

DEPARTMENT OF FORESTRY, FISHERIES AND THE ENVIRONMENT

NO. 2734

11 November 2022

NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998  
(ACT NO. 107 OF 1998)

**CONSULTATION ON THE PROCEDURES TO BE FOLLOWED FOR THE ASSESSMENT AND MINIMUM CRITERIA FOR REPORTING OF IDENTIFIED ENVIRONMENTAL THEMES IN TERMS OF SECTION 24(5)(a) AND (h) OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998, WHEN APPLYING FOR ENVIRONMENTAL AUTHORISATION**

I, Barbara Dallas Creecy, Minister of Forestry, Fisheries and the Environment, hereby consult on my intention to prescribe the protocol for the assessment and minimum report content requirements for determining impacts on Cape Vultures associated with the development of onshore wind energy generation facilities, which require environmental authorisation. This protocol must be read with either the avifaunal<sup>1</sup> or animal species protocol<sup>2</sup>, whichever is applicable to the specific application under consideration.

The requirements of the protocol will apply from the date of publication, except where the applicant provides proof to the competent authority that the specialist assessment affected by this protocol had been commissioned by the date of publication of the protocol in the Government Gazette.

Members of the public are invited to submit written comments or inputs, within 30 days from the date of the publication of this Notice in the *Gazette*, to any of the following addresses:

By post to:       The Director-General  
                    Department of Forestry, Fisheries and the Environment  
                    Attention: Dr D Fischer  
                    Private Bag X447  
                    PRETORIA  
                    0001

By hand at:       Reception, Environment House, 473 Steve Biko Road, Arcadia, Pretoria.

By e-mail:         [dfischer@dfre.gov.za](mailto:dfischer@dfre.gov.za)

Any inquiries in connection with the notice can be directed to Dr Dee Fischer at [dfischer@dfre.gov.za](mailto:dfischer@dfre.gov.za) or (012)399 8843. Comments or inputs received after the closing date may not be considered.

The Department of Forestry, Fisheries and the Environment complies with the Protection of Personal Information Act, 2013 (Act No. 4 of 2013). Comments received and responses thereto are collated into a comments and response report which will be made available to the public as part of the consultation process. If a commenting party has any objection to his or her name, or the name of the represented company/ organisation, being made publicly available in the

<sup>1</sup> Government Notice No. 320 published under Government Gazette No. 43110 of 20 March 2020

<sup>2</sup> Government Notice No. 1150 published under Government Gazette No. 43855 of 30 October 2020

comments and responses report, such objection should be highlighted in bold as part of the comments submitted in response to this Government Notice.



**BARBARA DALLAS CREECY**  
**MINISTER OF FORESTRY, FISHERIES AND THE ENVIRONMENT**

## CAPE VULTURES

### PROTOCOL FOR THE SPECIALIST ASSESSMENT AND MINIMUM REPORT CONTENT REQUIREMENTS FOR ENVIRONMENTAL IMPACTS ON CAPE VULTURES BY ONSHORE WIND ENERGY GENERATION FACILITIES

#### 1. SCOPE

This protocol provides the criteria for the specialist assessment and minimum report content requirements for determining impacts on Cape Vultures associated with the development of onshore wind energy generation facilities, which require environmental authorisation. This protocol must be read with either the avifaunal<sup>1</sup> or animal species protocol<sup>2</sup>, whichever is applicable to the specific application under consideration.

The assessment and reporting requirements of this protocol are associated with a collision risk potential identified by the national web based environmental screening tool (screening tool) for Cape Vultures. The relevant data in the screening tool has been provided by the FitzPatrick Institute of African Ornithology of the University of Cape Town. The protocol applies within and outside of the Renewable Energy Development Zones (REDZs)<sup>3</sup>.

#### 2. SITE SENSITIVITY VERIFICATION AND MINIMUM REPORT CONTENT REQUIREMENTS

Prior to commencing with the Cape Vulture specialist assessment, the collision risk potential for Cape Vultures of the preferred site as identified by the screening tool must be confirmed by undertaking a **site sensitivity verification** for a period of at least 12 months which must include the pre-breeding season (late March to early May) and the breeding season (May to December).

