



**forestry, fisheries
& the environment**

Department:
Forestry, Fisheries and the Environment
REPUBLIC OF SOUTH AFRICA

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

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Disclaimer: Organisations/People whose comments are below were made aware that their names/organisation name will be aligned to their comments and will be included on the Departments website as part of the transparency of the commenting process.

BA – basic assessment

EWT – Endangered Wildlife Trust

CA – competent authority

NEMA – the National Environmental Management Act, 1998 (Act No. 107 of 1998)

DFFE – Department of Forestry, Fisheries and the Environment

BLSA – BirdLife South Africa

EA – environmental authorisation

REDZs – renewable energy development zones

EAP – environmental assessment practitioner

Screening tool – the national web based environmental screening tool

EIA Regulations – Environmental Impact Assessment Regulations, 2014

SEA - strategic environmental assessment

EMI – environmental management inspector

WEF – wind energy facility

EMPr – environmental management programme

COMMENTS AND RESPONSE REPORT

No.	STAKEHOLDER	COMMENT	RECOMMENDATION	RESPONSE
GENERAL COMMENTS				
0.1.1	Andre van der Spuy	<p>It is a fact that wind energy facilities (WEF) located in vulture habitat are incompatible with vulture preservation and conservation. It is also a fact that planned wind farms always have the option to be located outside of vulture habitat, or not to be developed at all, while utilized and historical vulture habitat is immovable. Simply put wind Farm development located within vulture habitat which is still utilized is therefore anti-conservation and does not constitute environmentally sustainable development.</p> <p>It is a fact also that acceptable environmental practice, as prescribed under NEMA too, advocates a “risk averse and cautious approach” when development is considered so as to ensure that such development is truly environmentally sustainable.</p>		<p>The comment is noted but not supported. It is possible that the identified site is not posing a risk to Cape Vultures, only through monitoring can this be determined. In addition there is a tremendous body of knowledge being generated around mitigation measures which are proving to be very successful. It is only through assessment that this can be determined. For wind energy projects, the wind resource is obviously the main driver of success of the project, unfortunately the best wind resources are found in elevated areas where vultures also roost and breed. Therefore it is not entirely true to say that wind farms can be located outside of vulture habitat. If, considering the point you make “.... their habitat encompasses probably the majority of the country.” wind energy cannot be a technology considered in South Africa, but is considered in mostly</p>

		<p>Unfortunately, the intentional violation of both of the above principles is endorsed and facilitated by the “Proposed protocol for the assessment and minimum report content requirements for determining impacts on Cape Vultures (CV) associated with the development of onshore wind energy generation facilities which require environmental authorization”, 28 July 2023 (the protocol).</p> <p>The protocol is therefore anti-conservation and must correctly be considered to be a direct threat to the conservation of the Cape Vulture, an Endangered species.</p> <p>The danger of the protocol is that it pretends to be a tool that serves to protect the National Cape Vulture population whereas it actually facilitates and endorses wind farm development within vulture habitat. It is anti-conservation.</p>		<p>every country in the world. This does not seem to be a balanced approach.</p> <p>The protocol has been developed to enable the generation of additional site specific information that can assist developers, scientists and the decision makers to determine the extent of risk posed, and it is additional to the current requirements.</p> <p>The comment and view is noted but not supported.</p> <p>The comment and view is noted but not supported.</p>
SCOPE				
1.1.1	Andre van der Spuy	<p>The protocol specifies that where the DFFE screening tool identifies a location being considered for WEF development as being designated as “High” or “Very high” in terms of Cape Vulture sensitivity then a CV specialist who is inter alia familiar with vulture characteristics and issues must verify</p>		<p>The specialist’s work will be undertaken to determine if the site is fatally flawed or not and if the site can in fact be submitted for consideration of an EA. Compliance to the protocol is part of the assessment process for the development which includes identifying the preferred site.</p> <p>The nature of an EIA process is that the</p>

