



**FINAL  
ENVIRONMENTAL  
IMPACT ASSESSMENT  
Boulders Wind Farm**

**VOLUME 5  
Appendix G  
Comments & Responses  
Report (CRR)**

**BOULDERS WIND FARM,  
VREDENBURG, WESTERN CAPE PROVINCE, SOUTH AFRICA**

**FINAL ENVIRONMENTAL IMPACT ASSESSMENT REPORT**

**VOLUME 5  
COMMENTS AND RESPONSES REPORT**

Prepared for:



Prepared by:



**CES**

EAST LONDON

25 Tecoma Street

Berea, East London, 5214

043 726 7809

*Also in Grahamstown, Port Elizabeth, Cape Town, Johannesburg  
and Maputo (Mozambique)*

[www.cesnet.co.za](http://www.cesnet.co.za)

SEPT 2019



**TABLE OF CONTENTS**

**1 INTRODUCTION ..... 1**

**2 REQUESTS FOR INFORMATION AND QUESTIONS..... 1**

**3 EIA PROCESS ISSUES..... 4**

**4 OBJECTIONS ..... 25**

**5 SUPPORT ..... 29**

**6 ALTERNATIVES..... 33**

**7 BIRD ISSUES (AVIFAUNA) ..... 37**

**8 BAT ISSUES ..... 60**

**9 ECOLOGICAL ISSUES..... 64**

**10 HERITAGE ISSUES..... 66**

**11 VISUAL ISSUES ..... 71**

**12 ECONOMIC, TOURISM AND PROPERTY ISSUES ..... 88**

**13 SOCIAL IMPACTS..... 103**

**14 NOISE IMPACTS ..... 119**

**15 TRAFFIC AND TRANSPORT IMPACTS..... 124**

**16 CLIMATE CHANGE ISSUES..... 126**

**17 OTHER ISSUES..... 127**





## 1 INTRODUCTION

The issues, questions and concerns that interested and affected parties (I&APs) raised during the public review period for the Boulders Wind Farm (BWF) Draft EIR have all been included and responded to in this Comment Response Report (CRR). The CRR is laid out in the form of standard tables with the comments received from I&APs placed on the left hand side, with the name of the I&AP and data of submission provided in the middle columns, and the responses from CES and the Specialists in the right hand column. Many people submitted comments, views and questions on a number of different issues. There were also many people who raised the same issue. To organise the comments and facilitate effective responses to these, and to collate the relevant comments and concerns for each of the Specialists to respond to – the CRR has been divided up into a number of sections listed in the table of Contents for this CRR. The submissions received that covered a number of topics were divided up and each issue placed in the relevant section of the CRR. Note that not all the specialist studies have their own section as some only received minor comments or questions that were added to the “Other” section (Chapter 13). CES has indicated in the central column of this CRR, where comments were made as parts of petitions and how many participants/signatories there were (or were claimed to be). It was not practical to enter each of the petition participants in as separate but duplicate individual comments as this would have made the already extremely large and long CRR document completely unmanageable and user unfriendly.

## 2 REQUESTS FOR INFORMATION AND QUESTIONS

#	I&AP Requests for Information	I&AP	Date	EAP Response
1	Since CES have allocated the legal minimum amount of time to the review period, I would like to request that this be extended to 31 July. Failing that, I would like to add my support for Peter Pickford’s request that you take into account that many of the I&APs likely to be most directly affected by the wind farm work in the hospitality industry and will be extremely busy from 14 to 18 June because of the June 16 public holiday, and beyond that until 8 July because of school holidays. It seems only reasonable that this be taken into account. If a real (as opposed to a fake) extension is not possible, please supply reasons for this.	Ralphs, Mary (BH – Britannica Heights)	24-May	See response above to Mr Pickford on the request for an extension of the public review period. With regard to the conducting of the Specialist studies, due to the extremely tight timeframes for EIA processes, it is common practice and necessary for the specialist to continue their research and assessment processes during the authority review periods (between the Scoping and EIA phases). The specialists also need to remain independent of the Developers and the I&APs. They are provided with all the comments and issues raised by I&APs during the Scoping Phase and their terms of reference require that they take these into consideration in undertaking their assessments. In some, cases where relevant they will also interview key local informants and stakeholders as part of their research work where they see the need for this. They are however not required or obliged to consult with I&APs or to create additional opportunities for I&APs to make submissions. Request for Visual Images: These have been developed as part of the Visual Impact Assessments, two of which have been undertaken and are included in the EIA documents. Large printouts of the mock ups of the visual impacts from different vantage points will be produced for the Public Open Day and focus group meetings.
2	Please can you provide the layout plan with proposed infrastructure such as wind turbines, etc in a KML format. I would like to overlay the plan to assess the impact on our proposed prospecting area.	Hoek, Neels	27-May	KML file was sent to Mr Hoek on 4 June.
3	I take note of what you say regarding the proposed farm areas. If so, then I don't understand the scope doc which forms the basis of the application. To get the correct facts, can you therefore send us a map (1 page document please) of the properties/areas/farms that are now indeed part of and proposed to be suitable and included in the wind farm's proposed site plan?	Jordaan, Deborah (BH)	28-May	Response sent via email on 29 <sup>th</sup> May: The maps of the affected farms and the proposed layout of the turbines and project roads can be seen on page 3 and 4 of the draft Environmental Impact Assessment Report (Available on our website or at the following link: <a href="http://www.cesnet.co.za/assets/Boulders%20Wind%20Farm%20Draft%20Environmental%20Impact%20Assessment%20Report%20(EIR).pdf">http://www.cesnet.co.za/assets/Boulders%20Wind%20Farm%20Draft%20Environmental%20Impact%20Assessment%20Report%20(EIR).pdf</a> )





#	I&AP Requests for Information	I&AP	Date	EAP Response
4	I note that the avifauna report by BioInsight for the proposed Boulders Wind Farm makes mention of a radar report. Such radar report does not appear to be attached to any of the reports or be submitted as an independent report. Please can I ask for a copy of the said radar report as it bears on the avifauna impact of the proposed Boulders Wind Farm and as a consideration of the conclusions in the BioInsight report it is most relevant. I would further note that this same report was mentioned by Ms Karen Jodas of Savannah Environmental as the then EAP during the public meeting at Paternoster where I asked for a copy of the said report. I note that I never received this and did mention such lack of receipt in my comments on the scoping report. I trust that you will be able to amend the omission.	Pickford, Peter - Paternoster	29-May	Email response sent to I&AP on 5 <sup>th</sup> June 2019: The radar data and report were something the proponent of the Boulders Wind Farm commissioned as part of its pre-construction monitoring process, at great cost. This data is their private intellectual property which they have made available to the Avifaunal specialist for review as part of their assessment on condition that they sign a non-disclosure agreement (NDA) that protects their intellectual property. They are willing to provide BirdLife or any other avifaunal commenting body to review this data if requested, on the same conditions. The developers encountered these same access restrictions themselves when they tried to access the monitoring data from the WC1 developers. In their view, they are not required by the DEA to present any preconstruction monitoring data to the public in the EIAR. They have shared the data with the appointed avifauna specialist who are regarded as experts in their field and have the competences to review the data presented in the respective monitoring reports (radar and standard monitoring) and conclude on the results. The relevant contact person for the developer is Jonathan Visser who can be contacted at jonathanv@iwpower.co.za if BirdLife wish to review the data and are willing to sign a NDA.
5	With respect, relocating seven turbines might make you feel better but is going to make zero difference to how much damage the turbines do on several levels if the project is allowed to go ahead. Please do send me the other images. I will make sure that people I show them to know that the layout they show is not final. The problem with the set that I have is that they are not comparatively sized - the turbines are closer to Britannica Heights than to Paternoster but the size of the turbines shown is smaller. I want to see if the earlier set is more accurate.	Ralphs, Mary (BH)	10-Jun	Email Response from M Johnson on 11 June: Below is the dropbox link to the set of photomontages that were prepared for the original draft layout (i.e. before the relocation of the seven turbines).
6	The proposed hub height of the turbines: the main report mentions the maximum height of 120m, but at the meeting, reference was made to the fact that they will be "not much higher" than the existing turbines at West Coast 1. Please provide the accurate hub height and indicate where in the draft EIA this information provided.	Ralphs, Mary (BH)	25-Jun	This information is in the project description section of the EIR - Section 2.2.1.
7	Similarly, there is some confusion about the turbine layout; please could you confirm that the final proposed turbine layout is as per the draft EIA.	Ralphs, Mary (BH)	2019/06/25	<b>Email response:</b> see attached KML file with locations of turbines on google earth. See also figure 2-4 on page 21 of Draft EIR.
8	As noted during the meeting, a slide that contained a table summarising the social impacts of the wind farm was illegible to participants. Please send us a copy of that slide.	Mary Ralph (BH)	25-Jun-19	The summary table of BWF Social Impacts in Draft EIR (June 2019) were emailed on the 25th June 2019. As summarised in this table there are around 44 impacts from the mitigated layout of the Boulders Wind Farm that will affect different people in various ways. The 12 visual impacts account for ALL the high negative impacts that cannot be effectively mitigated, and these are most relevant to the residents of the farms immediately neighbouring the turbines, the residents living on the top of the ridge in Britannica Heights estate, and the residents and visitors to Paternoster. The rest of the negative impacts – those being the heritage, noise, traffic, economic and social impacts are mostly rated low negative post-mitigation. There are also seven moderate positive social and economic impacts associated with the proposed development that include income and employment benefits within the region. There is also a high positive benefit of securing clean energy which assists South Africa meet its energy security and carbon emissions reduction needs.
9	Please also email us a copy of the poster that summarised the proposed shareholding in the wind farm. You might remember that one of the development team tried to hold this up against the wall at the meeting, but the information it contained was too small to be visible from where we were sitting.	Mary Ralph (BH)	25-Jun-19	A pdf of the shareholding poster was emailed on the 25th June 2019.
10	During the meeting, one of the residents questioned why none of your reports deal with the health impacts related to very low frequency sound generated by wind turbines. One of the members of your team undertook to send us some further information about this.	Mary Ralph (BH)	25-Jun-19	Email response sent on 28 June 2019: Attached are the papers on the impact of low frequency waves from Mr Ronald Bach of the BWF development team as promised. One is in English and the rest in German and French. He has provided a summary in English of the studies and their findings in his email below. As per these reports, the 500m distance of turbines from houses/dwellings is considered sufficient to avoid any such impacts. This buffer has been included in the mapping of the



#	I&AP Requests for Information	I&AP	Date	EAP Response
				sensitive areas in the EIA and used in the design of a layout for the turbines.
11	<p>In terms of a meeting with residents of Britannica Heights, I think it would be best if you arrange a venue in St Helena Bay (perhaps at the hotel or civic centre?) and then notify all the Britannica Heights I&amp;APs about it. There are quite a number of us now and we are unlikely to fit in anyone's lounge. It would be unfortunate if residents were prevented from attending because the venue is not large enough. This is, in fact, precisely what happened when Savannah last organised a meeting for residents of the Heights. We were asked to keep numbers small and then they arrived with a large contingent that all but outnumbered the locals. We sincerely hope CES won't resort to this kind of bulldozing. Thank you for offering to respond to queries via email in the meantime. I do have a question related to the visual impact of the turbines. I am sure you are aware that the proposed wind farm has been on the cards for some years and I&amp;APs have had to engage with it several times. Each time, we have asked that a set of photographic images be provided showing the site landscape with a mock up of accurately placed and sized turbines superimposed on it. Given that the visual impact will be high, we think we have a right to be given a pretty good idea of what the turbines will look like from Da Gama Road and Columbine Crescent in Britannica Heights, but also from St Helena's main through-road, the entrance to Paternoster, the marina at Veddrif, etc. At the scoping document stage, we were told that such mock-ups could not be provided because the placement of the turbines had yet to be determined. Now that a definite proposal around turbine placement is in place, please could CES provide and circulate these images as a matter of urgency. They are a vital and very basic piece of visual information and we are astonished that they have not been included in the EIA.</p> <p>Additional Email on venue issue on the following day: Further to my email yesterday, Doug and Gay Portsmouth have offered to make their Hilltop Hideaway venue available. They are at ... Columbine Crescent. (Britannica Heights). Their email address is .... Please could you contact them directly to set a date that suits?</p>	Mary Ralph (BH)	22 & 23 May 2019	The Portsmouth's were contacted directly and a meeting arranged at their house on the 19 <sup>th</sup> June 2019 at 1pm.
12	I am writing to enquire as to the process going forward with regard to the draft EIR for the Proposed Boulders Wind Farm. Please can you provide me with a schedule of anticipated events and when and where the I&APs will be given further opportunity to react to your comments on our submissions and any further reports and for what period we might be given this opportunity? Thank you for your time and assistance.	Peter Pickford, Paternoster	29-Jul	Email response sent on 30 July 2019: We are unfortunately not in a position to provide you with clarification on when we will be completing and submitting the Final EIR. We are still in the process of reviewing all the comments and getting the specialists to respond and finalise their reports, and are uncertain as to when this will be complete. In accordance with the legislated EIA process, once we have incorporated all the comments into the Comments and Response Report, and made amendments to the draft reports (specialist, EIR, and EMP), they will then be submitted to the DEA who will initiate the decision making stage of the EIA process. During this stage, the DEA are obliged to receive additional comments from I&APs. The determination of the need for any additional formalised consultation with I&APs rests with them. I assure you that you and all the registered I&APs will be informed when the final reports are submitted and when and where you can access these reports and submit any further comments.
13	If at all possible, I would be grateful for any advance warning that CES can give us that your responses are almost complete and that we can expect the report to be submitted to the DEA.	Peter Pickford, Paternoster	31-Jul	Email response sent on 31 July 2019: As mentioned below the timing of the release of the final EIR is uncertain but that we will alert you to its release in due course.



### 3 EIA PROCESS ISSUES

#	I&AP Comments related to the EIA Process	I&AP	Date	EAP Response
1	With reference to the advert in Appendix A of the Draft EIA, the deadline for written comment is 21 June, but the email sent today gives this date as 18 June. Please clarify. Assuming 21 June is the correct date, holding the public meeting on 19 June, allows I&APs just two more days to submit comments. This seems exceptionally tight. Please let me know what the regulations are around timing?	Mary Ralph (BH - Britannica Heights)	16-May	The EIA regulations require a 30 day public review period. There are no requirements in terms of when any public meetings should be arranged during the public review period. CES prefers to hold the meetings later in this period to give I&APs an opportunity to familiarise themselves with the reports and identify their questions and concerns before we hold the meetings. The correct original deadline was the 21st June, and this was later extended to the 2 July - which made the public review period 44 days.
2	In downloading the 1st Draft of the EIA documents for the proposed Boulders Wind Energy facility, I note with concern that Appendix D3 the Bat Impact Assessment does not load and instead one is presented with the following error message: I have received notice of the same malfunction from other I&APs prior to today. It becomes incumbent on CES therefore to repair the malfunction and to begin the public participation process again from the date on which such malfunction is repaired. The public cannot comment on documents that are not available. I look forward to your response.	Pickford, Peter (Paternoster)	23-May	Email on 24th May. Thank you for drawing attention to the problems you're been having downloading the Bat specialist report. We have now rectified this problem. We draw your attention to the fact that hard copies of all reports are available at three libraries in the local area. It is therefore not correct to state that documents are not available and to use that to argue that the PPP process must start again. CES acted quickly to correct the problem and ensure that the report was available for download.
3	Mr. Pickford is quite correct. You are not. As the EAP it is YOUR obligation to ensure that you competently and fully deliver the notified options. I am in the Karoo but would also like to have the opportunity to view the document(s). No doubt other I&APs are in similar situations too.	V d Spuy, Andre	24-May	As per above response to Mr Pickford.
4	Thank you for your email of yesterdays date and too for your consideration of the Britannica Heights Residents Group request to extend the opportunity to comment. The extension tabled below is appreciated. However, I am writing to express the concern that the period for the public review for the Proposed Boulders Wind Energy Facility falls substantially within the period of the National Holidays. This may not, at first impression, be a matter of particular concern but when one looks at the amount of information there is to digest and then looks to the fact that a great many of not only the I&APs, but all of the public impacted by the report, will in fact, for a considerable period of the public response period, be committed to already long planned and booked holidays with their families then one becomes aware that <i>the real response opportunity</i> is thereby seriously curtailed. It should also be noted that both I&APs and members of the public on holiday will also not be able to attend the scheduled public meeting which falls right in the middle of the National Holidays. Further, a great many of the registered I&APs operate tourism or hospitality based business and as such the national holidays will represent some of their busiest times of the year and thereby again seriously curtail their opportunity to adequately review and effectively respond to the draft EIA or attend public meetings. With the above considerations in mind and the directives of our Constitution and NEMA both advocating the right of the public to be adequately consulted and their input to be actively sought, considered and implemented in policy and decision making, then I would respectfully request that you review the current public review and comment period for the Proposed Boulders Wind Energy Facility, being DEA project reference number (14/12/16/3/3/2/1507). I would propose that to genuinely ensure that the public is sincerely engaged and consulted and given fair opportunity to respond with their considered comment, that the public review period be extended to a week after the end of the National Holidays and that the public meeting scheduled for the 19th of June be re-scheduled for early in the first week after the holidays. Thank you for your consideration of my request and I look forward to knowing your response.	Mr Pickford - Paternoster	23-May-19	Your concerns about the large volume of reports to review, the overlap of the public review period with the national holidays and the request for an extension of the public review period for two weeks after the holiday period are noted. We presume you are referring here to the school holiday period which in the Western Cape occurs between the 15th June and the 8th July in 2019 which partially overlaps with the advertised public review period for this project. The EIA regulations in South Africa require a 30 day public review period for all EIA processes. We have advertised a public review period of 32 days. The potential to extend the public review period is limited by the overall legislated timeframes for the EIA process. The more time made available for public review, the less time there is to amend and finalise the report thereafter and respond to all the comments raised by the I&APs. The needs of the I&APs for time to review the EIA documents needs to be taken into consideration, but so too the needs of the developers and authorities. We have taken all this into consideration and propose to extend the public review period by two weeks till the 2th July 2019. This is the maximum possible accommodation that can be provided. With this extension the total length of the public review period was 44 days.
5	In downloading the 1st Draft of the EIA documents for the proposed Boulders Wind Energy facility, I note with concern that Appendix D3 the Bat Impact Assessment does not load and instead one is presented with the following error message: ... I have received notice of the same malfunction from other I&APs prior to today. It becomes incumbent on CES therefore to repair the malfunction and to begin the public participation process again from the date on which such malfunction is repaired. The public cannot comment on documents that are not available. I look forward to your response.	Mr Pickford - Paternoster	23-May-19	CES response on 24 <sup>th</sup> May 2019: Thank you for drawing attention to the problems you're been having downloading the Bat specialist report. We have now rectified this problem. We draw your attention to the fact that hard copies of all reports are available at three libraries in the local area. It is therefore not correct to state that documents are not available and to use that to argue that the PPP process must start again. The extension of the PPP period to 44 days also addresses this concern.



#	I&AP Comments related to the EIA Process	I&AP	Date	EAP Response
6	I missed this email yesterday. It is utterly disingenuous to frame the correcting of the contradictory dates on CES's documents as an "extension of the review period". I know some of us like to live in a post-truth world but, really? What I originally asked for was some information about what the regulations are for the public review period. Please could you clarify what the minimum and maximum periods are?	Mary Ralph (BH)	23-May	The public review period must run for (at least) 30 days.
7	Mr. Pickford (comment 5 above) is quite correct. You are not. As the EAP it is YOUR obligation to ensure that you competently and fully deliver the notified options. I am in the Karoo but would also like to have the opportunity to view the document(s). No doubt other I&APs are in similar situations too.	V d Spuy, Andre	24-May	As per above response to Mr Pickford on the 23 May.
8	Since CES have allocated the legal minimum amount of time to the review period, I would like to request that this be extended to 31 July. Failing that, I would like to add my support for Peter Pickford's request that you take into account that many of the I&APs likely to be most directly affected by the wind farm work in the hospitality industry and will be extremely busy from 14 to 18 June because of the June 16 public holiday, and beyond that until 8 July because of school holidays. It seems only reasonable that this be taken into account. If a real (as opposed to a fake) extension is not possible, please supply reasons for this	Mary Ralph (BH)	24-May-19	See response above to Mr Pickford on his request for an extension of the public review period.
9	Thank you for getting back to me and for providing clarity on the deadline for responses. The turnaround time still seems exceptionally short given the amount of text we have to wade through, and especially as we thought the process of drawing up the EIA and commissioning the specialist reports was all placed on hold while the legal appeals were underway. It is disconcerting to find that this process all merrily continued behind the scenes, as we were led to expect that I&APs would have opportunities to give input to the specialists while they conducted their research and evaluations.	Mary Ralph (BH)	24-May-19	See response above to Mr Pickford on the request for an extension of the public review period. With regard to the conducting of the Specialist studies, due to the extremely tight timeframes for EIA processes, it is common practice and necessary for the specialist to continue their research and assessment processes during the authority review periods (between the Scoping and EIA phases). The specialists also need to remain independent of the Developers and the I&APs. They are provided with all the comments and issues raised by I&APs during the Scoping Phase and their terms of reference require that they take these into consideration in undertaking their assessments. In some cases where relevant they will also interview key local informants and stakeholders as part of their research work where they see the need for this. They are, however, not required or obliged to consult with I&APs or to create additional opportunities for I&APs to make submissions. Request for Visual Images: These have been developed as part of the Visual Impact Assessments, two of which have been undertaken and are included in the EIA documents. Large printouts of the mock ups of the visual impacts from different vantage points were produced for the Public Open Day and focus group meetings. In addition, digital images can be requested from CES. Due to the large size of these files they cannot be provided on the CES website.
10	Since CES have allocated the legal minimum amount of time to the review period, I would like to request that this be extended to 31 July. Failing that, I would like to add my support for Peter Pickford's request that you take into account that many of the I&APs likely to be most directly affected by the wind farm work in the hospitality industry and will be extremely busy from 14 to 18 June because of the June 16 public holiday, and beyond that until 8 July because of school holidays. It seems only reasonable that this be taken into account. If a real (as opposed to a fake) extension is not possible, please supply reasons for this.	Mary Ralph (BH)	24-May	See response to same request from Mr Pickford in row 4 above (23 May).





#	I&AP Comments related to the EIA Process	I&AP	Date	EAP Response
11	As the EAP your acknowledgment of your error is noted. The NEMA EIA Regulations specify that: - a PPP comment period be minimum 30 days. - an EIAR includes inter alia the specialist studies (example Reg 23(1)(a); "an environmental impact assessment report inclusive of any specialist reports...which must have been subjected to a public participation process of at least 30 days"). - any information that has the potential to influence a decision that may affect other parties be made available for comment (Reg 40(2)). As the EAP you have, via one of the advertised options (and which is clearly a popular option of I&APs): - made available for review an incomplete EIAR for part of the for minimum 30 days. - make available a specialist study for less than 30 days. - make available for less than 30 days information which has the potential (and is intended to) influence the decision on the application. You have also (seemingly) failed to notify all I&APs of your significant error and the prevailing non-compliant situation which you are evidently intend on sustaining. Therefore, you have violated numerous clear NEMA requirements and your superficial rectification and dismissal of Mr. Pickford's objection do not restore the significant non-compliances. Above is not my "opinion" but is the law. As the EAP you are obliged to comply with the NEMA in order that the full rights of I&APs are properly presented. As the EAP you have now been notified of the non-compliances and objection has been lodged so that you proceed with the EIA process, under current circumstances, at your own and the Applicant's own risk. It would probably be remiss of you not to inform the Applicant of your error and calculated risk. For instance, should any I&AP happen to submit (again) comment or objection on grounds of the non-availability of the bat report on the website for the full term then you will need to take responsibility for depriving that party of its right to comment and whatever consequences are delivered upon the application.	Van Der Spuy, Andre	27-May	Email Response on 27 May 2019: Thank you for raising your concerns. We will forward to you an email sent to Mr Pickford and Ms Ralph in response to their specific request for an extension of the public review period (see mail from 23 May from Mr Pickford).
12	I note that the avifauna report by BioInsight for the proposed Boulders Wind Farm makes mention of a radar report. Such radar report does not appear to be attached to any of the reports or be submitted as an independent report. Please can I ask for a copy of the said radar report as it bears on the avifauna impact of the proposed Boulders Wind Farm and as a consideration of the conclusions in the BioInsight report it is most relevant. I would further note that this same report was mentioned by Ms Karen Jodas of Savannah Environmental as the then EAP during the public meeting at Paternoster where I asked for a copy of the said report. I note that I never received this and did mention such lack of receipt in my comments on the scoping report. I trust that you will be able to amend the omission.	Mr Pickford (Paternoster)	29-May-19	CES email response on 6 June 2019: The radar data and report was something the proponent of the Boulders Wind Farm commissioned as part of its pre-construction monitoring process, at great cost. This data is their private intellectual property which they have made available to the Avifaunal specialist for review as part of their assessment on condition that they sign a non-disclosure agreement (NDA) that protects their intellectual property. They are willing to provide BirdLife or any other avifaunal commenting body to review this data if requested, on the same conditions. The developers encountered these same access restrictions themselves when they tried to access the monitoring data from the WC1 developers. In their view, they are not required by the DEA to present any preconstruction monitoring data to the public in the EIAR. They have shared the data with the appointed avifauna specialist who are regarded as experts in their field and have the competences to review the data presented in the respective monitoring reports (radar and standard monitoring) and conclude on the results. The relevant contact person for the developer is Jonathan Visser who can be contacted at <a href="mailto:jonathanv@iwpower.co.za">jonathanv@iwpower.co.za</a> if BirdLife wish to review the data and are willing to sign a NDA.
13	Your comment and the extension of the public review period is noted and appreciated, thank you. I confirm that you shall confirm this extension to all I&APs.	Pickford, Peter	28-May	Emails, SMS's and official advertisements providing I&APs with notice of this extension was sent out on the 30th May 2019.





