



Ashleigh Blackwell
Arcus Consultancy Services
Icon Building, Cube Workspace
Cnr Long Street and Hans Strijdom Avenue
Cape Town

15th July 2020

Dear Ms Blackwell,

Noise Impact Assessment: Minor changes to the Paulputs Wind Energy Facility – Part II Amendments

It is understood that a number of minor changes are proposed to the Authorised Paulputs Wind Energy Facility (WEF). The purpose of this letter is to investigate the proposed changes in terms of noise, to ensure impacts are no greater than currently authorised. A total of three amendments are proposed, which together facilitate the splitting of the authorised 75-turbine Paulputs WEF into two separate developments: Paulputs North WEF (up to 40 turbines) and Paulputs South WEF (up to 35 turbines).

A summary of the three proposed amendments is as follows:

- **Amendment 1:** Paulputs North WEF (up to 150 MW) consisting of 40 turbines and associated infrastructure. Maximum rotor diameter (RD) of at 220 m, and maximum hub height (HH) of 180 m. Associated infrastructure will consist of the previously approved substation A and a Battery Energy Storage System (BESS).
- **Amendment 2:** The removal of the authorised 132 kV Grid Connection and Associated Infrastructure from the Authorised Paulputs Wind Energy Facility.
- **Amendment 3:** Paulputs South WEF (up to 150 MW) consisting of 35 turbines and associated infrastructure. Maximum rotor diameter (RD) of at 220 m, and maximum hub height (HH) of 180 m.

The potential noise impacts arising from each of the three Amendments are discussed below:

Amendment 1:

The authorised 75-turbine Paulputs WEF was assessed as a whole in the original assessment, and the principle of splitting the WEF into two individual developments (40-turbine Paulputs North WEF, and 35-turbine Paulputs South) has no effect on wind turbine noise levels.

The proposed alterations to some turbine locations are very minor (between 1m and 25m), and will have no effect on the predicted noise levels assessed in the original assessment. The proposed increase in rotor diameter and hub height of the turbines does not in itself result in increased noise levels; the turbine type selected for consideration in the original assessment (Acciona AW132-3300) is a worst-case in terms of noise, with a wide range of turbines available with equal or lower noise emission levels. Providing the actual turbine selected for construction has maximum noise emission levels equal to or lower than those originally assessed, there will be no additional impact.

With regard to the substation, the substation location was considered as a potential option in the original assessment (substation location A), and found to be acceptable. Noise from the inclusion of a BESS will be limited to a small number of air-conditioning units to regulate the temperature of the batteries. Given the substantial separation distance from location A to residential dwellings (approximately 4.7 km from the closest residential dwelling), noise from the inclusion of a BESS will have no impact and therefore not be significant.

Overall, the changes proposed as part of Amendment 1 will not result in any changes to the findings of the original assessment, and are therefore not significant in terms of the EIA Regulations.

Amendment 2:

As Amendment 2 involves the removal of infrastructure, it is not possible for the proposed changes to result in an increased noise impact, and are therefore not significant in terms of the EIA Regulations.

In order to serve Paulputs South WEF, an application is being made for an additional substation in the same location as the previously Authorised Substation optional location C of the Paulputs WEF, with associated BESS and grid connection. Despite the location being previously Authorised as one of three potential locations, the substation will be in addition to the substation at Location A (See amendment 1). As such, this substation, grid connection and BESS are being dealt with through a separate Authorisation; a separate letter has therefore been provided with regard to this particular element.

Amendment 3:

The authorised 75-turbine Paulputs WEF was assessed as a whole in the original assessment, and the principle of splitting the WEF into two individual developments (40-turbine Paulputs North WEF, and 35-turbine Paulputs South) has no effect on wind turbine noise levels.

The proposed alterations to some turbine locations are very minor (between 1m and 25m), and will have no effect on the noise levels assessed in the original assessment. The proposed increase in rotor diameter and hub height of the turbines does not in itself result in increased noise levels; the turbine type selected for consideration in the original assessment (Acciona AW132-3300) is a worst-case in terms of noise, with a wide range of turbines available with equal or lower noise emission levels. Providing the actual turbine selected for construction has maximum noise emission levels equal to or lower than those originally assessed, there will be no additional impact.