		<p>the designated sensitivity rating before the WEF can be considered further.</p> <p>The first obvious flaw with this approach is that the identification of “High” or “Very High” sensitivity CV habitat is a misnomer as its correct designation should be “No go” area for total exclusion of WEF development. Moreover, given the precarious conservation status of the national CV population, and vultures in general, even lesser sensitivity areas (“Medium” and “Low”) should be designated as “No go” areas if they are known or found to constitute CV habitat. Tracking data for CVs suggest therefore that most of South Africa (and much of the sub-continent) is unsuitable for WEF development. This is merely a hard fact that any genuine conservationist must come to terms with even if they subscribe to the ideology of renewable energy or climate change. In terms of (inter alia) CV conservation there are many more CV-friendly energy generation options available for consideration.</p> <p>The second obvious flaw is that the Departmental screening tool designation of “High” and “Very high” sensitivity areas is seemingly based upon the recent CV utilization distribution model that has been produced by Cervantes et al. (2023) but</p>		<p>impacts and in the case of Cape Vultures, the collision risk potential, will be determined before and after mitigation measures have been applied to determine if the risk can be mitigated to an acceptable level. In the case of Cape Vultures, this does not mean that any deaths will be tolerated, it will be up to the specialist to make the argument for a fatality number if this has been found to be acceptable to the national, regional and international population. Given the conservation status of the Cape Vulture it is unlikely that such a death rate will be found to be acceptable, but these are all aspects, including mitigation measures that are considered on a site level basis and is the objective of the EIA process. No go areas where no development can take place outside of proclaimed conservation areas have not been identified or gazetted to date as there are always site specific considerations that may not apply over the entire area.</p> <p>It is acknowledged that there are other energy generation technologies, however no technology has been prohibited to date, therefore all technologies are provided the opportunity to determine impacts, and propose mitigation measures.</p> <p>It is noted that the model has been published in a peer reviewed publication and as such has been subjected to a review</p>
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		<p>which is a fundamentally flawed and incomplete model (even by its own partial admission). The model, for instance, has a “hole” in its CV utilization distribution map of SA based on, supposedly, a data deficiency but which “hole” happens to coincide with the Cookhouse Renewable Energy Development Zone (REDZ3) which is where the greatest density of WEF development in the country exists - and where the greatest CV mortalities through turbine collision has occurred and continues to occur (this despite the culprit WEFs having supposedly been adequately mitigated for negative CV impacts). Of concern is that the corporate funders of the CV utilization distribution model have their own WEFs located within the REDZ3 and within the data “hole”. The model applies gross averaging assumptions which ultimately results in the REDZ3 being very significantly understated in terms CV utilization distribution when compared with real-life data, and thus too its importance as CV habitat is drastically understated. As a result, the collision potential of the REDZ3 is likewise dramatically understated compared to the real and current record of turbine collision mortalities from operating wind farms in the REDZ3 and recorded observations. Naturally the DFFE and Minister carry direct responsibility for authorizing the unsustainable WEFs of</p>		<p>of scientific peers who found the model and methodology sound, and allowed the paper to be published.</p> <p>There is no data deficiency specifically identified in the paper, however if the reference is to the colony and roost information in the vicinity of the central Eastern Cape region, which was identified as being low or having no Cape Vulture count even though there was a high presence of observed vulture activity in the area, this was compensated for by allocating colony size equal to the overall median colony size. The information collected was extrapolated in the model so there can be no “holes” experienced. A view of the Cape Vulture risk map also identifies that the Cookhouse REDZs has more or less a risk rating of half high and half low environmental sensitivity.</p> <p>Scientists have ethical and professional integrity to not distort research facts. Documents are also peer reviewed.</p> <p>The model has not dramatically understated the risk profile for Cape Vultures in the Cookhouse REDZs as identified above.</p> <p>These authorisations have been finalised before the implementation of this protocol, therefore it is possible that the additional</p>
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		<p>the REDZ3 which continue to kill CVs and other birds and bats on an ongoing basis in unacceptable and unsustainable numbers.</p> <p>Given the history of CV mortality through turbine collision in the REDZ3 (which should have surely generated the largest dataset of usable CV mortality data in South Africa?) and the large number of WEF EIAs undertaken in the area, it is disingenuous to allocate the REDZ3 area as being equivalent to the lowest level of potential turbine collision risk available in the model. Accordingly, one struggles to avoid arriving at the logical conclusion that the corporate funders have not been prevented from having undue and significant influence on the model on account of their own damning wind farm impacts on CVs in the REDZ3. In summary the CV utilisation distribution model and deduced collision risk application is incomplete, unrepresentative and unreliable and thus the spatial extent of the interpreted “High” and “Very high” CV sensitivity designations of the screening tool are presumably too (being significantly understated). The verification of these sensitivity designations becomes of crucial importance but here too the protocol is deficient as explained below.</p>		<p>monitoring and assessment requirements could improve on the situation which is the objective of the protocol.</p> <p>Of the total number of authorisations issued, the majority of wind energy facilities have been authorised in the Western Cape.</p> <p>So there is no gap over the REDZs, the risk map indicates that a portion of the area has a high risk rating and the remaining portion a low risk rating.</p> <p>The DFFE cannot comment on conspiracy theory.</p> <p>Please see the response to the discussion on the incompleteness of the model.</p> <p>Specialists must be registered through the relevant registration authority. This registration requires specific qualifications, experience and continued learning. The protocols are also intended to provide a level of guidance on the aspects to be considered in the assessment and the report content. If a specialist is unethical, they can be reported and face consequences, which could include not being able to work in the field going forward. This is not novel to the Cape Vulture Protocol but applies to all specialist</p>
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	<p>Thirdly, the protocol relies significantly upon CV-specialist expertise to generate reliable verifications of screening results and CV impact ratings yet experience of more than a decade has shown that the avifaunal experts typically involved in WEF development EIAs are variously insufficiently or inappropriately qualified, incompetent, lack appropriate or any suitable experience, or / and are unethical and compromised through ideology and/ or personal business interests. The biology of the many species under Class Aves is diverse in all respects and there are very few genuine vulture specialists practicing in the field of EIAs in South Africa. Yet it is critically important that the required impact study under the protocol be undertaken by a vulture specialist or at least an ornithologist as opposed to a general avifaunal specialist or ecologist. However, the protocol is vague in its definition and specifications of what qualifications a suitable CV specialist must hold and is sufficiently vague (point 2.1 refers) as to the level of qualification such CV specialist should have. This inherent weakness of the protocol will most certainly be to the significant detriment of the CV population, as it has been to date in WEF development in SA. This critically important specialist role and associated tasks should be left to only credible and</p>		<p>assessments, therefore the Cape Vulture Protocol does not change any current procedure or registration.</p> <p>It is not supported that the protocol is vague on the level of qualification, the specialist would need to demonstrate their experience in dealing with Cape Vultures.</p> <p>You will note that Vulpro is cited in the Cervants et al. 2023 paper as an author to the paper and has provided data and input into the model.</p>
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		specific vulture specialists associated with independent organizations such as Vulpro or perhaps other vulture specialists whose credibility they are willing to endorse.		
2. SITE SENSITIVITY VERIFICATION AND MINIMUM CONTENT REPORT REQUIREMENTS				
2.1.1	Albert Froneman	22(a)(iv) "Continuously monitor wind speed and other weather data "Is this practical and does this responsibility then become that of the specialist if the developer has not installed wind masts on the preferred site??"	Perhaps it would be better worded as: If available wind speed and other weather data (that could influence Cape Vulture activity on the preferred site) should be integrated into the survey data analysis.	Wind speeds are consistently monitored by the developer for a period of two years as part of the requirements for the Independent Power Producers Procurement Process. It would be possible to use this data, or alternatively the purchasing of an anemometer is not pricy. It is important to know what the wind speed and direction is to understand the movement of birds and specifically vultures over the site. It is felt that the requirement is not impractical.
2.1 2	Albert Froneman	2.2 (b) - vantage point monitoring by two people at the same time for a duration of at least 72 hours per vantage point, once per month for the 12 month period, in order to determine the level of Cape Vulture flight activity on the preferred site and the height of flight;	Suggested amendment to be: "bi-monthly for the 12 month period, "to align with the current BLSA vulture guidelines.	The intention of this protocol is to ensure that additional monitoring is undertaken as the areas that are subject to the protocol is identified as being of high or very high risk. The BLSA guidelines would be adequate for medium and low risk. An amendment was made in the protocol on the number of monitoring events. It was not intended that monitoring would be needed to be undertaken each month for 12 months. The input has been amended to indicate that 8 events per year and 14 hour per event with 2 observers being used at each point. So, each observer could be used for 7 hours for the event to allow for eating and resting during the monitoring event. A new

