ENVIRONMENTAL AND SOCIAL ADVISORY SERVICES

12 November 2020

Department of Environment, Fisheries and Forestry (DEFF)
Attention: Chief Director: Integrated Environmental Authorisations
Environment House
473 Steve Biko Road
Arcadia

Dear Sir/Madam,

APPLICATION FOR ENVIRONMENTAL AUTHORISATION FOR THE PROPOSED WAAIHOEK BESS AND RESERVOIR: RESPONSE TO THE DEFF SCREENING TOOL REPORT

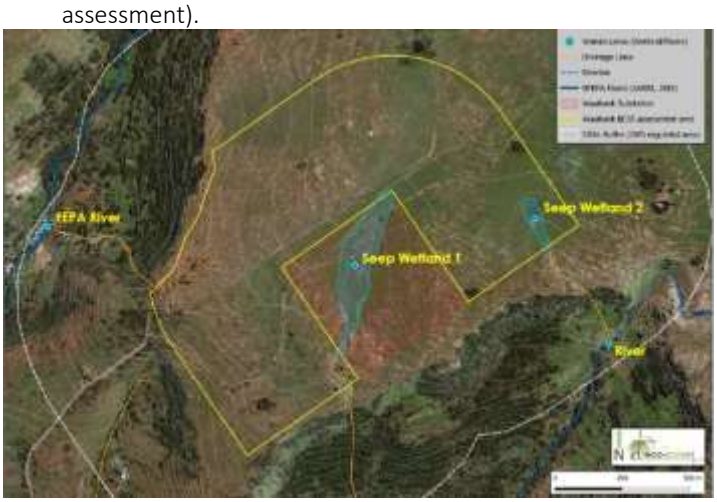
Waaihoek Wind Farm (Pty) Ltd is proposing the construction and operation of a BESS, associated infrastructure and water reservoir for the authorised Waaihoek Wind Energy Facility (WEF) (14/12/16/3/3/2/655 and 14/12/16/3/3/2/654), located near the town of Utrecht, in the eMadlangeni Local Municipality, Amajuba District, in Kwa-Zulu Natal Province of South Africa.

A site sensitivity verification process has been undertaken in order to confirm the current land use and environmental sensitivity of the proposed Waaihoek BESS and reservoir project area as identified by the National Web-Based Environmental Screening Tool (Screening Tool). A site visit was conducted by the EAP on the 16 October 2020 to verify site conditions.

The table below provides CES's motivation for inclusion/not including the specialist studies as recommended by the DEFF Screening Tool Report, based on the outcomes of the site visit (refer to photos below) and site sensitivity verification process.

Specialist studies undertaken as per the DEFF Screening Tool	2020 Specialist studies undertaken as part of current application	Original specialist studies undertaken for the Waaihoek WEF (2013-2014).
Agricultural Impact Assessment as per the Gazetted General Agriculture Assessment Protocol.	• The DEFF screening report rates the sites as 'Very High' Agricultural sensitivity due to land capability. • Therefore, an Agricultural Agro-Ecosystem Specialist Assessment has been completed (Mr Johann Lanz: Agricultural and Soil Specialist) • Refer to Appendix C1 of Draft BAR	• Not included as 2020 assessment has been completed.
Terrestrial Biodiversity Impact Assessment as per the Gazetted Terrestrial Biodiversity Assessment Protocol	• A site visit was undertaken on the 16 October 2020 by the CES Ecologist (Greer Hawley), and concluded that portions of the BESS assessment area can be rated as highly sensitive due to the presence of certain protected plant species. • A Terrestrial Biodiversity (Ecological) Impact Assessment (including Flora and Fauna) has been completed (Ms Tarryn Martin and Ms Amber Johnson from CES (Botanical and Faunal Specialists)). • Refer to Appendix C2 of Draft BAR.	• Not included as 2020 assessment has been completed.
Plant and Animal Species Assessment as per the Gazetted		• Not included as 2020 assessment has been completed.