#	I&AP Comments related to the EIA Process	I&AP	Date	EAP Response
14	I note from the Draft EIR that the next version of the EIR that will be produced under your management as the EAP will be the Final EIR. I also note however that you do not appear to have planned for a comment period on the Final EIR. Please confirm that a comment opportunity will indeed be provided (on the Final EIR) for I&APs, as required.	Mr A van der Spuy	10-Jun-19	The EIA regulations provide very specific requirements for the EIA process. In terms of this process a Draft EIR must be produced and made available for public review and comment. Thereafter, the EAP must produce and submit the final EIR and EMP with a Comments/ Response Report. No additional public review period is required for the Final EIR, which is submitted to the authorities for a decision. The I&APs will however be informed of the submission of the Final EIR and this report will be made available to the public on the CES project website. Any comments you or other members of the public wish to make at that stage would need to be submitted directly to DEA. Whether these comments, make outside the official/formal public review period, would be accepted or responded to, remains at the discretion of the DEA.
15	Below refers. I am aware of the very specific requirements of the EIA Regulations and NEMA. Please be advised that you will be required to provide I&APs, including our clients, with a further comment opportunity. If, as you seem to suggest, the future comments must be delivered to the DEA as the Competent Authority then you should provide us and the I&APs with confirmation that the DEA will accept and consider such comments at that time – and that you as the EAP will notify I&APs of their rights in this regard, and in good time. It is noted that the Draft EIR is completely silent in this regard.	Mr A van der Spuy	10-Jun-19	In response to your mail, the legal regulations for the EIA process do not require an additional public review period for the Final EIR. I&APs are however entitled to submit comments on the final EIR, but these must be submitted directly to the competent authority which in this case is DEA. As the EAP we are well aware of our responsibility to inform all the registered I&APs when the final EIR has been submitted and make it available for them on our website and inform them of the opportunity to make further comments and provide information in that regard. We are also well aware that it <u>is not</u> our responsibility to confirm whether or not the DEA will accept these comments, as we cannot respond, nor act on, behalf of the regulatory authority.
16	“As part of the Feasibility Assessment undertaken by the project developer, the developer engaged with numerous stakeholders to obtain a sense from key entities regarding the acceptability of the proposed wind farm facility on the planned site. In response, letters supporting the development were received from”, CES then lists many stakeholders who are in favour of the project, BUT not one who is opposed to it. Is this because the developer never engaged with those in opposition, considers them not key entities worthy of obtaining a sense regarding the acceptability, or that the developer & CES are ignoring their concerns and are just trying to bulldoze the project through.	Todd, A&J (BH)	18-Jun-19	See response to Mary Ralph making the same point at the FGM on the 20 <sup>th</sup> June (see number 18 below)
17	Surprised that specialist studies & EIA continued during the appeal process and that I&AP's did not have the chance to engage with specialists as they had expected.	(FGM) Focus Group Meeting: Britannica Heights (BH)	20-Jun	The specialist studies began during the Scoping process and continued until the EIR was completed. The economic specialists had interviews with 9 different local estate agents and 12 different tourism business operators.
18	2) Why are all the objections we and others made to the scoping report absent from the draft EIA, while letters of support from the farmers involved etc, are included?	FGM: (BH)	19-Jun-19	The comments received during the public review period for the Draft EIR will be included and responded to in the Final EIR. The EIA does not include or speak to the comments raised during the scoping process and many of these comments will not be relevant to the EIR. The letters of support you refer to were mentioned in the Needs and Desirability section of the EIR and speak to the willingness of the farmers to make their land available for the development.
19	3) Please clarify the process from this point onwards, that is: what are the time constraints? to whom do we address our objections to the final EIA? if the final EIA is approved by the Dept of Environment, what other agencies still have to give their approval, and to whom do we appeal?	FGM: (BH)	19-Jun-19	This was dealt with in the last slide of the CES presentation of the Draft EIR in this meeting. Registered I&APs will be informed of the outcome and the details of how to appeal if they wish to do so.





#	I&AP Comments related to the EIA Process	I&AP	Date	EAP Response
20	Accusation that the EAP is biased as the developer is paying the EAP to make sure that the development goes ahead.	FGM: (BH)	19-Jun-19	The EAP and specialists are independent, and their studies must legally be paid for by the developers. Payment is not subject to an approval.
21	Who makes the recommendation in the EIR?	FGM: (BH)	19-Jun-19	The EAP takes all the specialist studies into account and provides a recommendation.
22	There was no PPP for West Coast 1 WEF.	FGM: (BH)	19-Jun-19	CES cannot comment on the WC1 WEF as neither CES nor the developers were part of the EIA process for that project.
23	While you responded briefly to the emailed question about timeframes, please could you put this in writing as well? That is, * When must the final EIA be ready?	Ralphs, Mary (BH)	25-Jun	We have until October at the latest to submit the final EIR but the timing will depend on the amount of time it takes to address all the comments and finalise the reports with input from the specialists and the client.
24	* If the final EIA is approved by the Dept of Environment, what other agencies still have to give their approval, and by when?	Ralphs, Mary (BH)	25-Jun	All the other regulatory authorities will be submitting comments as part of the I&AP review process. If the developers receive environmental authorisation, they will still have to successfully go through a competitive bidding process for the Department of Energy's REIPPPP which is currently on hold.
25	* To whom would we appeal against such approval and within what timeframe would we have to do so?	Ralphs, Mary (BH)	25-Jun	DEA has a special section for appealing EA's. CES will notify all I&APs of who and where to submit your appeal when we notify you of the DEA decision on the application for authorisation. We have to notify all I&APS about the decision within 10 days of receipt of such. Anyone wishing to appeal will then have 20 days to submit an appeal. The appeal panel then has 60 days to make their decision.
26	When do the comments close?	FGM Paternoster I&AP	26-Jun	The 2nd of July.





#	I&AP Comments related to the EIA Process	I&AP	Date	EAP Response
27	<p>Re: Response to Draft Environmental Impact Report for the proposed Boulders Wind Farm Energy Facility, DEA Reference: 14/12/16/3/3/2/1057. News of the publication of the draft EIA for the controversial Boulders Wind Farm was delivered to I&amp;APs on 16 May 2019 with notice that we had until 18 June 2019 to respond – two days more than the legal minimum prescribed for a public participation process. On appeal, CES reluctantly extended this review period by 11 days. From the correspondence between you and I, as well as the exchanges we had at the two St Helena Bay meetings and on the telephone, it was apparent that CES was attempting to go through the motions of holding public meetings but can in no way be considered to have made sure that these were advertised in ways that the local community would be likely to respond to or held at times that would be convenient for them to attend. According to Section (2)(4)(f) of NEMA, the participation of all interested and affected parties (I&amp;APs) in environmental governance must: • be promoted and all people must have the opportunity to develop the understanding, skills and capacity necessary for achieving equitable and effective participation, and participation by vulnerable and disadvantaged persons must be ensured. Further, the DEA's 2017 Public Participation Guideline in Terms of NEMA EIA Regulations, makes clear that the DEA's expectation is that public participation be 'vigorous and inclusive'. Under Point 1, the guidelines note that: at a minimum', and among other things 'the PPP undertaken must allow for the following: • to enable the person conducting PP to incorporate the needs, preferences and values of potential or RI&amp;AP's into its proposed development that becomes the subject of an application for an environmental authorization (EA); • to provide opportunities for clearing up misunderstandings about technical issues, resolving disputes and reconciling conflicting interests; • to encourage transparency and accountability in decision-making; • to contribute toward maintaining a healthy, vibrant democracy (emphasis added). Point 4 of the same document continues: All potential and I&amp;APs have a right to be informed early and in an informative and proactive way regarding proposals that may affect their lives or livelihoods. Early communication can aim to build trust among participants, allow more time for public participation, and improve community analysis and increases opportunities to modify the proposal in regards to the comments and information gathered during the PPP. The level of public participation must be at a minimum be informed by – • the scale of anticipated impacts of the proposed project; the sensitivity of the affected environment and the degree of controversy of the project; and • the characteristics of the potentially affected parties.</p>	Ralphps, Mary (BH)	30/06/2019 (Part 1)	<p>CES went well beyond the minimum requirements for public participation in an EIA process. The EAP is not required to have meetings with I&amp;APs or particular groups of I&amp;APs. In the case of the public review period for the Draft Boulders EIR, CES arranged an open day in Paternoster and 8 different focus group meetings with various stakeholder groups including the residents of Britannica Heights, Paternoster, St Helena Bay, as well as the Tourism sector in the Peninsula and the Municipal and government authorities between the 18th and 26th June 2019. The first two attempts to meet with residents of the historical fishing villages in Paternoster and St Helena Bay were not successful in attracting the relevant stakeholders, but two additional meetings with these communities were held on the 26th June were well attended (70+ persons) and successful. In arranging the meetings, we attempted to obtain advice and assistance from local stakeholders on appropriate times and venues for different meetings. As for advertising and inviting people to the meetings: the open day was advertised in the newspapers when the public review period was advertised. In addition, all the registered I&amp;APs were invited via email and SMS messages. We also asked for assistance from key local stakeholders and residents to inform others about the meetings. As a result - CES was able to meet with many I&amp;APs with a broad range of interests and views. We are confident that through these meetings and the written submissions, we have successfully captured the full range of issues and concerns about the proposed BWF and the Draft EIR. With regards to some people not being able to make the meetings - it is not possible to schedule meetings to suit every individual's circumstances, nor is it appropriate to chop and change arrangements to suit one or two individuals who have problems with the scheduled times. In addition, attendance at the meetings is not essential. I&amp;APs were given every opportunity to raise issues and submit comments via email and a large number of people did so.</p>
28	<p>Please indicate how the notion of 'values' (as in morals, ethics, ideals, principles as opposed to monetary value) enters any of the documentation or public discussions held regarding Boulders Wind Farm? Where is 'transparency' when the details of how the farmers are going to benefit from this scheme are carefully censored? Where is 'accountability' when all you offer the local community is 17 long term jobs and a profit-dependent corporate social responsibility programme, and when you have not taken the time to quantify the size, nature and growth potential of those local business sectors in Paternoster and St Helena Bay that could be negatively impacted, thus putting a (very considerably) higher number than 17 jobs at risk. Where is 'accountability' when you knowingly endorse a proposal to plant another 45 massive turbines in the direct flight path of thousands of birds? How do you calculate the number of acceptable bird and bat fatalities without even mentioning, much less evaluating, the millions of other creatures up and down the food chain that are put at risk in this area by these wholly unnecessary deaths? Oh yes, humans don't yet fully understand biodiversity, or how the rapid extinction of species, particularly on this peninsula, might impact our future survival. Yet the assumption seems to be, let's kill them now anyway and picket the profits, and someone someday will find a new technology that will solve the problem later.</p>	Ralphps, Mary (BH)	30_June (Part 2)	<p>The potential economic impacts on the existing tourism sector and property values has been assessed by the Economic Specialists. They reviewed the existing data and interviewed 21 local estate agents and tourism facility operators and found no discernable impact from the WC1 wind farm on the local tourism sector or property values. In addition, they reviewed the experience of the Cape St Francis wind farms and the international literature on wind farms and also found no significant impact of wind farms on tourism or property values. Consequently, there have been no job or income losses that can be attributed to the existing WC1 windfarm and the potential for these impacts from the BWF is expected to be low and unlikely. As a consequence of the concerns raised by residents of Britannica Heights during the public review of the Draft EIR, about impacts on their property values (the properties along the top of Britannica Heights that have a view to the west), the Economic Specialists has further investigated this issue specifically and amended their report accordingly. The Final EIR has been amended in line with their findings. Please see responses on the assessment of impacts on birds, bats and ecology in these sections of the CRR. Our response to the broader concerns about the impact of economic development on the natural environment is included in response number 20 below.</p>



#	I&AP Comments related to the EIA Process	I&AP	Date	EAP Response
29	Where is your contribution to a healthy vibrant democratic process when you schedule a focus group during working hours on a week day? Then, when no one turns up, you reconvene another event, giving potential participants one day's notice? When again, fewer than 20 people pitch up and only about five of those are from the communities in Laingville, Steenberg Cove and Stompneusbaai that you were targeting, you claim you don't know how to reach people in those areas? Do you not then think that your PPP is not working and perhaps you need to take a little time to rethink your process? More importantly, where is your contribution to a healthy vibrant democracy when you use 'focus groups' to play into the West Coast community's social divides, assuming, for example, that none of residents of Britannica Heights had any interest in hearing the views of those in Laingville or Steenberg Cove? How can you, as an EAP, assume that different communities across the peninsula share no common interests?	Ralphps, Mary (BH)	30_June (Part 3)	CES found it initially difficult to contact and arrange meetings with disadvantaged residents from St Helena Bay and Paternoster, as there were few people from these communities who were registered on the database from the Scoping process. We then had to rely on Municipal officials to assist us in arranging the meetings and spreading the word, which was not successful. However, while we were conducting the initial meetings, we were able to identify and make contact with key leadership people in these communities and with their help were able to arrange two well attended meetings in the following week (26th June) for these communities. In Paternoster 25 residents attended the meeting on the 26th June and 51 in St Helena Bay. As for the issue of arranging focus group meeting with different interest groups - the rationale for this is to give all groups an accessible and unthreatening opportunity to raise their specific questions and issues of concern. It is also important to acknowledge that there are divergent and often competing viewpoints and interests (as in this case), and that trying to obtain consensus or agreement between all the I&APs would be a very difficult and beyond the scope of the EIA process. Placing the onus on the developers, via the EAP and EIA process, to secure such consensus is not practical. It is also not necessary or legally required, as these stakeholders are not the people who will make the decision on whether an application for environmental authorisation should be approved or not, and under what conditions. That responsibility lies with the relevant Environmental Authority which in this case is the national Department of Environmental Affairs. The EIA process is, therefore, designed to identify and present all the views, information and specialist assessments to the DEA so that they can make an informed decision.
30	In framing your response, please review the following documents attached: S Shackleton, G Ziervogel, SM Sallu, SM et al. (2015) Why is socially-just climate change adaptation in sub-Saharan Africa so challenging? A review of barriers identified from empirical cases. <i>Climate Change</i> , 6 (3). <a href="https://doi.org/10.1002/wcc.335">https://doi.org/10.1002/wcc.335</a> L Green (2014) Ecology, Race, and the Making of Environmental Publics: A Dialogue with Silent Spring in South Africa, <i>Resilience</i> : 1, 2).	Ralphps, Mary (BH)	30_June (Part 4)	These two papers have little relevance to the EIA for the BWF. They largely speak to the general concerns about unlimited and unsustainable economic growth. One is more relevant to the environmental justice and climate change adaptation issues experienced by more traditional subsistence and disadvantaged poor communities in Africa. These papers speak to the I&APs feelings of frustration and disillusionment about our global socio-economic system and its constant growth. These are issues that are outside the scope of this EIA. It also seems inappropriate to apply these demands for restraint to this wind farm but not to all the other developments including tourism and residential developments that have proliferated all along the coastline in this area.
31	As local resident and community representative Peter Pickford has stated in his response, 'no new energy facility should be imposed in this top down way, at the expense of the environment in all that the term environment encompasses, from fauna and flora to geographical, historical and social. This is particularly pertinent in the circumstances, such as those presently in South Africa, where the government and Eskom have initiated a fast track drive to introduce sources of clean energy into the country's energy supply systems. Fast track, should not countenance irresponsible or rash development.' CES's public participation process has been rash and fast track. And it is arguably rash and fast track development, with its single-minded devotion to the myth of unlimited economic growth, that explains why the future of our entire planet is now hanging on the most fragile of threads.	Ralphps, Mary (BH)	30_June (Part 5)	There is a political drive to fast track energy production projects in South Africa in order to improve South Africa's energy security and reduce its carbon emissions and other pollutants from fossil fuel energy production facilities. This is especially reflected in the National Development Plan (NDP), the SA Climate Change Strategy and the Department of Energy's REIPPPP process. However, this does not absolve energy developers from following the legally required environmental assessment and other licencing and bidding processes. As legally required, the developers of the BWF are applying for an environmental authorisation and going through a full EIA process. This process allows all the stakeholders an opportunity to comment (and appeal) and for the full range of impacts to be assessed. All of this information will be provided to DEA to make their decision on whether to authorise the BWF and under what conditions. This is not irresponsible behaviour.



#	I&AP Comments related to the EIA Process	I&AP	Date	EAP Response
32	We were also assured that I&AP's would be given opportunities to engage with specialists when they came to do their field studies. For this reason, we expected to see that basic facts about this area, that is obvious to any local resident but was starkly absent from the Scoping Report, would be acknowledged by the specialists and reflected in the draft EIA. The draft EIA quickly dashed these hopes. While some of the specialists interviewed a limited set of selected I&AP's, this could be considered fair and sufficient public participation only if all I&APs had at least been notified that such interviews were taking place and given an opportunity to participate if they wished to do so. Given the very limited attempts to gather local data, much less do any actual research, the specialist reports contain many serious shortcomings that undermine the validity of the studies and make a nonsense of the findings.	Ralphs, Mary (BH)	30_June (Part 6)	See the response to the same comment from Mrs Ralphs of the 24th May (row 17 above),
33	A scan of the 208-page EIA and its 16 appendices, many of which are lengthy, confirms that, like CES's approach to public participation, the draft EIA is heavily skewed in favour of the developer and designed to strong arm the energy utility through. Accordingly, the draft EIA and several of the specialist studies emphasise possible project benefits but fail to point out that these are not location dependent. In addition, the report is thin on facts and information that reveal problems and flaws in the proposed wind energy facility, and refuses to acknowledge that most of these are location specific. We raised many these issues in response to the 2018 Scoping Report, and were assured by the then- EAP, that our concerns would be addressed in the draft EIA.	Ralphs, Mary (BH)	30_June (Part 7)	Mrs Ralphs makes unsubstantiated allegations of the EAP being biased. The allegation that the EAP is favouring the developer appears to be based on the fact that the EAP and specialists are assessing the impacts of the development proposed by the developer (i.e. a wind farm) and are not considering other sites or types of developments – that do not suit the developer. This represents a failure by I&APs to understand the scope of an EIA process, its objectives and what can and cannot be assessed. They are effectively wanting the EIA to decide on what types of developments are suitable for particular areas which it is not designed to do and which is the responsibility of the Municipal Spatial Planning processes and national policy making processes. The responsibilities and scope of the EAP and Specialists work in the ÉIA process are limited by the EIR regulations – which is to assess and advise on the management of the impacts of a specific proposed development and application for environmental authorisation.
34	In addition, CES's interpretation of the specialist reports is mechanistic and, while making great claims to scientific objectivity, remains blatantly subjective. Generously considered, the draft EIA is little more than an attempt to demonstrate compliance with the minimum requirements but comes nowhere near constituting a real attempt to understand the local context or deliver a fair and balanced assessment of the facts. It is almost as if CES took note of the legal case of the bias shown in the Scoping Report, and decided that the ruling against this gives them as much latitude as they like. 'Bias,' they seem to declare in the sub-text of every second line, 'that's not bias! We'll show you bias!' In your response to this point, please consider the two reports by Andrew Jenkins and Andre van der Spuy, both commissioned in response to the draft EIA, the nature of which are typical of the serious shortcomings mentioned and replicable in almost all the specialist reports.	Ralphs, Mary (BH)	30_June (Part 8)	The response above (21) is relevant here too. Our responses to the reviews and comments submitted by Dr Andrew Jenkins (on the avifaunal issues) and Mr Andre van der Spuy (on a broad range of issues) are addressed directly in the relevant sections of this CRR.
35	4 Why are the Radar monitoring results not available to I&AP's, is there something that needs to be hidden? Surely ALL monitoring results should be available to ALL people to allow them to form an unbiased, objective opinion of the project! 5 Why are all I&AP's not notified re presentations or meetings, but one member in a community is notified and requested to contact others? Is this notification not the duty of the EAP and is notifying ALL I&AP's not set out in the regulations? 6 Why in the meeting with DEA re the complaint of bias were only four I&AP's – all Ward committee members - interviewed out of the many registered I&AP's and this considered to be a random selection of all affected people? It has also come to light that originally only three were "invited" by DEA and the fourth only invited after intervention by SBM. Is this considered to be an objective review of the bias complaint, and does DEA's action not hint at bias on their part?	Todd, A&J (BH)	01-Jul	With respect to the radar data issue - see response above to Mr Pickford on the 29 <sup>th</sup> May (number 12 above). CES notified all registered I&APs from Britannica Heights via email of the focus group meeting to be held with them on the 19th June 2019. The arrangements to organise the meeting were made with one or two residents who were active and willing. The open day was advertised to all I&APs. The various focus group meetings were targeted at particular groups of I&APs with similar interests or concerns. The invitations for these were also mostly emailed or SMS'ed. With respect to your query 6 about the appeal to DEA - this was the Appeal body's decision. CES had nothing to do with that and is not in a position to answer this question.
36	Please clarify the process from this point onwards, that is: what are the time constraints? to whom do we address our objections to the final EIA? if the final EIA is approved by the Dept of Environment, what other agencies still have to give their approval, and to whom do we appeal?	Mary Ralph (BH)	02-Jul	CES responded to this query in the FGM for Britannica Heights on the 19 <sup>th</sup> June 2019. The public had until the 2 July to submit comments on the Draft EIR to CES. After the public review period was closed, CES reviewed all the comments, amended the report where needed, and responded to all the comments received in the Comments and Responses Report which has been appended to the Final EIR. The minutes of all public meetings are also be appended to the Final EIR. The final EIR was then submitted to



#	I&AP Comments related to the EIA Process	I&AP	Date	EAP Response
				the DEA for a decision on authorisation. At the same time all registered I&APs were notified and the final Report made available on the CES website. Any I&AP wanting to make any comments on the Final EIR will need to submit these to DEA directly. The notices sent to I&APs informed them that the DEA Case Officer can be contacted in this regard. No additional public review period is legally required for the Final EIR. Once DEA have made their decision on authorisation, CES will inform all registered I&APs of the outcome and of their right to appeal.
37	<b>Prejudicial and Applicant-biased approach of “the EAP”, and others of CES.</b> 6. Section 1.4 of the DEIR pretends to meet compliance with EIA Regulations, Appendix 3,(3)(a)(i – ii). The DEIR quotes the relevant statute, per: 4. An environmental impact assessment report must contain the information that is necessary for the competent authority to consider and come to a decision on the application, and must include–(a) Details of–(i) The EAP who prepared the report; and (ii) The expertise of the EAP, including a curriculum vitae.” 7. It is clear thus that only a single person is permitted to act and carry out the prescribed duties of “The” EAP. No provision is made for a “study team” of “individual members”, as presented in the DEIR, to constitute the EAP or act in the EAP’s capacity. 8. In terms of NEMA and the EIA Regulations an EAP is defined as follows: “environmental assessment practitioner”, when used in Chapter 5, means the individual responsible for the planning, management and coordination of environmental impact assessments, strategic environmental assessments, environmental management plans or any other appropriate environmental instruments introduced through regulations;”. 9. The EAP is therefore required to be a natural person (“individual”). A profit-orientated and client-serving company, such as the CES, or a “study team” from amongst its employees, therefore does not meet the requirements of an EAP.	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	02-Jul	CES has previous experience of Mr vd Spuy raising this same issue on a number of previous EIAs for wind farms. In response to these allegations from him, the DEA advised him in a letter dated the 2 March 2016, that the definition of an EAP as defined in the EIA regulations, 2014 "means an environmental assessment practitioner as defined in section 1 of the Act. In terms of chapter 1 of the Act, an environmental assessment practitioner" when used in Chapter 5, means the individual responsible for the planning, management and coordination of environmental impact assessments, ... or any other appropriate environmental instruments introduced through regulations". ... the individual responsible for planning, management and coordination of the EIA process and does not have to personally undertake every task associated with the project. .... Based on the responses of the EAP as well as the NEMA definition of an EAP, your allegations have been found to not have basis and the investigation of this matter is accordingly closed".
38	10. The DEIR, Section 1.4, does not identify who the EAP is and instead describes the professional character of a range of employees from CES and also the business field of operation of the CES. Accordingly, the requirements of EIA Regulations, Appendix 3, (3)(a)(i-ii) have not been met and since we cannot find the signed application form we are unable to establish who the EAP is, or even if there exists an EAP at all.	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	02-Jul	As above
39	11. Accordingly, all use of the term “EAP” in this review and elsewhere by the reviewer must be regarded as being merely a reference to the party/s responsible for management of the proposed BWEF application. It would be wrong to assume that the use of the term “EAP” amounts to acknowledgment of legal compliance.	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	02-Jul	As explained above the EAP is the manager of the EIA process. This is in accordance with normal EIA practice as expected by DEA.
40	12. Under the circumstances the next version of the EIR would be well advised to include a copy of the signed and dated appointment by the Applicant of the individual who is the EAP.	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	02-Jul	The Final EIR includes a signed declaration by the EAP. The Specialist Reports also have the signed declarations for the specialists. Copies of the signed contracts between the EAP and developers are not required to be included in an EIR.
41	13. The approach of the DEIR (section 1.4) to not identify who the EAP is, but instead to introduce a profit-orientated, client-focused company (CES) and a number of its employees, is manipulative and fraudulent and takes advantage (to advantage of the Applicant) of I&APs who are unaware of such subtle but critically important matters. The position of the DEIR makes it now seemingly possible and legitimate for any of the listed CES employees to undertake the legislated tasks of a properly constituted EAP but without incurring the strict liability that accompanies the rightful appointment of an EAP. Issues of independence and objectivity (per EIA Regulation 13) in management of the application are thus violated extensively without fear of reprisal. This review reveals that this is indeed the case with the proposed BWEF application and DEIR.	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	02-Jul	CES is one of the oldest professional Environmental and Social Consulting firms in South Africa and has extensive experience undertaking EIAs and is well aware of the EIR regulations and its obligations in terms of the law when it is contracted by developers to undertake EIAs. All CES consultants are required to undertake their work and act in compliance with the legal requirements both within South Africa and internationally. All senior members of CES are either SACNASP registered or EAPSA registered, or both, and are bound by professional codes of conduct including independence and objectivity.