2.1. The site sensitivity verification must be undertaken by a specialist registered in the field of zoological science with the South African Council for Natural Scientific Professions (SACNASP) with demonstrated expertise in Cape Vulture observation and research.

2.2. The site sensitivity verification must be undertaken through the use of:

- (a) site inspections to-
  - i. identify the land use on surrounding erven with specific reference to the possible location of vulture restaurants or land uses which could result in carcass availability;
  - ii. identify any specific topographical features on the site which could attract or pose a risk to Cape Vultures including existing and planned powerlines within a 5km radius of the site;
  - iii. continuously monitor wind speed and other weather data that could influence Cape Vulture activity on the site throughout the initial site verification period;
- (b) vantage point monitoring<sup>4</sup> by two people at the same time for a duration of at least 72 hours per vantage point for the 12 months. Vantage point monitoring is to determine the level of Cape Vulture flight activity on the site and the height of flight;
- (c) consultation with relevant non-governmental organisations with an interest in Cape Vulture protection including BirdLife South Africa, VulPro and the Endangered Wildlife Trust; and
- (d) any other available and relevant information.

2.3. The outcome of the site sensitivity verification must be recorded in the form of a report that:

<sup>1</sup> Government Notice No. 320 published under Government Gazette No. 43110 of 20 March 2020

<sup>2</sup> Government Notice No. 1150 published under Government Gazette No. 43855 of 30 October 2020

<sup>3</sup> Renewable Energy Development Zones as published under Government Notice No. 114, Gazette No. 41445 on 16 February 2018.

<sup>4</sup> Vantage point monitoring is to be undertaken in accordance to the method as identified in the latest version of the BirdLife South Africa Guideline for impact assessment, monitoring and mitigation.

- (a) confirms or disputes the environmental sensitivity as identified by the screening tool (Cape Vulture risk layer);
- (b) contains a motivation, corroborated by evidence (e.g. monitoring data) and input from BirdLife Africa, of either the verified or different environmental sensitivity; and
- (c) where the site sensitivity verification has confirmed the site as being of a “medium” or “low” sensitivity for collision risk to Cape Vultures, the site sensitivity verification report and the Compliance Statement must be included in the avian specialist study which is to be submitted together with the relevant assessment report prepared in accordance with the requirements of the Environmental Impact Assessment Regulations.

**3. SPECIALIST ASSESSMENT AND MINIMUM REPORT CONTENT REQUIREMENTS**

<b>TABLE 1: ASSESSMENT AND REPORTING OF IMPACTS ON CAPE VULTURES FOR ONSHORE WIND ENERGY GENERATION FACILITIES</b>	
<p>1. General Information</p> <p>1.1 An applicant intending to undertake an activity identified in the scope of this protocol on a site identified by the screening tool and verified by the site sensitivity verification report as being of “very high” or “high” sensitivity for the potential collision of Cape Vultures with wind turbines, must submit a Cape Vulture Specialist Assessment unless the information gathered from undertaking the site sensitivity verification confirms that the occurrence of Cape Vultures on the site is “medium” or “low<sup>5</sup>”, in which case a Compliance Statement must be prepared.</p> <p>1.2 If any part of the proposed development footprint falls within an area of “very high” or “high” sensitivity, the assessment and reporting requirements prescribed for the “very high” or “high” sensitivity apply to the entire development footprint.</p>	
<p><b>VERY HIGH AND HIGH SENSITIVITY RATING</b> – areas where there is a very high probability of encountering Cape Vultures and where there is high risk of population-level impacts from the loss of Cape Vulture individuals.</p> <p>These areas are potentially unsuitable for wind energy development.</p>	<p><b>2. Cape Vulture Specialist Assessment</b></p> <p>2.1. The assessment must be undertaken by a specialist registered in the field of zoological science with SACNASP with demonstrated expertise in Cape Vulture observation and research.</p> <p>2.2. The following information or data (in addition to that collected as part of the site sensitivity verification) must be collected to inform the assessment:</p> <p>2.2.1. Wind energy developments for which environmental authorisation have been granted within a 30km radius<sup>6</sup>, including their location and GPS coordinates;</p> <p>2.2.2. any power line that poses an electrocution risk due to its design, or a collision risk due to the absence of bird flight diverters or any wind measurement masts within a 30km radius of the preferred site;</p> <p>2.2.3. data from an additional<sup>7</sup> twelve months of Cape Vulture monitoring, focusing on the collection of additional flight activity through the preferred site, flight direction, behaviour, and specific data necessary to populate a collision risk model;</p>