				footnote 7 has been added to provide further clarity. Paragraph 2.2(b) should furthermore be read with paragraph 2, which clarifies that 8 site visits are required within the 12-month period.
2.1.3	Albert Froneman	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 must be included in the assessment report required to be submitted in accordance with the requirements of the Environmental Impact Assessment Regulations.	More guidance and clarity is required on how the sensitivity thresholds are defined and triggered. See below for more detail.	The sensitivity ratings were prepared by the FitzPatrick Institute of African Ornithology of the University of Cape Town and HawkWatch International. The screening tool sensitivity ratings levels were developed with input from BLSA and other relevant experts in Cape Vultures conservation. The layer on the screening tool also contains meta data which indicates how the layer has been prepared.
2.1.4	Kate Webster	<p>“The potential collision of Cape Vultures with wind turbines is to be confirmed by undertaking a site sensitivity verification for a period of at least 12 months, with surveys timed to account for as much seasonal variation as possible. A minimum of 6 site visits must be conducted within the 12-month period.”</p> <p>The above is not sufficient in length of time for surveys. No consideration of prevailing climatic conditions (drought or extreme wet seasons) are taken into consideration. Cape Vultures can cover tremendous distances especially prior to becoming breeding pairs and food availability plays a very dominant role in determining where they will forage.</p>		The concern is noted. The vantage point monitoring events have been increased to 8 events over the year. For each vantage point 2 observers are required to monitor the point for 14 hours in total per monitoring event. This now exceeds what is required by the BLSA guideline and the initial requirements of the protocol. The additional events are intended to be able to consider the variations in climatic conditions.

<p>2.1.5</p>	<p>Kate Webster</p>	<p>The site sensitivity verification must be undertaken through the use of: “(a) site inspections to-</p> <ul style="list-style-type: none"> i. identify the land use in the surrounding areas within a 10 km radius of the preferred site 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 power lines within a 10 km radius of the preferred site; iii. verify the size and status of known breeding sites and roosts within a 30 km radius of the proposed preferred site that have not been monitored by any scientific body within the past 5 years; <p>The 10 km radius as well as the 30 km radius is a ridiculous assumption that Cape Vultures that fly or are seen beyond this area are not going to fly or forage inside this radius! This should at least be beyond 100km radius as Cape Vultures can cover in excess of this on a single day. (consult VulPro tracking data to confirm this).</p>	<p>The 10 km radius as well as the 30 km radius is a ridiculous assumption that Cape Vultures that fly or are seen beyond this area are not going to fly or forage inside this radius! This should at least be beyond 100km radius as Cape Vultures can cover in excess of this on a single day. (consult VulPro tracking data to confirm this).</p>	<p>The risk layer has considered tracking data from 68 Cape Vultures collected over the last 20 years as well as the location of birds and the number of birds, from data collected through a number of protocols, including from direct observation and helicopter surveys. This data has been used to develop a behavioural model based on habitat preference and movement patterns. This model has been used to estimate the movement around breeding colonies and roosts and to map the utilisation distribution. These results were then scaled by the size of the local populations determined by bird counts at breeding colonies and roosts. The outcome was then mapped to express the expected spatial distribution of Cape Vultures at a colony or roost at a given time. (Cervants et al. 2023).</p> <p>The mapping has therefore considered the distribution of Cape Vultures and identified the high risk areas for collision. Other factors have also been included.</p> <p>The increased monitoring required by this protocol is therefore intended to confirm the movement of Cape Vultures over the site as their presence would already be anticipated and to specifically identify their behaviour.</p>
<p>2.1.6</p>	<p>Kate Webster</p>	<p>There must be some sort of evidence and proof that this consultation has taken place with not only ONE of the</p>		<p>Paragraph 2.3(b) requires that the site sensitivity verification report which is generated must be corroborated by</p>