Coastal and Environmental Services (Pty) Ltd
T +27 43 726 7809 | F +27 43 726 8352
PO Box 8145, East London,
Reg no: 2012/151672/07
www.cesnet.co.za

Specialist studies undertaken as per the DEFF Screening Tool	2020 Specialist studies undertaken as part of current application	Original specialist studies undertaken for the Waaihoek WEF (2013-2014).
General Requirement Assessment Protocol.		
Aquatic Biodiversity Impact Assessment as per the Gazetted Aquatic Biodiversity Assessment Protocol.	• Eco-Pulse Consulting (Aquatic and wetland specialists) has undertaken a rapid level screening of the site using GIS databases and Google EarthTM imagery and is of the opinion that the "Very High" sensitivity rating is confirmed due to the presence of two seep wetland systems within the BESS assessment area. Figure 1 below shows the BESS and the reservoir assessment area, with wetlands identified by the wetland ecologist from Eco-Pulse which highlights the need for a formal Wetland Assessment and Report to inform the BAR and Water Use License Application (WULA). Indeed, the fact that one of the seep wetlands potentially extends onto the development site means that direct impacts to the wetland may occur. • Essentially, due to wetlands being present, a wetland assessment report is required to meet the EIA requirements as well as WULA requirements of the project. No other aquatic ecosystems (rivers) appear to be present in close proximity of the site (only wetlands), therefore an Aquatic Assessment is not required (only a wetland specialist assessment).  • A Wetland Impact Assessment has been completed (EcoPulse (Aquatic and Wetland Specialist). • Refer to Appendix C3 of Draft BAR.	• Not included as 2020 assessment has been completed.
Palaeontology Impact Assessment as per the Gazetted	• Refer to the attached Heritage/Archaeological and Palaeontological Site Sensitivity Verification Letter and the	• Paleontological Impact Assessment:

Specialist studies undertaken as per the DEFF Screening Tool	2020 Specialist studies undertaken as part of current application	Original specialist studies undertaken for the Waaihoek WEF (2013-2014).
General Requirement Assessment Protocol.	original Heritage Impact Assessment (HIA) and Paleontological Impact Assessment (PIA) specialist reports attached within Appendix C4 of the Draft BAR. • Umlando undertook the HIA for the original Waaihoek Windfarm in 2014. There are no recorded heritage/archaeological sites in the BESS and reservoir application area according to the original survey (2014) and verified through the use of recent aerial imagery as part of the site sensitivity verification process. As Heritage/Archaeology sensitivity is unlikely to change within the short-term, Umlando concluded that the site is of low sensitivity, and no further assessment is required. • Regarding Palaeontology, the BESS and reservoir is located on Dolerite, which has no fossil sensitivity (due to the igneous nature). This is confirmed by the original PIA report undertaken by Dr Gideon Groenewald, and current review of the geology of the BESS and reservoir area, therefore, requiring no further assessment.	Dr Gideon Groenewald
Archaeological and Cultural Heritage Impact Assessment as per the Gazetted General Requirement Assessment Protocol.		• Heritage Impact Assessment: Mr Gavin Anderson from Umlando
Socio-Economic Assessment as per the Gazetted General Requirement Assessment Protocol.	• Refer to the attached Socio-Economic Site Sensitivity Verification Assessment (Appendix C5 of the BAR). • Dr Neville Bews & Associates was appointed to undertake a social compliance statement for the proposed Waaihoek BESS and reservoir. After consideration of the original Socio-Economic Impact Assessment conducted by CES (2014), the social specialist concluded that the proposed construction and operation of the BESS, associated infrastructure and reservoir is unlikely to result in any increased severity and/or additional impacts. Considering the above, it is most unlikely the proposed BESS will add any additional social risk to the Waaihoek WEF. • It was, however, agreed by the specialist that the addition of the BESS will make the facility more efficient and reliable; and electricity supply more constant. This will, in turn, have positive social consequences as better security of electricity supply will have both positive economic affects and health benefits. Security of energy supply helps to increase business confidence and reduce health risks associated with disrupted medical procedures and traffic control. Consequently, the project is supported on a social basis and should proceed. No additional mitigation measures were recommended by the specialist, or conditions are attached to the EMPr.	• Socio-economic Impact Assessment: Mr Anton Hough from CES