#	I&AP Comments related to the EIA Process	I&AP	Date	EAP Response
42	14. Evidence of the Applicant-favoured actions of the CES and its employees involved in managing the EIA and producing the DEIR are everywhere to be seen in the DEIR to the trained eye. It becomes quite clear that the entire EIA process and its documentation such as the DEIR are designed to arrive at a pre-determined outcome of approval of the application irrespective of what the findings may dictate. In this limited review it is not possible to describe all of the illegal and Applicant-favoured actions of the "EAP" but some examples are presented below and throughout this review and suffice to prove the allegation of Applicant-favoured bias. Three examples are given below:	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	02-Jul	The response above is also relevant here.
43	16.1 The impact assessment criteria used between the various specialist studies and the DIER lacks standardization and is open to significant manipulation by the EAP and CES and these parties have not let the situation slip by unattended (and to the advantage of the Applicant's interests). For instance, an impact given as "Air Quality Climate Change" in Appendix C1 "General Impacts Table", and repeated as such in the DEIR, is allocated a "Very High +" rating yet nowhere in the documentation can be found the rational impact assessment for this impact but which happens to be very favourable to the Applicant's interests. In fact, the DEIR lacks a proper specialist climate change impact assessment (as is properly required in order to introduce such a potential impact assessment). The EAP has subjectively introduced this impact without any basis at all and it is clearly designed to place the proposed BWEF in a favourable light. Further to the matter is that real world evidence (such as in Germany) points to the fact that renewable energy programs result in increased carbon emission levels (which is an obvious scientific fact). See Appendix A.	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	02-Jul	This impact was assessed in the Social Impact Assessment and is based on the positive socio-economic benefits for the country from the additional energy provided by renewable energy projects and the way in which such projects assist the country in reducing its carbon emissions as per international agreements and will help the country reduce its reliance on coal power stations and the pollution and associated health problems these have created. This is especially reflected in the National Development Plan (NDP), the SA Climate Change Strategy and the REIPPPP process. A specialist study on climate change mitigation was not included in the plan of study for the EIA that was approved by DEA in the Scoping process.
44	16.2 The later section "VISUAL IMPACT: PROPOSED BWEF "FATALLY FLAWED" of this review dealing with the manipulation by those of CES of the LoGIS VIA's limiting mitigation measures, via introduction of their own non-compliant CES VIA, in order to further the interests of Applicant.	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	02-Jul	This issue is responded to in the relevant section with comments on the visual Impacts.
45	16.3 Appendix F of the DEIR, "Feasibility study letters from stakeholder letters" is a collection of letters of renewable energy favourable organizations and departments in which the interests of the proposed BWEF is advanced. However, no Appendix of equal status is granted to the many existing comments and letters of objection against the proposed BWEF by local community members and organizations. The EAP thus attempts to falsely and dishonestly portray the project as enjoying significant support yet the DEIR data itself (Table 8-6) reveals that four times as many letters of objection against the BWEF were received than letters of support. Further, it is the suspicion of this reviewer that the level of opposition is significantly understated by the EAP given his/her/its revealed bias and the EAP's unqualified statement that "the data was cleaned to remove the duplications" (DEIR, page 114), made in reference to the number of I&AP submissions. The integrity of the EIA process is protected under law by requiring that all the persons involved in produced information towards production of the required EIR (i.e. the appointed EAP and appointed specialists) all make an oath to act legally and ethically. This then provides I&APs with the assurance that the credibility and inherent rights of the EIA process are protected and that the responsible parties can be easily identified and held accountable if need arises. However, the approach of the CES in managing and producing information for the EIA, via various of its employees who are not bound in the required manner, undermines this assurance that is due to I&APs.	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	02-Jul	The response in issue 41 above is also relevant here re EAP having to comply with both SACNASP and EAPSA codes of conduct. The public review period for the Draft EIR is currently underway and all comments received will be included and responded to in the Final EIR. The Draft EIA was made available for public review and the comments received during this period are included in and responded to in the Final EIR. The Draft EIR also does not include or speak to the comments raised during the scoping process and many of these comments will not be relevant to the EIR. The letters of support you refer to were mentioned as part of the pre-feasibility assessment undertaken by the developers prior to initiation of their application for environmental authorisation and included in the Needs and Desirability section of the EIR. They provide evidence of the willingness of the farmers to make their land available for the development and the desirability of the development from some key local regulatory authorities. The reference to "the data was cleaned to remove duplications" refers specifically to the multiple submissions made by individuals when attempting to quantify the number of I&APs who participated in the Scoping process and made submissions.



#	I&AP Comments related to the EIA Process	I&AP	Date	EAP Response
46	<b>Critical information missing/ withheld.</b> 27. Critical information is missing from the DEIR (including its associated documentation and specialist studies). This is an important issue in so far as I&APs have the right to review and comment on all information that has the potential to influence a decision that affects them. In this regard EIA Regulation 40(2)(d) refers: <i>“The public participation process contemplated in this regulation must provide access to all information that reasonably has or may have the potential to influence any decision with regard to an application unless access to that information is protected by law and must include consultation with... all potential, or, where relevant, registered interested and affected parties”</i> .	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	02-Jul	CES is well aware of the requirement of regulation 40(2)(d). See responses below concerning the specific omissions Mr van der Spuy has raised.
47	28. The actual signed application form is one such critical piece of information which is missing. On it is required to be the signature of the individual as proof of who is the EAP. We have been unable to establish who the signed EAP is for this application on account of the omission. The issue is significant in so far as various employees from CES are involved in the direct management and production of the DEIR and EIA process itself and the CES is also variously referred as being the EAP1 (the latter is illegal).	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	02-Jul	Response 41 above is also relevant here. The inclusion of the developer’s application form submitted to DEA at the initiation of the EIA is not required to be included in the EIR. A signed EAP declaration is included in the Final EIR as legally required. The signed specialist declarations are also included in the Specialist Reports.
48	29. Another critical piece of information which has been intentionally withheld by the EAP is the radar report undertaken as part of the avifaunal impact assessment for the proposed BWEF. Mr. Peter Pickford, a registered I&AP requested this report on no less than 3 occasions, but without success, per: 24.1 Public meeting held at Paternoster where the request was made directly to Ms.K. Jonas of Savannah Environmental; 24.2 Mr. Pickford’s comments (dated 25/3/2018), page 13, on the Scoping Report. 24.3 Email of 29 May 2019 to Ms. M. Talbot of CES. 30. On the occasion of the last request made by Mr. Pickford the EAP responded that the radar information was intellectual property and that it would only be provided to certain parties of the Applicant’s choice but which excluded all I&APs, and Mr. Pickford, amongst others. 31. The refusal of the EAP to provide the radar report to Mr. Pickford is a direct violation of EIA Regulation 40(2)(d)(j) in so far as the radar study has presumably, or should have, contributed significant data to the avifaunal information upon which the avifaunal impacts of the proposed BWEF are based. The extent to which this is true is unable to be determined by Mr. Pickford or this reviewer. 32. The failure to produce this requested information is a fatal flaw which can only be undone by providing it for review and comment by all registered IA&Ps and within a legitimate and “reasonable” comment opportunity. It is pointed out that it is not protected under law.	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	02-Jul	As indicated in our email response (dated 5 June 2019) to Mr Pickford’s request, the radar data and report commissioned by the Boulders Wind Farm company as part of its pre-construction monitoring process, at great cost. This data is their private intellectual property which they have made available to the Avifaunal specialist for review as part of their assessment on condition that they sign a non-disclosure agreement (NDA) that protects their intellectual property. They are willing to provide BirdLife or any other avifaunal commenting body to review this data if requested, on the same conditions. The developers encountered these same access restrictions themselves when they tried to access the monitoring data from the WC1 developers. In their view, they are not required by the DEA to present any preconstruction monitoring data to the public in the EIR. They have shared the data with the appointed avifauna specialist who are regarded as experts in their field and have the competences to review the data presented in the respective monitoring reports (radar and standard monitoring) and conclude on the results. The relevant contact person for the developer is Jonathan Visser who can be contacted at jonathanv@iwpower.co.za if BirdLife wish to review the data and are willing to sign an NDA.
49	33. The PPP outlined in the DEIR makes no provision for the FEIR to be reviewed and commented on by I&APs. The EAP, Ms. Maura Talbot has also advised in an email of 1 DEIR, page 103: <i>“CES were then appointed as the new EAP to conclude the EIA and the application for authorization.”</i> June 2016 to the reviewer that no comment opportunity will be provided since the EIA Regulations make no provision for such. She has advised that any comment after the submission of the FEIR must be made directly to the DEA. 34. I&APs have the right to review and comment on all information that has the potential to influence a decision that affects them. In this regard, EIA Regulation 40(2)(d) refers: <i>“The public participation process contemplated in this regulation must provide access to all information that reasonably has or may have the potential to influence any decision with regard to an application unless access to that information is protected by law and must include consultation with... all potential, or, where relevant, registered interested and affected parties.</i>	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	02-Jul	This issue was raised by Mr van der Spuy earlier and is responded to in comment and response 10 above.



#	I&AP Comments related to the EIA Process	I&AP	Date	EAP Response
50	35. The DEIR advises that responses of the EAP (and others no doubt) to the comments now made on the DEIR during the current comment opportunity will be included in a Comments and Responses Report which will be submitted to the DEA with the FEIR. However, no comment opportunity on the FEIR, including the final (different) version of the Comments and Responses Report will be provided for. It is thus clear that the EAP has adopted a pre-determined position that the actions that may be necessary to take according to comments of I&APs made now will effectively be ignored irrespective of their nature, and to the extent that no significant changes (in the EAP's view) will be made to the DEIR. Furthermore, the EAP has also determined that whatever responses are provided to I&AP comments will not constitute material information which may influence the decision on the application. This is an unacceptable prejudicial position of the EAP and which disqualifies EIA Regulation 23(1)(b) <sup>2</sup> from potentially having application. The EAP's view effectively already nullifies the purpose of the current comment opportunity. Footnote: 2 The applicant must within 106 days of the acceptance of the scoping report submit to the competent authority— a notification in writing that the 'S%+!&)(reports, and an EMPr, will be submitted within 156 days of/ receipt of the application by the competent authority, as significant changes have been made or significant new information has been added to the environmental impact assessment report or EMPr, which changes or information was not contained in the reports consulted on during the initial public participation process contemplated in subregulation (1)(a), and that the revised environmental impact assessment report or EMPr will be subjected to another public participation process of at least 30 days.	AVDS Enviro Consulting (Andre Vd Spuy)	02-Jul	See response immediately above and in comment/response number 14-5 on 10th June in this section. The issues and comments raised by I&APs during the public review period have all been included in the CRR and responded to. In addition, full copies of all submissions received, including a number of papers and reviews submitted by I&APs, are included in VOLUME 4 of the final EIR submission. The relevant comments received from I&APs were forwarding to each of the Specialists concerned and they were asked to review and respond to them, and where needed amend their reports accordingly. In some cases, this resulted in additional research being done and added to their reports (e.g. the Economic study), and/or amendments to their reports. These changes were then transmitted to the Final EIR which provides a summary and overview of all the impacts. The Stakeholder Engagement chapter in the Final EIR also provides an overview of the submissions by I&APs and how this affected the EIR. This demonstrates that the comments received have not been ignored but carefully considered, responded to and used to amend and finalise the EIR where needed. This process did not result in any changes to the proposed development (i.e. layout or design changes), or the need to significantly revise the impact ratings due to new information. Consequently, CES is not of the opinion that the changes to the EIR represent substantial changes or significantly new information that would warrant an additional public review period. It will, however, be up to the DEA to consider this and decide if an additional review period is warranted.
51	36. As already pointed out in this review material information is missing from the DEIR, in the form of the signed application form and the avifaunal radar report, and that it is also necessary to subject this information to public review and comment.	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	02-Jul	This is a repeat of previous concerns which are responded to above. CES do not agree that these issues justify an additional public review period.
52	37. This review also identifies elsewhere other fundamental flaws in the substance and procedure upon which the application is based and which demand that wholesale and substantial changes be made if it is decided by the Applicant not to abandon the proposed BWEF. There can be no way therefore that the FEIR, as it is envisaged by the EAP, will be in a suitable and compliant state fit for its submission.	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	02-Jul	As per our responses above (row 49, 50, 14 and 15), CES disagrees with Mr van der Spuy's contention that these represent "fundamental flaws in the substance and procedure" in the EIA which require "wholesale and substantial changes" and "is not suitable" for submission.
53	38. The PPP outlined in the DEIR fails to allow for registered I&APs to the undertake the important verification process pertaining to the EAP and others having correctly and honestly recorded their original comments in the CRR. It also denies them the opportunity to contest the responses to such issues even though such responses "may have the potential to influence any decision" with regard to the application. The discretion as to what amounts to significant changes to the EIR must surely fall to the registered I&APs and not the EAP since the PPP is the mechanism by which local knowledge is meaningfully incorporated into the proposed development in order for the development to have any chance of being considered to be sustainable in terms of NEMA Section 2(4)(a).	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	02-Jul	As per our responses above (row 49, 50, 14 and 15). Any I&AP who on review of the Final EIR finds that their comments are not included or have not been accurately recorded, can submit comments to DEA in this regard. When notifying I&APs of the submission of the final EIR, CES will provide I&APs with information about who in DEA to submit any additional comments to. Any decision on whether any edits to the EIR constitute significant changes does not rest with the I&APs or with the EAP, but with DEA. CES has made various changes to the EIR in response to information and comments received by I&APs. Changes have been made to the following sections of the EIR: Section 5 – Alternatives, Section 8 – Public Participation Process, Section 9 – Key Findings of Specialist Studies, Section 11 – Environmental and Social Impact Assessment, Section 12 – Conclusions and Recommendations.  CES do not anticipate that an additional review period will be required as no significant new information has become available that was not taken into





#	I&AP Comments related to the EIA Process	I&AP	Date	EAP Response
				consideration earlier in the process by the various specialists. There have also been no changes to the layout of the proposed BWF since the Draft EIR was made available for review.
54	<b>Non-compliance with accepted Plan of Study for EIA.</b> 39. The EIA Regulations, Appendix 3,(1)(1), state that, “The environmental impact assessment process must be undertaken in line with the approved plan of study for environmental impact assessment”. 40. The DEIR (page 118) advises that the Plan of Study for EIA was accepted in June 2018. 41. The DEIR makes the following relevant statements: “The key issues are to be comprehensively addressed and assessed in the EIA Phase according to the Plan of Study for EIA (refer to Chapter 8) and the terms of reference for each specialist study.” (DEIR, page 169); “During the EIA phase detailed environmental assessments will be conducted in line with the Plan of Study contained in Chapter 8 of this Scoping report. These studies will include recommendations for the implementation of avoidance strategies (if required), mitigation and management measures to ensure that the final assessed layout and development footprint retains an acceptable environmental impact and that impacts on the environment are minimised as far as possible.” (DEIR, page 201); “The SR Plan of Study states that “The following assessments will inform the findings of the EIA... Visual Impact Assessment to be undertaken by Lourens du Plessis of LoGIS...”(DEIR,page 205).	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	02-Jul	This aligns with our (CES) understanding of the regulations.
55	42. The Plan of Study for the EIA Phase is an important document as it is based upon the results of the scoping phases and which should be informed by local knowledge. Once accepted by the Competent Authority the EAP is obliged to adhere strictly to it during the EIA phase. The EAP has not adhered to the accepted Plan of Study for EIA in the case of the Proposed BWEF application. 43. The EAP has allowed the introduction of an additional VIA study to that of the one accepted in the Plan of Study for EIA. While the required LoGIS VIA was indeed undertaken the EAP has commissioned another VIA which has been undertaken by the EAP’s own firm, CES. Furthermore the EAP has allowed the illegitimate CES VIA to dictate the results and findings in the DEIR and which are significantly different (especially in terms of the recommended mitigation measure efforts) to those of the LoGIS VIA. The details of this significant manipulation effort are discussed later in this review under the issue of the potential visual impact assessment.	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	02-Jul	There is no restriction 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. We consider this to be both prudent and responsible. In this instance, the CES visual specialist was able to independently largely confirm the results obtained by LoGIS thus providing further comfort on this matter. In addition, the visual information, findings and recommendations from the LoGIS study are the results reflected in the EIR. The CES VIA was not used to assess visual impacts or included in the Draft or Final EIR specialist studies, except to include it in Appendix H relating to Other Information. The additional study has, therefore, not resulted in any change but simply serves to give CES and the developer more confidence in the findings.
56	44. The DEIR, its findings and the environmental application itself, are accordingly invalidated by the introduction of the CES VIA which was not specified in the “accepted” Plan of Study for EIA.	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	02-Jul	The response to comment 41 above is also relevant here.
57	45. EIA Regulations, Appendix 3(1)(1), has not been complied with. It will be necessary to back-track the EIA process to the Scoping Phase or otherwise dismiss the CES VIA entirely and entirely reassess the findings of the DEIR. Importantly, all the recommended mitigation measures of the LoGIS VIA will need to be implemented but that will still be no guarantee that a fatal flaw will be avoided.	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	02-Jul	See CES responses to the comments on the visual impact assessments in that section of the CRR. Based on our responses in this regard CES disagrees that there has been any compromise to the EIR as a result of this additional visual assessment.
58	<b>Negative impacts significantly outweigh benefits of the proposed BWEF.</b> 94 It is required that the DEIR assess all the potential impacts associated with the proposed BWEF. As discussed elsewhere in this review the DEIR has not included the assessment of impacts associated with the essential powerline component of the proposed BWEF and which would substantially increase the associated total number of potential impacts.	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	02-Jul	The assessment of the impacts of the BWF powerline will form the subject of a separate Basic Assessment which is currently being prepared. The Basic Assessment will and is required to include an assessment of the cumulative impacts.



#	I&AP Comments related to the EIA Process	I&AP	Date	EAP Response
59	Nonetheless, objective analysis of the potential impacts assessed for the proposed BWEF, as such are presented in the DEIR and in Appendices C1 and C2, reveals the following critically important facts: 94.1 Over all the development phases (Planning and Design; Construction; Operation; Decommissioning) of the proposed BWEF a total of 139 potential environmental impacts are identified and assessed. 94.2 Of the total 139 impacts associated with the proposed BWEF 87% are negative potential environmental impacts. 94.3 Conversely, only 13% of the total number of potential impacts are positive (i.e. benefits of the proposed BWEF).94.4 The potential environmental impacts associated with the “No go” development option have not been assessed, as required in terms of the EIA Regulations, but would surely amount to a considerable majority of positive potential impacts in terms of the proposed BWEF. 95 It is therefore quite clear that the proposed BWEF will result in an unacceptably high number (87%) of associated negative potential impacts and these facts therefore dictate that it clearly constitutes unsustainable development under NEMA. This compelling evidence, produced directly from the data generated under management by the CES itself, cannot be overridden by the common argument that the proclaimed positive benefits of renewable energy to the Nation (exaggerated as they are in this matter) supersede the negative impacts since the proclaimed benefits have already been included in the data set and the comparison (i.e. they were assessed and incorporated by the SIA). On this basis alone the DEA will be compelled to refuse the application entirely and the Applicant would accordingly be well advised by the CES to permanently terminate the application.	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	02-Jul	It is inappropriate to compare the total number of negative impacts with the total number of positive impacts and because there are more negative impacts than positive ones, to conclude that the proposed development is unsustainable and should not be approved. This ignores the significance of the impacts and the extent to which they can be mitigated. While there are many more potential negative impacts, the majority (83%) are low negative impacts which can easily be mitigated and are therefore generally acceptable impacts. The no-go option is adequately discussed and compared to the other alternatives (as per normal EIA practice) in the alternatives section of the EIR (see Chapter 5 of the EIR). With respect to Mr van der Spuys argument that the "the DEA will be compelled to refuse the application entirely and the Applicant would accordingly be well advised by the CES to permanently terminate the application." - this fails to recognise the right of the developers (or any developers) to apply for an environmental authorisation for their proposed development, have its potential impacts professionally assessed and reported on (taking into consideration the comments from the public), and to submit their final EIR and EMP for the DEA to make its decision on their application.
60	96 On the other hand, the “No go” development option (although not assessed in the DEIR, as explained elsewhere in this review) will ensure that an exceedingly beneficial quotient of positive environmental impacts will be maintained and that the local community and Nation remain unaffected by the many negative potential impacts. Therefore, when compared to the proposed BWEF the “No go” option is clearly the “best practical environmental option” and the Competent Authority will accordingly be forced to ensure that the “no go” option is maintained failing which the proposed BWEF, when constructed, will constitute illegal (unsustainable) development.	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	02-Jul	The No-Go Alternative has been assessed in Chapter 5 of the EIR and results in a mix of negative and positive impacts of varying significance levels. Mr van der Spuy is simply articulating his own unquantified opinion that the No-Go option is the best practical environmental option and imposing his view on what the DEA must decide. With respect to his last point here: if the BWF developers obtain a positive record of decision on their application for environmental authorisation, and any other authorisations they may require, and comply with any of the conditions associated with their authorisations, their development will be legal.
61	97 The EIA Regulations , Appendix 3, (1)(k) require that: “An environmental impact assessment report must contain the information that is necessary for the competent authority to consider and come to a decision on the application, and must include... the final proposed alternatives which respond to the impact management measures, avoidance, and mitigation measures identified through the assessment;” The DEIR however fails to comply with this requirement since it presents no alternative in which ALL of the specialist recommended mitigation measures are implemented. In fact the critically important LoGIS VIA recommended mitigation measures, which are all required in order for the proposed BWEF to possibly stave off a “fatal flaw” finding, are not incorporated into an assessment where the “final proposed alternative(s) which respond(s) to the impact management measures, avoidance, and mitigation measures identified through the assessment”. This fundamental failure simply confirms that the proposed BWEF, with its implementation of very limited mitigation measures, still definitely constitutes unsustainable development and is inherently “fatal flawed”.	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	02-Jul	This argument is based on the assumption that the high negative visual impacts of the proposed BWF cannot be avoided or mitigated. It ignores the fact that the Developers have done all that they could feasibly do to minimize the visual impacts (e.g. by keeping the development as far away as possible from Paternoster and Britannica Heights, and away from and outside the buffer zone around the Kasteelburg heritage site). The fact that the project is not permanent, i.e. will only be licenced for 20 years, is also a mitigating factor in an assessment of fatal flaws. It also ignores the findings of the economic assessment, which found no discernible or tangible evidence that the proposed development would have negative economic impacts on the existing tourism and property markets. CES is of the opinion that the high visual impacts of the proposed BWF would only be problematic if they were expected to have a significant and discernible impact on the existing tourism sector and property markets in the WC peninsula. The economic study investigated the impact of the WC1 development on tourism and property values and reviewed the experience elsewhere in South Africa and internationally and found no discernible negative impact.
62	98 The EAP’s weak and brief effort (see DEIR, Section 12.3) to override and justify the proposed BWEF against the overwhelming number of significant negative impacts is noted in DEIR Section 12.3 and where the following struggling quote is extracted from: “There are a number of significant positive impacts (benefits) associated with the Boulders Wind Farm. These relate primarily to indirect benefits around climate change mitigation and resource (energy) conservation, and economic benefits for the surrounding communities.”	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	02-Jul	The response to comment number 59 is also relevant here. CES as based its conclusions on an overall assessment of all the impacts and their significance ratings.