		<p>NGOs but multiple..... this is not happening at present. The outcome of the site sensitivity verification.....</p>		<p>evidence and input from any NGO's of either the verified or different risk mapping. This would include a record of the consultation. The CA will assess the evidence and come to a decision, therefore it would be to the advantage of the developer to include inputs from as many NGOs as would be relevant based on the motivation being submitted. The specialist report is also reviewed by stakeholders which would include NGOs, therefore if some information is left out or incorrect they would be able to identify this through the consultation process. It is not the intention of the Department to tell the professional specialists how to undertake their work. It is assumed that they have professional expertise and are working to ensure that the information provided would facilitate decision making.</p>
2.1.7	SAWEA	<p>Prior to commencing with the Cape Vulture specialist assessment, and in parallel with the reconnaissance study and pre-application avifaunal monitoring plan required in terms of the Protocol on Avifaunal Species, the collision risk potential for Cape Vultures on the preferred site as identified by the screening tool must be confirmed.</p> <p>The potential collision of Cape Vultures with wind turbines is to be confirmed by undertaking a site sensitivity verification for a period of at least 12 months, with surveys timed to account for as much seasonal variation as possible. A</p>	<p>Will a minimum of 6 or 12 site visits be required for the Site Sensitivity Verification study?</p> <p>Will the Cape Vulture and Wind Farms: Guidelines for impact assessment, monitoring and mitigation (July 2018) remain valid?</p> <p>We understand this to mean that prior to undertaking the Cape Vulture Specialist Assessment for sites containing sections of high or very high sensitivity sites for 1 year, wind Developers are required to first conduct 1 year of avifaunal pre-construction monitoring</p>	<p>An amendment has been made in this section to reflect that a minimum of 8 site visits being required as part of the site sensitivity verification process which must be undertaken over the 12-month period.</p> <p>The Protocol does not include a reference to the Cape Vulture and Wind Farms Guidelines. The intention is to reference the guidance for vantage point monitoring which is included in the BirdLife South Africa Guideline for impact assessment, monitoring and mitigation. See footnote 5 of the Protocol.</p> <p>The site visits that are required through the</p>

		<p>minimum of 6 site visits must be conducted within the 12 month period.</p>	<p>and concurrently undertake a Cape Vulture Site Sensitivity Verification study to verify the sensitivity in the Vulture Screening Tool Theme.</p> <p>In other words, regardless of the Vulture Screening Tool Theme sensitivity, all sites require 12 months for the Cape Vulture Site Sensitivity Verification study (e.g. to verify the sensitivity even if it is low in the Vulture Theme Screening Tool classification).</p> <p>Therefore, prior to considering a Scoping and EIA Process, the Developers will need incur costs for (1) 1-year of avifaunal pre-construction monitoring, (2) 1-year of Cape Vulture site sensitivity verification, and (3) 1-year of bat monitoring before potentially commencing with an additional 1-year of Cape Vulture specialist assessment. The formal assessment process for an identified site will therefore take up to 3 years.</p> <p>The current Draft Cape Vulture Gazette is only applicable to one vulture species and only to one of many priority species in South Africa, and yet it will significantly increase the assessment costs for wind energy facilities. If similar species-specific protocols are envisioned, the development of wind energy facilities in South Africa could soon become unfeasible to Developers</p>	<p>protocol will be different as the site on which this protocol would be utilised would have been identified as having a very high or high risk for potential Cape Vulture collision.</p> <p>The requirements of the Avifaunal Specialist assessment protocol remain in place for a site which falls within areas of “very high” and “high” sensitivity for Cape Vultures in the screening tool. Therefore, the developer would have an avifaunal specialist already doing vantage point sampling and will prepare an avifaunal specialist assessment. What is new is that the avifaunal specialist appointed should have specific expertise in Cape Vultures and an extra 2 visits will be required to each vantage point. Other visits can follow the monitoring regime identified for other bird species. At the end of the first year, the Cape Vulture specific monitoring would have determined if there was a specific risk to Cape Vultures. If the site has been confirmed as medium or low environmental sensitivity, then the specialist will include all the findings including the findings from the Cape Vulture specific monitoring into the Avifaunal Specialist assessment.</p> <p>If the site sensitivity monitoring identifies that the site is very high or high risk then for the next year, the Cape Vulture Specialist Assessment would consider the possible mitigation measures.</p>
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3 SPECIALIST ASSESSMENT AND MINIMUM REPORT CONTENT REQUIREMENTS				
3.1.1	Albert Froneman	<p>On what basis is an area or site classified as medium and on what basis does a medium risk area as per the risk map (based on data collected) become high risk, and what triggers a high risk area to become very high risk. High and very high risk areas trigger the requirement of an additional year of monitoring and standardization is required on when that is required.</p>	<p>The footnote (6) provides an explanation of low but what is critical and must be included in the protocol is guidance on when a site is classified as high, very high or medium.</p>	<p>The sensitivity ratings have been provided by the FitzPatrick Institute of African Ornithology of the University of Cape Town and HawkWatch International, based on specific tracking data and the preparation of a utilisation distribution model.</p> <p>Please also review the meta data provided for the layer which can be accessed on the left hand side of the screening tool under the Layers (i.e. in the Vulture Species Species Theme Combined Sensitivity theme).</p>

3.1.2	Albert Froneman	2.2.6 - Does ESKOM have the information and capacity to provide such information for all the projects? Perhaps better to reword to read: ESKOM/EWT partnership?		Additional wording has been inserted, to indicate that the information can also be gathered through a site inspection. This could be a drive by and taking a photograph of the pylon construction to determine if the line could accommodate nesting by Vultures. Engagement with Eskom would be a last resort if the specialist was not able to identify the pylon type and then determine what the possible risk could be. The developer could also discuss with EWT. However, they are more involved with collision mapping.
3.1.3	Albert Froneman	<p>The location of existing power lines indicating any risk areas and proposed power lines as identified in paragraph 2.2.2 - This information is not readily available - recommend that "proposed" wording be removed.</p> <p>Unless it refers to only powerlines of the proposed project - if so it should be stated accordingly i.e.: proposed power lines for the site.</p>		The wording has been amended as suggested. Information on bird collision with powerlines can be obtained through either EWT or Eskom who collaborate on the updating of a central incident register of bird death along power lines.
3.1.4	Kate Webster	<p>As stated above why are developments being authorized/applied for where there is a definitely infringement in the Cape Vulture (and African White-back) environment.</p> <p>Importantly there is no complete data base available of how many Cape vultures (and others) have already been detrimentally affected by this type of development.</p>		<p>Your views and conclusions are noted.</p> <p>It is acknowledged that a protocol will not solve the problem of bird collisions with turbines or on its own conserve Cape Vultures, however the protocol does provide additional guidance and extends the monitoring that must be undertaken prior to considering the site as being the final site. It is possible that in some cases even in areas identified as being of very high or high risk for Cape Vulture collision,</p>