Specialist studies undertaken as per the DEFF Screening Tool	2020 Specialist studies undertaken as part of current application	Original specialist studies undertaken for the Waaihoek WEF (2013-2014).
	• Further to this, the potential socio-economic risks/impacts/benefits of the BESS and reservoir have been assessed within the Basic Assessment Report itself, and potential impacts adequately addressed by providing mitigation measures to promote local job creation and minimise potential negative impacts.	
Noise Impact Assessment as per the Gazetted Noise Impact Assessment Protocol.	• Refer to the attached Noise Site Sensitivity Verification Assessment and Compliance Statement (Morne de Jager of EARES (Noise Specialist)) (Appendix C6 of the Draft BAR) • It was concluded that the operation of the BESS and associated infrastructure will not have a significant impact on the surrounding residents due to the nature of the BESS technology and the nearest noise sensitive receptor being located 410m away.	• Noise Impact Assessment: Dr Brett Williams from SafeTech
Hydrology Assessment	• Tsunami Resources was appointed by Mainstream Renewable Power South Africa to conduct a hydrogeological study of the groundwater supply potential for the authorized Waaihoek WEF, which was conducted between December 2019 – January 2020. Refer to Appendix C7 of the Draft BAR. • It should be noted that potential impacts of the proposed BESS relating to water quality has been assessed as part of the Wetland Impact Assessment (Appendix C3 of the Draft BAR).	• N/A
Traffic Impact Assessment	• A preliminary traffic assessment was undertaken for the associated Waaihoek WEF in 2014 (refer to Appendix C8 of the Draft BAR). The traffic assessment concluded that the existing traffic is currently operating at free flow conditions. The analysis, which involved calculating the construction traffic and then adding it to the existing traffic, indicated an insignificant decrease in traffic conditions. • As the construction and operation of the BESS and reservoir is unlikely to significantly increase construction or operation traffic in relation to that already assessed for the Waaihoek WEF, it is the EAP's opinion that a full Traffic Impact Assessment is not necessary for the BESS and reservoir, as the potential traffic impacts can be assessed within the Basic Assessment Report itself, and potential impacts adequately addressed by providing mitigation measures to promote road safety during the construction phase (as per the National Road Traffic Act (1996) and the Occupational Health and Safety Act (OHSA, 1993)). As a mitigation measure, the BAR will recommend that a traffic management plan is compiled	• Traffic Plan: BVi Consulting Engineers Western Cape (Pty) Ltd (refer to Appendix C8)

Specialist studies undertaken as per the DEFF Screening Tool	2020 Specialist studies undertaken as part of current application	Original specialist studies undertaken for the Waaihoek WEF (2013-2014).
	prior to the commencement of construction, which takes into consideration all associated components of the Waaihoek WEF, including the BESS and reservoir.	
Geotechnical Assessment	• A preliminary geotechnical investigation was conducted by SMEC South Africa (Pty) Ltd. in 2015 and 2020 on behalf of Mainstream Renewable Power South Africa (Pty) Ltd. for the authorized Waaihoek WEF. (Refer to Appendix C9)	• Preliminary Geotechnical Assessment: BVi Consulting Engineers Western Cape (Pty) Ltd

Photographic evidence of study area:

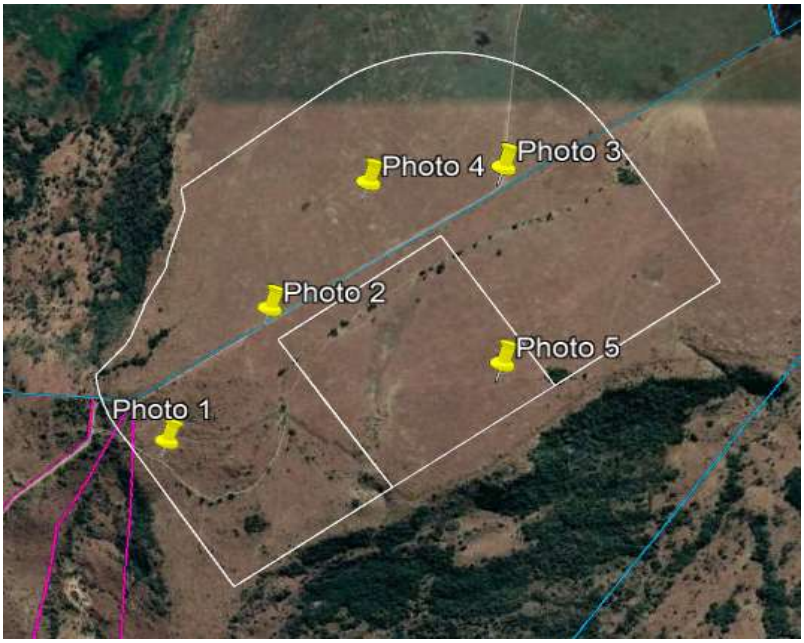


Figure 1: Locations of photos taken on site

Figure 2: Photo 1 location, looking south west

Figure 3: Photo 1 location, looking north. Rocky landscape and shallow soils are evident.

Figure 4: Photo 2 location, looking north east. Grassland vegetation evident on rocky terrain.

Figure 5: Photo 3 location, looking south west.

Figure 6: Photo 4 location, looking west.

Figure 7: Photo 5 location, looking south.

ENVIRONMENTAL AND SOCIAL ADVISORY SERVICES

Figure 8: Photo 5 location, looking north.

Should you have any queries or concerns, please do not hesitate to contact me.

Kind regards

Caryn Clarke
Senior Environmental Consultant
Email: c.clarke@cesnet.co.za