



**MINISTER  
FORESTRY, FISHERIES AND THE ENVIRONMENT  
REPUBLIC OF SOUTH AFRICA**

**Reference: LSA 191558**

**APPEAL DECISION**

**APPEALS AGAINST AN ENVIRONMENTAL AUTHORISATION GRANTED FOR THE  
PROPOSED 140MW BOULDERS WIND FARM WITHIN THE WEST COAST DISTRICT  
MUNICIPALITY IN THE WESTERN CAPE PROVINCE**

Aksie Paternoster Action Group	First Appellant
Andre Kleynhans	Second Appellant
Beverly Pickford	Third Appellant
Cape West Coast Biosphere Reserve	Fourth Appellant
Christina H Coetzee	Fifth Appellant
Daniel G. Kotze (Rooiheuvel Trust)	Sixth Appellant
David J S Westbrook	Seventh Appellant
1050 Paternoster (Pty) Ltd	Eighth Appellant
Deon Van Schalkwyk	Ninth Appellant
Anne and John Todd	Tenth Appellants
Louis Engels	Eleventh Appellant
Marion Lubitz	Twelfth Appellant
Aurora Wind Power (RF) (Pty) Ltd	Thirteenth Appellant
Marx and Mary Ralphs	Fourteenth Appellant
Michael Anderson	Fifteenth Appellant
Cape Columbine Conservancy,	

Groot Paternoster Nature Reserve, and  
Shelley Point Home Owners Association

Sixteenth Appellants

Vredenburg Wind Farm (Pty) Ltd

Applicant

Department of Environment, Forestry and Fisheries

Competent Authority

**Appeal:** Sixteen appeals were submitted by the abovementioned appellants (collectively referred to as the appellants), against the decision of the Chief Director: Integrated Environmental Authorisations of the Department of Environment, Forestry and Fisheries (the Department) to grant an environmental authorization (EA) to Vredenburg Windfarm (Pty) Ltd (the applicant) on 14 January 2020, in respect of the proposed 140 MW Boulders Wind Farm within the West Coast District Municipality, in the Western Cape Province.

## **1. BACKGROUND AND APPEAL**

- 1.1 On 28 February 2018, the applicant lodged an application for an EA with the Department for the proposed 140MW Boulders Wind Farm within the West Coast District Municipality in the Western Cape Province.
- 1.2 The Boulders Wind Energy Facility (WEF) will produce up to 140 MW, consisting of up to 47 turbines.
- 1.3 The applicant commissioned an independent environmental consultancy, namely Coastal and Environmental Services (CES), to conduct an Environmental Impact Assessment (EIA) for the above-mentioned application. The final Environmental Impact Assessment Report (EIAR) and the Environmental Management Programme (EMPr) were received by the Department on 16 September 2019. After evaluating the final EIAR and EMPr, the Department decided to grant an EA to the applicant on 14 January 2020.
- 1.4 Subsequent to the abovementioned decision of the Department, the Directorate: Appeals and Legal Review (Appeals Directorate) within the Department received sixteen appeals

from the abovementioned appellants. Registered interested and affected parties (IAPs) were notified of the aforesaid decision on 20 January 2020. Considering the provisions of regulation 4 of the National Appeal Regulations, 2014 (2014 Appeal Regulations), 16 appeals were lodged timeously against the proposed WEF by 10 February 2020.

1.5 As per regulation 5 of the 2014 Appeal Regulations, the responses to the appeals were due to be submitted on or before 2 March 2020. On 20 February 2020, the applicant submitted a request for extension to the Appeals Directorate, requesting a twenty (20) day extension until 23 March 2020 to submit their response to the appeals lodged against the abovementioned EA. A copy of this request was also sent to the sixteen appellants. Fourteen appellants submitted objections to the request for extension.

1.6 After considering the request for extension, as well as the objections thereto, the request for extension was granted by the Director of the Appeals Directorate on 28 February 2020. Responses to the appeals were subsequently submitted by the applicant on 20 March 2020.

1.7 A copy of the appeals were also provided to the Department so as to source comments on the grounds of appeal. Their comments were received by the Appeals Directorate on 28 February 2020.

1.8 On 31 March 2020, Mr Diemont, on behalf of the thirteenth appellant, Aurora Wind Power (RF) (Pty) Ltd (interchangeably referred to as the thirteenth appellant / Aurora), sent an email to the Appeals Directorate, requesting the opportunity to submit an answering statement. This statement was thereafter received by the Appeals Directorate on 19 May 2020.

1.9 The appeals are premised on the following grounds:

1.9.1 Tourism and impact on property

1.9.2 Heritage impact

1.9.3 Visual impact

- 1.9.4 Avifauna impact
- 1.9.5 Public Participation Process (PPP)
- 1.9.6 Job opportunities
- 1.9.7 Aviation
- 1.9.8 Alternatives
- 1.9.9 Bias
- 1.9.10 Flawed EIA process
- 1.9.11 The EMPr is not approved
- 1.9.12 Wake effects

## **2. EVALUATION**

### **2.1 *Tourism and Impact on property***

- 2.1.1 The first and fifteenth appellants submit that there are misguided economic comparisons with the WEFs close to Vredenburg and St Francis Bay. These appellants go further to contend that there are misleading comparisons of the impact on property values by the WEFs in Vredenburg and St Francis Bay.
- 2.1.2 The fourth appellant contends that there are potential negative effects on the local tourism industry, especially as tourism is a major employer in the West Coast area. The ninth appellant contends that the negative visual effect will, without a doubt, result in a decline in tourism.
- 2.1.3 The fifth appellant states that Paternoster has been described by many as '*The jewel of the West Coast*' and draws tourists from all over the world and the economic well-being of Paternoster depends highly on the income from tourists. The seventh appellant contends that there are clear indications of potential property and revenue loss.
- 2.1.4 The eighth appellant contends that the specialist study on tourism, property values and economic impacts failed to acquire sufficient information relating to Paternoster and is therefore sloppy and totally deficient. The appellant argues that the EIAr failed to take into

consideration that the municipality's Spatial Development Framework (SDF) provides for tourist development on the beachfront land next to the proposed WEF. The tenth appellant contend that the EIAr provides no scientific facts that the project will not affect tourism and property prices, but merely supplies selected case histories, some from other countries.

- 2.1.5 The eleventh appellant strongly believes that she will suffer a loss in property value and states that she would never have considered buying this property in 2015 if she knew a WEF development was proposed for the valley and she doesn't believe any future buyer would consider buying a property right next to a WEF. The eleventh appellant states that an estate agent named Charmaine Swanepoel from Chas Everitt, has stated that they are very worried about the effect on the property market in St Helena Bay due to the WEF development. Further to this, the appellant contends that the proposed WEF with new access roads will promote an influx of criminal elements, as was experienced with all developments of this nature.
- 2.1.6 In response to this ground of appeal, the applicant submits that most of the arguments raised under this ground of appeal are unsubstantiated and/or are subjective statements or opinions that does not invalidate the Department's reasons for issuing the EA. According to the applicant, two sites were selected since they would provide meaningful comparisons, as the existing West Coast One WEF (WC1) is immediately adjacent to the proposed Boulders WEF and Cape St Francis is also a coastal community reliant on tourism where 4 to 5 WEFs have been constructed.
- 2.1.7 The applicant states that issues relating to tourism have been dealt with comprehensively in the Property, Tourism and Economic Assessment conducted by Urban-Econ. The applicant further provides that no evidence is provided to substantiate the allegation that the proliferation of WEF operations will have a significant negative impact on the local tourism industry. Further to this, the applicant provides that the specialists, namely Urban-Econ, are well respected and capable South African professional economic consultants and their study is of a high standard and it is denied that there has been a breach of the requirements of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA) The study, according to the applicant, dealt effectively with the main concerns

raised by the I&AP's, including impacts on tourism and property prices, as well as economic impacts such as job creation.

2.1.8 The applicant also provides that SDFs are merely planning guidelines. Furthermore, there are a number of existing WEFs within the area and the closest turbine of the Boulders Wind Farm to the beach is 6km, which is quite some distance from the beachfront. In addition, the applicant explains that there is little visual impact on most of the beachfront of Paternoster due to the natural vegetation and the dunes along the beach. The applicant explains that the Social Impact Assessment (SIA) identified crime associated with the influx of workers during the construction phase as a potential issue, but determined the risk to be low and furthermore the duration of the construction phase of the project is for a limited period.

2.1.9 In their comments on this ground of appeal, the Department states that the economic specialist investigation into the potential impacts on property values and tourism indicated that these impacts are likely to be low or absent. In addition, the Department states that the property value study was updated to specifically look at the potential impacts on homeowners with properties on the ridgeline in Britannica Heights and found that their property values will not be affected.

2.1.10 Furthermore the Department states that the main tourism activities in Paternoster include whale watching and visiting the Cape Columbine Nature Reserve. The Department provides that the development of the WEF will likely increase business tourism to the area and increase the demand for accommodation and catering. The Department states that the following mitigation measures are included in the EIAr:

2.1.10.1 Introducing a visitors centre could assist developing a new form of tourism that could also extend the demand for tourism products into the off-peak season.

