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AGGENEYS 2 PART 2 AMENDMENT: HERITAGE COMMENTS

Project description

ABO Wind Aggeneys 2 PV (Pty) Ltd is proposing the construction and operation of a Battery Energy Storage System (BESS) with a contracted capacity of up to 500MW/500MWh as part of the authorised Aggeneys 2 solar energy facility, on a site located 11km south-east of Aggeneys in the Northern Cape Province. The project is located within the Springbok Renewable Energy Development Zone (REDZ), within ward 4 of the Khai-Ma Local Municipality and within the greater Namakwa District Municipality in the Northern Cape Province on the Remaining Extent of Bloemhoek 61. The purpose and utilisation of a Battery Energy Storage System (BESS) is to save and store excess electrical output as it is generated, allowing for a timed release when the capacity is required. BESS systems therefore provide flexibility in the efficient operation of the electricity grid through decoupling of the energy supply and demand.

The development area for the battery energy storage system is ~ 5ha and is proposed within the area assessed and approved for the solar PV facility, and within one of the two authorised laydown areas. Both laydown areas authorised for the project are being considered for the placement of the BESS.

The following infrastructure is associated with the BESS:

- » Electrochemical battery storage systems with a maximum height of 3.5m; and
- Multi-core 22kV or 33kV underground cables, to follow internal access roads of the PV facility, to connect the battery storage area to the on-site facility substation.

Previous heritage work

A heritage impact assessment including an archaeological specialist study and a separate palaeontological specialist study were undertaken for the Aggeneys 2 PV project. The report references are as follows:

» Orton, J. 2018. Heritage Impact Assessment: proposed Aggeneys 2 – 100MW Solar PV Facility and associated infrastructure near Aggeneys, Namakwaland Magisterial District, Northern Cape. Unpublished report prepared for Savannah Environmental (Pty) Ltd. Lakeside: ASHA Consulting (Pty) Ltd.

Almond, J.E. 2018. Aggeneys proposed PV Solar Energy Facilities on the remaining extent of the farm Bloemhoek 61 and associated power line corridors near Aggeneys, Namakwa District Municipality, Northern Cape. Unpublished report prepared for ASHA Consulting (Pty) Ltd. Cape Town: Natura Viva cc.

Previous heritage findings

The study area was surveyed for archaeological remains on 22 and 23 October 2018 (Figure 1). Although isolated stone artefacts attributable to background scatter were noted in a number of locations, significant archaeological materials were only seen in one place. This location contained two likely graves, some stone walling and a light scatter of quartz flaked stone artefacts. Only the graves are of high significance. The grave site is located close to but outside of the authorised PV area. It is much further away from the two locations under consideration for the BESS. The cultural landscape was found to be a largely natural landscape but with electrical and mining infrastructure being the dominant anthropogenic traces. There are unconfirmed historical reports that a massacre of Bushmen may have occurred in a kloof of the Gamsberg but surveys have failed to yield any evidence of this. Orton (2018) did not recommend that any further archaeological work be carried out for the project. From his desktop research, Almond (2018) found the study area to be of very low palaeontological sensitivity. He did not consider that any further palaeontological work was

necessary but that a Chance Finds Procedure should be implemented in case of accidental finds.

Potential heritage impacts

Because the BESS would be located approximately 1.0 km (Option 1) or 0.6 km (Option 2) away from the significant grave site and within the already authorised Aggeneys 2 PV project footprint and within either one of the authorised laydown areas, its addition to the project will not result in any new or unanticipated physical impacts to archaeology. Similarly, no new or unanticipated palaeontological impacts would occur. Its addition would also not affect the visual appearance of the PV facility and no new cultural landscape impacts are thus expected. Options 1 and 2 for the placement of the BESS are equally acceptable from a heritage point of

view.

Conclusion

Because no new or unanticipated heritage impacts are expected to occur, it is recommended that the BESS be authorised for either of the two location options (i.e. within either of the laydown areas) and that an amended EA can be issued, subject to the existing requirements in the Heritage Impact Assessment Report still being implemented, including the measures for the discovery of any heritage materials

Yours sincerely

Jayson Orton

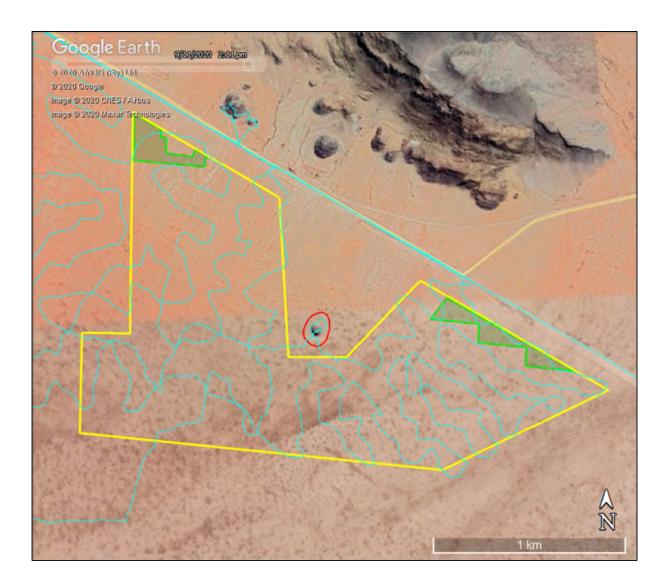


Figure 1: Aerial view of the Aggeneys 2 PV study area (yellow polygon) showing the two laydown areas proposed for the construction of the BESS (green polygons), the heritage survey tracks (turquoise lines) and the single important heritage site found in the area (red circle). The BESs will be developed within either of the two laydown areas