#	I&AP Comments related to the EIA Process	I&AP	Date	EAP Response
63	99 In conclusion the disadvantages and negative potential impacts of the proposed BWEF far outweigh the benefits (positive impacts) which dictates that the EAP was duty bound to recommend that this proposed unsustainable development not be approved in any form. The EAP/ CES however acted differently and has approved the proposed BWEF in the DEIR. The EAP/ CES would also be well advised to inform the Applicant of the correct finding in order for it to abandon its opportunistic development proposal without incurring further wasteful expenditure of authorities limited time and public funds.	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	02-Jul	The response to comment number 59 is also relevant here. This is a concluding statement of Mr van der Spuy's opinion which CES does not agree with, as indicated in our responses above.
64	<b>Mitigation of High negative impacts not considered properly in terms of the mitigation hierarchy.</b> 100 One of the chief failings in this application is the stubborn refusal of the Applicant to implement all of the recommended mitigation measures fully. However, the EAP/CES have an active hand in facilitating this approach which is variously noncompliant with the EIA regulations (as pointed out in other sections of this review) and are not shy to recommend (DEIR Section 12.6) that the application be conditionally approved (even though information generated from the public participation process is still to be delivered). This flawed and illegal approach must ultimately be to the detriment of the Applicant whose application is now fundamentally flawed beyond repair.	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	02-Jul	The response to comment number 59 is also relevant here. This is a concluding statement of Mr van der Spuy's opinion which CES does not agree with, as indicated in our responses above.
65	102 The attempts of the EAP and CES's Mr. Johnson and Dr. Carter (authors of the CES VIA) to undermine the due and required specific mitigation attempts identified by the LoGIS VIA have been extensively dealt with already. However, the DEIR has a further failing in terms of its general methodology which excludes application of the full mitigation hierarchy where significant potential negative impacts have been identified.	AVDS Enviro Consulting (Andre Vd Spuy)	02-Jul	See responses to VIA comments in the Visual section of the CRR.
66	103 According to "Social Impact Assessment; Guideline for assessing and managing the social impacts of projects", by International Association for Impact Assessment, (p. 88, 2015), mitigation is defined as: "Mitigation: the process of devising and implementing processes, procedures and/or changes to a planned intervention in order to avoid, reduce or minimize, or to compensate (offset) for impacts likely to be experienced." Therefore compensation is clearly defined as a mitigation measure for (negative) impacts. From <a href="http://www.merriam-webster.com/dictionary/compensation">http://www.merriam-webster.com/dictionary/compensation</a> the following two definitions of "compensation" are provided: "something that is done or given to make up for damage, trouble, etc."; and "something good that acts as a balance against something bad or Thus compensation is clearly a mitigation measure that can be applied to "make up for" any negative impacts. 104 In conclusion, the EAP/CES has failed to ensure that all feasible means of mitigation are investigated and implemented and instead has recommended in the DEIR (Section 12.6) that the application be conditionally approved.	AVDS Enviro Consulting (Andre Vd Spuy)	02-Jul	The need for compensation as a mitigation strategy was not recommended or considered necessary for the BWF for two reasons. Firstly, the expected impact on property values and tourism is rated as low negative and no evidence was found of any discernible impact of the WC1 development or other wind farms on property values and tourism. Secondly, unless the views of any affected properties are protected by a servitude written into their property title deeds, South African law does not recognise any inherent right to an existing view of a property. There is therefore no legal basis or guidelines to support the payment of compensation due to visual impacts.
67	105. The above definitions and meanings for compensation" and "mitigation" are noted to be entirely consistent with the criteria and meanings for sustainable development as such are set out under Section 2(4) of NEMA and, in relation to the potential residual high negative impacts associated with the BWEF, especially NEMA Section 2(4)(a)(viii) which states: "Sustainable development requires the consideration of all relevant factors including the following...that negative impacts on the environment and on people's environmental rights be anticipated and prevented, and where they cannot be altogether prevented, are minimised and remedied." (Bolding added)	AVDS Enviro Consulting (Andre Vd Spuy)	02-Jul	As above in 66
68	106. The EAP/ CES and other appointed consultants do not appear to have had a proper and competent grounding in proper integrated environmental management whereby genuine mitigation of negative impacts is a necessary and critical aspect in order to ensure that sustainable development is achieved. The Section 2 (4) NEMA gives effect to the application of the "mitigation hierarchy" tool and which is otherwise represented in the extracted figure below (note that the Figure 12 title appears to be incorrect but is inconsequential for the purposes of this review), as taken from the "Social Impact Assessment: Guideline for assessing and managing the social impacts of projects"; by International Association for Impact Assessment, (2015):	AVDS Enviro Consulting (Andre Vd Spuy)	02-Jul	As above in 66



#	I&AP Comments related to the EIA Process	I&AP	Date	EAP Response
69	107. In terms of such mitigation hierarchy, negative impacts are to be mitigated through the above-illustrated order of priority and where compensation " <i>in kind</i> " or " <i>by other means</i> " are considered to be the last mitigation options when negative impacts cannot be avoided, reduced or repaired to acceptable levels. Compensation (offsetting) is therefore applied to deal with residual negative impacts which cannot be avoided, such as those for those whose property values would be negatively impacted from the proposed BWEF (and for which most recommended mitigation would apparently be ineffective and where the Applicant has been unwilling to implement that limited level of mitigation measure that would indeed be at least partially effective). The BWEF application therefore falls short of properly considering all mitigation options by not having considered <i>inter alia</i> the specific options of compensation and off-setting as a remedy for the consequences of its residual high negative impacts.	AVDS Enviro Consulting (Andre Vd Spuy)	02-Jul	As above in 66
70	108. Furthermore, the fact that some existing community members stand to only suffer the costs and inevitable damages (as confirmed <i>inter alia</i> by the SIA per negative impacts on property values) of the proposed BWEF, but no benefits, while a few privileged and select entities, including the Applicant who is neither a member of the local community nor a local tax-payer, stand to (apparently) make substantial financial benefits (at the expense of others), is unjust and is in direct conflict with the "environmental justice" promoted under NEMA Section 2(4)(c).	AVDS Enviro Consulting (Andre Vd Spuy)	02-Jul	As above in 66
71	109. In terms of the costs and damages that will be delivered by the proposed BWEF upon other people, such are non-compliant with the established legal principle that the " <i>polluter pays</i> " and which is encompassed under NEMA Section 2(4)(p) and in so far as the Applicant will be among " <i>those responsible for harming the environment</i> " (where the environment includes local community members in the case of the proposed BWEF), it will thus be necessary for the Applicant to ensure that the costs to such persons are " <i>paid</i> ". It also falls to the EAP to ensure that such mitigation is tabled in the application.	AVDS Enviro Consulting (Andre Vd Spuy)	02-Jul	As above in 66
72	110. Under the EIA Regulations "mitigation" " <i>means to anticipate and prevent negative impacts and risks, then to minimise them, rehabilitate or repair impacts to the extent feasible</i> ". The definition therefore makes provision for the implementation of offsetting/ compensation and, in fact, requires it to be considered " <i>to the extent feasible</i> ". The application has failed to do so and instead the EAP regards it as justifiable that others, suffer the costs of the proposed BWEF on the basis of a proclaimed greater public benefit. The NEMA certainly makes no allowance for people to become for victims of any development activity such as the proposed BWEF would do.	AVDS Enviro Consulting (Andre Vd Spuy)	02-Jul	As above in 66
73	104. In conclusion, the EAP/CES has failed to ensure that all feasible means of mitigation are investigated and implemented and instead has recommended in the DEIR (Section 12.6) that the application be conditionally approved.	AVDS Enviro Consulting (Andre Vd Spuy)	02-Jul	As above in 66



#	I&AP Comments related to the EIA Process	I&AP	Date	EAP Response
74	<p>ENGLISH TRANSLATION - GENERAL Given the background where the application were attempted to be stopped by the residents who are opposed to the development, two times, by the sabotaging of the process, it is clear to me that it is a PERSONAL agenda, because the Department had at two occasions to lift the objections (appeal). I cannot see why the project should not go ahead. I have been present at two of the current information meetings, and the objections that were made definitely seem to be PERSONAL agendas and therefore carry no objective facts for the cancellation of the project. It is the same people I have seen at the meetings who continuously makes the objections with whatever I want to do or plan whether it be development or rezoning of land etc. Some of the objectors are not South African citizens, and some not even residents for 2 years yet. The tax payers and residents are quick to object to minor issues, but I ask the following: - Three years ago I lost R300 000 with dogs catching my sheep and nobody attempted to help me. - Nobody did anything about the lawless theft of my small stock and the cutting of my fencing. -Why do the internet towers not get removed which were done without EIA's? -Why do they not react to the illegal construction of buildings in Paternoster? - Why do they not react on unsightly warm water cylinders that were constructed on RDP houses? It appears to me as if objecting people wants to stop local farming to get their way. I can unfortunately not agree with this. I believe in an orderly legal process to be followed, but there are continuous interference by uninformed residents through an incorrect attitude displayed before they have all the facts. This project will bring a very big economical injection for the local environment, as well as for the local Community, at the construction and permanent basis. The current electricity situation in South Africa is no secret and the Government's policy around clean energy. The Cape Metro is currently busy with a court case to obligate Eskom to directly purchase electricity from independent power suppliers. I want to place on record that any senseless delay that are caused, by the Objectors, will be reacted to by damage claims. I trust that my input will be a positive contribution to the confirmation of a much needed CLEAN ENERGY project.</p>	Pierre Heydenrych (local farmer)	02-Jul-19	The EIA process for the BWF EIA was interrupted and delayed by an appeal lodged against the DEA decision on the Scoping Process. The appeal was lodged by I&APs who live in the coastal settlements and have interests in the local tourism industry and property markets. Under South African environmental law, all I&APs have a right to submit their comments on the Scoping and EIA reports and also have a right to appeal the decisions made. It is recognised that there are many different opinions and perspectives on the proposed BWF development with both opposers and supporters, potential beneficiaries and negatively affected parties. The potential positive and negative impacts of the proposed development have been identified and assessed by the Social and Economic Specialists and reported on in the EIR. The points you raise about the negative impacts of tourism and other socio-economic developments on the natural environment and wildlife are valid in terms of recognising that all human developments (including eco-tourism, farming and power generation development) have negative impacts on the natural environment and on different human interest groups. All of these need to be taken into consideration in assessing the appropriateness, need and desirability of proposed developments and whether they should be authorised or not and under what conditions.
75	<p>AFRIKAANS SUBMISSION: ALGEMEEN: Gegewe die agtergrond waar die aansoek twee keer deur inwoners probeer stop is, deur die sabotering van die proses is dit vir my duidelik dat dit 'n PERSOONLIKE agenda is, want die Department het by twee geleenthede die besware opgehef. Ek kan myself nie insien waarom die projek nie moet voortgaan nie. Ek was by twee van die huidige inligtingsvergaderings bygewoon, en die besware wat ge-opper is blyk definitief na 'n PERSOONLIKE agende en dra dus geen objektiewe feite vir die kansellering van die projek nie. Dieselfde persone wat ek opgemerk het by die vergaderings is dieselfde persone wat voortdurend beswaar maak met wat ek ookal wil doen of beplan hetsy ontwikkeling of hersonering van grond ensv. Sommige van die beswaarmakers is nie Suid-Afrikaanse Burgers nie en sommige nog nie eens 2 jaar inwoners nie. Die belastingbetalers en inwoners is gou om oor kleinighede besware te opper, maar ek vra die volgende: - Drie jaar terug het ek R300 000 verloor met honde wat skape vang en niemand het my probeer help nie. - Niemand doen iets oor die wettelose steel van my vee en die knip van my drade nie. -Hoekom word die internettorings nie verwyder wat sonder 'n EIA gedoen is nie. - Hoekom reageer hulle nie oor onwettige bou van geboue in Paternoster nie? - Hoekom reageer hulle nie oor onooglike warmwater silinders wat aangerig is op RDP huise nie? Dit wil vir my voorkom asof die beswaarmakers plaaslike Boerdery wil staak om hulle sin te kry. Ek kan ongelukkig nie hiermee saamgaan nie. Ek glo aan 'n ordelike en wetlike proses wat gevolg moet word, maar daar word gedurig ingemeng deur oningeligte inwoners deur 'n verkeerde gesindheid te openbaar voordat hulle al die feite het. Hierdie projek gaan 'n baie groot ekonomiese inspuiting bring vir die plaaslike omgewing, asook vir die plaaslike Gemeenskap, wel by die oprigting en permanente basis. Die huidige kragtoesit in Suid-Afrika is geen geheim nie en die Regering se beleid om trent skoon energie. Die Kaapse Metro is besig met 'n hofsaak om Eskom te verplig om direk by onafhanklike kragvoorsiensers krag aan te koop. Ek wil graag op rekord plaas dat enige sinnelose vertraging wat veroorsaak word deur die beswaarmakers wat ge-opper word met 'n eis vir skadevergoeding indien ons onregverdig verdrag word met die Windplaas projek. Ek vertrou dat my inset as positiewe bydrae tot die bevestiging van hierdie broodnodige SKOON ENERGIE projek sal wees.</p>	Pierre Heydenrych (local farmer)	02-Jul-19	See response in English above.



#	I&AP Comments related to the EIA Process	I&AP	Date	EAP Response
76	<p>Preamble: The residents of Britannica Heights are not unacquainted with the EIA process and those who manage it. This is the third resurrection of the EIA for the above project. While the previous two EIA practitioners manifested all the usual tactics for avoiding questions, diminishing concerns, sprouting mantras and so on, CES has proven unique in not attempting to disguise their contempt for any I&amp;AP's who don't fall into line with the aspirations of their paymasters. The degree to which the EIR is loaded in favour of the developer's objectives is quite unprecedented for us. The level of bias and distortion, conscious or otherwise, in order to produce a favourable outcome for the developer is alarming - especially for professional practitioners who have signed a commitment to neutrality. This attitude was also reflected in the cavalier, box-ticking approach adopted for the I&amp;AP engagement meetings. The I&amp;AP's were left with the clear impression that their valid concerns, both locally and in the bigger picture, were of no importance and that they are really small-fry in a big world. They're probably right on the second point. Nonetheless, the degree to which they have sacrificed their authentic role as protectors of the environment needs to be made very clear to them. Likewise, the degree to which they are comfortable with the meaningless double-speak that economists have subtly introduced into their work needs to be pointed out. Herewith some points that should be reflected upon:</p> <ul style="list-style-type: none"> <li>• Nothing we human beings do to meet our insatiable demand for energy and "stuff works in harmony or balance with the environment. There might be a few surviving hunter-gatherers in the Amazon who wisely refuse to partake of our system, but that's it.</li> <li>• Everything we do to acquire our needs causes harm to the environment, to a greater or lesser degree. This is especially true of the relatively affluent, but unfortunately also true of the less affluent.</li> <li>• We largely all aspire to a lifestyle which is more affluent and increases the burden on the biosphere. Witness the rise of China, where per capita differences in impact with the greedy West are rapidly diminishing.</li> <li>• "Sustainable growth" and "sustainable development" are meaningless oxymorons. You can't have endless growth (in population or per capita demand) in a finite biosphere. Period. But Oooh the politicians, economists and EIA practitioners love this one!</li> <li>• The wild spaces in the biosphere, together with their enormous diversity, provided the arena in which life appeared and thrived. Only wild space growth within nature's constraints enhances the health of the biosphere.</li> <li>• Human intervention in all its forms inevitably destroys wild spaces and hence the health and resilience of the biosphere. This includes the burning of fossil fuels and the commandeering of vast swathes of land for renewable energy forms. We humans are not good at accepting sobering truths that threaten our "rights", enjoyment of affluence and aspirations to affluence. We're even worse when those threats are predicted to roll out over decades rather than days or months. The EIA process was conceived to give the environment a voice through the EIA practitioner. As such the EIA practitioner is right not to be a neutral party. They should be shouting for the environment. The I&amp;AP's will generally shout to defend against threats to their personal experience of life, asset values and speak for a few favourite animals. The developer blunders forward towards realising a profit for his shareholders. Who really speaks for the environment? The EIA practitioner's capacity to provide that crucial voice is compromised in several ways:</li> <li>• They have to survive in the current environmentally destructive economic model,</li> <li>• The developer is assigned to be their paymaster,</li> <li>• If they don't meet the developers aspirations, they will be replaced - as has been done twice in this particular wind farm application,</li> <li>• If they become known for stopping new developments in their tracks, or even curtailing part of the development, no developer will approach them for their services.</li> <li>• They stance is subject to human pressures for job creation, poverty alleviation and so on. This in a legislated framework which still favours distributing the larger percentage of returns on fewer individuals. In view of these constraints, it is hard to imagine that the EIA process can do more than slow down or temporarily delay any new development. The wild places will inevitably be degraded, the human cancer will continue to thrive. When a place is partially degraded by some development, it becomes much easier to push the next one through. The process in effect feeds itself. Once the local valley is full of wind turbines, who will bother to stand in the way of mining or heavy industry for example. The valley will be dead and the existing EIA process can do little other than tick the boxes towards its demise. On a lighter note, one can respond to CES' dismissive attitude towards the local I&amp;AP's by becoming enraged. I have elected to bury my rage and respond to you by making use of satire - both to illustrate how your major dominant members come across and what we might conclude about your attitude to our concerns. Enjoy</li> </ul>	Marx, Matthew	02-Jul	<p>Your opposition to the proposed wind farm is noted. See CES responses to comments about unsustainable growth and EAP bias in numbers 30 and 33 above. Similar issues raised by other I&amp;APs about the energy supply issues, costs and the German experience of wind farms are responded to in the 'Alternatives' and "Other Issues" sections of the CRR. We have acknowledged the high visual impacts on the affected BH residents, of whom Mr Marx is one, and the inability to mitigate this any further than has already been done by the developers by limiting it to the area immediately adjacent to the WC1 facility Mr Marx's additional comments on the Visual issues are responded to in that section of the CRR. This submission provides a very good example of an I&amp;AP shamelessly using highly emotive language and 'satire' to ridicule, discredit and shame the EAPs and Developers and taking out all their frustrations about the potential impact on their property and the dire projectory of our socio-ecological system out on them. Most of these comments are based on very idealistic and unrealistic expectations about the EAPs role and the EIA processes in managing new developments. CES and most EAPs, along with the Environmental Authorities, are well aware of the fact that EIA processes rarely stop proposed developments, rather they are designed to inform and shape them in ways that avoid and minimize negative impacts as much as possible and maximise the benefits. They are not instruments designed to radically change our western market economy and political systems.</p>





#	I&AP Comments related to the EIA Process	I&AP	Date	EAP Response
	<p>and feel free to poke fun at us in return. We can all learn something from satire. So without further ado: CES Cast of Characters: 1. "The Reasonable Man". Every EIA group has one. The leader. The sensible, fatherly presence who overlays the fraught, tempestuous public engagement process with the lubricating oils of mature, reflective "reasonableness". He represents the only "neutral" figure in the drama, a facilitative conduit between the raging I&amp;AP's on the one side and the members of his team who fight for the cause of their Paymaster on the other. He diffuses tense situations by encouraging the moaners to commit their concerns to paper: "Please, please do so – that we may tick the right boxes and get this tedious "requirement" out the way. We don't intend to waste any time giving you meaningful feedback at this face-to-face meeting or, for that matter in the final EIA report, (particularly for those awkward questions!), so we simply employ deflection techniques to gently show you how irrelevant you all are in the big picture". 2. "The Drama Queen": The I&amp;AP's have been through several EIA teams on this project. CES is the first to include this thespian master of eye-rolling, huffing, puffing and desperate facial contortions to demonstrate in no uncertain terms how monumentally stupid this motley collection of rustics are. That incomprehensible French fellow, with a PhD in electrical engineering, rabbiting on about "infrasound" ("he's from Barcelona" as the nice English-woman helpfully put forward). Or that grim-faced woman who worried about "shadow-flicker", when everybody knows that at this location the sun is never behind the proposed site. Or that obnoxious, bald-headed twit who presumed to challenge the Paymaster's clearly unbiased comments on wind-power economics. How did it get to this? Part of a team of once bright-eyed worshipers of the wild places. Now facilitating the roll-out of the vast behemoths of humankind's technological dream into what remains of these spaces. Evaluating the fate of the local fauna and flora, not in terms of the majesty of their individual being, but as statistics. To feel ok about whacking them out of the sky if they have not yet been classified as "red-listed". Perhaps feeling some pang of despair if they are endangered. But immediately feeling better again at the thought that their flight paths will probably not lie in the 55-120 m height range of the vicious turbine blades – as suggested by the armchair specialist. God help those flying at 56 or 57 meters! But we will put in some traffic signs to guide them and, with great relief, condone the impact ranking from shockingly High to comfortably Numb. As for the bats? We'll get somebody to count the carcasses every day and add the numbers to our statistical data base to inform the next wind farm project - those that haven't of course been spirited away by the wind farm company before the counting begins. We'll also investigate frightening them out of the general area by blasting them 24/7 with the bat equivalent of heavy metal. After a few months of this, we feel sure that the carcass count will show negligible fatalities. Those cynical I&amp;AP's will probably suggest that this follows from there being no more bats in the area - stupid bumpkins! 3. "The Turbine Junky": There was always going to be one. The odd bird, who, from years of familiarity, has gone and done it. Fallen in love with a wind turbine. In fact two wind turbines. Moderately tall, graceful structures that peep alluringly at him every morning from behind the local petrol station near his holiday home in old Blighty. With an almost indecent sense of pleasure, he gazes longingly back in return - so close, but so unreachably far! The passionate, unrequitable tension is hardly bearable. What's to be done? Go evangelical of course! How can you I&amp;AP's be so blind to the beauty of these sensual machines? You lucky, lucky bastards! I've got to settle for two little tadgers back home - and here you have the promise of 45 soaring 165 meter high beauties to choose from! On your doorstep no less! Add to that 47 existing temptresses already close to you - not short themselves at 125 meters - and you're complaining! 4. "The Paymaster": The icy winds cut south from the gun-metal-grey of the Baltic sea on Germany's northern coastline. The tall, imposing figure of the Paymaster paces gloomily before the heaving waters. He glares balefully at the off-shore wind turbines, part of the wind energy system that meets 20% of Denmark's energy needs. Damned Danes! Clever idea that in hindsight. We in Germany decided go onshore - extending our few remaining natural forests with forests of giant wind turbines. Penetrating and submerging our ancient fields, meadows and vales with wind turbines. Now there are rumblings from the people. Kickback they call it. Those same once silent places are where Beethoven walked, drawing inspiration for his glorious symphonies. What cacophony would he have produced if he had emerged after many hours, head spinning, from a vast array of monotonous wind turbines? The people are beginning to know this. In fact the Paymaster is beginning to know this. The need to go global has been evident for years.</p>			