Overall, the changes proposed as part of Amendment 3 will not result in any changes to the findings of the original assessment, and are therefore not significant in terms of the EIA Regulations.

Conclusion:

As demonstrated by the above, the proposed Amendments will not result in a greater level of noise impact that originally assessed for the Paulputs WEF. The amendments are therefore considered to be acceptable without the requirement for further noise studies to be undertaken.

Yours sincerely,



Alan Moore
Senior Acoustics Consultant



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

DETAILS OF THE SPECIALIST, DECLARATION OF INTEREST AND UNDERTAKING UNDER OATH

	(For official use only)
File Reference Number:	
NEAS Reference Number:	DEA/EIA/
Date Received:	

Application for authorisation in terms of the National Environmental Management Act, Act No. 107 of 1998, as amended and the Environmental Impact Assessment (EIA) Regulations, 2014, as amended (the Regulations)

PROJECT TITLE

Proposed Amendment of the Paulputs Wind Energy Facility, Northern Cape Province

Kindly note the following:

1. This form must always be used for applications that must be subjected to Basic Assessment or Scoping & Environmental Impact Reporting where this Department is the Competent Authority.
2. This form is current as of 01 September 2018. It is the responsibility of the Applicant / Environmental Assessment Practitioner (EAP) to ascertain whether subsequent versions of the form have been published or produced by the Competent Authority. The latest available Departmental templates are available at <https://www.environment.gov.za/documents/forms>.
3. A copy of this form containing original signatures must be appended to all Draft and Final Reports submitted to the department for consideration.
4. All documentation delivered to the physical address contained in this form must be delivered during the official Departmental Officer Hours which is visible on the Departmental gate.
5. All EIA related documents (includes application forms, reports or any EIA related submissions) that are faxed; emailed; delivered to Security or placed in the Departmental Tender Box will not be accepted, only hardcopy submissions are accepted.

Departmental Details

Postal address:

Department of Environmental Affairs
Attention: Chief Director: Integrated Environmental Authorisations
Private Bag X447
Pretoria
0001

Physical address:

Department of Environmental Affairs
Attention: Chief Director: Integrated Environmental Authorisations
Environment House
473 Steve Biko Road
Arcadia

Queries must be directed to the Directorate: Coordination, Strategic Planning and Support at:
Email: EIAAdmin@environment.gov.za

1. SPECIALIST INFORMATION

Specialist Company Name:	Arcus Consulting Ltd			
B-BBEE	Contribution level (indicate 1 to 8 or non-compliant)	4	Percentage Procurement recognition	100%
Specialist name:	Alan Moore			
Specialist Qualifications:	BA(hons), MIOA			
Professional affiliation/registration:	Full member of the UK Institute of Acoustics (membership number 44639)			
Physical address:	Arcus Consultancy Services Ltd 1C Swinegate Court East 3 Swinegate York YO1 8AJ United Kingdom			
Postal address:	Arcus Consultancy Services Ltd 1C Swinegate Court East 3 Swinegate York YO1 8AJ United Kingdom			
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Telephone:	+44(0)7388388910	Fax:	N/A	
E-mail:	alanm@arcusconsulting.co.uk			

2. DECLARATION BY THE SPECIALIST

I, Alan Moore, declare that –

- I act as the independent specialist in this application;
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant;
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting the specialist report relevant to this application, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, Regulations and all other applicable legislation;
- I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the competent authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
- all the particulars furnished by me in this form are true and correct; and
- I realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.

3. UNDERTAKING UNDER OATH/ AFFIRMATION

I, Alan Moore, swear under oath / affirm that all the information submitted or to be submitted for the purposes of this application is true and correct.



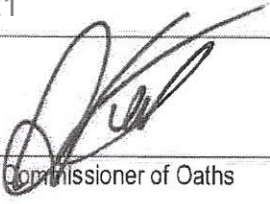
Signature of the Specialist

Arcus Consultancy Services Ltd

Name of Company

2 May 2021

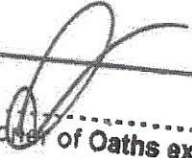
Date



Signature of the Commissioner of Oaths

03/05/2021

Date


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Commissioner of Oaths ex Officio
Advocate A FRIEDMAN
.....
Advocate of the High Court
of South Africa
81 Maude Street, Sandton
Date 03/05/2021
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