		<p>What is the point of setting up all these protocols (of which some are not really tested and others have limited data input) and expecting that this will 'solve' the vulture collision issue. Sadly it seems that DFFE is quite happy to 'spend' some vulture bodies for the sake of this type of development however, their mandate really is to sustainably look after the environment for all (including our endemic and near endemic species!).</p> <p>The first priority prior to publishing another set of regulations, is to obtain a data base of what has actually happened with regards to cape vultures (and others) already with this type of development.</p> <p>Lastly despite all the protocols before this proposed one, there is a clear indication from present development taking place, that previous protocols have not been taken into consideration and what will guarantee that this additional protocol will assist our endemic Cape Vulture? Nothing!</p>		<p>that due to some site anomaly there is no Cape Vulture activity over the site. In these cases development can be allowed. Similarly, it is possible that with the application of certain mitigation measures, the risk to Cape Vultures can be avoided and development can be allowed.</p> <p>The assessment that will need to be undertaken if the Cape Vulture activity is identified on the site, must consider the possible impact of the predicted fatality rate on the regional and national Cape Vulture population with or without mitigation and depending on the outcome the specialist must make the recommendation if this is acceptable or not. It would be difficult for the decision maker to ignore the input of the specialist.</p> <p>The efforts of NGOs such as BirdLife Africa and Vulpro who regularly monitor and keep data on birds in general and vultures, as well as other conservation agencies and academics conducting research in the field, are acknowledged and supported. Further it is the intention to finalise the implementation of the national bird monitoring database where all the data collected by developer and other interested groups will be populated to improve our understanding of avifaunal species in general.</p>
3.1.5	SAWEA	The site sensitivity verification must be undertaken by a specialist registered in	The pool of avifauna specialists specialising in Cape Vultures is limited.	The rules of SACNASP allow for a specialist who meets the requirements of a

		<p>the field of zoological or ecological science with the South African Council for Natural Scientific Professions (SACNASP) with demonstrated expertise in Cape Vulture observation and research.</p>	<p>Thus, resource availability is a large concern and will impact finding a specialist to work on the proposed Cape Vulture Specialist Assessment Reports.</p> <p>The SACNASP field should also cover Environmental and Animal themes, provided the specialist has relevant expertise and experience. This is applicable throughout the Protocols where “zoological or ecological” fields are mentioned.</p> <p>A significant portion of the new wind farm projects being developed, with decent wind resource and available grid evacuation capacity, are located within high and very high Cape Vulture sensitivity areas. It is therefore crucial that these requirements do not create a bottleneck for the undertaking of such assessments by wind developers.</p> <p>As such, can DFFE please indicate how many specialists in South Africa currently meet the requirements specified above and also have experience in undertaking specialist assessments in terms of Appendix 6 of the National Environmental Manage Act (Act No. 107 of 1998, as amended) Environmental Impact Assessment Regulations (2014, as amended) as well as the relevant specialist assessment protocols?</p>	<p>specialist field to register in that field, therefore it is possible for a specialist registered in the animal or environmental theme who meets the requirements, either through their field of study or through past experience to register as a zoological or ecological scientist.</p> <p>The comment is noted, however the mandate of the department is to ensure sustainable development and ensuring the correct expertise of specialists undertaking these assessment is necessary to ensure the quality of such assessments.</p> <p>This information can be obtained from SACNASP. Over the past 15 years, the DFFE has approved over 548 wind applications. Of the 548 authorisations only approximately 65 to 70 have received preferred bidder status and have been constructed. There are currently many applications for authorisation being submitted which have no intention of being constructed. Developers should consider the need for the submission of applications and their intention to develop them as they put strain on the system, including the</p>
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			<p>And of these specialists which meet the requirements, how many currently have capacity to undertake such assessments?</p> <p>What are the criteria required for a specialist to demonstrate that they have “expertise in Cape Vulture observation and research”? Please share a list of the specialists who meet these requirements.</p> <p>May the same Avifaunal Specialist team appointed to undertake the Avifaunal Pre-Construction Monitoring also undertake the Cape Vulture Site Sensitivity Verification study?</p>	<p>number of specialists that are available to do the necessary assessments, by submitting applications that there is no need for or commitment to construct.</p> <p>It is the duty of the applicant to appoint suitably qualified specialists, however the need for research in Cape Vultures has been removed.</p> <p>If the specialist doing the avifaunal specialist assessment meets the requirements of the Cape Vulture specialist assessment, there are no restrictions.</p>
3.1.6	SAWEA	<p>The site sensitivity verification must be undertaken through the use of: (a) site inspections to: i) identify the land use in the surrounding areas within a 10 km radius of the preferred site with specific reference to the possible location of vulture restaurants or land uses which could result in carcass availability;</p>	<p>Would land uses that could result in carcass availability include livestock farming, wildlife grazing and hunting, roads with the potential for roadkill, etc.? A broad range of land uses may result in carcass availability.</p> <p>Once clarity is provided on the query above, please confirm if desktop data, such as the DFFE SA National Landcover Data (SANLC), can be used to identify and/or supplement land use in the surrounding areas.</p>	<p>The land uses highlighted do have the potential to result in wildlife carcasses, however this would be opportunistic deaths not a site which would encourage Cape Vulture activity on a regular basis and which would create a flight path. It would be possible for the developer as part of their conditions to form agreements with surrounding farmers etc. to agree on carcass management strategies.</p> <p>The use of land cover data or other desktop information that may be used to identify or confirm land-uses are encouraged.</p>
3.1.7	SAWEA	<p>Identify any specific topographical features on the site which could attract or pose a risk to Cape Vultures including existing power lines within a 10 km radius of the preferred site;</p>	<p>Why would it become the responsibility of wind developers to identify existing powerlines which may pose a risk to Cape Vulture? These powerlines are owned and operated by Eskom and are</p>	<p>Powerline data can be obtainable in the screening tool or through Eskom itself. The intention here is to get a sense of cumulative impacts and overall risk of electrocution or collision of Cape vultures</p>