2.1.10.2 Procure local accommodation for out-of-town construction and engineering crew.

2.1.10.3 Consider contracting local catering facilities for the provision of catering services.

2.1.11 The Department states that the chances of the negative impacts on tourism and property values are acknowledged, however are anticipated to be small given the research findings of International studies. The Department provides that the SDF also states that the demand for renewable energy has increased and will continue to increase as infrastructure develops within the area and the population growth results in more demand for electricity in the future. Furthermore, the Department states that the SIA has identified the crime and theft risks on neighbouring farms that may be associated with the influx of job-seekers as a potential negative impact of low significance due to the relatively small size of the development and job creation potential.

2.1.12 In evaluating this ground of appeal and responses thereto, I note from the information before me that the applicant commissioned a Property Values, Tourism and Economic Issues Assessment. This assessment finds that:

*"While the possibility of negative impacts on property prices and tourism cannot be ruled out completely, research shows that if any, the impacts on tourism will be marginal while the effect on property prices will dissolve once the wind farm is developed. Based on the experience of WC1 and wind farms in the Cape St Francis and Jeffry's Bay area, and other research, there is no clear correlation between property price dynamics (positive or negative) and the development of wind farms".*

2.1.13 I further note from page 214 of the EIAr that:

*"The economic specialist investigation into the potential impacts on property values and tourism indicates that these impacts are likely to be low or absent. This conclusion is further supported by the fact that these tangible impacts have not materialised as a result of the West Coast 1 development which has been in operation for almost 3 years. A similar experience has been seen for wind farms located near Cape St Francis and Jeffrey's Bay in the Eastern Cape. In addition, the property value study was updated to specifically look at the potential impacts on homeowners with properties on the ridgeline in Britannica Heights and found that their property values will not be affected".*

- 2.1.14 In addition I note that the applicant conducted an analysis of historic property sale prices and interviews with nine (9) Estate Agents. I note the following from the Property Values, Tourism and Economic Issues Assessment report:
- Page 49 – *"No apparent change in freehold property prices has been identified for Vredenburg due to the development of West Coast One WEF."*
- Page 55- *"The review of the property transfers in Britannica Heights in the past few years does not given any indication that the demand or property prices have been negatively impacted by the development of the West Coast One wind farm with the closest wind turbines located some 6 km away from the properties on Vasco da Gama Crescent."*
- Page 57 – *"The experience of all (nine -9) real estate agents interviewed asserts that wind farm developments have not had a notable effect on the demand and value of surrounding properties. They state that prospective buyers have mostly been indifferent to the presence of wind farms. One real estate agent from Saint Helena Bay stated that one property owner complained that they would not have purchased the property had they known about the development of the West Coast One Wind Farm. This is the only opposing case that was presented."*
- 2.1.15 While I note the concerns around an increase in criminal activities, the SIA rates crime as negative impact of low significance. Further to this I find that the assessment provides appropriate and adequate mitigation measures to limit the identified impact such as maximising the employment of local residents, limiting the residence of workers on site to key security personnel, entering into security agreements with local farmers and compensating them in the event of theft and damages, the transport of workers to and from the site on a daily basis, implementation of a Code of Conduct for construction workers and the dismissal of workers found guilty, and developers holding contractors liable for any theft or damages caused by their employees.
- 2.1.16 Based on the above, I am inclined to conclude that the potential impacts associated with property value, tourism and the economy have been adequately assessed. Further to this, I cannot find that the issuance of the EA is contradictory to the SDF. As a result thereof, this ground of appeal is accordingly dismissed.



## **2.2 *Heritage Impact***

- 2.2.1 The first and fifteenth appellants contend that the applicant disregarded the heritage values of Kasteelberg. The third appellant contends that the mitigation measures proposed by the applicant does not satisfy the mitigation requirements of the Heritage Impact Assessment (HIA).
- 2.2.2 The sixth appellant, a neighboring farm owner, and the fifteenth appellant contend that the turbine buffer zone of 3.5 km around Kasteelberg Heritage Resource, set by CEO of Heritage Western Cape Mr Andrew Hall, was not adhered to and most of the WEF turbines fall within this buffer zone. The sixth appellant states that he will not allow this WEF to be approved with a buffer zone around Kasteelberg of less than 3.5 km. The sixth appellant's argument focuses around comparing the proposed WEF with the established WC1 WEF and it is argued that the type of development is exactly the same and therefore the same rules should apply. The sixth appellant contends that the heritage significance of Kasteelberg remains unchanged and therefore the buffer zone applicable for the WC1 WEF project should be applicable to the proposed Boulders WEF. The sixth appellant contends that the heritage and visual impact and sense of place for this proposed project is still high post mitigation. In this respect, the appellant refers to specific pages of the EIAr. The eighth appellant contends that the HIA recommendations are based on an untested assumption regarding the social benefits of the project.
- 2.2.3 The ninth appellant contends that the historical significance of Paternoster and Kasteelberg which will be almost surrounded by turbines will be disrespectful to the Khoi-Khoi people.
- 2.2.4 In response to this ground of appeal, the applicant denies that the heritage values were disregarded. According to the applicant, Heritage Western Cape Heritage Resource Agency (WC HRA) has accepted the proposed alternative where seven turbines were relocated, five to the east and two to the south of the Vredenburg to Paternoster road.

- 2.2.5 In their comments on this ground of appeal, the Department states that the Kasteelberg cultural/historical site is not declared as a Protected Heritage Site by Heritage Western Cape. Furthermore, the cultural scenic value and archaeological sensitivity/value of this site is largely informed by the HIA report prepared by Katie Smuts, dated 17 August 2019. The Department further provides that according to the Heritage Western Cape comments, the committee supports the development alternative 2 and has no objection to the development proceeding. The Department provides that the HIA concludes that the project is not fatally flawed from a heritage perspective with the current layout, but that further improvements could be effected by removal of all turbines west of the Vredenburg-Stompneus Bay road and reduction in turbine heights.
- 2.2.6 In evaluating this ground of appeal and the responses thereto, I note that the applicant caused a Heritage, Archaeological and Palaeontology Impact Assessment to be commissioned. I note that the site layout was further refined to adhere to the recommendations of the HIA, where seven turbines were relocated, to produce a final mitigated layout. The EIA specialist studies assessed the relative impacts of both the pre-relocation of 7 turbines and post-relocation of 7 turbines.
- 2.2.7 Importantly I note that the project site contains no proclaimed heritage sites in the form of either Provincial or National Heritage Sites, and there are no scenic routes proclaimed in the wider region. Kasteelberg koppie, however, retains very high significance in the landscape as the focus of human activity since the Middle Stone Age, and for religious, spiritual and symbolic purposes over the past 2000 years. Kasteelberg was identified in the late 1990's as a site worthy of declaration as a National Monument. Heritage Western Cape has attempted to have the Kasteelberg Archaeological site declared as a provincial heritage site but to date this process has not been successful. Therefore Kasteelberg koppie is not yet a protected area as contemplated in terms of the National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003) (NEMPAA).
- 2.2.8 I further note condition 15.16 of the EA which provides that the EMPr amendment must include *"A Heritage Conservation Management Plan (HCMP) inclusive of management procedures to protect and manage the identified rocks art sites and burial grounds"*.

2.2.9 I further note that the EA contains the following conditions:

- "48. Accidentally discovered archaeological material must be reported to the Provincial Heritage Authority in terms of section 35 of the National Heritage Resources Act. The finds must also be reported to the appointed archaeologist for assessment and possible action.*
- 49. Accidentally discovered human remains must immediately be reported to the Provincial Heritage Authority in terms of section 36 of the National Heritage Resources Act. The finds must also be reported to the appointed archaeologist for assessment and possible action.*
- 50. The Heritage Western Cape Chance Fossil Finds Procedure must be included in the Environmental Management Programme (EMPr) and implemented in the case of fossil remains being encountered."*

2.2.10 In light of the foregoing, this ground of appeal stands to be dismissed as I believe that the abovementioned mitigation requirements of the Heritage Impact Assessment (HIA) are sufficiently addressed in the EA.

## **2.3 Visual Impact**

2.3.1 The third appellant contends that the Visual Impact Assessment (VIA) offers no mitigation measures. According to the third appellant, the second VIA produced in-house by the Environmental Assessment Practitioner (EAP) is an unprecedented departure from procedure and was compiled by unqualified VIA specialists.

2.3.2 The fifth appellant contends that the VIA concluded that the visual impact is high however this was seriously downplayed. The sixth and fifteenth appellants further contend that the Vredenburg-Paternoster Road (P2160) is a gravel road and will be completely tarred during 2020, making this road a scenic road as in the case of the R399 (R45) between Vredenburg and Paternoster. The sixth appellant explains that the R399 road has a turbine buffer zone of 2 km on either side of the road, so this should be the new buffer set for the

P2160 from Vredenburg to Stompneusbay as well, because all the residents of Stompneusbay; Brittaniabay and St Helena Bay, as well as tourists and visitors, will be using this road. The eleventh appellant also contends that the R399, which due to its large traffic volume and link between Paternoster and Vredenburg, is being considered as a scenic route. The eighth appellant contends that the visual impact of the project will be unacceptably high for the communities in its close proximity and will have a dominating and intrusive presence and will materially and detrimentally affect the sense of place of these residents. The eighth appellant argues that the West Coast District Municipality, amongst many others, regards the project as visually unacceptable. The ninth appellant contends that the most disturbing effect is the white flashing lights during the day and red lights at night, especially if you were heading down the main street.