#	I&AP Comments related to the EIA Process	I&AP	Date	EAP Response
	<p>We in Europe will never meet our vast energy needs from renewables - our population is far too large and the available land area far too small for "country-sized" installations. That damned late David McKay! His book showed clearly the implications for the UK going totally renewable. And as for that decrepit Father of Gaia theory, James Lovelock! He was supposed to be a Greeny and here he is croaking out his hatred of wind turbines (wind-mills he calls them) and advocating nuclear power. Nuclear power! After Fukushima?! We shut all ours down after that event. Now we have to burn dirty lignite coal to make up and run every now and then to France for some of their nuclear power. Horrors! Despite all our well-meaning efforts, our carbon emissions are still going up! But Africa. South America. Mmmm. Vast land area, relatively small populations. But generally poor. The Paymaster likes the poor. They are desperate enough to believe any positive spin placed on any new development. Although we had better hurry up and get a foot in the door. Even the poor are becoming cynical, what with repeated promises that never materialise. South Africa's West Coast looks particularly good. But those damned Danes got there first! And what a killing they made. An enormous R3.3 billion rand for 47 relatively puny 125 meter turbines - just a few years ago; nameplate capacity of only 94 MW. Peanuts. What's worse is that the Danes got the only spot on the West Coast where the wind blows. It's in a rather pleasant section of mixed agricultural and wild land, a few low hills, some signs habitation by ancient cultures and pleasingly close to the sea. The Danes have grabbed the best spot, on a high point before the land sweeps through a valley towards the sea. We will have to build into the valley. Unheard of for wind farms - and partly downwind of the existing wind farm for much of the year. We have nonetheless measured the wind speeds with our masts and we can still make a good profit here. We haven't bothered to measure the wind speed anywhere else, from which it may be concluded that the wind doesn't blow anywhere else. We are really obsessed with burying what's left of this particular valley under giant wind turbines and flatly refuse to consider alternative sites - regardless of the requirement of the local legislation to do so. The locals in the area keep asking why we are so stuck on this spot. I don't know myself to be honest, and if I did know, those troublesome I&amp;AP's would be the last to be informed - especially that collection of yahoo's from Britannica Heights. The government wind map shows vast areas available to us. We foolishly admitted to the I&amp;AP's in a previous meeting under the auspices of Savannah that the power transmission cost is a very small fraction of the total project cost - so we do have great flexibility to look elsewhere. Our own calculations of cost look rather surprising. Where the existing wind farm invested R3.3 billion for 47 x 2 MW turbines, we are managing to invest R1.52 billion for 45 x 3.1 MW turbines. Enormous beasts that dwarf the local mountains! How do we do it? So much less investment for so much more hardware. Again, I'm not sure - but we'll think up something. It's little wonder we can claim that wind power is so cheap. Of course we ignore that fact that it leans heavily on coal, gas, hydro, nuclear in the grid to ensure reliability of supply. We dare not factor in that cost or the cost of huge battery banks which will be required to even begin a cost comparison with the competitors. Just assure the dim locals that their electricity will get cheaper! 33% of our surprisingly low investment gets spent in South Africa. In order to keep the country's GINI coefficient nice and high, a few percent of the returns go to the local black community for social / economic upliftment (several thousand indigent people in the area). A few more percent goes to local shareholders from the black communities (far fewer people). A whopping 21% goes to BEE consortiums (a relative handful of lucky people). And 67% goes back to Germany. Under COP 21, rich first-world countries were encouraged to offset their emissions by investment in third world countries, without the expectation of vast profits. The Paymaster presumably knows this. In fairness to him, this extraordinarily skewed distribution of profits is actually set by local legislation. We've clearly misunderstood all along. Money flush Africa should be honoured to donate something to spin all those impoverished Europeans out of their cycle of poverty. But we will create jobs! About 20 permanent jobs at a cost of about R78 million per job. Wow! Better keep that figure under wraps. But don't let us stop the facts from allowing us to trumpet the extraordinary job-creating capacity of wind farms and renewable energy in general. We had better downplay the benefits for the local farmers. Two farmers receiving a monthly stipend for each turbine on their property. We must remain cagey about the magnitude of the stipend, but these irritating locals are throwing around numbers of about R10 000 to R20 000 per turbine per month. One of the farmers hosts 31 turbines, the other 14. What a return! Millions</p>			





#	I&AP Comments related to the EIA Process	I&AP	Date	EAP Response
	<p>of rand per annum without investing a cent. The Paymaster turns his face away from the wind. No! The project must continue. We will proceed as we have during all the years we have been bullying the project through this tedious EIA process. We've already fired two EIA companies. Hopefully CES will come to the party. Just to make sure, I'll re-enforce their neutrality by being present at all their public engagements - just to make sure we're on the same page! (The rest of this submission has been put into the Visual Impact Section)</p>			





## 4 OBJECTIONS

#	I&AP Comments - Objections to the proposed BWF	I&AP	Date	EAP Response
1	Thank you for directing me to the maps. I made a copy of the map and indicated with a Red Circle the proposed wind farm areas that are too close to Britannica Heights Smallholdings - a large residential area in St Helena Bay. See picture attached. Wind towers so close to our homes will negatively impact our sleep, health, peace & quiet, views and property values. This is not what we signed up for when we bought out properties as far back as 2011. These proposed monsters will be much taller than the ones already in operation today. We strongly object against it.	Jordan, Deborah (Britannica Heights)	29-May	Your objection is noted. The EIR has acknowledged that the BWF will have a high negative visual impact on the affected Britannica Heights properties along the ridge which have a west facing view, like yours. The developers of the BWF have tried to minimize these impacts by keeping the project as far south as possible adjacent to the WC1 wind farm, However, the visual impact will still be high. In response to the concerns raised by I&APs from Britannica Heights, the economic specialists have undertaken additional research into the potential impacts on property values of the affected properties in the Britannica Heights estate and included these findings in their final report (see specialist volume). Their additional investigations did not result in any significant change in their impact ratings – which are low negative.
2	With regards to above proposed Boulders Wind Energy Facility I wish to register as an interested/affected party. In addition, I strongly object to this proposal for the following primary reasons: 1) The proposal represents gross visual pollution in terms of its location in the heart of a popular tourism hotspot as well as a pristine unspoiled natural area. 2) The proposal will lead to noise pollution, vibrations and consequent interference with natural birdlife and migratory paths. 3) There are more than sufficient alternative areas on the West Coast for such proposed installations, where no established and existing development/infrastructure will be adversely affected by introducing new wind energy developments. 4) The “polluting” effect of the proposed wind farm activities will seriously affect tourism development in the greater St Helena Bay area as investors in property in this area are those seeking an unspoiled natural environment.	Mr Robert Morley	11-Jun-19	Your objection is noted. Please see responses to the alternative sites issue, and the visual, noise, bird, bat, ecological and tourism impacts in the relevant sections of the CRR. Except for the visual impacts, with mitigation most of the remaining negative impacts are rated as low, and some or moderate. The peninsula area is not an unspoiled natural environment. It has already been significantly transformed by agriculture, roads, powerlines, fishing industries and settlements, numerous tourism developments along the coastline, and most recently by the WC1 wind farm.
3	Re: DRAFT ENVIRONMENTAL IMPACT ASSESSMENT REPORT BOULDERS WIND FARM I herewith enclose my objections as an affected and interested party regarding the above as follows: 1) The proposed Wind Turbines have a direct highly negative visual effect on the properties of Britannica Heights. We bought our properties here because of the uninterrupted views of the natural/rural environment. 2) The continuous flashing lights day and night of the proposed Wind Turbines and the acoustic impact is altogether detrimental to our health. 3) The natural beauty and bird life of this area would be replaced with a forest of moving structures of a height that is higher than all the buildings in Cape Town. 4) Our Properties 's will drop drastically by approximately 80% and we would insist on compensation with the help of legal advice. 5) Our Tourism Business would drop to zero. Who on earth would book a holiday looking on to flashing lights day and night?? Again we would insist on compensation for the loss of business for our B&B's and self catering establishments. 6) We therefore suggest that you relocate your planned Wind Farm by continuing the expansion of the Westcoast One Turbines to the area of the R399, where there is no interference to residential areas and it would be financially more viable as it would be next to an already established road. Kindly confirm the receipt of my objection.	Barbara Adendorff (Britannica Heights)	26-Jun	Your objection is noted. See the first response above. Please see responses to the alternative sites issue, and the visual, noise, bird, bat, ecological and tourism impacts in the relevant sections of the CRR. The area you suggest was previously considered by the developers but excluded due to its proximity to the main tourist route to Paternoster amongst other reasons.



#	I&AP Comments - Objections to the proposed BWF	I&AP	Date	EAP Response
4	<ul style="list-style-type: none"> <li>• The proposed Project is located in the immediate vicinity of the existing West Coast 1 windfarm. In its current form, the Project would cause significant interferences with West Coast 1 operating conditions;</li> <li>• The proximity of the Project wind turbines with West Coast 1 wind farm would reduce the energy production of West Coast 1 and increase operating costs:               <ul style="list-style-type: none"> <li>o Part of the wind energy would be captured by Project wind turbines, and would contribute to the reduction of the overall energy production of West Coast 1 Project;</li> <li>o Wake effect generated by the close Project wind turbines would increase the stress on West Coast 1 wind turbines and therefore accelerate their wear and tear (increasing further operating costs);</li> <li>o A wake effect impact assessment is urgently required.</li> </ul> </li> <li>• While the substation is assumed to be on the Project site, the grid connection is implied to transverse over the existing West Coast 1 windfarm:               <ul style="list-style-type: none"> <li>o The practicalities concerning the grid connection need to be clarified and agreed including any required outages and losses to West Coast 1 in connecting to the Aurora-Fransvlei line, proximity to West Coast 1 turbines, impact on existing land leases and impact on obligations under the EMP.</li> </ul> </li> <li>• The constraints placed by the Department of Environmental Affairs need to be consistent for all wind farms, given the Project its current form, certain concessions would need to be made for the Project.</li> </ul>	Aurora Wind	27-Jun	Your objection is noted. The BWF developers initiated discussions with Aurora (WC1 WEF) in March 2019 to understand and determine these impacts. Technical and commercial effects of the wind farm on any neighbouring wind farms falls outside the scope of the environment being assessed in the EIA. The Grid Connection is being assessed in a separate Basic Assessment process.
5	BOULDERS WIND FARM – DRAFT EIA REPORT. Further to your notification of the availability of the Draft EIA Report of the above application, I would like to submit the following comments for your records: 1. I object to this application as it is located in an inappropriate setting, namely: <ul style="list-style-type: none"> <li>• In direct view of our property,</li> <li>• In an area of unique beauty and sense of place,</li> <li>• In an area that is utilised heavily by resident and transitory birdlife;</li> <li>• In an area that is significantly reliant on tourism for its economy. It is my belief that the Boulders Wind Farm will have unacceptable adverse effects on all of these factors.</li> </ul>	Portsmouth, Doug (BH)	30-Jun	Your objection is noted. See responses 1 and 2 above.
6	As interested and affected parties my family and I wish to raise an objection against the Boulders Windfarm development. Green energy is welcomed, but a more environmentally friendly site further removed from our rural communities is the answer, or else we will suffer the consequences on our tourism trade, business, property value, crime figures and the character of our sleepy villages. We will shortly commence building on our Erf in St Helena Bay, Britannica heights and do not want to live next to these ugly turbines. This development is unwanted in our beautiful valley, please consider our objection.	Booyesen, Gaylne (BH)	02-Jul	Your objection is noted. See responses 1 and 2 above.



#	I&AP Comments - Objections to the proposed BWF	I&AP	Date	EAP Response
7	<p>I am a property owner of a small holding in Columbine Crescent, Britannica Heights, St Helena Bay. My husband and I bought this small holding of about 1 hectare in Columbine Crescent at the end of 2015, property transfer took place in beginning of 2016, and we thought we had a fantastic deal with retirement in sight - the small, low maintenance farmhouse with a solar power system, grey water storage tank, indigenous water saving garden, wild life like Steenbokkies, tortoises, porcupine, hare, mongoose, guinea fowl, and a selection of birdlife roaming freely on the property and on the hill of this small holding development. The building guidelines suited us perfectly: "To retain the rural character of the development, one may only clear a max of 2500 sqm of the natural fynbos for development of the homestead and garden. The remainder of the stand may not be cleared and needs to remain in its original natural state." We loved the view across the valley of the neighbouring farms and Paternoster in the distance. We even had a sea view from the elevated position of our property, with no obstructions possible due to the building guidelines prescribing a height of 7m (double storey) at the highest of any dwellings in front of us. We are planning to retire to this quiet, peaceful and virtually crime free rural neighbourhood with our dogs as soon as we can sell our current residence in Saldanha. I have to emphasize, we were not in any stage of buying the property informed or warned either by the previous owner or the estate agency SEEFF of this planned wind farm development right next to us on the neighbouring farms and in our face! If we were informed, we would not for a second have considered buying this piece of land that seemed to be everything a retired couple could wish for, after residing in a busy, industrial and crime ridden town like Saldanha. Now we are confronted with this application for the Boulders Wind Farm introducing 45 turbines of 165m in height, with the closest one only about 4 km away! With these turbines right in our view, we would be able to see every turbine in full length, al 45 of them. And they won't be in our BACKYARD, but right in our front view where we expected to have a very scenic view of farmland and the sea. So it is understandable that at this stage we are FURIOUS and feel cheated, and we would like somebody to be held responsible for this. Please find attached my OBJECTIONS to the proposed Boulders Wind Farm, and my reviews of the impact studies conducted by certain specialists. <i>(The rest of the more detailed comments and objections related to specific issues are included and responded to in the sections of the CRR dealing with Property and Tourism Impacts)</i></p>	Engels, Annaline (BH)	02-Jul	<p>Your objection is noted. See responses 1 and 2 above. We also note that you bought your property when the construction of the WC1 Wind farm was complete and had become operational (June 2015). However, the first process of applying for authorisation for the BWF was only just beginning and may not yet have been publicly known. Unfortunately, unless you bought your properties with a servitude that would protect your views, new developments that may change your view cannot be dismissed because of the impact on your view. Without an agreed servitude on your title deed, the legal framework in South Africa also does not provide you with the legal right to file for damages or compensation in the case of changes to your view from other developments.</p>
8	<p>Objections to the thudding vibration of the turbines and links to health problems such as headaches, anxiety and nausea have led to the United Kingdom, Denmark, Holland and Germany scaling down ambitions to combat fossil fuel-fired climate change by using wind energy. Paternoster's natural stone houses and village atmosphere draw tourists, who generate about R100-million a year and at least 500 jobs. It is also home to well-preserved neolithic heritage sites at Kasteelberg. With nearby Britannia Bay and Vredenburg—where more wind farms are planned—the town forms part of the proposed West Coast Biosphere Reserve. The sleepy fishing villages attract retired people "who want to walk on quiet, safe beaches", Kleynhans said. Residents of Britannia Bay expressed concern about the impact of construction and access roads to a wind farm proposed by Terra Power Solutions. The planned site is designated a critical biodiversity area, with limestone trandveld and two other endangered endemic vegetation types. They are worried the 100m-high wind towers will cause fatal collisions with endangered bird species found in the area, which include blue cranes, Ludwig bustards, greater flamingos, secretary birds and a variety of seabirds." It is clear that Paternoster residents are not at all happy with West Coast One, so would be even more disgusted at the development of another wind farm with turbines so closely placed, the term "forest effect" comes to mind. ....Conclusion: It is not fair that we, as property owners in the St Helena bay area paying our property taxes, be ignored and bullied to accept a development that is detrimental to our property value, our environment by killing protected birds and bats, to the tourism industry in Paternoster, Shelly Point, etc., to our safety and peace of mind by causing more crime due to influx of desperate jobless people, and to our future plans and daily lives as retirees. .... We are part of a group of concerned residents willing to fight tooth and nail, using all our resources to fund resistance and stop this development or have it moved to another, more acceptable site with less detrimental impact. Petitions are circulating in St Helena, Shelly Point and Paternoster for signing by everyone opposed to the Boulders Wind Farm Project. I hope that this time our objections are valued and considered, and that the survival of our beautiful West coast towns are more important than handing over our resources to international developers and a few farmers on a mission to make millions.</p>	Engels, Anneline (BH)	02-Jul	<p>Your objection is noted. See also responses 1 &amp; 2 above. The issues you are concerned about (which have been raised by many other local I&amp;APs) have all been investigated and the impacts found to be acceptable and possible to mitigate.</p>





#	I&AP Comments - Objections to the proposed BWF	I&AP	Date	EAP Response
9	NO TO BOULDERS WIND FARM (Email Petition). I, a home owner/regular visitor/resident or business owner, agree with the comments below and say No Boulders Wind Farm. Comments on the Draft Environmental Impact Report. We are of the opinion that sustainable energy generation is definitely part of the solution to our electricity shortages. However, this may not be to the detriment of all of us in Paternoster, who have invested in this very successful village. Only German companies (Enercon, EnergieQuelle, and Saertex), a few farm property owners and very few South Africans (who do not live in Paternoster) will benefit from this venture. We, as ratepayers and property owners, have invested in the success of Paternoster, but stand to only loose from this proposed Boulders Wind Farm. (The rest of this petition is lengthy and makes comments on the following issues that are included and responded to in the other relevant sections of the CRR, namely: Visual Impact, Sense of Place (Visual), Heritage impact, Internet and Air Space (Other), health impacts (Noise), property values, job opportunities and social impact, alternative energy supply (Other); decommission (Other), and support for the BWF (Objections).	No Boulders Wind Farm Email Petition (31 submissions) & Roon(Aksie Paternoster Aksie) Petition with 114 signatures	1&2 July	Your objections are noted. The EIR acknowledges that the economic benefits will accrue more at regional scale and the amount of local jobs will be limited to 17 during the operational phase and +/- 813 direct full time equivalent person years and 1049 indirect full time equivalent person years amongst goods and service providers during the construction phase, with skilled jobs and contracts going to companies outside the immediate locality of the BWF. This amounts to 931 jobs for two years during the construction phase. During the operational phase R7 million per annum will be invested by the developers in socio-economic development projects locally and R2 million per annum in educational development projects locally. The energy and emission reduction benefits are national in extent and represent a shared benefit. The economic assessment has investigated the potential effect on the local tourism sector and property values and found these to be indiscernible and low. They drew on the experience of the WC1 WEF and wind farms close to St Francis Bay (another coastal tourism settlement in the Eastern Cape), along with a review of literature and existing studies to inform their assessment.
10	I, the undersigned, am aware of the proposed Boulders Wind Farm (BWF) on the West Coast Peninsula, including its supposed benefits and potentially negative impacts. I am also aware that the proposed BWF will offer the local community no relief from Eskom tariff increases or local power outages, nor will it employ a significant number of people beyond the 2 year construction phase. I am of the opinion that the impact of the proposed BWF, combined with the existing West Coast 1 wind farm, will have many long-term negative social, economic, environmental and aesthetic impacts on our community, and that these far outweigh any benefits. The West Coast Peninsula is a unique part of our country that is increasingly driven by a rapidly growing tourism and hospitality industry. If BWF is approved, its giant turbines will dominate the landscape. Tourists will choose to go elsewhere and the hospitality sector will suffer a major loss of income. Retrenchments are likely and thousands of jobs that could have been created will never exist. I hereby register my opposition to the BWF and associated infrastructure, and I encourage the developer, Saldanha Bay Municipality and the national Department of Environmental Affairs to propose alternative sites where the negative impacts are much reduced while the positive ones are retained.	Britannica Heights Petition 106 signatories	02-Jul-19	Your objections are noted. See also responses 1, 2 and 9 above.



## 5 SUPPORT

#	I&AP Comments - Support for BWF	I&AP	Date	EAP Response
1	Great presentation today. I am firmly behind the development as presented. For your info – there is likely to be strong opposition from various sources. One of the spokesmen for one of these sources recently asked me (as Principal of an Estate agency in the area – Paternoster and St Helens bay) for comment. My view is : • The feeling of our prospective buyers is neutral – some for, some against. • Tracking property values since the implementation of Westcoast 1 – no negative effect on property values . Values have increased – but I cannot ascribe that to the windfarm. • We also have an office in Hopefield – and have had no negative comment.	Wilkinson, Ian (Paternoster)	18-Jun-19	Your support is noted. Your experience with property values aligns with the findings of the specialist assessment of impacts on tourism and property values
2	Seeing turbines in the area compliments the scenery of nature, Always joyful to look at it and kids love it. Poverty is one characteristic the West Coast is facing and to at least some financial security can be provided to locals through job creation and investment in local communities, some hope will be given to those who are hopeless. It can also look at possible decrease in electricity cost. local people will benefit more than holiday owners or investors. at least there might be a possibility for a job- Boulders Windfarm to look at putting local communities first.	Early Learning Resource Unit	2019/06/19	Your view confirms the social specialist comments that there are people who find the turbines attractive and like to see them in the landscape. The assessment indicates that there will be some job and other economic benefits for local communities (see response 9 above for details) and the developers are committed to maximising these, but these will be limited and many of these economic benefits will accrue to businesses and skilled persons within the region and country. It is unlikely the development will result in cheaper electricity, but it will contribute to enhancing the supply of electricity in the region and South Africa. This development will provide enough electricity to meet the needs of 84 000 households.
3	People from Europe are used to seeing them and should not be put off visiting the area for that reason.	Cruywagen, Christo	19-Jun-19	This is possible but not guaranteed.
4	Personally, I find them elegant. I think that, as people get exposed to the sight of them, they will soon get used to seeing them and not even notice them.	Cruywagen, Christo	2019/06/19	Your view confirms the social specialist comments that there are people who find the turbines attractive and like to see them in the landscape.
5	People have to choose between more coal/fossil fuel power generators with their pollution and negative affect on global warming and clean sources of energy such as wind turbines.	Cruywagen, Christo	19-Jun-19	These issues are highlighted in <b>Chapter 3</b> of the final EIR. (Policy and Needs and Desirability)
6	The only comment I have is “Wind farms are great” the more the better ! We need the power !	Smith, Derek	01-Jul	Your view confirms the social specialist comments that there are people who find the turbines attractive and like to see them in the landscape.
7	Please keep us updated – as full supporters of the project. (Chairperson of the Longbeach Residents Association in Paternoster area)	Rootman, Ben (Paternoster)	01-Jul	Your support is noted. All I&APs will be kept informed.
8	Whatsapp message recieved on 2 July. Wilfred Magerman ondersteun die Boulders Windfarm projek. (Wilfred Magerman supports the Boulders Wind farm project)	Magerman, Wilfred (St Helena Bay)	02-Jul	Your support is noted.



#	I&AP Comments - Support for BWF	I&AP	Date	EAP Response
9	<p>As a resident in the St Helena Bay area I, Gerald Cloete, after having attended and read the report, support the establishment and favourable consideration of this project from all the relevant government departments. My reasons are as follows; St Helena Bay economy has been historically based and dependent on the marine sector. This industry is seasonal orientated and has in recent years reached their ceiling with employment opportunities. Apart from this fishing stocks has been going down each year and seasonal workers are currently working less than 7 months for the year. As a result many households are being left with very little to get along. Apart from the fishing industry there are no other industry absorbing unemployed citizens and this is adding to many social evils that exists in this area. Furthermore the current situation is also responsible for the youth not venturing into any other opportunities as the sea is viewed as their only outcome.</p> <p>I am further convinced that the windfarm would have a positive outcome on employment opportunities and also professional opportunities. The current scope of the project are also making is hopeful that if the amount of turbines could be increased it would also mean more corporate social investment and also employment opportunities. It is for these reasons that I am very positive and proud to support this project 100% and urge all relevant departments and institutions to give the go ahead for this project.</p>	Gerald Cloete	02-Jul	The potential economic benefits of the project have been assessed. Most of the job opportunities, especially for unskilled or semi-skilled workers will be limited to the construction phase for the project. Priority will be given to local contractors and workers wherever possible. Local incorporates all people and businesses in a 50km radius around the development. It is estimated that +/- 300 people will be employed during the construction phase and 17 during the operational phase. The developers will also be investing a portion of their annual revenues in local social development projects and will engage with local stakeholders to identify the most suitable projects to invest in after they have obtained an environmental authorisation. The upskilling of local young people has already been mentioned by many I&APs as important. There will also be an equity sharing opportunity for local communities, but this is only likely to yield dividends that can be spent locally in the long term - after the investment loan has been paid off.
10	<p>Ek ondersteun die Boulders Windfarm Projek vir verskillende redes. ( I support the Boulders Windfarm for various reasons)</p>	Goliath, Calvin	2019/07/03	Your support is noted.
11	<p>ENGLISH TRANSLATION: I want to provide the following comments on the BOULDERS Windfarm's Environmental Process: MY BACKGROUND: I the writer am farming for the past 50 years in the area. I was born on the farm where I am currently farming. I am one of the biggest/largest tax payers in the area and am just as entitled to the utilisation of economic opportunities as everyone else. I have been giving more land to the community of Paternoster than any other person. I am more familiar with the environment than any other resident and especially than the people objecting. (other comments submitted are listed under the EIA Process, Socio-Economic Benefits and Tourism/Property sections of the CRR) ... This project will bring a very big economic injection for the local environment, as well as for the local Community, at the construction and permanent basis. The current electricity situation in South Africa is no secret and the Government's policy around clean energy. The Cape Metro is currently busy with a court case to obligate Eskom to directly purchase electricity from independent power suppliers. I want to place on record that any senseless delay that are caused, by objecting people, that are raised, will result in a damage claim in case we are unfairly delayed with the Wind Farm Project. I trust that my input will be a positive contribution to the confirmation of a much needed CLEAN ENERGY project.</p>	Pierre Heydenrych (local benefitting farmer)	02-Jul-19	The economic benefits of the project are highlighted in the EIR. Some of these are mentioned again above, but also include the income benefits for the beneficiary farmers which we understand will help to make farming more financially viable. The contribution of the project to energy supply and reducing carbon emissions and pollution are also rated as a high positive benefits for South Africa.