<sup>5</sup> Low in the context of a potential collision risk of a Cape Vulture with a wind turbine means that the level of Cape Vulture flight activity over the site is low and where Cape Vultures are identified the height is consistently observed exceeding the tip of the turbine blade and no behaviour that would bring the Cape Vulture into contact with the wind turbine blades is observed throughout the yearlong observation.

<sup>6</sup> This information can be obtained from the screening tool but will need to be verified by Eskom or discussions with landowners.

<sup>7</sup> Additional monitoring from the monitoring that was undertaken as part of the site sensitivity verification.

	<p>2.2.4. radar confirmed heights of Cape Vulture activity and flight activity records for early evening and morning when visibility is poor;</p> <p>2.2.5. the size and status of known colonies and roosts within a 50km radius of the preferred site;</p> <p>2.2.6. the location of possible roosts and colonies within a 5km radius<sup>8</sup> of the preferred site; and</p> <p>2.2.7. land use with specific reference to the possible location of vulture restaurants or land uses which could result in carcass availability within a 30km radius of the preferred site.</p> <p>2.3. The spatial information is to be represented on a map which includes the following:</p> <p>2.3.1. topographical features;</p> <p>2.3.2. location of vantage point monitoring locations;</p> <p>2.3.3. locations of existing wind energy developments or wind energy developments for which environmental authorisation have been granted but not constructed;</p> <p>2.3.4. the location of existing power lines indicating any risk areas and proposed power lines as identified in paragraph 2.2.2;</p> <p>2.3.5. location of roosts or colonies as well as potential roosts and colonies,</p> <p>2.3.6. the flights recorded over the site; and</p> <p>2.3.7. location of vulture restaurants and land uses which could result in the availability of carcasses.</p> <p>2.4. The monitoring data is to be tabulated and included in a spreadsheet using a template consistent with that envisaged by the national bird monitoring database.</p> <p>2.5. The monitoring data must be uploaded to the database once operational.</p> <p>2.6. The monitoring data must include as a minimum the following information:</p> <p>2.6.1. GPS coordinates of vantage point monitoring sites; and</p> <p>2.6.2. flights, including direction, height, date, time, wind speed, weather conditions and behaviour.</p> <p>2.7. The Cape Vulture Specialist Assessment must be undertaken on the preferred site and must identify and predict the following:</p> <p>2.7.1. high risk areas on the site for potential collision risks;</p> <p>2.7.2. the collision risk potential determined through the application of a collision risk model to predict an annual fatality rate;</p> <p>2.7.3. the possible cumulative impact on the regional Cape Vulture population from the various wind energy developments within the 30km radius of the preferred site, based on the cumulative fatality rate and fatalities through power line electrocution or collision;</p> <p>2.7.4. the possible impact of the predicted fatality rate on the regional Cape Vulture population and that impact on the national population; and</p> <p>2.7.5. areas not suitable for development based on the risk of impacts on Cape Vultures.</p>
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<sup>8</sup> This information can be collected through desk top analysis, consultation with local bird associations, BirdLife South Africa, Vulpro and the Endangered Wildlife Trust.

