutherland WEF are located along the crest of the escarpment, the study area is very remote and located a long distance from major roads which means that very few people will see the facility. The nearest pass over the escarpment lies some 3.5 to 4.0 km southwest of the Sutherland WEF but then once over the escarpment it passes through the Sutherland 2 WEF. This gravel road is almost exclusively used for local access, however, with the tarred R356, located more than 20 km further west, being the main access route up the escarpment and to Sutherland. There are few houses in the area and some are unoccupied. The overall number of turbines was reduced during the previous amendment application which means that impacts to ground-based heritage will be less than originally assessed. With further reductions to the development footprint(s) there will be a further reduction of possible physical impacts. The visual/contextual impacts to the landscape and any other visually sensitive heritage features are, however, the most relevant to the present amendment application. There will be no new impacts as a result of the changed dimensions.

With a reduction in the project footprint or number of turbines (where appropriate), there would be a minor benefit to heritage. An increase in turbine height and rotor diameter from 150 m to 200 m (a 33% height and diameter increase) will likely make very little difference to the overall impacts to the landscape, especially considering that the original height was already very substantial. Significant reduction of visual impacts from far smaller turbines through screening or shifting turbines is not possible and thus this change in dimension will not affect the significance rating of the impact assessment. It is thus my opinion that, because the significance of impacts will remain unchanged or might be marginally less significant, the Amendment application to increase the turbine height and rotor diameter from 150 m to 200 m for the three Wind Energy Facilities of concern here is acceptable in terms of impacts to heritage resources and that, as was the case with the earlier dimension-based amendment, no further heritage-related work is required. The proposed increase in hub height and rotor diameter should be authorised.

Yours sincerely



Jayson Orton