			<p>not the responsibility of the wind developer, unless this becomes part of the Project's offset plans (but this should be a pre-EIA requirement).</p> <p>As one can imagine with large wind farm sites, this requirement will be extremely costly for Developers, which will hinder new wind developments in high and very high sensitivity areas. Furthermore, not all landowners allow specialists to access their properties, and this may render it impossible to fully achieve this requirement.</p>	<p>by powerlines. This information is pertinent in the assessment of that risk. One would not necessarily need to visit adjacent landowners to get information on powerlines but can use desktop information for this.</p>
3.1.8	SAWEA	<p>Verify the size and status of known breeding sites and roosts within a 30 km radius of the proposed preferred site that have not been monitored by any scientific body within the past 5 years.</p>	<p>As per a previous question, will BirdLife South Africa, VulPro, and the Endangered Wildlife Trust be required to share all relevant Cape Vulture data for the site and the surrounding 30km radius during the required consultation process?</p> <p>Will the spatial data of all known breeding sites and roosts be made publicly available as well as the associated monitoring data, where available?</p>	<p>The entities mentioned have indicated their desire to share the relevant data at their disposal as part of their commitment to the development of this protocol. Data is also available on the screening tool.</p> <p>Breeding sites for Cape Vultures are not obscure. Many birds congregate on exposed cliff faces. It would therefore be possible using the information provided on the screening tool on the wind methodology, avifaunal layer, and the expertise of the specialist to locate these sites.</p>

<p>3.1.9</p>	<p>SAWEA</p>	<p>Continuously monitor wind speed and other weather data that could influence Cape Vulture activity on the preferred site throughout the site sensitivity verification period</p>	<p>It should be acknowledged that developing a wind project within an area that poses a potential high or very high risk to Cape Vultures poses a significant risk to the project as the site could be deemed to be fatally flawed. In such instance, the developer may not have erected the met mast or commenced with the wind measurement campaign as the first priority would be to ensure that the project site is not fatally flawed before commissioning the wind measurement campaign and commencing with the application for environmental authorisation.</p> <p>It is requested that this required be removed or restated to allow for the use of other online sources of weather data that could be available for an area.</p> <p>This requirement should be based on publicly available weather data, rather than the weather data captured by Developer's met masts. Or alternatively, only the conclusions drawn by the appointed specialist, based on the Developer's wind data shared with the appointed specialist, should be included in the publicly available Site Sensitivity Verification Report, i.e., not specific wind speed figures and other confidential data captured by the met mast. Also see query for clarification under Section 3 regarding this requirement.</p>	<p>Any site which is being put forward for an environmental authorisation should have adequate and commercially viable wind resources. Without continuous monitoring of wind speed and other weather data that could influence Cape Vulture activity, it would not be able to identify whether the site would be suitable for development.</p> <p>In addition, anemometers are inexpensive to purchase and the specialist should have expertise in utilising this technology.</p> <p>Publicly available data would not provide the necessary detail that would be required to determine the flight patterns and behaviours of Cape Vultures which is the objective of requiring the information.</p> <p>In terms of the confidentiality of the information, collated and aggregated information can be provided in the reports. The actual daily or hourly wind speed is not necessary to be reported on, it is the impact of the wind information that would provide the necessary information that would be required for bird behaviour and flight pattern analysis.</p>
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			<p>It should be clarified that the wind speed and weather data specifically refers to specialist observations taken by the specialist on site and at the time of any vulture observations, as well as a record of any particular weather conditions that occurred at the time (for example, a weather report for the day that indicated average maximum and minimum temperatures, wind speeds, etc.).</p> <p>"continuously monitor wind speed and other weather data that could influence Cape Vulture activity on the preferred site throughout the site sensitivity verification period; " The practicality of this is in question - this could be possible if a met mast has already been installed on the preferred site, however if not, what is the expectation then for how the developer or specialist will obtain this data?</p> <p>Is this requirement referring to the wind data collected by the Developer? If so, would Developers be required to share their wind data with the appointed specialist for inclusion in their Site Sensitivity Verification Reports? The Site Sensitivity Verification Report will be a public document, and sharing this information publicly is not acceptable to Developers.</p>	<p>Please see the response above.</p> <p>The developer would be the applicant and it would be to their benefit to provide the information to support the EA application. In terms of the confidentiality please refer to the response provided above. It is aggregated information which would be required and this data has a specific purpose and therefore does not need to be information which would be valuable as commercial information.</p>
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3.1.10	SAWEA	Vantage point monitoring by two people at the same time for a duration of at least 72 hours per vantage point, once per month for the 12 month period, in order to determine the level of Cape Vulture flight activity on the preferred site and the height of flight;	<p>This contradicts with the statement that requires a minimum of 6 site visits to be conducted within the 12 month period. Please clarify.</p> <p>Will a minimum of 6 or 12 site visits be required for the Site Sensitivity Verification study?</p> <p>Will the Cape Vulture and Wind Farms: Guidelines for impact assessment, monitoring and mitigation (July 2018) remain valid?</p>	<p>Please refer to 2.2(b) of the protocol, the section has been corrected.</p> <p>With two people visiting each vantage point, this should allow more time per vantage point as well as the option of the monitors staggering the visits to ensure they don't miss anything on site. While this may result in more time spent on each vantage point, it must be borne in mind that these are high risk areas for Cape Vultures, and this can only benefit conservation efforts for the species.</p>
3.1.11	SAWEA	<p>If an average preferred site requires seven vantage points, this requirement will result in the following:</p> <p>72 hours X 12 months = 864 hours (36 days) per vantage point per person [requirement is for two people at a vantage point which has not been factored into this calculation]</p> <p>864 hours X 7 vantage points = 6 048 hours (252 days) per person for all vantage points [requirement is for two people at a vantage point which has not been factored into this calculation]</p>	<p>This requirement is unreasonable in terms of cost to the Developers and capacity of Avifaunal Specialists. Suitably qualified and experienced Avifaunal Specialists, and their monitoring teams, already lack capacity to take on work which is being conducted in accordance with the current protocol and guidelines.</p> <p>"vantage point monitoring by two people at the same time for a duration of at least 72 hours per vantage point, once per month for the 12 month period, in order to determine the level of Cape Vulture flight activity on the preferred site and the height of flight;" It is recommended that this align with the BLSA vulture guidelines which requires bi-monthly visits</p>	<p>An amendment has been made and there are now 8 visits required, for a site which has been identified as being of high or very high risk of Cape Vulture collision.</p> <p>There would be no point to providing the additional guidance if the status quo is what would be achieved. It is intended, due to the sensitivity rating, that additional monitoring is required on the site.</p>
3.1.12	Andre van der Spuy	The protocol furthers its anti-conservation approach towards CVs by tolerating CV mortality by WEFs at what		The comment is noted but not supported. The mortality rate must be determined to identify the impact on the regional and