**2.3.3** The tenth appellants attach pictures to its appeal so as to show the visual intrusion caused by the existing WEFs in the area. The tenth appellants argue that the EIA appears to only consider the benefits to the grid and green energy, but no negative effects to the area or the local community are considered. I further note other appellants also raise concerns relating to the visual impacts of the proposed WEF.

**2.3.4** In response to this ground of appeal, the applicant provides that VIA is not a fatal flaw. According to the applicant, condition 14 of the EA specifically states that the EMPr is not approved and condition 15 requires that the EMPr must be amended to include all recommendations and mitigation measures recorded in the EIAr, as well as those listed in the specialist reports. Thus the applicant explains that mitigation measures shall be implemented as required by the EA. Moreover, the applicant states that all I&APs will be provided with a further 30 day opportunity to review and comment on the revised EMPr and which comments will be submitted to the Department for consideration and determination of whether to approve the revised EMPr or not.

**2.3.5** The applicant explains that the EIAr and VIA confirm that the visual impacts remain high but does not represent a fatal flaw. The applicant refers to the summary of the VIA in the EIAr captured under section 9.11 on page 146 of the EIAr which provides that:

*"The wind farm will undoubtedly be imposing and dominate the visual landscape for those in close proximity. However, based on the assessment of significance in the VIA, it is concluded that the potential losses of scenic resources are not sufficiently significant to present a fatal flaw to the proposed project...."*

- 2.3.6 According to the Department, a high visual impact does not imply a fatal flaw. The Department provides that a large number of specialist studies have been conducted. These included the assessment of the potential visual, social and economic impacts that the development would have on the area. According to the Department there are no restrictions on the EAP undertaking additional assessments to confirm the outcome of another specialist report, especially relating to an issue that is very controversial, such as the visual impacts. The Department provides that the EAP considered this to be both prudent and responsible. In this instance, the EAP's visual specialist was able to independently largely confirm the results obtained, providing further comfort on this matter.
- 2.3.7 In addition, the Department provides that the visual information, findings and recommendations from the LoGIS study are the results reflected in the EIAr. The EAP's VIA was not used to assess visual impacts but to confirm the findings of the VIA conducted by LoGIS. The additional study has, therefore, not resulted in any change but simply serves to give the EAP and the applicant more confidence in the findings. The Department also explains that the overall significance of daylights and nightlights has been identified as moderate.
- 2.3.8 In evaluating this ground of appeal, I note that the most common comments raised during the EIA process were related to the high visual impact and the anticipated impact this WEF would have on tourism and property values, with many arguing that this was a fatal flaw, particularly people involved in the local tourism industry and the affected residents along the top of Britannica Heights. Thus the visual impacts of the proposed Boulders Wind Farm on the landscape was identified as a significant environmental issue during both the scoping phase of the EIA processes and a VIA was conducted by Logis (Mr Lourens Du Plessis).

2.3.9 An additional VIA was conducted by the EAP, CES, to verify the findings of the Logis VIA. This study was consistent with the Logis study and I note both VIAs can be found as appendices to the EIAr Specialist Report section.

2.3.10 The VIA indicates that the mitigation of this impact is possible and entails the relocation of the wind turbines (13 in total) to the east of the road or outright removal of the wind turbines in the event that they cannot be accommodated to the east of the road.

2.3.11 I note from the EIAr that overall, the visual impacts of the proposed Boulders Wind Farm remain high after the implementation of the mitigation measures. This includes the cumulative impact of multiple wind farms in the region. The wind farm will undoubtedly be imposing and dominate the visual landscape for those in close proximity. However, based on the assessment of significance in the VIA, I note from page 146 of the EIAr that the potential losses of scenic resources are not sufficiently significant to present a fatal flaw to the proposed project given the following:

2.3.11.1 The superstructures are technically removable on decommissioning;

2.3.11.2 Certain mitigation recommendations in the EIAr;

2.3.11.3 An understanding that although there are local losses, there are also other local, regional and national environmental, social and economic gains;

2.3.11.4 Authentic efforts to ensure certain benefits accrue to those in close proximity to the development in terms of socio-economic development initiatives; and

2.3.11.5 That turbine structures are not a new feature to this particular landscape.

2.3.12 While the visual intrusion is unavoidable, I find that the visual impacts associated with the proposed project does not constitute a fatal flaw in the EIA process or the issuance of the EA. I find that the visual impacts have been adequately assessed and that a further verification assessment was conducted by the EAP. The fact that the visual impact is rated high does not essentially entail that the proposed project should be refused.

2.3.13 As a result thereof, this ground of appeal is dismissed.

## **2.4 Avifauna**

- 2.4.1** The third appellant contends that there are fatal flaws present in the avifaunal impact assessment (AIA) report. The third, as well as the sixteenth appellant, aver that the avifauna report is chronically deficient and cannot be used as a reference on which to base an "informed decision". It is contended that the avifauna report was compiled by a discredited specialist known to favour developers and the peer review of the avifauna report by Dr Andrew Jenkins, the country's foremost authority on avifauna and wind farms was dismissed as "not relevant" by the EAP. The third and sixteenth appellants contend further that a second avifauna specialist, Dr Rob Simmons, has upheld the review of Dr Jenkins and dismissed the validity of the avifauna report. According to the third appellant, Dr Simmons report states that the Boulders Wind Farm report threatens endangered species and must be re-done thus the avifauna report needs to be entirely re-done.
- 2.4.2** The fourth appellant states that they are concerned about the impact on birds and bats, as the proposed WEF is in the flight path of birds between the Bergriver Estuary, the coastal areas of the Saldanha Peninsula and the RAMSAR site in the West Coast National Park to the south. The fourth appellant contends that turbines should be visible to avifauna when they in flight and questions how the impact on avifauna and flying mammals will be mitigated.
- 2.4.3** The fifth appellant contends that the avifaunal study is considered totally inadequate, as it was obviously done by foreigners who do not have the necessary knowledge of South African birds. The tenth appellant contends that the AIA is outdated and gives no accurate figures for bird and bat fatalities at the existing WC1 WEF.
- 2.4.4** The fourteenth appellants state that in the draft EIAr, the applicant provided an avifauna report that was both inadequate and inaccurate but submissions made pointing out these problems were disregarded. As evidence of this the appellants refers to the report by Dr Simmons attached to their appeal. The fourteenth appellants argue that the extent to which the applicant has got things wrong with regard to avifaunal impact is alarming and reflects

badly on their choice of expert advisors and casts doubt on the validity of all their findings and conclusions.

- 2.4.5 In response to this ground of appeal, the applicant provides that this issue was raised by many I&APs in the PPP and was responded to by the EAP. Furthermore, the applicant states that the issue was comprehensively dealt with in the EIAr and therefore this issue and these comments have already been considered by the decision maker prior to making a decision to grant the abovementioned EA.
- 2.4.6 The applicant denies the allegation that they have dismissed Dr Jenkins avifaunal report. The applicant states that the avifaunal specialists have provided comprehensive responses to queries relating to avifaunal impacts, as reflected in the comments response report (CRR). According to the applicant, it is factually incorrect that Dr Jenkins' report was dismissed as not relevant. The applicant states that, in response to this ground of appeal, a response to Dr Simmons report has been provided by the Avifaunal Specialist, Bio-Insight. The applicant quotes Bio-Insight's response.
- 2.4.7 In response to the fourth appellant's appeal, the applicant provides that avifaunal issues are dealt with comprehensively in the specialist avifaunal study and impacts deemed to be within acceptable limits. The applicant highlights the relevant avifaunal mitigation measures provided in the EIAr and explains that the mitigation measures suggested by the avifauna report shall be included in the revised EIAr and EMPr and consequently implemented. Moreover, all I&APs will be provided with a further 30 day opportunity to review and comment on the revised EMPr and which comments will be submitted to the Department for consideration.
- 2.4.8 In response to the fifth appellants' contentions, the applicant states that such contention is a highly personal opinion about the technical capabilities of the bird specialist team, ignoring the fact that the lead specialist investigator is registered as professional member in compliance with the Natural Scientific Professions Act of 2003. The applicant's bird specialist team highlights that by combining local and international expertise should be seen as beneficial to the process, adding a substantial know-how, not only with regard to



South African Birds but also to the technical coverage of overall impact assessment processes and knowledge of potential WEF impacts on biodiversity, monitoring, mitigation.