	<p>2.8. The findings of the Cape Vulture Specialist Assessment must be written up in a <b>Cape Vulture Specialist Assessment Report</b> that contains as a minimum the following information:</p> <p>2.8.1. A copy of the SACNASP registration certificate of the zoological scientist who prepared the assessment and a curriculum vitae demonstrating experience in Cape Vultures;</p> <p>2.8.2. details including contact details of the zoological scientist;</p> <p>2.8.3. a signed statement of independence by the specialist;</p> <p>2.8.4. the duration, date and seasons of the assessment and the relevance of the season to the outcome of the assessment;</p> <p>2.8.5. a summary of the findings of the site sensitivity verification report;</p> <p>2.8.6. a description of the methodology used to undertake the data generation and assessment inclusive of the equipment and models used, as relevant;</p> <p>2.8.7. a summary of the findings of the Cape Vulture monitoring;</p> <p>2.8.8. a map showing the information required in paragraph 2.3 superimposed over the high-risk collision areas and areas not suitable for development as identified in paragraph 2.7.5;</p> <p>2.8.9. a summary of the findings of the Cape Vulture specialist assessment;</p> <p>2.8.10. an indication of the potential annual fatality rate, as well as the cumulative annual fatality rate;</p> <p>2.8.11. the assessed impact of the predicted fatality rate on the regional Cape Vulture population as well as the anticipated impact on the national population;</p> <p>2.8.12. a substantiated statement from the specialist with regards to the acceptability or not of the proposed development on the Cape Vulture population and a recommendation on the approval or not of the proposed development;</p> <p>2.8.13. a description of the assumptions made and any uncertainties or gaps in knowledge or data; and</p> <p>2.8.14. any conditions to which this statement is subjected.</p> <p>2.9. The zoological scientist must recommend conditions to be included in the environmental authorisation which must include as a minimum the following:</p> <p>2.9.1. mitigation measures to be included in the environmental authorisation which could include curtailment and shut down on demand options and/or carcass and food availability management plans;</p> <p>2.9.2. the initiation date for the start of the post-construction monitoring plan;</p> <p>2.9.3. the approval of the development is subject to adaptive management which could include the inclusion or amendment of curtailment and shut down measures as well as the need to include radar shut down should monitoring identify unanticipated and unacceptable fatality rates; and</p> <p>2.9.4. the intervals for the submission of the post-construction monitoring report.</p> <p>2.10. A summary of the findings of the <b>Cape Vulture Specialist Assessment</b> as well as the proposed conditions to be included in the environmental authorisation must be incorporated into the avian specialist study to be included in the Basic Assessment Report or the Environmental Impact Assessment Report.</p>
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	<p>2.11. A signed copy of the Site Sensitivity Verification Report and the Cape Vulture Specialist Assessment must be appended to the Basic Assessment Report or Environmental Impact Assessment Report.</p> <p>2.12. A <b>Cape Vulture post-construction monitoring plan</b> is to be provided as part of the Cape Vulture Specialist Assessment Report. This plan must include as a minimum the following information:</p> <p>2.12.1. timeframes and intervals for monitoring both wind turbines and power lines on and off the preferred site where risks were identified;</p> <p>2.12.2. the locations to be monitored including GPS points (this will relate to wind turbines once the final turbine placement plan is approved);</p> <p>2.12.3. methodology for searcher efficiency and scavenger removal;</p> <p>2.12.4. methods for monitoring (i.e., transects or radial) as well as the extent of the monitoring area;</p> <p>2.12.5. the years and intervals for the duration of post-construction monitoring must be identified; and</p> <p>2.12.6. monitoring must include power lines on the preferred site and any high-risk power lines identified in paragraph 2.2.2.</p> <p>2.13. The findings of the post-construction monitoring must be submitted to the relevant competent authority and relevant conservation organisations at intervals identified in paragraph 2.9.4 and must include as a minimum the following information:</p> <p>2.13.1. A copy of the SACNASP registration certificate of the zoological scientist who prepared the monitoring report and a curriculum vitae demonstrating experience in Cape Vultures;</p> <p>2.13.2. a signed statement of independence by the specialist;</p> <p>2.13.3. the duration, date and seasons of the monitoring;</p> <p>2.13.4. a summary of the findings of the monitoring;</p> <p>2.13.5. a description of the methodology used, indicating where the methodology was amended from that identified in paragraphs 2.12.3 and 2.12.4;</p> <p>2.13.6. a map indicating where carcasses of Cape Vultures were found, where relevant;</p> <p>2.13.7. an indication of the cause of death;</p> <p>2.13.8. verification of expected fatality rates compared against post-development prediction; and</p> <p>2.13.9. a statement on the correlation between the expected fatality rate and the findings of the monitoring, including any amendments that must be made to the layout or curtailment times.</p> <p>2.14. The data related to the post-construction monitoring must be uploaded to the national bird monitoring database throughout the period of post construction monitoring, once the system is operational.</p>
<p><b>MEDIUM AND LOW SENSITIVITY RATING</b> - are areas where there is a low probability of encountering vultures and a low risk of vulture fatalities.</p>	<p><b>3. Cape Vulture Compliance Statement</b></p> <p>3.1. The <b>Cape Vulture Compliance Statement</b> must be prepared by a specialist registered in the field of zoological science with the SACNASP with demonstrated expertise in Cape Vulture observation and research.</p> <p>3.2. The compliance statement must:</p> <p>3.2.1. be applicable to the preferred site and proposed development footprint;</p>