	<p>it deems to be “acceptable” levels. Given that the vulture is the most turbine-vulnerable bird group, and which could quickly and easily be tipped back into the “Endangered” category, it begs belief that the DFFE could consider there actually exists a level at which CV mortality is acceptable. The level of acceptability is left to the discretion of the CV specialist which is a notion fraught with threat to CV conservation given the wide scope of allowance permitted for the qualifications of such a person. Indeed, it is avifaunal specialists who have directly facilitated the ongoing, unacceptable CV mortalities being experienced at operating WEFs in SA. This has usually been achieved through a tolerant approach towards high negative impacts (WEF-friendly) in which the avifaunal specialist has considered impact mitigation to be sufficiently effective to permit WEF development in CV habitat. This unwarranted emphasis on the application of mitigation measures so as to facilitate WEF development in CV habitat has failed tragically in SA and the CV population is suffering because of it. The evidence (suppressed but known) clearly shows that mitigation of collision impact is impossible, except for WEF re-location and application of the WEF “no go” option (refusal of the environmental application). The</p>		<p>national population, this is part of the assessment process. It would be up to the specialist to determine if this would be acceptable and to motivate if it is. The competent authority will then consider the outcome of the assessment and make a call. It is noted that the Biodiversity and Conservation Branch do comment internally on EIA documents and would comment on any Cape Vulture assessment. Any decision would be taken with this Branch. It is therefore not a given that the bird fatality rate will be accepted.</p> <p>Mitigation is a valid concept in environmental impact management, it could be that through mitigation, the risk is reduced to 0. For example, shut down on demand of any turbine which would pose a collision risk to a Cape Vulture, should such vulture activity be observed. This would avoid any contact with a Cape Vulture. By ensuring that the risk are known it is possible for a developer to identify if they would be able to initiate shut down on demand. The need to consider such drastic measures are identified in the protocol, see paragraph 2.9.1.</p> <p>Mitigation is possible. Mitigation measures have been applied all over the world which have proven to be effective, albeit expensive. For example shut down of turbines as birds approach. This protocol identifies that these expensive measures</p>
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		<p>currently favoured “offset” approach now being employed via the Vulture Safe Zone program and associated CV spatial utilization distribution model of Cervantes et al. is being actively promoted and incorporated by WEF development companies, especially those (like Biotherm and Windlab) whose operating and supposedly vulture-mitigated wind farms are nonetheless still actively killing vultures. The protocol therefore merely adds support to this anti-conservation practice by the industry which tolerates CV turbines collisions and which is also an approach tolerated by the DFFE. Much media fanfare accompanies the offsetting efforts, which are presented in the media as proactive and magnanimous conservation contributions by the WEF companies and even the associated conservation organisations, so as to divert attention away from the real problem of those corporates’ WEFs still killing CVs (and white-backed vultures).</p>		<p>may need to be applied to ensure that the developer is aware of the extent of expected mitigation before proposing the site. Offsets is not currently the favoured approach to WEF as this would entail the death of an endangered species. Offsets are applicable to land impacts not bird impacts. The model on which the Cape Vulture risk model is based is not based on Safe Zones, but rather identifying risk of where Cape Vultures are likely to be active. The monitoring will determine if the risk of collision is confirmed to be high or very high, and the protocol will provide further guidance on what the assessment should needs to cover. The assessment would identify the levels of risk as well as identify any mitigation measures. The assessment would then again determine the risk once the mitigation measures have been considered. If the risk assessment identifies that the risks are still too high, the site would be identified as being not acceptable for consideration, and the developer will need to consider an alternative site.</p> <p>Offsetting is not an appropriate mitigation measure for bird strikes related to an endangered species.</p>
3.1.13	Andre van der Spuy	<p>The protocol requires that a CV specialist assessment be undertaken where a site is verified to be a “high” or Very High” sensitivity CV site. This approach is again anti-CV conservation since such confirmation of sensitivity</p>		<p>The comment is noted but not supported Please refer to the response provided in #1.1.1.</p>