2.4.9 In their comments, the Department states that the AIA proposed mitigation measures, which are based on international standards, the author's expertise and follow the general indications from the recent publication "*Birdlife South Africa and Endangered Wildlife Trust recommended conditions of approval for all wind energy facilities to monitor and reduce potential impacts on avifauna*" (BirdLife South Africa & EWT 2015). Further to this, the Department states that the EAP took all the specialist studies into account and provided recommendations. According to the Department, the Avifauna studies prepared by Bioinsight (Pty) Ltd and GAIA Environmental Service, states that with the implementation of the proposed mitigation measures provided in the EIAR, the project will not cause irreplaceable loss of avifauna biodiversity and as such, no fatal flaws were identified for the project.

2.4.10 The Department provides that the following features were considered for the definition of sensitive areas:

2.4.10.1 Areas of drainage lines and natural vegetation used by raptors and other sensitive species (such as Blue Crane) and are associated to have a high probability of collision consistently throughout the year. Furthermore, natural vegetation represents an important habitat for sensitive, endangered species, such as the Black Harrier. A 200m buffer around these areas must be considered NO-GO and no turbines are to be sited in these areas.

2.4.10.2 A 200m buffer around water bodies, as these features may attract birds under certain conditions and are the only places where certain sensitive species such as Greater and Lesser Flamingos were observed. These areas must be avoided and are considered NO-GO areas.

2.4.10.3 A 500m no-go areas buffer and 2000m medium sensitivity buffer around the active Secretarybird nest identified during the pre-construction monitoring period. 500 metres around this active raptors nest must be considered as a NO-GO area (no wind turbines are proposed for this area). Additionally, a 2000m buffer has been established around the nest to prevent disturbance of these particular individuals during the construction phase.

2.4.11 Further to the above, the Department states that the Directorate Biodiversity Conservation within the Department does not have any objections for the proposed development.

2.4.12 In evaluating this ground of appeal, I note the document compiled by Bioinsight (Pty) Ltd dated 25 February 2020. The said document states as follows:

*"Regarding the new contents presented by the author regarding Black Harriers, several assumptions on the negative impacts due to the presence of the species and the existence of suitable breeding habitat near the wind farm can be highlighted as the focal points in Dr. Simmons' report.*

*The population viability modelling (for the Black Harrier) conducted by Dr. Simmons is relevant in showing the decline of the species' population. This result is in accordance with bibliographic data that specifies that the species has a decreasing population trend (Taylor, 2015). Also relevant to note is that the Black Harrier population currently has a declining trend independent of wind farm impacts, i.e., regardless of whether or not the presence of a wind energy development exists. Nonetheless, as specialists, Bioinsight concurs that wind farms may be an aggravating factor if significant fatalities occur and if significant negative impacts are proven to compromise the viability of the Black Harrier population during the lifetime of a wind farm.*

*Dr. Simmons is implying that the facility will likely cause Black Harrier fatalities. This assumption is based, among other factors, on the relation of results between the proposed Boulders wind farm and that of its neighbouring West Coast One wind farm (currently in operation). Bioinsight reaffirms that the potential occurrence of mortality of Black Harriers due to the Boulders WEF operation is a potential negative effect that was duly assessed in the final IA report. We also reiterate information considered in the assessment of this species:*

- The presence of the species was also confirmed by Bioinsight. The evidence that we possess tells us that it is true that the Black Harrier uses the area. However, in accordance with the results of field data, the species wasn't registered in high*

*abundances and the majority of Black Harrier flights were observed below the rotor swept zone.*

- Although there is always uncertainty surrounding potential fatalities on proposed wind farms, the comparison with nearby wind farms located in similar habitats may serve as reference, as in the example of the West Coast One wind farm. Bioinsight notes that, from the information made available to us, the results from the neighbouring West Coast One wind farm have not yet yielded any indication that the species is being negatively affected in terms of mortality in the area, since no fatality occurrences of Black Harriers have yet been identified (Jenkins et al., 2017) (Arcus Consulting, 2019).*

*Regarding the indication in Dr. Simmons report that the area forms suitable breeding habitat for Black Harrier, Bioinsight also confirms that this has already been noted in the final specialist IA report. In fact, it is stated that the broader area is known for the breeding of certain species such as Black Harriers. It was also mentioned that natural vegetation was relevant for some endemic bird species, such as the Black Harrier. As such, based on the data gathered, this type of vegetation, together with drainage lines, has already been classified as sensitive areas and subsequently buffered by 200m. These areas have been defined as "No-Go" areas for the placement of wind turbines.*

*In his report, Dr. Simmons also suggests that the matter of varying turbine heights were also somewhat overlooked. He makes mention to the fact that taller turbines kill disproportionately more birds than shorter ones (Loss et al., 2013), and that as a result – Boulders WEF will be worse than the neighbouring West Coast One project, in terms of the fatalities that it causes. While Bioinsight is aware of this article/research, we also make reference to other studies, whereby they found that no relation exists between bird fatalities and turbine heights.*

*In summary, given all the above, although we acknowledge the relevance of the information provided by Dr. Simmons regarding the Black Harrier, we found no evidence that could justify changes to the conclusions in the final IA report, at this stage."*

- 2.4.13 There is no evidence before me to suggest that the Bioinsight team appointed to conduct the avifaunal study is incompetent or unqualified to perform the study. In fact there is

sufficient information before me to suggest otherwise. I am further of the view that combining local and international expertise is beneficial to the EIA process, particularly in assessing potential WEF impacts on biodiversity and recommending appropriate monitoring and mitigating measures.

2.4.14 I note from page 94 of the EIAr that the bird community located within the project site has been confirmed through an avifauna pre-construction monitoring campaign, as well as a radar monitoring campaign. The data collected at the site indicated that the most abundant groups of birds recorded were water birds and Cranes (Blue Crane being the only Crane species recorded). Other than the Blue Crane, twelve species with a conservation status of concern were recorded. These twelve species are Black Harrier, Martial Eagle, Verreaux's Eagle, Secretary bird, Lanner Falcon, Cape Cormorant, Greater and Lesser Flamingo, Great White Pelican, Caspian Tern, Ludwig's Bustard and Southern Black Korhaan.

2.4.15 There is thus important and vulnerable bird communities located within the project area. The Boulders Wind Farm is located in a medium sensitivity area, however the sensitivity rating is not considered an impediment for the construction and operation of the proposed wind energy facility, as long as the appropriate mitigation measures are implemented. Although impacts cannot be totally eliminated, they can be minimised to the maximum extent possible, through the avoidance of no-go areas and the implementation of the recommended mitigation measures. The EIAr suggests that with the implementation of the proposed mitigation measures, the project will not cause irreplaceable loss of avifauna biodiversity and no fatal flaws were identified for the project.

2.4.16 I note condition 14 of the EA which provides as follows: "*The Environmental Management Programme (EMPr) submitted as part of the final EIAr is not approved. The EMPr must be amended to include measures as dictated by the final site lay-out map and micro-siting; and the provisions of this environmental authorisation. The EMPr must be made available for comments by registered Interested and Affected Parties and the holder of this environmental authorisation must consider such comments. Once amended, the final EMPr must be submitted to the Department for written approval prior to commencement of the activity*"

2.4.17 Importantly condition 15 of the EA goes further to state that the EMPr amendment must include, amongst others, all recommendations and mitigation measures recorded in the EIAr; all mitigation measures as listed in the specialist reports must be included in the EMPr and implemented; and the post construction avifaunal monitoring plan that is in line with Birdlife's most recent guideline.

2.4.18 As a result thereof, this ground of appeal is dismissed.

## 2.5 **PPP**

2.5.1 The first appellant contends that the applicant disregarded their comments relating to the loss of sense of place. The seventh appellant contends that property owners were ignored to save German costs. The eighth appellant contends that the final EIAr fails to refer to and respond to several comments from the Department of Environment Affairs and Development Planning of the Western Cape (DEADP), and is therefore in breach of NEMA. The ninth and fifteenth appellants further argue that the PPP is only used to demonstrate due diligence without giving enough attention to valid objections/comments. The fourteenth appellants' further raise concerns around the PPP, which I have taken note of.

2.5.2 In response to this ground of appeal, the applicant states that registered I&APs comments made during the PPP were not ignored or disregarded and that the comments were placed before the Department and would have been taken into account when the decision to authorise the project was made. Regarding the eighth appellant's contention, the applicant avers that the matter was rectified with an addendum response report submitted to the Department titled *"Consolidation of Responses to Comments from the Western Cape Department of Environmental Affairs and Development Planning – November 2019"*.

2.5.3 In their comments on this ground of appeal, the Department states that a detailed EIAr was circulated during PPP so that I&APs could comment. The Department states that issues relating to sense of place were addressed by the applicant and that the applicant

responded adequately to the comments that were provided by DEADP and were addressed in the final EIAr.

- 2.5.4 In evaluating this ground of appeal and the responses thereto, I note that the EIA process for the proposed Boulders WEF has been subjected to a rigorous Public Participation and stakeholder engagement process both during the Scoping and EIA Phases. The information before me indicates that consultation with I&APs did take place as required in terms of regulation 41 of the Environmental Impact Assessment Regulations, 2014, as amended (2014 EIA Regulations). Details of the PPP are comprehensively described in Section 8 of the final EIAr. After considering such, I cannot find any evidence that the PPP undertaken by the applicant in respect of the abovementioned application was inadequate or fell short of the requirements of PPP prescribed in the 2014 EIA Regulations. This ground of appeal is thus dismissed.