12	<p>AFRIKAANS SUBMISSION: Ek wil graag die volgende kommentaar lewer op BOULDERS WINDFARM se Omgewingsproses: MY AGTERGROND: Ek die skrywer boer al die afgelope 50 jaar in die omgewing. Ek is gebore op die plaas waar ek tans boer. Ek is een van die grootste belastingbetalers in die omgewing en is net so geregtig om ekonomiese geleenthede te benut soos almal. Ek het al meer grond afgestaan aan die gemeenskap van Paternoster as enige ander persoon. Ek is meer vertrouwd met die omgewing as enige inwoner en veral die beswaarmakers. BOERDERY Net 'n kort opsomming, dit raak vir my onmoontlik om hier onder normale praktyke verder te boer daarom het ek dit goed gedink om my na alternatiewe soos Windenergie te wend nadat ek genader is deur die instansie oor die goeie "windmetings" wat hier gedoen is. Ek word blootgestel aan ernstige veediefstal en honde vanaf Paternoster en omgewing wat my skape vang en verskeur van onbeheerde eienaars.</p> <p>Dit is alombekend dat aardverwarming besig is om 'n baie groot rol by ons omgewing te speel en dus 'n baie groot impak op my Boerdery omstandighede te hê. Omdat ek hier gebore is kan ek sien hoe die reënval al minder raak en hoe die seevlak styg. Dit wil vir my voorkom asof plaaslike Boerdery gestaak moet word om hulle wil af te dwing, ek kan ongelukkig nie hiermee saamgaan nie. TOERISME Die sogenaamde toerisme waarvan daar so baie opspraak gemaak word is besig om stadig maar seker ons infrastruktuur te vernietig as gevolg van toeloop van mense in die omgewing. Toerisme lewer geen bydrae tot my Boerdery nie. Ek moet daagliks drade en paaie instand hou as gevolg hiervan. Ek moet mense inspan om vuilgoed (plastieksakke) wat op my lande waai op te tel, want as 'n bees of skaap 'n plastieksak kry sal hy hom vreet en daaraan doodgaan. Drie jaar terug het ek byna R300 000 verlies gehad van onbeheerde rondloperhonde van inwoners sowel as toeriste se honde wat my skape gevang en verskeur het. Dit was so erg dat die SABC 'n program daarvoor gemaak het en dit op Fokus uitgesaai het. Geen inwoner of Toeris het my as Boer probeer help of probeer bystaan deur dit nie. Die aansoek van die nuwe Windplaas is slegs 'n uitbreiding van die bestaande Windplaas en kan ek nie sien waarom die beswaarmakers so besorg is nie, want die bestaande Windplaas het geen invloed op die inwoners van Paternoster en omgewing nie, en in ander dorpe wêreldwyd en in Suid-Afrika word dit reg langs dorpe gevestig. Dit is vir my onregverdig teenoor my om deur Paternoster- en omgewing se inwoners te besluit waarmee ek mag boer of nie. Die inwoners van veral Paternoster is onder die indruk dat Paternoster en omgewing te "gesog" is vir 'n Windplaas, daar is baie ander toeriste dorpe wat ook Windplase het en dit het geen effek nie. Die verhoogte toerisme in Paternoster speel 'n belangrike rol in die vernietiging van plantegroei ensv. Hier word meer diere soos bokkies, jakkalse, voels en eende doodgery as wat enigiets anders kan skade doen. Ek patroleer die paaie tussen my plase meer as enigiemand in hierdie omgewing daagliks en is seker van my feite wat ek stel, en word hier nie goed uit my duim gesuig soos die beswaarmakers nie. ALGEMEEN. Gegewe die agtergrond waar die aansoek twee keer deur inwoners probeer stop is, deur die sabotering van die proses is dit vir my duidelik dat dit 'n PERSOONLIKE agenda is, want die Department het by twee geleenthede die besware opgehef. Ek kan myself nie insien waarom die projek nie moet voortgaan nie.</p> <p>Ek was by twee van die huidige inligtingsvergaderings bygewoon, en die besware wat geopper is blyk definitief na 'n PERSOONLIKE agende en dra dus geen objektiewe feite vir die kansellering van die projek nie. Dieselfde persone wat ek opgemerk het by die vergaderings is dieselfde persone wat voortdurend besware maak met wat ek ookal wil doen of beplan hetsy ontwikkeling of hersonering van grond ensv. Sommige van die beswaarmakers is nie</p>	Pierre Heydenrych (local benefiting farmer)	02-Jul-19	See response in English above.
----	--	---	-----------	--------------------------------



<p>Suid-Afrikaanse Burgers nie en sommige nog nie eens 2 jaar inwoners nie. Die belastingbetalers en inwoners is gou om oor kleinighede besware te opper, maar ek vra die volgende: - Drie jaar terug het ek R300 000 verloor met honde wat skape vang en niemand het my probeer help nie. - Niemand doen iets oor die wettelose steel van my vee en die knip van my drade nie. -Hoekom word die internettorings nie verwyder wat sonder 'n EIA gedoen is nie. -Hoekom reageer hulle nie oor onwettige bou van geboue in Paternoster nie? - Hoekom reageer hulle nie oor onooglike warmwater silinders wat aangerig is op RDP huise nie? Dit wil vir my voorkom asof die beswaarmakers plaaslike Boerdery wil staak om hulle sin te kry. Ek kan ongelukkig nie hiermee saamgaan nie. Ek glo aan 'n ordelike en wetlike proses wat gevolg moet word, maar daar word gedurig ingemeng deur oningeligte inwoners deur 'n verkeerde gesindheid te openbaar voordat hulle al die feite het. Hierdie projek gaan 'n baie groot ekonomiese inspuiting bring vir die plaaslike omgewing, asook vir die plaaslike Gemeenskap, wel by die oprigting en permanete basis. Die huidige kragstatus in Suid-Afrika is geen geheim nie en die Regering se beleid om trent skoon energie. Die Kaapste Metro is besig met 'n hofsaak om Eskom te verplig om direk by onafhanklike kragvoorsieners krag aan te koop. Ek wil graag op rekord plaas dat enige sinnelose vertraging wat veroorsaak word deur die beswaarmakers wat ge-opper word met 'n eis vir skadevergoeding indien ons onregverdig verdrag word met die Windplaas projek.Ek vertrou dat my inset as positiewe bydrae tot die bevestiging van hierdie broodnodige SKOON ENERGIE projek sal wees.</p>			
---	--	--	--





## 6 ALTERNATIVES

#	I&AP Comments on Alternatives	I&AP	Date	EAP Response
1	3) There are more than sufficient alternative areas on the West Coast for such proposed installations, where no established and existing development/infrastructure will be adversely affected by introducing new wind energy developments.	Mr Robert Morley	11-Jun-19	The site alternatives for the Boulders Wind Farm were investigated in their pre-feasibility phase prior to the EIA. This was mentioned in the Scoping report but not fully discussed. The developer did however provide the DEA with a report on the alternatives investigation they undertook during the appeal process. A summary of this investigation of alternative sites and findings has been included in the Final EIR to clarify these issues (see VOLUME 1 - Final EIR - Chapter 5). The feasibility of four sites in the SBM were assessed by the developer 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 is an assessment of a WEF for this site. The DEA decision on the Scoping process made it clear (letter 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	Why have you not considered any alternative sites in this immediate area - please bring a slide that shows an accurate wind map and the exclusion zones linked to the airfield etc. to elucidate your response.	Mary Ralphs	17-Jun-19	As in 1 above
3	In the FSR it is stated that there was no alternatives for this project, but during the EIA process done by Aurecon for IDP Power there were alternatives! Boulders Windfarm have lease agreements for some of these farms. See attached map(IDPMap2011.pdf) How is it possible to state that there was no alternatives?	Kotze, Danie	30-Jun	As in 1 above
4	Residents in this area do not want a WEF farm which will be seen from the local towns and for many kilometres around. (From the initial EIA, an area of at least 4500 sq.km.) Why is this the only site being considered and no alternative sites investigated?	Todd	18-Jun-19	As in 1 above
5	CES states that alternative sites were considered and rejected as they were in NO-GO areas. Are these sites in the Langebaan Road AFB exclusion area, and if so were they taken over from Savannah who considered them before the AFB exclusion area was known? If this is so, why did CES consider these same sites if it was known they were in the exclusion area and not investigate other alternative sites, or were they just taken over irrespective, to just tick the box for alternate sites, and no other sites considered? Can CES please advise which other sites were considered.	Todd, A&J	01-Jul	As in 1 above
6	The developer of the (above) application is a commercial enterprise and thus their prime motivation and decision-making is driven by the need to maximise profit and return on investment. Within the draft EIA report, representations have been made that the Wind Farm Project must be granted approval as it will yield benefits to many parties, ranging from the Nation to local residents seeking work. Whilst this is possibly true, these benefits will accrue wherever a wind farm is located. with this in mind it is reasonable to draw the assumption that the real reason the developer prefers the location selected is that it will maximise their profits and return on investments. whilst these commercial motivations are normal in a capitalist economy, I believe that these commercial motivations should not be allowed to take precedence over and to the detriment of existing residents, businesses and environment. the developer should be encouraged to seek alternative location for this project where these conflicts are not present. the west coast is a large region with many other locations suitable for this project. if the profitability of other locations cannot match that of the location in this application, then as is normal in a commercial business, the business model must be redesigned to optimise the situation- for example lower turbine site rentals for landowners	Portsmouth, Doug	02-Jul	<p>Response 1 above is also relevant here. In addition: The developers are applying for authorisation for this project, on this site. They chose this site because it is one of the few high wind resources areas in the Western Cape and is close to existing grid connections, access roads and the Saldanha bay port. The competitive bidding process for renewable energy projects controlled by the Department of Energy, forces all renewable energy developers to compete with one another based on the lowest price, ensuring the cheapest electricity to be available to South African citizens. As a result, developers have to focus on the highest potential areas that can provide the cheapest and most competitive energy prices. The profits are ultimately controlled by the competitive nature of the bidding programme and ensures that developers seek minimal feasible returns in order to be successfully awarded a project under the bidding programme.</p> <p>The EIA process is designed to assess the full range of impacts of proposed developments and make recommendations on the mitigation of the impacts and whether it should be authorised. If they do not get authorisation for this site, then they will have to look for other places where they can develop competitive wind farms.</p>



#	I&AP Comments on Alternatives	I&AP	Date	EAP Response
7	<p>ALTERNATIVE SITES: It is important to note that throughout all the public participation processes, including public meetings, it has been repeatedly requested of the Developer to put forward a minimum of two alternative sites for the Proposed Boulders Wind Farm; to date this has not been done. The correspondent notes that on the map published by the Department of Environmental Affairs – titled: RENEWABLE ENERGY DEVELOPMENT ZONES (attached as Annexure D) the Paternoster and Vredenburg areas are NOT included. Throughout all of the above comments, it is apparent that the proposal of an alternative site, one holding not only the developers interests at heart but too the considerations of the communities affected by the development of alternative energy facilities and further the considered and reviewed government proposal for renewal energy corridors, would contribute substantially to an agreeable site choice with lesser negative ramifications and one more in line with the ongoing development of national renewable energy provision. In conclusion: I am an advocate of clean and renewable energy but not where such proposed development is rash and ill considered. I feel that the Proposed Boulders Wind Farm although worthy of consideration, remains fatally flawed in one major aspect: the choice of its site and the extensive negative ramifications this chosen site brings with it in terms of its damaging influence upon one of the driving industries behind the local economy: tourism. And further, in equal or even greater regard, the chronic disruption and irrevocable damage the site will cause to the sense of place of the local community and the potential irrevocable damage of the cumulative effect of two wind energy facilities side by side can have on the birds and bats. It will too threaten the validity of the conserved land of the Groot Paternoster Nature Reserve, which serves as a vital conservation area, lying directly adjacent to the Cape Nature Groot Paternoster Rock Islands. The West Coast Peninsula is an area of Outstanding Natural Beauty. This unique natural attribute and character has motivated settlement and tourism to the area bringing wide and long-term improvement. To threaten this without proposing alternative sites is unacceptable. We place our trust in the authority vested with the decision to review this 1st Draft EIA with this firmly in mind.</p>	Pickford, Peter	02-Jul	Response 1 above are also relevant here. In addition: The Renewable Energy Development (RED) Zones were identified and developed by national government to facilitate such developments - not restrict them. Any project developed in the RED zones benefit from not having to undertake a full EIA, but only a Basic Assessment. However, any renewable energy developer can apply for authorisation for a project outside of these RED zones but must then undertake a full EIA, which is what the Vredenburg Wind Farm (Pty) Ltd developers are currently undertaking. As for the impacts this proposed windfarm will have - these have been assessed and reported on in the EIR and comments on these are responded to in the relevant sections of this Comments Response Report.
8	<p><b>Alternative sites:</b> It must be noted that wind as a resource is different to that of gold or minerals, where the resource is site specific. Wind as a resource is not dictated to by a fixed site, it can be accessed and utilized over a wide option of sites. Alternative sites that do not, for the period of an entire generation, threaten the sense of place and worth of the land in its current character for the tens of thousands of people, must be tabled and considered. This remains a glaring omission in the Proposed Boulders Wind Farm application to date. I note, for example, that although the Isivunguvungu site, in the middle of the Saldanha Bay Industrial area, has been approved it has not been tabled for consideration. Further, I have established in my investigations, that West Coast 1, in its development proposal, undertook to pay for and install 30km of 132KVA power line. If it was a feasible economic proposition for West Coast 1 to include the cost of 30km of 132KVA power line as an acceptable cost for the profitable function of its development, then the same must be true of the larger and greater generation capacity installation of the Proposed Boulders Wind Farm. This then, means that the scope of alternative sites is expanded to a radius of at least 30km from the proposed site and probably viably so, to a radius of 50km. The single strongest argument that the developer uses for the proposed site is the relative proximity of the 132KVA line currently serving West Coast 1, and the saving of capital outlay this proximity means to the developer. What we are comparing, as the principal crux on which the see-saw of decision of site selection rests, is the capital outlay saving by the developers who are, at the core of the development, Energiequelle GMB - a foreign company - and the value of the land in terms of its place in the intellectual possession of all of the local community as expressed above, a community of tens of thousands of people. To the mind of this correspondent, there is no contest: The vested interest of the community, in both the value of its intellectual possession of the land as home, embracing the inherent</p>	Peter Pickford and Associates	02-Jul	See first response above and others.



#	I&AP Comments on Alternatives	I&AP	Date	EAP Response
	and established character of the land, and further, its quantifiable value, in terms of individual personal investment in the community and the land, outweighs that of saving the developer a single figure percentage cost of the total development.			
9	3) Alternatives: In terms of the NEMA EIA Regulations all Scoping Reports must contain a description of any reasonable alternative and comparable Assessment. In this regard I wish to point out that there are alternative sites which are out of sight of property owners. Another alternative would be solar power.	Adendorf, AM	02-Jul	See the first response above on alternative sites investigated. As for the issue of solar alternatives, this developer is a wind energy developer, and a solar energy project in this area would not be able to compete in the competitive bidding process against other solar projects in the highest solar energy potential areas. The high potential solar energy areas are indicated in Figure 5-2 in VOLUME 1 - Final EIR - Chapter 5.
10	Were any alternative sites assessed?	BWF Focus Group Meeting: Municipal	20-Jun	As first response and others.
11	The EIA doesn't include enough on the scoping or excluding of areas or why this site specifically was selected. Suggestion was made that CES make this more obvious (i.e. explain the process of how site was selected and alternatives considered). Suggestion that CES represent the exclusion zones.	BWF Focus Group Meeting: Municipal	2019/06/20	See response 1 above. This has been added to the Final EIR.
12	<b>No proper assessment of the "No go" alternative.</b> 21. Under the 2014 EIA Regulations, Section 1, "alternatives" are defined as being: "in relation to a proposed activity, means different means of meeting the general purpose and requirements of the activity, which may include alternatives to the ...and includes the option of not implementing the activity;". Thus, importantly the consideration of alternatives must be in relation to the purposes and requirements of the "activity" and not the "Applicant". Also, the consideration of the "no go" option in NEMA environmental applications dealing with "alternatives" is therefore a prerequisite under the 2014 EIA Regulations. 22. The DEIR claims that the "No go" option is "(a)ssessed in this report" yet the reviewer was unable to find any proper comparative impact assessment for the "No go" option anywhere in the DEIR.	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	02-Jul	The alternatives that can be considered in an EIA, which is ostensibly the application for environmental authorisation for a particular development by a particular developer, are always subject to their feasibility for the developer. The no-go option is adequately discussed and compared to the other alternatives (as per normal EIA practice) in the alternatives section of the EIR (see VOLUME 1 - Final EIR - Chapter 5).  CES acknowledge that if the proposed development is not approved, other renewable energy project which do obtain environmental approval will be able to bid to provide renewable energy. So, while renewable energy may still be provided by other developers at other sites, the non-approval of the BWF will result in a loss of the local economic benefits in the peninsula area associated with the BWF.
13	23. In the search for the assessment of impacts associated with "No go" option, Section 9 ("Findings of the specialist studies"), Table 10-1 and Appendices C1 and C2 from the DEIR were consulted but no such assessments were to be found. The DEIR, despite is claims otherwise, certainly does not include an assessment of the environmental impacts associated with the "No go" option. Given the revealed Applicant-favoured bias of the "EAP" this must be a calculated omission which is perhaps not surprising given the likely outcome of such assessments (which would undoubtedly reveal a majority of positive impacts associated with the "No go" option) when compared to the overwhelming large number negative potential impacts (87%) associated with preferred BWEF development option which has been assessed.	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	02-Jul	See response 12 above. The EAP is required to take an overall view of the full range of impacts. This does not mean that we can simply count the impacts and if there are seven positives and 14 negatives then the negative impacts are more important than the positives. The significance of the impacts (positive and negative) also need to be factored in.
14	24. Notwithstanding the obvious picture that would emerge from a proper comparative assessment of the preferred development option against the "No go" option (and which surely would be detrimental to the aspirations of the Applicant in this matter) the EAP is compelled to have done so in order to ensure that the "best practical environmental option" (per NEMA Section 2(4)(b)) is chosen. The EAP's omission is significant and illustrates once again the extent to which the EAP is prepared to go in order to favour the interests of the Applicant.	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	02-Jul	As in 13 above.



#	I&AP Comments on Alternatives	I&AP	Date	EAP Response
15	25. EIA Regulations, Appendix 3 states that; "An environmental impact assessment report must contain the information that is necessary for the competent authority to consider and come to a decision on the application, and must include ... (h) a full description of the process followed to reach the proposed development footprint within the approved site, including... (vii) positive and negative impacts that the proposed activity and alternatives will have on the environment and on the community that may be affected focusing on the geographical, physical, biological, social, economic, heritage and cultural aspects; ... (l) an environmental impact statement which contains... (iii) a summary of the positive and negative impacts and risks of the proposed activity and identified alternatives;" 26. The DEIR is accordingly not in compliance with Appendix 3 of the EIA Regulations	AVDS Enviro Consulting (Andre Vd Spuy)	02-Jul	The first response above (in this alternatives section) is also relevant here. A full discussion of all the alternative sites assessed has now been included in the EIR. This information was also taken into consideration by DEA in its response to the appeal on the Scoping process.
16	101 The ultimate mitigation measure for any proposed development is obviously the "No go" development option. As pointed out in this review the EAP has failed to present and assess properly, and in a comparative manner, this obligatory alternative/ mitigation measure.	AVDS Enviro Consulting (Andre Vd Spuy)	02-Jul	See response 12 above.
17	RENEWABLE ENERGY GENERATION AND LOCATION. I support the need to generate energy from renewable resources. However, the implementation of a renewable energy strategy must be carried out with regard to exercising correct selection of sites, especially as both wind and solar installations are very disruptive to the environment. It is my belief that the choice of site of this application is entirely wrong and the application should be denied.	Portsmouth, Doug	02-Jul	See responses above re the alternatives investigated. The developer has selected the best site for their needs, in one of the highest potential wind generation areas in the Western Cape. The objective of this EIA is to assess the potential impacts of this proposed development on this site and make recommendations on mitigation and authorisation. It is up to the DEA to decide if it should be authorised and under what conditions.
18	"The potential to produce electricity from wind turbines in South Africa is significantly greater and much more widely spread than initially thought, a recent study by the Council for Scientific and Industrial Research (CSIR) reveals. More than 80% of South Africa's land mass has enough wind resource for economic wind farms with very high annual load factors of greater than 30%; <a href="https://www.csir.co.za/wind-power-potential-south-africa-par-solar-recent-csir-study-show">https://www.csir.co.za/wind-power-potential-south-africa-par-solar-recent-csir-study-show</a> . So it is difficult for me to understand why a beautiful, scenic, environmentally sensitive valley has to be offered on the altar of wind farm development, causing detrimental effects on the animal life, the property owners, the tourist trade, and the character of the surrounding peaceful fisherman's villages. For job creation? Only 17 maintenance jobs in the 25 year term? We have seen the outcome of industrial development in the Saldanha area. To me a much more acceptable site would be in close vicinity of Saldanha Steel, Duferco and the IDZ development areas on the outskirts of Saldanha. A wind Farm development of 6 turbines is already approved (although as residents of Saldanha we were never informed to register as Interested and Affected Parties of this development...) "The project is being pursued in partnership with Isivunguvungu Wind Energy Converter (I-WEC), which recently unveiled a 52-m mould, which will be used to manufacture wind turbine blades in Cape Town. The cost of a turbine produced at the I-WEC facility, including transport, foundation costs and erection on site, is currently estimated at between R15-million and R17-million a Megawatt." <a href="https://www.engineeringnews.co.za/article/saldanha-steel-mill-supports-wind-energy-project-2011-12-06">https://www.engineeringnews.co.za/article/saldanha-steel-mill-supports-wind-energy-project-2011-12-06</a> . See map with layout of planned Isivunguvungu wind farm next to SaldanhaSteel, containing 6 turbines. ( Interesting to me is the West Coast National Park Viewshed Protection Zone marked on the map, where wind farm development HAS to consider the view from an environmental landmark, but in the Paternoster/St Helena Bay area the environmental No Go or Sensitive areas, or the Cape Columbine Nature Reserve, or the Groot Paternoster Private Nature Reserve are NOT protected from the viewshed of the proposed Boulders Wind Farm.) The site of the 6 turbines is marked in red. See photograph taken from the hill in Saldanha across the valley. There is absolutely no comparison between the impact of a wind farm in this region and the scenic valley in the Paternoster / St Helena Bay vicinity. See photograph taken from the hill in Saldanha across the valley.	Engels, Annelina	02-Jul-19	With respect to alternative sites please see response 1 above. The article mentioned is about a wind development proposed in 2011 that has not yet materialised. It also indicates in the article that the plans had not yet received an environmental authorisation or won a IPP bid. Eight years later there is still no sign of this development in the area. It is unlikely that such a development would have received authorisation due to the 18.5km buffer around the Langebaan airport, which has also limited site options for the BWF.