		should immediately designate the proposed site as a “no go” site (and area) for WEF development. For the protocol to even consider WEF further is a violation of the “risk averse and cautious approach” advocated under NEMA.	
3.1.14	Andre van der Spuy	Point 2.2.1. of the protocol should rather include the requirement that all intended, planned, approved and built developments of any type which are located within at least 80km of the proposed WEF site, and as specified by recognized vulture conservation organizations such as Vulpro, be considered. The consideration of only WEFs within 30km radius reflects an ignorance towards the spatial extent of CV habitat and movements and is entirely inadequate. Furthermore, it will fall short of the requirements for a cumulative impact assessment as provided for under NEMA. Same applies to point 2.7.3.	The screening tool Cape Vulture risk layer identifies areas in which Cape Vulture activity is expected, therefore the spatial extent has been factored into the risk layer. The site specific monitoring will then determine the level of activity over the actual site. It is therefore not necessary to consider such a large area for vulture activity. Merely having vultures in the 100km areas does not mean more in terms of risk. If you have vultures using flight paths over the identified site the risk is very high. The 30km radius is for powerlines when considering cumulative effects.
3.1.15	Andre van der Spuy	The further numerously stated general specification of 30km radius around the proposed WEDF site given in the protocol for consideration of CV related features is entirely inadequate. There is no appropriate radius given the extent of CV habits but, as a crude application of the “risk averse and cautious approach” required under NEMA, it is suggested that the specification should	Please see the response to #3.1.14 above.

		be at least a 100km radius around the targeted site.		
3.1.16	Andre van der Spuy	Points 2.8.10 and 2.8.11 where, for instance, the specialist is required to indicate the “potential annual fatality rate” of CVs, indicates the tolerance of the protocol towards accommodating predicted CV losses from a proposed WEF within a high or very high sensitivity area. The wide scope of discernment allowed to the DFFE competent authority and the CV specialist in the protocol raises significant concern in regard to the effectiveness of the protocol to limit CV-damaging WEF development (it clearly does not seek to prevent it).		This does not identify a tolerance for bird fatalities. It is required in order to understand the risk associated with the death of one bird on the national and regional population. Only through a full understanding of the risks can a decision-maker make an informed decision. Please also refer to the response provided in #3.1.14.
3.1.17	Andre van der Spuy	Under point 2.9 extensive scope is given to the application of mitigation measures and Point 2.9.4. even refers to the “acceptable number of fatalities”! The fact is that CV fatalities from WEFs cannot be effectively mitigated and the consideration of mitigation and the acceptance of fatalities simply provides substantial scope for speculative and over-optimistic impact predictions by unscrupulous operators and officials to the detriment of real CV conservation. If CV fatalities are predicted at any level, then the WEF application must be refused irrespective of impact mitigation proposals (which are inevitably		<p>The acceptable number of fatalities could be 0, this would depend on the impact on the population size.</p> <p>In terms of mitigation, please note that mitigation is possible through micro siting and curtailment of the functioning of the turbine. Success has also been identified in the changing of the cut in speed of the turbine.</p> <p>The impact on the population will determine an acceptance of any fatality, it is unlikely for an endangered species that any fatality rate would be found to be acceptable.</p>

		speculative and exaggerated in their level of effectiveness by the specialists).	
3.1.18	Andre van der Spuy	<p>Points 2.12 and 2.13 are concerning in that their specifications regarding post-construction monitoring and record of CV fatalities indicates a continuing direct accommodation in the electricity generation plan for SA of CV-killing WEFs and which is surely a violation of NEMA and the Convention on Biodiversity.</p> <p>CVs range extensively over the three-dimensional landscape and their habitat encompasses probably the majority of the country. This is a fact that the DFFE needs to honestly accept and plan for accordingly. The implication is that any WEF located within SA is very likely to be located within CV (and other vulture) habitat and to thus amount to unsustainable development. No amount of “micro-siting” or inter-site planning will be of any real effect in mitigating such given the relative scale of such insignificant changes.</p>	<p>It is not to say that because it is required that the developer monitor fatalities that one would be expecting them. Monitoring is required to ensure the ongoing acceptability of mitigation measures, which is a principle in integrated environmental management. If you are expecting 0 fatalities and fatalities are recorded then additional mitigation must be applied or the responsible turbine shut down. If you were not monitoring these events, additional mitigation could not be applied.</p> <p>Please see the response to #1.1.1.</p>
3.1.19	Andre van der Spuy	<p>It is a fact that other vulture species, not only CVs, are being killed by WEFs in SA. An Enel WEF near Copperton has recorded numerous fatalities of White-backed Vultures, an Endangered bird, for instance. The protocol fails to address this important gap (it does not intend to).</p>	<p>The WEF's referred to have been authorised and constructed without the benefit of the further guidance that this Protocol is intended to provide to the developer, specialist and decision maker.</p>

		<p>In summary, the Protocol threatens to do more harm than good in terms of CV conservation. It is overly lenient in its tolerance of CV-damaging WEFs located in CV habitat. Any potential WEF location in which vultures are observed or known to occur, even if just occasionally, is unsuitable for WEF development. More potentially environmentally sustainable energy generation options can then be considered such as possibly solar PV.</p>		<p>The view is noted but not supported, the protocol provides additional protection through the requirement for additional monitoring, more stringent assessment requirements and more specific post construction monitoring.</p>
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