## **2.6 *Job opportunities***

- 2.6.1 The first and fifteenth appellant contends that the EIA contained misleading job opportunity figures. The fifth appellant contends that some fishermen and other local people are left with the false impression that the proposed WEF will generate lots of temporary and permanent job-opportunities and that they would pay less for electricity, once this WEF has been developed and starts operating. The seventh appellant also contends that job creation and socio economic benefits are a complete myth. The eighth appellant contends that the location of the WEF right next to what is essentially the only remaining beachfront development land in Paternoster will severely impact job creation. The ninth appellant argues that the comments regarding work opportunities, creation of job opportunities and skills development, are completely unfounded.
- 2.6.2 The tenth appellants contend that the EIAr does not state how jobs will be provided to local residents and how will the applicant prevent an influx of outsiders being given the jobs. The eleventh appellant also raises concerns around job creation and states the applicant's promises and arguments of job creation and socio-economic benefits are not convincing.

- 2.6.3 In response to this ground of appeal, the applicant submits that the appellants fail to indicate how the job figures are misleading, and does not substantiate this bold statement in any way. According to the applicant so as to benchmark the figures presented in the EIAr, the South African Wind Energy Association (SAWEA) has presented a letter which the applicant attaches to their response. The letter states that *"The additional 1 049 full-time equivalent indirect jobs estimated for Boulders Wind Farm is actually quite conservative considering that it also includes local jobs supported in the travel, accommodation and retails sectors."*
- 2.6.4 Furthermore, the letter states that *"The 140MW Boulder Wind Farm plans to create 17 new direct jobs during operation and maintenance, which is quite consistent with the number reported by the IPP Office of 2166 actual O&M jobs created thus far for the 2 GW already operational"*.
- 2.6.5 Furthermore, the applicant states that the labour and employment issues were dealt with comprehensively in the SIA which outlines the potential effect on employment during the construction and operations phases. The applicant states that this ground of appeal is based upon the "impressions" of individuals, something which is subjective and not grounded in fact.
- 2.6.6 In their comments on this ground of appeal, the Department refers to the findings of the Property Values, Tourism and Economic Issues Assessment.
- 2.6.7 In evaluating this ground of appeal, I note from page 48 of the EIAr that the construction and operation of the Boulders WEF will contribute to local developmental objectives of poverty eradication and other social and socio-economic benefits. The development of WEFs attracts significant direct foreign financial investment into South Africa and local communities and can lead to the creation of both skilled and un-skilled jobs in the renewable energy industrial sector.
- 2.6.8 I further note that the applicant attaches a letter from the SAWEA dated 19 March 2020, the contents of which I have noted. SAWEA states that:

*"Having reviewed the Property Values, Tourism and Economic Issues Assessment Report for the proposed Boulder wind farm, SAWEA can confirm that the number of jobs estimated to be created during the construction of the proposed Boulder Wind Farm are quite consistent with employment numbers achieved in wind farm developments of similar size and nature. The number of jobs created must be viewed in terms of the total value chain full time equivalent jobs and not total number of people employed on site. This should also be viewed as a total including direct, indirect and induced jobs".*

2.6.9 I have further noted the finding of the Property Values, Tourism And Economic Issues Assessment, particularly that the proposed development will have a number of positive low to medium economic impacts on the local and regional economy, especially during the two-year construction phase, leading to the creation of over 900 jobs, and up to 60 jobs in the operational phase. This is considered beneficial for local job seekers and businesses, particularly in the context of high unemployment, considerable poverty and the decline of the historical fishing industry in this area.

2.6.10 In light of the above, I am inclined to dismiss this ground of appeal.

## **2.7 Aviation**

2.7.1 The first and fifteenth appellant contend that the applicant is whitewashing the impact on recreational flying by stating that the applicant is in consultation with authorities. Further to this, the first and fifteenth appellants contend that the Saldanha/Vredenburg aerodrome was ignored. The first and fifteenth appellants further contend that the applicant does not disclose who would be financially responsible for investigating possible internet interference. The ninth appellant contends that many problems exist with the quality of the internet due to interference from the turbines. The eighth appellant contends that the Civil Aviation Authority will require an impact assessment before final approval is given. The ninth and fifteenth appellants further contend that light aircrafts use the area frequently for recreation and will be negatively influenced by the turbines.



- 2.7.2 In response to this ground of appeal, the applicant states that an assessment was conducted in relation to the terms and provisions as contained in the Civil Aviation Act, 2009 (Act No. 13 of 2009) for the controlling and/or restricting of structures which will constitute an obstruction or potential hazard to aircraft moving in the navigable air space. According to the applicant, the Civil Aviation Approval was received in August 2014. In addition the applicant provides that there is no evidence that internet connectivity will be affected in any way and no evidence is provided that there would be such an impact.
- 2.7.3 In their comments on this ground of appeal, the Department provides that a Civil Aviation Authority conditional approval has been received for the Boulders WEF.
- 2.7.4 In evaluating the ground of appeal and the responses thereto, I note from the information before me that the applicant engaged directly with the Civil Aviation Authority regarding the structural details of the facility. I further note that the Civil Aviation Authority approval was obtained in August 2014, during the scoping phase. Regarding the concerns around internet disturbances, there is nothing before me which suggests that internet connectivity will indeed be affected. Nonetheless, I note the following from the Comments Response Report (CRR) under issue 24 on page 135:
- "If there are any complaints received from I&APs regarding internet interference, then an investigation of the interference will be made, and if found that the Wind Farm reduces the internet connectivity of these I&APs, new receivers would be installed to restore the signal back to the original value."*
- 2.7.5 Considering the above, this ground of appeal is dismissed.

## 2.8 **Alternatives**

- 2.8.1 According to the third appellant, the alternative sites discussion was purposefully withheld from I&APs and a *bona fide* exploration of alternative sites has not been investigated. The seventh appellant contends that they are surrounded by sites that any layman can see are more efficient. The eighth appellant contends that the EIA process failed to consider location alternatives.

- 2.8.2 The eleventh appellant raises comprehensive grounds of appeal relating to the proposed WEF site and contends that choosing another site, like the Saldanha IDZ area, will realise all the benefits as stated by the EAP without impacting any environmental, tourism or property value elements. The twelfth appellant states that in principal there is no opposition against the WEF but against the location of the proposed WEF. The sixteenth appellants, represented by Mr Peter Pickford, contend that alternative sites have not been addressed by the “all possible means” prerogative and alternative sites discussion was purposefully withheld from I&AP comment.
- 2.8.3 In response to this ground of appeal, the applicant states that alternatives have been comprehensively addressed. Further to this, the applicant provides that it is necessary to understand how the assessment of alternative sites occurs practically for WEFs. The applicant explains that the location selection process usually occurs prior to the appointment of an EAP and the commencement of the EIA process based on wind potential. Thereafter, the EAP is mandated to undertake an EIA process. It follows that, in accordance with the 2014 EIA Regulations, the EAP is merely required to provide such information pertaining to the prior identification and consideration of potential location alternatives, which is usually undertaken by the applicant. Therefore the applicant states that the EAP is not required to investigate and assess potential location alternatives. In addition, the applicant provides that as per condition 12 of the EA, the actual layout of the WEF has not yet been approved as it is still subject to preconstruction micro siting.
- 2.8.4 In their comments on this ground of appeal, the Department states that site alternatives for the Boulders WEF were investigated in their pre-feasibility phase prior to the EIA process. The Department states that the applicant did provide the Department with a report on the alternatives investigation they undertook. The Department confirms that a summary of this investigation of alternative sites and findings has been included in the EIAR to clarify these issues.
- 2.8.5 In evaluating this ground of appeal, I note that the feasibility of four sites in the Saldanha Bay Municipality were assessed by the applicant prior to the Scoping Phase. However,

these were ruled out due to 18.5km exclusion zone around the airforce base, the two important bird areas, the 4km coastal protection buffer and the buffer around Kasteelberg. The EIA process was thus an assessment of a WEF for the proposed site. I have further noted from the Department's decision, dated 11 June 2019, that the EIA needed to focus on the assessment of the proposed site, and the different layout alternatives proposed that would best mitigate the impacts.

- 2.8.6 The EIA was thus confined to investigating and assessing different site layout alternatives within the proposed site. The EIAr suggests that the layout alternatives were adequately assessed. I have particularly taken note of section 12.4 on page 213 of the EIAr which provides that:

*"In reaching the current proposed layout, the placement of turbines was refined on two occasions to further reduce the visual impact of the wind farm. To minimise these visual impacts on some Britannica Heights residents along the top of the ridge, the Paternoster residents and the Kasteelberg Heritage resource, the footprint of the proposed development was reduced in the EIA phase from the original 10 farms, to the five farms closest to the existing WC1 energy facility. A sensitivity analysis was used by the developers to design an initial proposed layout on the remaining 5 farms. The layout was further refined to adhere to the recommendations of the Heritage Impact Assessment, where seven turbines were relocated, to produce a final mitigated layout. The EIA specialist studies, therefore, assessed the relative impacts of both these proposed layouts (i.e. pre-relocation of 7 turbines and post-relocation of 7 turbines)."*

- 2.8.7 In light of the above, this ground of appeal is dismissed.