## 7 BIRD ISSUES (AVIFAUNA)

#	I&AP Comments on Birds	I&AP	Date	Response
1	I note that the avifauna report by BioInsight for the proposed Boulders Wind Farm makes mention of a radar report. Such radar report does not appear to be attached to any of the reports or be submitted as an independent report. Please can I ask for a copy of the said radar report as it bears on the avifauna impact of the proposed Boulders Wind Farm and as a consideration of the conclusions in the BioInsight report it is most relevant. I would further note that this same report was mentioned by Ms Karen Jodas of Savannah Environmental as the then EAP during the public meeting at Paternoster where I asked for a copy of the said report. I note that I never received this and did mention such lack of receipt in my comments on the scoping report. I trust that you will be able to amend the omission.	Pickford, Peter	29-May	<b>Avifaunal Specialist Response:</b> The requested information - the referred Radar report - is not property of the specialist team and thus we cannot provide it. Please request to obtain from client. <b>CES Response:</b> see response number 4 in the Requests for Information section of the CRR.
2	2) The proposal will lead to noise pollution, vibrations and consequent interference with natural birdlife and migratory paths.	Mr Robert Morley	11-Jun-19	<b>Avifaunal Specialist Response:</b> The potential effects referred in the comment were assessed by the specialist team and are included in the IA Report under “disturbance/displacement effects”.
3	The proposed WEF is on the flight line for birds from the IBA’s at Velddrift and Langebaan Lagoon. Not only will the WEF impact, but also the associated infrastructure – HV Lines, substations, roads, etc - will impact on flight lines and habitat. This has already been the case with bird fatalities from WC1.	Todd, A&J	18-Jun-19	<b>Avifaunal Specialist Response:</b> Migratory paths and other available information considered relevant for the study was assessed by the specialist team in the IA Report, as well as within the cumulative impacts section of said report. With respect of the flight line between both IBAs referred to in the comment, please note that the affirmation is not entirely accurate. The proposed Boulders WEF is located north/northwest of the West Coast 1 WEF (“WC1 WEF”) and thus, in comparison, at a higher distance from the referred IBAs (Berg River Estuary and West Coast National Park & Saldanha Bay Islands). Also, it is important to acknowledge that the proposed location for Boulders WEF does not intercept the corridor when considering a north-south line between both IBAs, contrary to what seems to be the affirmation in the comment.  Regarding other infrastructures, please note that the planned associated infrastructures provided in addition to the Boulders WEF project (turbines) were assessed in the IA Report. In the cumulative impact section of the IA Report, other infrastructures not directly related to the Boulders WEF project were assessed as well. As a remark, Boulders will have its connection point into an existing substation (no additional impact with a new building) and the proposed associated Power Line will have a length of 34 m.
4	We have found little reference in the draft EIA to post-construction monitoring of bird and bat fatalities at the West Coast 1. Although we are now aware that this information is available and it seems logical that it should have informed both the scoping report and the draft EIA. Please could you indicate if the findings from these reports have studied and where in the draft EIA this information is reflected?	Ralphs, Mary	25-Jun	<b>Avifaunal Specialist Response:</b> The available monitoring data for WC1 WEF has been considered by the bird specialist team in the final version of the IA report. Please refer to page 6 of the IA report, for example.
5	where is accountability when you knowingly endorse a proposal to plant another 45 massive turbines in the direct flight path of thousands of birds ? how do you calculate the acceptable bird and bat fatalities , without even mentioning, much less evaluating the millions of creatures up and down the foodchain that are put at risk in this area by these wholly unnecessary deaths? oh yes, humans dont yet fully understand biodiversity, or how the rapid extinction of species, particularly on this peninsula might impact our future survival. yet the assumption seems to be, lets kill them now anyway and picket the profits, and someone, someday will find a new technology that will solve the problem later	Ralphs, Mary	30-Jun	<b>Avifaunal Specialist Response:</b> We appreciate the comment and your concern. The bird specialist team considers it important to clarify that, as stated in the IA Report, we do not object to or endorse the proposed development but aim to present facts and our best scientific and professional opinion with regard to the impacts of the development. For the “millions of creatures” up and down the food chain, please note that the specialist was tasked with the duty of assessing the impacts on the local bird population in the area, as a result of the installation of wind turbines – which has been presented in the specialist impact assessment report.





#	I&AP Comments on Birds	I&AP	Date	Response
6	<p>1. The extract noted below is extremely concerning as it would appear that this iteration of the Avifaunal Final Impact Assessment Report was, in the main, a mere desk-top exercise using old, out-dated data, by foreign consultants with little experience of the area.</p> <p>No apparent effort was made to interrogate possible population and distribution changes caused by the erection and operation of the West Coast 1 WEF.</p> <p>As basis to the impact assessment, this report refers to the findings of the bird pre-construction monitoring surveys conducted at the proposed Boulders Wind Farm (WF), between June 2014 and May 2015.</p>	de Kock, C	01-Jul	<p><b>Avifaunal Specialist Response:</b> This comment starts with 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 which aims to “Provide for the establishment of the South African Council of Natural Scientific Professions (SACNASP)”. In fact, the presence of an international team, with foreign but also local specialists, in a study conducted in South Africa seems to be a common concern as found in several of the comments received during the public consultation process. On this matter, the bird specialist team would like to highlight 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 - local knowledge through local technicians who conducted the field surveys among other aspects of the work; but also to the technical coverage of overall impact assessment processes and knowledge of potential WEF impacts on biodiversity, monitoring, mitigation, etc. - not only from local South African projects, but international knowledge as a result of a wide range of projects concerning Wind Energy and other renewable energy projects conducted in Europe, Africa and South America.</p> <p>The bird specialist team adds that, as stated in the peer review Report (produced by AVISENSE Consulting) requested by Mr Peter Pickford during the public consultation process, the IA Report for Boulders WEF proposed project development is compliant with the national Best Practice Guidelines defined for South Africa (Jenkins et al., 2015). It should also be noted that the scientific support used to build the Best Practice Guidelines is substantially based in international studies (including several European references). In fact, 82% (69 out of 84) of the scientific references cited on the Best Practice Guidelines are from foreign studies, thus acknowledging the importance of international know-how. Apart from this, two (2) references are made to Bioinsight peer-reviewed work on windfarm-wildlife conflict.</p> <p>Regarding the topic referred on the comment about “out-dated” data and other suggestions about deficient information; during the timeframe on which the IA report was compiled by the bird specialist team, the data was valid according to the Best Practice guidelines and other requirements for the impact assessment process. In addition to the pre-construction monitoring campaign, the bird specialist team has conducted an additional site visit to the study area in October 2017, also in compliance with Best Practice, which determined that the general characteristics of the study area have not significantly changed since the initial pre-construction monitoring campaign was conducted. All the information and data that was used in the IA Report was that which has been deemed relevant to conduct the impact assessment studies.</p>
7	<p>2. It is of concern that the actual numbers of the sensitive species which were reported by the specialist observers and which have been recorded by the relatively high number of ADU atlassing cards, have not been adequately recorded and/or listed in the specialist study. It would appear that the transects which were walked by the specialists were not carried out, in the main, in areas of higher density of birds.</p>	de Kock, C	01-Jul	<p><b>Avifaunal Specialist Response:</b> The bird specialist team clarifies that walked transects and other sampling units are not designed to consider the "highest" densities of birds only or other elements such as the ADU atlas cards, as this would be a biased analysis. Transects and other sampling units in any impact assessments and/or monitoring programmes for any WEF are rather set up to cover a representative coverage of bird habitats on site, providing the best characterisation of the area.</p>





#	I&AP Comments on Birds	I&AP	Date	Response
8	<p>3. The effects of this proposed WEF when added to the existing West Coast 1 WEF will place in excess of 90 wind turbines over the established gathering and breeding areas of the resident Blue Crane grouping which is consistently in excess of 100 birds. As result of the Avifaunal Final Impact Assessment Report depending on old, quite possibly no longer relevant, data collected in 2017 at the time of a previous EIA (subsequently withdrawn), the current Avifaunal Final Impact Assessment Report makes no mention of the effect the construction of the West Coast 1 WEF has had on the distribution of bird populations which used to extend over the full area of the West Coast peninsula and which, as a result of the construction of West Coast 1, have moved territory and clustered in the area of this proposed development. It is currently a common experience to count higher numbers in bird groupings in the proposed area whilst carrying out regular censussing of bird numbers and species</p>	de Kock, C	01-Jul	<p><b>Avifaunal Specialist Response:</b>The bird specialist team highlights that all groups of birds were assessed during the pre-construction monitoring programme. The specialist team also highlights that available published monitoring report for WC1 WEF has been considered in the final version of the IA report.</p> <p>Movements of some groups of species registered in the vicinity of WC1 WEF seem to remain unaffected with no clear pattern corresponding to the disturbance that could be associated with the WEF Presence. Raptor traffic throughout both the wind farm area and the control area was apparently unaffected and remained about the same throughout the study area, while Blue Crane numbers dropped on the control site from pre- to post-construction, and numbers of coastal birds generally, and Kelp Gulls (in particular) increased during post-construction (Jenkins et al., 2017). Also, specifically for the Blue Crane, according to Ralston-Paton et al. (2017), so far, no evidences where found about displacement effects due to wind farms and Blue Cranes have been recorded breeding near to wind turbines, at least for the available data for South Africa by 2017.</p> <p>Regarding the expected mortality impact of new turbines in the vicinity of Blue-crane breeding grounds and flight paths, there is no evidence that the species might be significantly affected. The Radar study conducted at Boulders WEF proposed location found that although the Blue Crane uses the area regularly, none of this species' mapped flights corresponded to high collision risk, as they were not observed flying at rotor height (Millikin, 2015). Results from the WC1 WEF monitoring operational phase (year 1, 2015-2016) shows that a total of 54 carcasses were detected under the turbines, yet no Blue Crane or other large terrestrial species were detected (Jenkins et al., 2017). Pearson 2019, also shows that the results of the 3rd year of monitoring of the West Coast WC1 WEF, show that there is no evidence of displacement or disturbance for birds and that successful breeding of key species was recorded on or near WEFs: Blue Crane, Jackal Buzzard, Verreaux's Eagle. The above corroborates the statement provided in the WC1 WEF Report (Jenkins et al., 2017): "very little evidence in the data we collected to suggest that the operating wind farm had a significant effect on the abundance or diversity of birds in the area, or that the turbines had a meaningful influence on patterns of bird movement. (...) Numbers of large terrestrial species (e.g. Blue Crane Anthropoides paradiseus) were also apparently unaffected, and while there were some subtle changes in small bird diversity and abundance that could be attributed to the wind farm, these did not involve any priority species, and were not of a magnitude that warranted concern."</p> <p>The observed pattern of no/potentially low mortality of Blue Crane is also supported by peer reviewed literature. A review produced for South Africa and other countries have shown that Cranes and other Gruiformes are only marginally affected by mortality at windfarms. For South Africa, only 2% of all recorded fatalities were associated to Large Terrestrial Birds, group in which Blue Cranes are included (Ralston-Paton et al. (2017). In the USA, not a single Crane species was recorded from a total of 6655 fatalities collected from 167 studies at 115 locations (AWWI 2019). In a review of collisions in Germany from 1989 to 2010, only 2 Cranes were found out of 1192 records (Rydell et al., 2012). In a global analysis with predictions of collisions for 19 orders, Accipitriformes had the highest predicted collision rates of any taxonomic order, with mean predictions also high for Bucerotiformes, Ciconiformes and Charadriiformes. Gruiformes were not among the most affected group of species (Thaxter et al. 2017). Mortality is expected to occur, but at levels that will hardly put the regional population at risk of viability.</p>





#	I&AP Comments on Birds	I&AP	Date	Response
9	<p>4. There are several established flyways over the West Coast peninsula which cross over the already established West Coast 1 WEF as well as the installation proposed by this application. In addition to the high number of migrant waterbirds transiting between the Verlorenvlei/Berg River wetlands and the Langebaan Lagoon, which usually fly at night, these flyways are also used by birds such as African Fish Eagle and Osprey. The flyways extend, amongst other routes, over a significant portion of the range of hills to the west of St Helena Bay. The established West Coast 1 WEF and the proposed Boulders WEF combined will place an extended dense array of wind turbines over the same portion of the hills. Waders, and other birds, particularly when migrating south in large groupings, flying over St Helena Bay, will increase their altitude to overfly the hills and be faced immediately with a barrier of wind turbines placed across the full width to their flightpath. The same would obviously apply when approaching from the south. It is common cause that the client has withheld radar mapping data which means that the Avifaunal comment on radar data, particularly that of migrating species, cannot be checked for veracity. Obstruction of flyways is in contravention of several international conventions to which South Africa is a signatory, e.g. the Ramsar Convention on Migratory Species, UNEP Convention on the Conservation of Migratory Species of Wild Animals, Afro-Eurasian Waterbird Agreement and the Benguela Current Convention.</p>	de Kock, C	01-Jul	<p><b>Avifaunal Specialist Response:</b> The bird specialist team clarifies that the referred Radar report is property of the developer, and thus can't be provided by us. Please request to obtain said report from client.</p> <p>The presence of wind turbines can effectively pose some level of obstruction to the movements of birds in the area, but there is no evidence that this conflict will cause any significant impact to the use of that flight corridor or that the obstruction will negatively affect the species at an individual or population level.</p> <p>The bird specialist team based their argument on several studies that evaluated the obstruction effect of wind turbines on flyway paths and its importance as effective barriers and the impact in energy expenditure of birds. The general conclusion is that birds can adjust their flight paths to avoid wind turbines and that this response varies between species (Hotker et al., 2006; Masden et al. 2009). Even when the level of avoidance (distances in birds flight paths to turbines) is larger, causing birds to flight larger distances, it is likely to cause negative effects only in exceptional circumstances (Hotket et al., 2006), and that for all species, costs of extra flight to avoid a wind turbine appear much less than those imposed by low food abundance or adverse weather (Masden et al., 2010). Regarding extra energetic costs as consequence of change flight behaviour, it was also pointed out by Jenkins et al. (2017) that only subtle effects are expected to occur in WC1 WEF with adaptation of flight paths in the vicinity of the wind farm facility.</p> <p>From a literature review, Drewitt &amp; Langston (2006) concluded that none of the barrier effects identified so far have had a significant impact on populations of birds. The same authors also refer that, in some circumstances, barrier effect might lead indirectly to population-level impacts – but no significance is advanced in their study. There are, at the same time, evidences from another study that wind farms do not act as a landscape obstruction to passerines, but this was inconclusive for raptors and non-passerines (Farfán et al., 2009).</p> <p>The observed pattern of flight movements and bird numbers in the close vicinity of Boulders WEF, provided by radar studies shows that flight movements occurred predominantly in the Reference Site with no similar pattern in the wind farm (Millikin, 2015). Data from field observation and radar operation in WC1 WEF (Millikin et al., 2013 in Jenkins et al., 2017) shows that birds adapted their flight paths as a response to facility presence, but changes were subtle and there was no corresponding reduction in bird flight activity in the wind farm area (Jenkins et al., 2017). These findings strongly support the argument in favour of no effective barrier effect and no change in general pattern of flight behaviour in the area.</p> <p>We understand and agree with the demonstrated concern and for this reason the EIA study recommended a construction and post- construction monitoring programme that will allow to continue to assess the bird communities on the site, complementing the information gathered during the pre-construction phase and allowing the detection of potential changes and effects caused by the project and also proposal for taking adequate mitigation measures, if necessary, adjusted to the site specifics.</p>





#	I&AP Comments on Birds	I&AP	Date	Response
10	<p>5. Placing of wind turbines. This comment is made based on the information in Fig 1-2: Project Layout of the proposed Boulders Wind Farm contained in the DRAFT Environmental Impact Assessment Report – May 2019. It is common cause that variations have been made to the final proposed layout, and that I&amp;APs have not been provided with this information as required by the Act and neither has the diagram Figure 1-2 of the Report available on the CES website been amended. The comment, however, is made with reference to both the documented layout as well as to any revised layout. The draft refers to Environmental Sensitivity Mapping which reflects no-go areas located within the project site. The Sensitivity Map reflects a particularly broken up, patchwork series of no-go areas, over the entire proposed site, with some non-no-go areas wholly, or almost wholly, encircled by no-go areas. The patchwork nature of the defined no-go areas is not acceptable. A discrete monolithic area should be defined as such, without a patchwork of go areas encircled by the larger no-go area. To design the wind turbine siting as is, is almost an invitation for birds will fly in the greater no-go area, only for them to be confronted, here and there, by wind turbines. On the farm Het Schuytje 21, the row of turbines 28, 29, 30, 32,34 35 is placed adjacent to a no-go area and the row of turbines 15, 22, 23, 24, 25 is similarly placed adjacent to another no-go area situated with a distance of approximately 300 – 400 m between the two rows of wind turbines. With the wind turbines having a blade disc diameter of ± 90m and allowing for the rotor swept area not impinging on the no-go areas and for spacing between wind turbines, the corridor between the rotor swept areas of the wind turbines could be less than 100m. Turbines 12, 14, 16, 17, 18 and 20 are placed in no-go areas or immediately adjacent to no-go areas. It is an unacceptable risk to compel birds to attempt to navigate the proposed lethal hazard. As it is not possible for birds to determine the immediate transition from no-go to go to no-go areas, there should be a medium sensitivity (transition) buffer of at least 200m around any no-go area. This proposed requirement is backed up by the statement by the Avifaunal Report consultants regarding 200m no-go areas and more particularly by the 2000m medium sensitivity buffer requirement noted in the extract below: ‘500m no-go areas buffer, and 2000m medium sensitivity buffer around the active Secretary bird 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.’ The result of rational sensitivity mapping including no-go and transition areas, and excluding irrational patchwork, would mean that there is no likelihood of this proposed development being able to comply. Mention is made of a minimum blade tip height of 55m above ground level. On level ground this may well allow for some slight measure of avoidance, however, on this site the hilly nature of the site means that whilst individual blade tip heights may be no less than 55m above the immediate ground level, a bird flying through the wind farm would be faced by an array of wind turbines placed at various heights., which is unacceptable. The conclusion in the extract noted below is questionable as the birds would have been flying above sloping ground well below sight horizon height and would have, at best, provided questionable radar returns. Once again, the withholding by the developer of radar data is questioned. Overall, of all flights recorded by the radar, only 1% of flights were shown to occur within the rotor swept zone, and most of these flights were recorded along lines of natural vegetation and along slopes facing the dominant prevailing winds in the area (SW). The mention of ‘less than 10m height’ noted in the extract below is generally incorrect as Blue Cranes are regularly sighted at heights in excess of 20 - 30m, particularly when transiting between feeding and/or breeding areas. It is common cause that flights post-flushing are usually for a short distance and of low height merely to exit the immediate area when disturbed. ‘Due to its abundance and conservation status, the Blue Crane is a species of concern since it may be prone to collision at certain times (e.g. when commuting between roosting and feeding sites or commuting after farming activities which increase food availability). However, the species has been observed flying at rotor height only during very brief periods during the monitoring programme. In the remaining</p>	de Kock, C	01-Jul	<p><b>Avifaunal Specialist Response:</b> It is true that during the impact assessment different versions of the proposed layout for Boulders WEF were considered. These variations were considered precisely due to the identification of environmental sensitive features. The relocation of turbines aimed to avoid and/or reduce the potential impacts cause by the WEF. Given this situation, the bird specialist team clarifies that final Project Layout of the proposed Boulders WEF is presented in the final specialist IA report in Chapter 6, p 62, Fig.7. Several direct statements in the comment about turbine locations are out-dated, we kindly recommend the analysis of said Chapter.</p> <p>On the topic of the definition of no-go areas (based on sensitivity mapping) and turbine locations, it is important to clarify that the goal for defining “no-go areas” is not for bird exclusion or orientation, which is in fact in accordance with the stated in the comment “it is not possible for the birds to determine the immediate transition from go to no-go areas (...)”. The presentation of no go-areas is based on the highest sensitivity areas which are, in turn, based on several different environmental features as described in the final specialist IA report (p 39). In fact, all no-go areas were originated from specific features in specific locations that may be relevant to bird impact assessment (species, nests, habitats, water, etc.) to which buffers were then applied. This application ensures that all the critical features are mapped and buffered for protection purposes.</p> <p>We reaffirm that the final specialist report is compliant with the Best Practice guidelines (Jenkins et al, 2015). It is also important to clarify that the Best Practice do not specify the criteria to account for the definition of highly sensitive areas or no-go areas.</p> <p>Go and no go-areas are defined in order to help the decision-making process and aim to define the layout of a given WEF (turbine locations). No-go areas correspond to areas where it is recommended that turbine placement by the developer is avoided. This is clearly stated in the final specialist IA report (page 2; in more detail in page 39, Chapter 3.1; and again, in page 57, Chapter 4.2). The bird specialist team reinforces that the Precautionary Principle has been applied throughout the assessment, buffer zones were identified aiming to avoid or minimise the risk of collision to the minimum level as much as possible. Also, the Mitigation Hierarchy was applied throughout all the impact assessment process as recommended by international standards (BBOP, 2012; IFC, 2012).</p> <p>Considering the sensitive mapping analysis and by applying the mitigation hierarchy, including all mitigation measures and monitoring programmes for construction and post-construction phases that are recommended in the final specialist IA report (that will contribute with relevant data to consider to an adaptive management approach), collision, displacement/disturbance and other assessed negative impacts were not classified as very significant. The bird specialist team would also like to point out that, as per the updated version of the Boulders WEF layout (Chapter 6, p 62, Fig.7.), no turbines are placed inside of no-go areas.</p> <p>Regarding the turbines situated on hilly terrain; The specialist confirms that data captured in the field took into account the bird flight heights relative to turbine blade heights, while considering the underlying topography underneath the flight path. This information, along with several other general parameters, is used to inform the specialist impact assessment.</p> <p>Regarding the Blue Crane statements in the comment and the concerns about the Radar data and reporting, the bird specialists team clarifies that the referred Radar report is not property of the specialist team and thus we cannot provide it. Please request to obtain directly from the client.</p> <p>The specialist would like to highlight that the Blue Crane flights that were generally not higher than 10m was due to direct observations and is therefore correct in that regard. It is however correct to</p>



#	I&AP Comments on Birds	I&AP	Date	Response
	<p>observations, Blue Cranes were mostly observed close to drainage lines and the associated habitats in the southern section of the study area, in large flocks, feeding or resting on the ground. On some occasions, the observers' presence flushed some birds. However, flights were still generally very low (less than 10m height) and short distanced.' Of concern is the fact which the report downplays of the disturbances throughout the duration of the construction contract is that the total time-line of project activities from road creation to final commissioning of the WEF, which will impact directly, and negatively, on the resident bird populations. The time-line which could be up to three years would extend through at least two, and possibly three, breeding seasons, thereby causing breeding disturbance and the high likelihood of causing abandonment of further breeding and elimination of currently resident species. All of this disturbance would be prior to the long-term after-effects of an operational windfarm. It has been difficult to obtain during-construction and post-construction records of bird fatalities from many WEF's in the Western Cape area as alluded to in the extract below. The potential impacts of wind turbines on South African bird communities are still largely unknown and still being determined and refined as more information is made available (Ralston-Paton et al., 2017). Therefore, data collection and further investigation is needed and pre- and post-construction monitoring should be implemented to fill these gaps and promote the sustainability of wind energy developments in South Africa. A contractual mechanism which ensures the public availability of the results of such monitoring must be put in place.</p>			<p>say that these types of heights are associated with flushing. This was observed on a number of occasions.</p> <p>As for the final specialist IA report, as a result of the Blue Crane assessment in the pre-construction monitoring programme together with the findings of the said Radar study (Millikin, 2015), what is described in the IA report is a summary of the field data that was collected, as well as an overall analysis of what was most commonly observed in terms of behavior of the species (flight height etc.). That is, in fact, that Blue Cranes typically fly at relatively low altitudes. The bird specialist team does not state at any point that the species never flies at rotor height, on the contrary, in the final specialist IA report it is referred that the species may be prone to collision at certain times, but the collision risk is not high – which is what can be read in the excerpt of the IA report that was transcribed to this comment. Additionally, we respectfully suggest the reading of topics provided by the bird specialist team in response to comment #8.</p> <p>The bird specialist team also highlights that the negative effects that may impact birds during the WEF construction phase were assessed, as described in the final specialist IA report.</p> <p>Finally, about the last paragraph in the comment, the bird specialist team is in total agreement, highlighting both the need for a better understand of real impacts on bird populations due to WEF development and also the encouragement of sharing information and open knowledge.</p>
11	<p>3 Why are the operational monitoring results from WC1 not available for bird and bat impacts to allow for mitigating measures to be put in place during the construction phase instead of waiting for the deaths of these creatures to be observed during the operational stage at BWF before mitigating measures are put in place?</p>	Todd, A&J	01-Jul	<p><b>Avifaunal Specialist Response:</b> The available published monitoring report for WC1 WEF has been considered by the bird specialist team in the final version of the IA report. It is also important to refer that the exact impacts caused at WC1 may not necessarily be completely applicable at Boulders WEF, there is uncertainty to acknowledge. On this topic, the bird specialist team highlights that even the results from first year of WC1 operation (Jenkins et al., 2017) have been somewhat different to the following year results - with far fewer fatalities from the second year onwards, at least until the first months of 2019, according to (unpublished) data presented by the team currently responsible for the monitoring programme in WC1 WEF (Pearson 2019). Besides following the mitigation hierarchy, one must also use an adaptive management approach when dealing with a lot of mitigation strategies and adjust them whenever necessary, given the monitoring programme results - of which the development and implementation is in fact recommended by the specialist team in the IA report.</p>