	<p>3.2.2. confirm that preferred the site is of “low” or “medium” sensitivity for impacts to Cape Vultures; and</p> <p>3.2.3. indicate whether or not the proposed development will have an unacceptable impact on the Cape Vultures.</p> <p>3.3. The <b>Cape Vulture Compliance Statement</b> must contain, as a minimum, the following information:</p> <p>3.3.1. details including contact details and relevant expertise as well as the SACNASP registration certificate of the zoological scientist preparing the statement, including a curriculum vitae;</p> <p>3.3.2. a signed statement of independence by the specialist;</p> <p>3.3.3. a map showing the proposed development footprint, overlaid on the Cape Vulture risk map generated by the screening tool;</p> <p>3.3.4. confirmation from the zoological scientist that all reasonable measures have been taken through micro-siting to avoid impacts on Cape Vultures;</p> <p>3.3.5. a substantiated statement from the zoological scientist on the acceptability, or not, of the proposed development and a recommendation on the approval, or not, of the proposed development;</p> <p>3.3.6. any conditions to which this statement is subjected;</p> <p>3.3.7. where required, proposed impact management actions and outcomes or any monitoring requirements for inclusion in the EMP; and</p> <p>3.3.8. a description of the assumptions made and any uncertainties or gaps in knowledge or data.</p> <p>3.4. A summary of the findings of the compliance statement must be included with the avian specialist study which is to be submitted as part of the Basic Assessment Report or Environmental Impact Assessment Report.</p> <p>3.5. A signed copy of the compliance statement must be appended to the Basic Assessment Report or Environmental Impact Assessment Report.</p> <p>3.6. A <b>Cape Vulture post-construction monitoring plan</b> is to be provided as part of the Cape Vulture Compliance Statement. This plan must include as a minimum the following information:</p> <p>3.6.1. timeframes and intervals for monitoring both the wind turbines and power lines on site and off site where specific risks were identified;</p> <p>3.6.2. the locations to be monitored, including GPS points (this will relate to wind turbines once the final turbine placement plan is approved);</p> <p>3.6.3. methodology for searcher efficiency and scavenger removal;</p> <p>3.6.4. methods for monitoring (i.e., transects or radial) as well as the extent of the monitoring area;</p> <p>3.6.5. the years and intervals for the duration of post construction monitoring must be identified; and</p> <p>3.6.6. monitoring must include power lines on the preferred site.</p> <p>3.7. The findings of the post-construction monitoring must be submitted to the relevant competent authority and relevant conservation organisations at intervals identified in 3.6.1 and must include as a minimum the following information:</p> <p>3.7.1. A copy of the SACNASP registration certificate of the zoological scientist who prepared the monitoring report and a curriculum vitae demonstrating experience in Cape Vultures;</p>
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	<p>3.7.2. a signed statement of independence by the specialist;</p> <p>3.7.3. the duration, date and seasons of the monitoring;</p> <p>3.7.4. a summary of the findings of the monitoring;</p> <p>3.7.5. a description of the methodology used;</p> <p>3.7.6. a map indicating where carcasses of Cape Vultures were found where relevant;</p> <p>3.7.7. an indication of the cause of death; and</p> <p>3.7.8. should a fatality of a Cape Vulture be identified through monitoring the specialist is to make recommendations for mitigation measures or additional monitoring for discussion with BirdLife Africa and the competent authority within 3 months of the monitoring event.</p> <p>3.8. The data related to the post-construction monitoring must be uploaded to the national bird monitoring database throughout the period of post-construction monitoring once the system is operational.</p>
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