## 2.9 **Bias**

- 2.9.1 The third and sixteenth appellants contend that the final EIAr is flawed with multiple instances of bias. These appellants contend that the instances are too numerous to list but are broadly defined by 3 categories:

- 2.9.1.1 The EAP favours the developer in all aspects of the application and understates, dismisses and withholds the scope and voice of any opposition thereto.
- 2.9.1.2 The EAP repeatedly makes assumptions in favour of the developer but never to endorse any negative impact.
- 2.9.1.3 The EAP makes statements of questionable integrity under oath.
- 2.9.2 The third, fifth and eleventh appellants state that the public undertook a motion of no confidence in the EAP. The fifth appellant states that the EAP's conduct during the PPP does not give her any confidence in EAP's objectivity in this matter. The eighth appellant also contends that the EAP was biased and lacked objectivity. The fourteenth appellants contend that the EAP did not disclose that they are working for both the developers of the proposed WEF and certain prospectors whom are carrying out prospecting activities in the same region.
- 2.9.3 In response to this ground of appeal, the applicant provides that these allegations of bias, both against the current EAP and the previous EAP, have been consistently raised and responded to during the EIA process. According to the applicant, statements that the EAP favours the developer are denied and are unsubstantiated. In addition, the applicant states that the allegations relating to the so-called "motion of no confidence" have been raised and responded to during the EIA process. Furthermore, the applicant argues that this ground of appeal is defamatory and should be disregarded.
- 2.9.4 In evaluating this ground of appeal, I note that during the EIA process the Department suspended the application for the EA so as to investigate allegations of bias relating to the EAP. On 8 October 2018, the Department, after assessing the allegations and responses thereto, uplifted the suspension of the aforementioned EA application. An appeal was lodged on 29 October 2018 against this uplifting of suspension. On 15 April 2019, the Acting Minister of the then Department of Environmental Affairs dismissed the appeal and confirmed the uplifting of the suspension of the EIA process. Further to this, the Acting Minister stated that she was satisfied that the Department adequately investigated the allegations of bias prior to reaching a decision to uplift the suspension. The allegation

pertaining to bias of the EAP has been fully investigated during the EIA process and during the subsequent appeal process.

2.9.5 In view of the foregoing, this ground of appeal is accordingly dismissed.

## **2.10 EIA Process**

2.10.1 The eighth appellant contends that the methodology for impact assessment was not consistently applied throughout the specialist studies. The fourteenth appellants contend that the applicant has failed to ensure that the experts they contracted to write specialist reports used relevant literature and conducted appropriately detailed research.

2.10.2 The eighth appellant further argues that the final EIAr fails to recommend specific conditions of approval, which is in breach of NEMA and the conditions of approval fail to limit the period of operation of the project to 20 years and contains no condition of approval relating to the Trust that is to be established and funded by the applicant for the benefit of communities. The ninth and fifteenth appellants question what the applicant offers to the Community Trust Fund. The eighth and tenth appellants contend that the EIAr failed to disclose the radar report that informed the avifauna report. The ninth and fifteenth appellants contend that there are serious concerns about the noise and health impact studies referred to in the report.

2.10.3 The eighth appellant also raises arguments pertaining to the need and desirability of the proposed WEF and also contends that no assessment on the potential impact of climate change on wind patterns in the project area was conducted. The eighth appellant further contends that the applicant and the EAP failed to apply the precautionary principle in section 2 of NEMA, which requires that, in the absence of scientific certainty relating to environmental impacts, a risk-averse and cautious approach must be taken.

2.10.4 The tenth appellants argue that the wind turbine EIA and the transmission line EIA are treated separately to apparently present less impact when considered. The thirteenth appellant contends that the fact of separately considering and assessing the proposed

Boulders WEF and the grid connection impacts has resulted in a defective assessment process. The thirteenth appellant contends that the defensibility of separating the EIA process for the proposed Boulders WEF and grid connection, is without merit.

- 2.10.5 In response to this ground of appeal, the applicant states that all specialist studies comply with the 2014 EIA Regulations and the EIAr presents many mitigation measures which would form the conditions of approval and the EA specifically imposes the condition that *"the EMPr amendment must include...[a]ll recommendations and mitigation measures recorded in the EIAr"*. Further to this the applicant explains that the EIAr refers to the operation of the WEF for 20-25 years. Therefore, by virtue of the EA, the EMPr is binding on them
- 2.10.6 Regarding need and desirability of the proposed WEF, the applicant states that the contribution of the project to GHG emission reductions and alignment with government national development, energy and climate change policy is explained in great detail in the Need and Desirability section of the EIAr. The applicant explains that there is no evidence that the WEF causes climate change and the appellant does not tender any evidence to support this allegation.
- 2.10.7 The applicant further explains that it is common practice for the required sub-transmission lines and grid connections to fall under a separate EA. The reason being, is that such electrical infrastructure is actually owned and operated by Eskom and any EA in relation thereto will eventually be transferred into the name of Eskom so that it can operate the infrastructure in accordance with the conditions of the EA.
- 2.10.8 In their comments on this ground of appeal, the Department explains that the WEF is proposed for 20 years, after which the turbines and other superstructure will be removed on decommissioning and the site will then be rehabilitated. The Department states that the radar data and report were something commissioned as part of its pre-construction monitoring process. This was made available to the avifaunal specialist for review as part of their assessment. The Department states that a specialist study on climate change

mitigation was not identified as necessary and not included in the Plan of Study for the EIA which was approved by Department.

2.10.9 In evaluating this ground of appeal, I note that the EA has project specific conditions on pages 15 to 17. The EIAr and EMPr contains detailed mitigation measures and the EA specifies that the EIAr and EMPr must be adhered to. This is not out of the ordinary. Condition 57 of the EA provides that "*The recommendations of the EAP in the final EIAr dated September 2019 and the specialist studies attached must be adhered to*". Further to this, condition 16 of the EA provides "*The final amended EMPr (once approved) must be implemented and strictly enforced during all phases of the project. It shall be seen as a dynamic document and shall be included in all contract documentation for all phases of the development when approved...*".

2.10.10 The EIAr specifies the life of the proposed project and the fact that this is not written into the EA is not a *fait accompli*. In addition the radar data was commissioned by the applicant and considered by the avifaunal specialists in their assessment. I cannot find that the non-disclosure of this radar data renders the issuance of the EA fatally flawed. Furthermore I am satisfied that the need and desirability of the proposed project has been adequately explained in the EIAr.

2.10.11 With regards to the concerns raised regarding sound waves, I am satisfied that issues relating to noise have been comprehensively addressed in the Noise Impact Assessment. I take particular note that the noise impact assessment concludes that, with the implementation of the recommended mitigation measures, the various identified noise impacts will be low.

2.10.12 There is no obligation upon the Department to impose a condition under NEMA and the 2014 EIA Regulations that a Trust must be developed for the benefit of the surrounding communities. The purpose of the EIA process to evaluate and assess the impacts of proposed developments in line with NEMA and the 2014 EIA Regulations and propose mitigation measures so as to curtail or limit the identified impacts. With the proposed WEF a climate impact assessment was not deemed necessary. The development of WEF often

aids in reducing GHG emissions and it is unlikely that such developments contribute negatively to the climate.

2.10.13 Furthermore the EIA application for the proposed transmission lines is separate from the EIA application for the proposed WEF and any arguments pertaining to the transmission lines will have to be dealt with in a separate appeal process. Furthermore I cannot find that the separation of the transmission lines for the EIA application from that of the proposed WEF is a means of giving an illusion that the impacts are less. The separation of the EIA processes for the development of WEFs and for the development of the associated electrical infrastructure has, for practical planning reasons, become standard and accepted practice in the renewable energy sector.

2.10.14 I thus cannot find the EIA process is flawed. This ground of appeal is consequently dismissed.

## **2.11 *EMPr is not approved***

2.11.1 The eighth appellant contends that the EA is not a final decision and is therefore not valid. It is contend that the EA approves the development but does not approve either the EMPr or the final layout. The eighth appellant contends that the EA calls for further information and this means that there was insufficient information in the final EIAr to decide the application, which amounts to a material failure to comply with NEMA. The tenth appellants contend that if the EIAr does not supply sufficient information for final approval, then surely it is not up to the standard required.

2.11.2 In response to this ground of appeal, the applicant states that in the case of *Muckleneuk/Lukasrand Property Owners and Residents Association v The MEC: Department of Agriculture, Conservation and Environment, Gauteng Provincial Government and others* (28192/04; 12137/06 TPD) [2006] ZAGPHC 86 (30 August 2006) ("MLPORA"), a full bench of the Gauteng High Court confirmed that environmental authorisations can be made conditional upon the subsequent approval of an EMPr which is subjected to public participation.



2.11.3 The applicant thus argues that the non-approval of the EMPr and final layout does not impact upon the validity of the EA and any requirement for further submissions is imposed as a condition of the EA, and hence will have to be complied with. The applicant further submits that regulation 26 (i) of the 2014 EIA Regulations empowers the decision-maker to impose 'any relevant conditions which the competent authority deems appropriate', the scope of which would include the amended EMPr and final site plan. The applicant states further that the amendment of an EMPr and the finalisation of the site layout plan, as conditions of the EA, are common requirements for WEFs and EMPrs are working documents that are continuously revised throughout the lifespan of an operation and the appellants will still have an opportunity to comment on the final EMPr and site layout plan.

2.11.4 In their comments on this ground of appeal, the Department states that the EA issued is a final decision and is valid and the layout and EMPr will be amended and submitted to the Department for approval.

2.11.5 In evaluating this ground of appeal, I note from the information before me that a final EMPr was submitted to the competent authority, as per regulation 19(1), and secondly, the EMPr contained all the information set out in section 24N of NEMA. Further to this, the final EMPr was submitted in support of the EA application and sufficiently evaluated by the Department. Therefore the Department had all the necessary and essential information at their disposal to make an informed decision.

2.11.6 While I take note that condition 14 of the EA stipulates that "*the Environmental Management Programme (EMPr) submitted as part of the final EIA is not approved*", it is imperative to point out that all conditions set out in the EA are binding on the applicant as alluded in the EA under "*Scope of authorisation*". I also note that the applicant remains ultimately responsible for ensuring that the proposed development is implemented according to the requirements of the final EMPr (once approved by the Department) and the conditions of the EA throughout all phases of the project. Condition 16 of the EA further states that, "*The final amended EMPr (once approved) must be implemented and strictly enforced during all phases of the project*".

2.11.7 I must point out that the content of condition 14 of the EA is underscored by the provisions of section 24N (5) of NEMA which provides that "*The Minister, the Minister responsible for mineral resources or an MEC may call for additional information and may direct that the environmental management programme in question must be adjusted in such a way as the Minister, the Minister responsible for mineral resources or the MEC may require*"

2.11.8 Very importantly, subsection (6) provides that "*The Minister, the Minister responsible for mineral resources or an MEC may at any time after he or she has approved an application for an environmental authorisation approve an amended environmental management programme*".

2.11.9 I am accordingly satisfied that the Department considered, evaluated and assessed all relevant information and the applicable law prior to making a decision to grant the abovementioned EA to the applicant. Furthermore, I am satisfied with the content of condition 14 of the EA. Therefore I cannot find that the Department reached an irrational decision nor that it operated under an error of law. I must stress that the law in its current form prescribes no requirement to approve the EMPr simultaneously with the granting of an EA. In addition thereto, the final EIAr and EMPr adequately assessed the potential impacts associated with the proposed project and I cannot find that the granting of the aforementioned EA without the approved EMPr constitutes as *fait accompli* as argued by the appellants. There is accordingly no merit to infer that the Department erred, either factually or legally, in granting the abovementioned EA to the applicant. Hence I proceed to dismiss this ground of appeal.

## 2.12 ***Wake effects (appeal by the Aurora Wind Power)***

2.12.1 The thirteenth appellant raises comprehensive grounds of appeal relating to wake effects and supports their appeal with a Wake Loss Assessment Report prepared by Tractebel Engineering S.A (Tractebel report). Aurora's appeal centres on the following: wake effect impacts; socio-economic impacts; grid connection impacts and the requirement for an independent wake assessment.

- 2.12.2 The thirteenth appellant owns and operates the approved WC1 WEF, comprising of 47 wind turbines and generating 94 MW. WC1 has been commercially operational since June 2015. The proposed Boulders WEF is located adjacent to the existing and operating WC1 WEF and the appellant thus argues at length that the proposed Boulders WEF would cause significant interferences to the WC1 WEF and that a wake impact assessment should be undertaken.
- 2.12.3 According to the appellant, the Department did not require or request a wake effect study at any stage of the EIA and for this reason the Department's decision is legally flawed as relevant information in respect of the sustainability enquiry was not before it. It is contended that in terms of section 24(1) of NEMA, the potential consequences of impacts on the environment of listed activities must be considered, investigated, assessed and reported to the Department. This includes an assessment of the wake effects of the proposed Boulders WEF. The appellant contends that the EIA process falls short of the requirements in NEMA as it failed to adhere to the impact assessment and mitigation hierarchy, by failing to ensure that all project-related impacts are assessed comprehensively to determine whether or not such impacts can or should be avoided.
- 2.12.4 It is further argued that the failure to undertake an assessment of wake effects has compromised the assessment of the potential socio-economic impacts associated with the project and the findings of the EIA. This concern is underpinned by the adverse financial impacts on the WC1 WEF and the consequential negative effects on the appellant's Socio-Economic Development ("SED") commitments. The appellant refers to the case of *Fuel Retailers of Southern Africa v Director-General Environmental Management, Department of Agriculture, Conservation and Environment, Mpumalanga Province and Others 2007 (6) SA 4 (CC)* (Fuel Retailers case), which confirms that NEMA requires all developments to be socially, economically and environmentally sustainable.
- 2.12.5 The thirteenth appellant contends that based on the selected wake models, an overall loss in the annual energy production due to the proposed Boulders WEF ranges between 1.5 % and 2.5 % and decreasing the rotor diameter and/or increasing the hub height of the

turbines on Boulders WEF, only has a limited impact in reducing the wake loss. The appellant argues that the effect of increased turbulence caused by or related to wake effects of the turbines on the proposed Boulders WEF will result in and/or cause material fatigue and reduces turbine capacity and the lifespan of the WC1 WEF. The appellant argues that the proposed Boulders WEF turbines are situated immediately upwind of the approved WC1 WEF, thus depleting WC1 WEF's access to the wind resource. In light of the above, it is contended that the direct and indirect negative impacts caused by the wake effects of the proposed Boulders WEF will include the following:

- 2.12.5.1 Loss in energy production and associated loss in revenue for WC1 WEF;
  - 2.12.5.2 Inability to meet agreed energy production and financial obligations, determined by contractual obligations with reference to WC1 WEF's energy yield potential and capacity factor;
  - 2.12.5.3 Reduced benefits flowing to local community, which is a percentage of WC1 WEF project revenue;
  - 2.12.5.4 Increased mechanical "wear and tear" and associated maintenance costs for the WC1 WEF;
  - 2.12.5.5 Additional operational downtime for WC1 WEF (i.e. due to grid connections and control actions required to be implemented because of wake effects); and
  - 2.12.5.6 Decrease in the anticipated life of the wind turbines on WC1 WEF.
- 2.12.6 It is contended that the direct socio-economic impacts have not been assessed, as required, and the cumulative socio-economic impacts have not been considered at all. The appellant argues that the dramatic impacts associated with the wake loss were not considered and taken into account in the EIA process, notwithstanding the various attempts by the appellant to bring this to the attention of the applicant, the EAP and the Department. According to the appellant, if the proposed Boulders WEF project is implemented, as per the current layout authorised by the Department, then this will adversely affect the viability and sustainability of the WC1 WEF. The thirteenth appellant states that *should I conclude that the wake effect impacts cannot be avoided and/or mitigated, it is imperative that WC1 WEF be compensated for any loss due to wake effects*

*of the proposed Boulders WEF and that such compensation must be catered for in an authorisation, varied on appeal.*

2.12.7 It is contended that based on the Tractebel report, the impact of wake effects cannot be discounted, and provision should have been made during the EIA process to assess, avoid and mitigate this potential impact on the WC1 WEF. The appellant states that the information they commissioned, evidences a real and valid concern about adverse wake effect impacts on the WC1 WEF and this gives rise to negative socio-economic consequences for the WC1 WEF. It is thus contended that a detailed Forecast Energy Yield Report, identifying the potential energy loss expected on WC1 WEF caused by the wake effects of the proposed Boulders WEF must be undertaken by an independent external specialist at the applicant's cost. The appellant states that the Forecast Energy Yield Report must include an accurate identification, evaluation and assessment of wake effects associated with proposed Boulders WEF.

2.12.8 In response to the thirteenth appellant's appeal, the applicant refers to the finding of a previous appeal decision by the former Minister Mokonyane in the appeal submitted by South African Mainstream Renewable Power Developments (Pty) Ltd against the decision by the Department to issue environmental authorisations for the development of the San Kraal and Phezukomoya WEFs. In that appeal decision former Minister Mokonyane decided that *"I am of the view that the wake impacts have no environmentally associated impacts affecting the appellant in any way, and as such, I am not responsible to determine the influence bearing of the wake impacts by the two projects on the Noupoort WEF"*.

2.12.9 The applicant explains that the Department included certain safeguards within the content thereof which prevents the decision from being flawed and preserves the appellant's right to fair administrative action. The first safeguard according to the applicant is that the Department did not approve the layout that was presented in the EIAr. Secondly, the applicant states that the Department confirmed at condition 14 of the EA that *"The Environmental Management programme (EMPr) submitted as part of the EIAr is not approved. The EMPr must be amended to include measures as dictated by the final site layout map and micro-sitting; and the provisions of this environmental authorisation. The*

*EMPr must be made available for comments by registered Interested and Affected Parties and the holder of this environmental authorisation must consider such comments. Once amended, the final EMPr must be submitted to the Department for written approval prior to commencement of the activity.* The applicant states that the EIA process is not yet complete and historical EAs that have previously been granted by the Department in respect of WEFs confirms that delaying the approval of the final layout plan and the EMPr for WEFs has become standard and accepted practice.

2.12.10 The applicant affirms its previous commitments made to the thirteenth appellant that it will appoint an independent consultant to compile a wake assessment report. The applicant explains that such independent report will, excluding a forecast energy yield, identify and assess any possible wake effect impact that the proposed Boulders WEF may have on the WC1 WEF. The applicant further explains that it makes complete sense for such wake assessment to only be conducted when it has, after taking the micro-siting considerations into account, determined its absolute final layout plan for the proposed Boulders WEF.

2.12.11 The applicant explains that the Tractebel report did not recommend that the proposed Boulders WEF should not be built, but rather recommended that:

2.12.11.1 A setback distance of 1km from the WC1 WEF is recommended to help lower wake effect;

2.12.11.2 If the turbine type is not yet selected then a smaller rotor diameter with a higher hub height should be recommended to lower wake effects; and

2.12.11.3 Financial compensation should be requested for expected annual energy production losses.

2.12.12 The applicant denies that:

2.12.12.1 Additional operational downtime will occur for the WC1 WEF;

2.12.12.2 There will be incremental increases in associated maintenance costs; or

2.12.12.3 There will be a decrease in anticipated life of the WC1 WEF turbines.

2.12.13 I note that the applicant further challenges the various findings in the Tractebel report and raises comprehensive responses thereto. The applicant further contends that the concurrent operation of the proposed Boulders WEF and the existing WC1 WEF will actually have significant socio-economic benefits. The applicant submits that the alleged negative socio-economic impacts that may occur as a result of the operation of the proposed Boulders WEF are significantly outweighed and mitigated by the confirmed positive socio-economic benefits thereof.

2.12.14 The thirteenth appellant submitted an answering statement to the applicant's responses, wherein they argue that the San Kraal, Phezukomoya and Grassridge matters create precedent that the wake impacts must be assessed in the EIA and not after the EA is issued. Aurora submits further comprehensive representation to the applicant's issues with the Tractebel report which I have taken note of. The appellant further points out that in line with the Grassridge appeal decision, the Department when assessing the EIA application for the proposed Boulders WEF, should have requested that a wake impact assessment be concluded. The appellant argues that at a minimum, large scale revisions to the layout of the Boulders WEF are necessary and not minor layout adjustments.

2.12.15 The appellant states that the applicant's failure to conduct a wake impact assessment during the EIA process is a fatal flaw and the decision to issue the EA is consequently unlawful. For this reason the appellant argues that their appeal be upheld. The appellant nevertheless states that should the appeal be dismissed, the EA should be amended to include that a forecast energy yield report, identifying potential energy loss expected on the WC1 WEF caused by the proposed Boulders WEF, is concluded by independent specialists and at the applicants cost. The appellant argues that the approval of the final layout must be informed by the forecast energy yield report.

2.12.16 In their comments on this appeal, the Department provides that the applicant previously initiated discussions with Aurora in March 2019 to understand and determine these impacts. The Department confirms that no wake loss assessment was conducted for the proposed Boulder WEF. The Department confirms that the Tractebel report was not requested by the Department but was submitted to the Department for review.

2.12.17 In evaluating this ground of appeal and responses thereto, it appears to me that the essence of this ground of appeal relates to the absence of a wake impact assessment conducted as part of the EIA process to investigate the impact of the proposed Boulders WEF on the existing WC1 WEF. It is not in dispute that a wake effect study was not conducted by the independent expert commissioned by the applicant, as part of the EIA process for the proposed Boulders WEF.

2.12.18 In this regard, I have already ruled on 14 October 2019, in the appeal lodged against the granting of an EA to Bayview Wind Power (Pty) (Ltd) for the proposed development of Bayview Wind farm, that the wake effects of the proposed establishment of a WEF are a relevant factor to be considered prior to making a decision on an application for a EA. To the extent that the EA for the proposed development of Bayview Wind was granted without the benefit of wake effect study, I found that the decision of the Department to grant the said EA to the applicant was flawed, and accordingly proceeded to set aside the authorisation.

2.12.19 In reaching the above conclusion, I was guided by the majority judgement in the Fuel Retailers case, where the Constitutional Court held that *"NEMA, which was enacted to give effect to section 24 of the Constitution, embraces the concept of sustainable development. Sustainable development is defined to mean the integration of social, economic and environmental factors into planning, implementation and decision-making for the benefit of present and future generations"*.

2.12.20 It was further held that *"one of the key principles of NEMA requires people and their needs to be placed at the forefront of environmental management – batho pele. It requires all developments to be socially, economically and environmentally sustainable. Significantly for the present case, it requires that the social, economic and environmental impact of a proposed development be considered, assessed and evaluated and that any decision made must be appropriate in the light of such consideration and assessment. This is underscored by the requirement that decisions must take into account the interests, needs and values of all interested and affected persons."*



- 2.12.21 The court also pointed out that *"NEMA makes it abundantly clear that the obligation of the environmental authorities includes the consideration of socio-economic factors as an integral part of its environmental responsibility"*
- 2.12.22 Very importantly, the court further pointed out that *"the nature and the scope of the obligation to consider the impact of the proposed development on socio-economic conditions must be determined in the light of the concept of sustainable development and the principle of integration of socioeconomic development and the protection of the environment. Once it is accepted, as it must be, that socio-economic development and the protection of the environment are interlinked, it follows that socio-economic conditions have an impact on the environment"*.
- 2.12.23 The court went further to state that *"a consideration of socio-economic conditions therefore includes the consideration of the impact of the proposed development not only in combination with the existing developments, but also its impact on existing ones"*.
- 2.12.24 The impacts on turbines caused by wake effect, including material fatigue are widely known and is an accepted impact. Furthermore material fatigue is also to be expected as part of the normal WEF operating conditions.
- 2.12.25 As stated above, a wake impact assessment is required for the proposed Boulders WEF and the wake effects of the proposed WEF is a relevant factor to be considered by the Department. This ground of appeal is good in law, hence it is upheld accordingly.
- 2.12.26 In view of the foregoing, the applicant is directed to commission an independent expert to conduct a wake impact assessment in respect of the proposed project, and thereafter subject the report thereof to a public participation in accordance with the 2014 EIA Regulations.
- 2.12.27 Comments received from I&AP's, as well as responses thereto by the applicant, must be incorporated into the final EIAR for submission to the Department for reconsideration of the application for EA. In this regard, the timeframes prescribed by the 2014 EIA Regulations in respect of PPP and decision making must be adhered to.

### **3 DECISION**

**3.1 In reaching my decision on the appeals lodged against the decision of the Department to grant the abovementioned EA, I have taken the following into consideration:**

**3.1.1 The sixteen appeals lodged by the appellants by 10 February 2020;**

**3.1.2 The responding statement submitted by the applicant on 20 March 2020;**

**3.1.3 The comments on the grounds of appeal submitted by the Department on 28 February 2020;**

**3.1.4 The answering statement submitted by the thirteenth appellant on 19 May 2020, and**

**3.1.5 The information contained in the project file (14/12/16/3/3/2/1057) with specific reference to the EIAr, EMPr, various specialist studies and EA dated 14 January 2020.**

**3.2 In terms of section 43(6) of NEMA, I have the authority, after considering the appeal, to confirm, set aside or vary the decision, provision, condition or directive or to make any other appropriate decision.**

**3.3 Having carefully considered the abovementioned information and in terms of section 43(6) of NEMA, I have decided to:**

**3.3.1 Dismiss the grounds of appeals by the appellants mentioned in paragraphs 2.1 to 2.11 above;**

**3.3.2 Uphold the ground of appeal mentioned in paragraph 2.12 above, which deals with wake effect assessment;**

**3.3.3 Set aside the abovementioned EA granted to the applicant on 14 January 2020; and**

**3.3.4 Direct the applicant to comply with the instructions set out in paragraphs 2.12.26 and 2.12.27 above.**

**3.4 In arriving at my decision on the appeals, it should be noted that I have not responded to each and every statement set out in the appeals and/or responses thereto, and where a particular statement is not directly addressed, the absence of any response thereof should not be interpreted to mean that I agree with or abide by the statement made.**

- 3.5 Should the appellants be dissatisfied with any aspect of my decision, they may apply to a competent court to have this decision judicially reviewed. Judicial review proceedings must be instituted within 180 days of notification hereof, in accordance with the provisions of section 7 of the Promotion of Administrative Justice Act, 2000 (Act No.3 of 2000) (PAJA).



**MS B D CREECY, MP**

**MINISTER OF FORESTRY, FISHERIES AND THE ENVIRONMENT**

**DATE:** 30/8/2020