#	I&AP Comments on Birds	I&AP	Date	Response
12	<p>BIRDLIFE AND BATS. It is a universally known fact that wind turbines have a highly detrimental impact on birds and bats. The location chosen for the Boulders WEF is rich in many species of birds. As a resident, I regularly observe numerous species of raptors, including the rare Verreaux's eagle. I have the privilege of hearing daily the distinctive calls of blue cranes, who live in the field adjacent to our property. In addition to these birds, it is well known that, at night, birds commute from St Helena Bay/Berg River across the proposed site of Boulders WEF to Saldanha Bay. Whilst the Draft EIA Report goes into detail about the exclusion zones where turbines will not be sited, to allow bird access, such an exercise is entirely unrealistic as birdlife cannot read maps and tend to fly in straight lines. I would state that in my view the avian impact study is deficient as in certain sections, the specialist refers to certain birds &amp;/or behaviours that suggest the specialist actually has a lack of knowledge of South African birds. As a long-time resident of Britannica heights, we have never had a problem with mosquitoes. However, in the last 2 years the number of mosquitoes invading our house during summer has risen to the point that we have been forced to buy a mosquito net. As we are in a period of drought and there is no standing water in our environment, the only conclusion I can draw is that the bat mortality rate due to the West Coast One WEF is so high that the mosquito population is no longer under control. If this is true then, Boulders WEF will only compound this problem. This is a small point, but yet another reason why the Boulders WEF application is requesting an inappropriate location.</p>	Portsmouth, Dou	02-Jul	<p><b>Avifaunal Specialist Response:</b> The bird specialist team reaffirms that all groups of birds were assessed during the pre-construction monitoring programme. In the final version of the specialist IA report, consideration is made for a known flyway. All the detailed information concerning the pre-construction monitoring campaign is duly presented in the final monitoring report for Boulders WEF pre-construction phase (Bioinsight 2018). Please request to obtain directly from the client. Additionally, we respectfully suggest the reading of topics provided by the bird specialist team as response to comment #9.</p> <p>On the topic of the definition of no-go areas (“exclusion zones”), there seems to be some confusion in the comment about the goals of this approach in the impact assessment process. We respectfully suggest the reading of topics provided by the bird specialist team as response to comment #10.</p> <p>The bird specialist team notes that the comment includes a personal opinion about the technical capabilities of the bird specialist team. These types of subjective comments are not based in specific facts. The specialist team will not dwell on this matter and has nothing to add to what is stated in response to comment #6.</p>
13	<p>I live and more work at Paternoster Oyster Company oyster farm situated on the old Salt pans between a portion of Uitkoms and Swartrug Farms and have a life rights to my residence. I have lived here for approximately 20 years and my view from my house is of the salt pans with a daily display of water birds, and to the east, Kasteelberg where the sun and moon rises, and now for the past few years, approximately 20 visible Wind turbines. The visual impact of more turbines, larger and more bulky, both during the day (in a duplicate, is they reflect on the water) and the flashing lights at night, would it be totally unacceptable. I wish to question the accuracy of the Avian Study as only once or twice, to my knowledge, there were people monitoring the birds on the Salt pans.(they had to drive past my house and ask permission to be there) The Pans are home to 100s of smaller water birds e.g. Ducks and waders, but it is specifically the flamingos that are year -round visitors as the pans do not dry up completely. Now that the farm is again operational, the pans will be full year-round and attract even more birds. Blue cranes use the pans as their Night roosts, landing after dark and flying away before first light. Both the flamingos and the blue cranes use the pans as their base and leave to forage in other areas, often flying in flocks of between 70 - 150 birds in the direction of the proposed Wind turbines. The safety and conservation of wildlife in the area has never been priority to the farmers of the vicinity and there has been a long and agonising history of poisoning animals, wild and domestic at random, also leading to secondary death of carnivorous animals and birds. In contrast to this, of the coastal properties on either side of the salt pans, one is a declared private nature reserve and the other earmarked for eco-development and no mitigation measures could be put in place that would justify Wind turbines in this layered and special landscape.</p>	Smit, Kiffi	02-Jul	<p><b>Avifaunal Specialist Response:</b> On the matter of the landscape and visual features to local inhabitants due to the presence of turbines, the bird specialist team doesn't have any contributions to add, as this is a matter for the visual specialist and/or EAP to answer, if deemed necessary.</p> <p>Regarding the field work conducted during the avifauna monitoring campaign, the bird specialist team clarifies that the pans in question were monitored a total of six times, covering all four seasons of the year, and considered all species present - including densities of flamingo's, blue cranes, ducks and waders. This data was considered and assessed in the specialist IA Report. All the detailed information concerning the pre-construction monitoring campaign is duly presented in the final Monitoring Report for Boulders WEF pre-construction phase (Bioinsight 2018). Please request to obtain directly from the client.</p> <p>Additionally, with regards to the use of area by Blue-cranes, we respectfully suggest the reading of topics provided by the bird specialist team in response to question/comment #8. We also would like to highlight the reference of poisoning observed in the area. Poisoning is referred to as one of the main causes of the decline of vultures and other scavengers bird species (Ogada et al. 2016) with severe effects at the entire food web. The situation is considered dramatic for the large raptors and terrestrial birds in West African savannahs (Thiollay 2007). Several authors agree that combating illegal poisoning is a major challenge for vulture conservation (Sanz-Aguilar et al. 2015, Hernández &amp; Margalida, 2009; Oro et al., 2008; Ogada, 2014). In many circumstances poisoning of large raptors is deliberate (Mien and Botha, 2018) but also unintentional (Ogada et al. 2016.), suggesting that environmental awareness campaigns would help to reduce the impact of use of poison on bird populations and on the entire ecosystem.</p> <p><b>CES Response:</b> for visual impact issues, please see the Visual Impact section of the CRR.</p>
14	<p>Birding in the area is also a popular tourist activity and therefore there is great concern as to how the wind farm will effect birds passing by on their migratory paths.</p>	Muller Cotzee	03-Jul	<p><b>Avifaunal Specialist Response:</b> The bird specialist team clarifies that the relevant flyways have been considered in the final version of the specialist IA report. We also wish to highlight that there is no evidence that the proposed WEF will have significant impacts that may lead to the abandonment of the area by birds. We respectfully suggest the reading of topics provided by the bird specialist team in response to comments #8 / #9. Therefore, although we are empathic with the shared concerns, we find little reason to believe why tourist activity could cease or be at risk of reducing.</p>



#	I&AP Comments on Birds	I&AP	Date	Response
15	1. CES is involved in three major projects which can effect environmentally upon the West Coast Peninsula, (a) Coastal Management Plan for the West Coast District Municipality. (b) Boulders Wind Farm. (c) Prospecting for Phosphate ore on Duiker Eiland, which is the third largest known deposit in South Africa. Therefore the decision not to place turbines to the West of the Paternoster/Strompneus Bay gravel road could be due to a conflict of projects, although it was requested to protect a bird flyway.	WEST COAST BIRD CLUB	02-Jul	<b>Avifaunal Specialist Response:</b> The bird specialist team has nothing to add to this comment. It is a matter for the EAP to answer, if deemed necessary.
16	2. Boulders is to be built adjacent to West Coast No.1 with no corridor between the two sites. The priority is to extract 140 MW from available land. A map is required showing the position of turbines for both sites along the boundary at 23, 28 30,4,42 and 1. There appears to be a wide gap going over the ridge and all that is required is a 200 metre wide corridor. This section is where African Fish Eagles from the Berg River cross the ridge on their way to Paternoster, return by flying over the sea. This corridor will also be mitigation for Bats hunting the northern ridge.	WEST COAST BIRD CLUB	02-Jul	<b>Avifaunal Specialist Response:</b> This comment seems to share a common concern already addressed previously in the current list of responses. We respectfully suggest the reading of topics provided by the bird specialist team in response to comment #9.
17	3. The observation of the action of Sea Fog confirms the problems encountered and evening observations are required, unfortunately a Sea Fog event cannot be predicted (I had the problem while counting Cape Cormorants entering the Berg River) only that the fog comes with a Northern wind. There has been a large kill of Common Terns on the West Coast road North of Laaiplek of birds disorientated by fog and colliding with telephone lines.	WEST COAST BIRD CLUB	02-Jul	<b>Avifaunal Specialist Response:</b> The bird specialist team highlights that all features deemed as relevant were considered for impact assessment and are compiled in the final specialist IA Report. We wish to reinforce that the action of Sea Fog, as referred in the comment, is something that cannot be predicted, although it may in fact contribute to disorientation of birds and lead to some extent of a higher collision risk. On this topic, the Radar study conducted on site (Millikin, 2015) lists Fog as a potential factor leading to the increase of collision risk for birds. However, according with the information provided in that same study, fog was observed in only one day throughout the monitoring period. Additionally, the information provided the first year of operation phase of the WC1 WEF (Jenkins et al. 2017) does not make any reference to fog as an aggravating factor regarding the interaction between the bird community and the wind farm facility.  In summary, although we understand the concerns raised in the comment, we didn't find evidence suggesting that Sea fog may be a significant factor for the Boulders WEF impact assessment process, and that no sufficient evidence exists that may lead to any changes in the overall conclusion stated in the final specialist IA Report.
18	4. Collisions are not all caused by turbine blades, there are collisions with the towers and infrastructure, transformers and buildings, could towers and buildings be painted a more distinctive colour (not black birds do not see black)?	WEST COAST BIRD CLUB	02-Jul	<b>Avifaunal Specialist Response:</b> The bird specialist team highlights that the relevant infrastructures associated to Boulders WEF were assessed in the specialist IA Report. Regarding the concerns raised in the comment, although it is a fact that collisions may occur in said infrastructures, the resulting effects on the overall bird community are not expected to correspond to significant impacts. Additionally, we add that the information provided for the first year of operational phase of the WC1 WEF (Jenkins et al. 2017) does not make any reference to fog as an aggravating factor regarding the interaction between the bird community and the wind farm facility.  We highlight that the specialist IA Report recommends a list of mitigation measures according with the predicted negative impacts, as well as a monitoring programme throughout the Boulders WEF operational phase, which will allow to assess the need to define any additional mitigation measures, if deemed necessary.  Nevertheless, regarding the painting of turbines (blades), towers, building and other infrastructures, yes, this type of action can be considered a mitigation measure to reduce bird-collision risk. These measures can be considered if future WEF operational monitoring results eventually show significant (unexpected) negative impacts. But, so far, it is not the case.



#	I&AP Comments on Birds	I&AP	Date	Response
19	5. Outside lights to be motion activated so as not to cause light pollution and attracting insects. This would also be mitigation for Bats.	WEST COAST BIRD CLUB	02-Jul	<b>Avifaunal Specialist Response:</b> It has been recommended by the bird specialist team in the final specialist IA report for lights to be kept to a minimum, and to be directed downwards in order to avoid disturbances. It has also been recommended for turbine lights to be strobe-like. The bird specialist team also adds that, with regards to the flashing warning lights placed on the turbines; they have to be configured in this manner due to security procedures (regarding aviation), as they are largely for the benefit of aircrafts flying at night. Regarding the Bat component, we note that the appointed bat specialist team should be able to answer, if deemed necessary.
20	6. Has the effect of sound and vibrations from the turbines upon ground nesting species as recorded in the USA been considered?	WEST COAST BIRD CLUB	02-Jul	<b>Avifaunal Specialist Response:</b> Sound and Vibrations resulting in disturbance/displacement effects among all species in general have been assessed in the final specialist IA report, focusing on the potentially relevant elements.
21	7. The area is a large 'natural' habitat where natural fauna has had access, therefore access points must be designed in sections of fences to allow large mammals passage to their traditional feeding areas. Similarly, sections of fencing to be raised above ground level to allow small mammals and reptiles passage. All farm, turbine and natural dead animal and bird carcasses to be immediately removed upon finding to prevent the attraction of carrion feeding birds to the site, which can result in collisions.	WEST COAST BIRD CLUB	02-Jul	<b>Avifaunal Specialist Response:</b> All bird carcasses will be collected during construction and operational phase monitoring campaigns for identification purposes and will be disposed of according to applicable provincial legislation.
22	8. Road access to site, dangerous large Lorries and vehicles transporting sections of turbines cannot be routed through Vredenburg High Street. The R27 to R399 and West Coast No.1 route must be used.	WEST COAST BIRD CLUB	02-Jul	<b>Avifaunal Specialist Response:</b> As the bird specialist team, we cannot comment on behalf of the transporting/logistics of the construction team, in this particular regard. In this case, we note that the appropriate specialist or EAP will respond accordingly.
23	9. Where is the large amount of excavated spoil from foundations to be disposed of?	WEST COAST BIRD CLUB	02-Jul	<b>Avifaunal Specialist Response:</b> As the bird specialist team, we cannot comment on behalf of the excavating/construction team, in this particular regard. In this case, we note that the appropriate specialist or EAP will respond accordingly.
24	14. Bats, the report indicates weather conditions have a significant bearing upon bat activity, temperature below 11 degrees C, rain for the night above 4mm and wind speed above 9 m/sec. could these be factored into start up procedures? Bat activity on the North West edge can during daylight be mirrored by the swifts and swallows which can be seen feeding upon insects blown over the ridge by the South wind.	WEST COAST BIRD CLUB	02-Jul	<b>Avifaunal Specialist Response:</b> All bird species (including swifts and swallows) were considered in the final bird specialist IA report. Regarding the Bat component, we note that the appointed bat specialist team should be able to answer, if deemed necessary.
25	Avifauna Report: Two statements by Mr. Miguel Mascarenhas in the opening paragraphs of his report on behalf of Bio Insight are important to bear in mind: "We do not object to or endorse the proposed development, but aim to present facts and our best scientific and professional opinion with regard to the impacts of the development." "The Precautionary Principle has been applied throughout this investigation." A) It would appear that Mr. Miguel Mascarenhas contradicts himself in the first statement of the above by choosing to underline and make bold, the following excerpt from the executive summary: No fatal flaws were identified for the project, only no-go areas were identified which should be excluded from development due to the high sensitivity of the environmental features located within these areas. This inclination must be held as applicable therefore to his entire report. B) His second statement as above is brought under scrutiny in examination of Figure 5 on page 40/ 77 of his report. When examining the positioning of turbines 43, 33, 31, 27, 21, 41, 39, 38 and 45 one finds that ALL of them lie within the proposed "buffer zone" of the site of the Secretary Birds nest. One must question if this is indeed an example of the "Precautionary Principle" as expressed above, and further what exactly is the purpose of delineating a "buffer" zone if one then ignores its boundaries and places turbines well within its limits? In the same figure 5 the following turbines are placed right on the edge of the proposed "No Go" areas: 2, 6, 4, 7, 9, 11, 31, 33, 43, 41, 45, 35, 29, 30, 22, 23, 24, 25, 26, 16, 17, 18, 20 and 14. Whilst turbine 36 is placed within the defined "No Go" area. The above means that 53% of the total development lies at the extreme edge of "No Go" areas. Again, one must question if this is a valid example of the	Pickford, Peter	02-Jul	<b>Avifaunal Specialist Response:</b> The bird specialist team would like to start by stating that the requested information - the referred Radar report (Millikin, 2015)- is not property of the specialist team and thus we cannot provide it. Please request to obtain directly from the client. Also, all the detailed information concerning the pre-construction monitoring campaign is duly presented in the final Monitoring Report for Boulders WEF pre-construction phase (Bioinsight 2018). Please request to obtain directly from the client.  On the topics about turbine location, sensitive mapping / no-go areas, the bird specialist team clarifies that final Project Layout of the proposed Boulders WEF is presented in the final specialist IA report in Chapter 6, p 62, Fig.7. Several direct statements in the comment about turbine locations are out-dated, we kindly recommend the analysis said Chapter.  Regarding sensitive areas, species specific buffer zones are identified aiming to eliminate the risk of collision or to reduce it as much as possible to the minimal level. Based on that, we entirely agree when the comment states that having wind turbines installed inside species specific buffer zones (i.e. high sensitive, no-go areas) would be not acceptable and would be in clear contradiction with the Precautionary approach that is required by Impact Assessment.  In the final layout of the WEF, the position of seven turbines were adjusted. The updated Boulders



#	I&AP Comments on Birds	I&AP	Date	Response
	<p>“Precautionary Principle,” and further if Mr. Miguel Mascarenhas does indeed stand by the statement not to endorse the development? It should be obvious that the turbines specified above, placed on the edge of a “No Go” area will have a reach of 45 meters into the space of the 200-meter-wide “No Go” area, thereby negating the validity of such placement.</p> <p>This not only applies to 53% of the proposed development, but on further examination of Figure 5 one is compelled to notice that the placement of several groups of turbines exist in areas sandwiched between “No Go” areas, such areas themselves apparently narrower than 200 meters. I include below screen shots for ease of understanding this, where red is “No Go” and yellow is allowable. Surely, this is irresponsible on the part of Mr. Miguel Mascarenhas, how can such placements truly be deemed to be considerate of the “Precautionary Principle”? They are not. Birds do not observe the neat delineations of desktop assessment, they fly. And if a bird finds itself in the “No Go” zone beside turbine 22, in the figure at left above, then it is not unlikely that, to get to the other areas known as preferential habitat, it will fly directly to this area and thereby pass right under turbines 25 and 26. The same applies for all the examples shown above. The delineations appear as neat and tidy concepts on a map, but they have zero bearing on the decisions of where birds choose to fly. It is a dereliction of the trust placed in Bio Insight’s neutrality to propose that areas sandwiched tightly between areas identified as sensitive, and therefore “No Go” zones, be considered safe and allowable sites for placing turbines. It becomes critical in the light of the above to examine the proposed “No Go” and “Buffer Zone” areas and ensure that they are created with a sense of causing a real and valid effect and not to merely satisfy desktop examination parameters, as has been done in Bio Insight’s report. Further, the EIA was negligent in recognising the area for the Proposed Boulders Wind Farm as lying on a peninsula jutting out into the ocean and therefore a major flyway for birds between the internationally registered and recognised Important Birding Wetlands of the Langebaan Lagoon and West Coast National Park and the Lower Berg River Estuary. In failing to present this, the EAP denies the consideration of the possible catastrophic bird mortalities that might occur as a result. In a bird report made post the construction of West Coast One, the adjacent wind farm, these are some of the figures of just the raptor mortalities collected under the wind turbines during a period of 14/15 months. Lanner Falcon 3 (Endangered); Rock Kestrel 4; Yellow-billed Kite 3; Booted Eagle 2; Martial Eagle 1 (Endangered); Jackal Buzzard 17. The figures of avian fatalities found when scientifically extrapolated out over the same period 14/15 months, on an average between a lower and upper confidence level, came to an estimated 329 bird mortalities. In the same bird report a radar-based monitoring survey counted, in a 147-hour nocturnal survey in the summer, 30 546 birds passing through the area directly adjacent to the Proposed Boulders Wind Farm. As examples of local Bird Club random surveys: on an outing in the summer of last year, on a single day, on one of the farms included in the Proposed Boulders Wind Farm footprint, counted over 200 blue cranes (a Threatened species on the IUCN Redlist); For those of us concerned for our environment these facts cannot be ignored and it is our responsibility to defend the wildlife that shares our home. It is a fact that the cumulative impact of wind farms side by side will be exponentially devastating to the bird populations. In addition to the above, I wish to endorse and hold as valid the report and findings of Dr. Andrew Jenkins of Avisense, employed by the conservation bodies and individuals of the West Coast Peninsula community. And further to endorse his examination of the report of Bio Insight. The report is attached with this letter of comment as annexure A.</p> <p><b>Bat Report:</b></p> <p>It is noted that the Bat Report is a desktop study by Gaia Environmental using the field information provided by Bio Insight. In this regard, it is noted that Bio Insight are not specifically qualified Bat Specialists and as such their field research may require investigation by the specialists of Gaia Environmental as to its validity and application. And especially so, as the Scoping Report was done by Gaia Environmental and that much of the observations and recommendations thereof have been carried over into this 1st draft EIA report. It becomes obvious in learning the cumulative results of</p>			<p>WEF layout fulfils the requirement referred to in the above paragraph. It is presented in the EIA report and Fig. 7 (not Fig. 5) from Chapter 6, but the scale of the map and the quality/resolution of the image may have misguided Mr. Peter Pickford in his interpretation.</p> <p>We kindly recommend reading from Boulders WEF final specialist IA report (p 62) the following: “A new layout was provided by the client. Seven turbines were relocated, and in five of them (turbines 21, 27, 31, 33 and 43) the alterations are significant, due to their removal from the medium sensitivity buffer of the secretarybird nest (...).” The same considerations apply to the second part of the comment of Mr. Peter Pickford. As we pointed out, no turbines were placed inside ‘no-go’ areas. All bird-relevant zones were mapped and buffered, while adopting the precautionary procedure and in compliance with best practice (Jenkins et al., 2015).</p> <p>Specifically for the Secretarybird, according to the updated layout presented in the final IA report, only two turbines are located inside the medium sensitivity area for this species, as opposed to the previous layout where seven turbines were located inside of the area (considering a 2km buffer over the known nest of the species). This represents that the closest turbine to the species nest (turbine 41) will be located greater than 800m from the limits of the defined no go area (500m buffer over the nest) and greater than 1300m from the nest itself.</p> <p>Still on the topic of turbine location, proximity to no-go areas and buffer zones, the specialist clarifies that although some turbines may indeed be located near the buffer limits, no part of a turbine (e.g. tower, rotor, blade) is located in such place where it directly encroaches any specific high sensitive environmental feature. Additionally, we respectfully suggest the reading of topics provided by the bird specialist team as response to comment #10.</p> <p>Given all of the above, regarding the overall insinuations of the specialist team’s endorsement the development of the WEF and not adhering to the precautionary principle, we reaffirm once again that we do not object to or endorse the proposed development. It must be noted that the specialist has assessed all aspects of sensitivity proposed for the development, and recommended certain areas to be excluded from development, which have subsequently been excluded. As such, the precautionary principle has been maintained. The specialist also notes that the questioning of the specialist’s intentions to endorse the development are unfounded, given the strict avoidance/mitigation measures proposed for the development. Strict protocols have been developed for defining avoidance areas – which are to be adhered to at all times.</p> <p>In respect of the suggested possibility in the comment about “catastrophic fatalities” and the lack of acknowledgement of the IBAs importance, the team clarifies that in the final the specialist IA report, consideration is made for a known potential flyway (please see p 19, Chapter 1.4). The team is in agreement that bird fatalities may potentially occur, and possibly in numbers that may raise concern.</p> <p>However, as stated in response to comment #11, there is always uncertainty surrounding this. Due to this, the bird specialist team highlights that besides following the mitigation hierarchy, one must also use an adaptive management approach when dealing with mitigation strategies and adjust them whenever necessary, given the monitoring programme results - of which the development and implementation is in fact recommended by the specialist team in the IA report. For “catastrophic fatalities” there is no evidence that the development of the WEF will cause significant negative impacts on bird communities. The bird specialist team also highlights that, yes, the results of the monitoring surveys that were conducted both for Boulders WEF project, including radar study, and for WC1 WFE were also assessed in the specialist IA report. Additionally, we respectfully suggest the reading of topics provided by the bird specialist team as response to comments #8 / #9.</p>



#	I&AP Comments on Birds	I&AP	Date	Response
	<p>the bat report, that without mitigation, the Proposed Boulders Wind Farm would be disastrous to the bat population and render the project fatally flawed. Figure 3.6 on page 155 refers: It states: Consequence: Potential significant declines in local bat populations of species which fly at rotor-sweep height. Currently locally abundant bat species may become locally threatened. The mitigation required to avoid this must therefore be scrutinized with extreme care.</p> <p>In doing this, it is quite apparent that the principal mitigation is the placement of turbines outside areas of risk and yet Gaia Environmental acknowledge on page 163 of their report: When comparing the previous layout with the current layout, turbine 19 has been moved to a location which should decrease it's impacts on bats, while turbines 15, 33 and 43 have moved to locations which may have a greater impact on bats. The blade sweep area of turbine 43 may overlap with a high sensitivity zone. Furthermore, 2 more turbines (18) are located in moderate sensitivity areas. And further on page 162: provided that no part of the wind turbine infrastructure, including the blade, overlaps with these zones. This is difficult for the specialist to determine based on a google earth layout with turbine points and must be ensured by the developer. This is particularly important at turbines 8, 9 and 45. No turbines fall within high sensitivity zones. Turbines 5, 10, 11, 13, 14, 15, 16, 20, 22, 23, 24, 29, 32, 33, 36, 42, 43 and 45 (18 turbines) fall in moderate sensitivity zones and could be moved out of these zones to minimise the impact of the proposed activity on bats, And further on page 162: In particular, turbines 18, 36 and 43 are located very close to moderate sensitivity zones and it is likely that the turbine blade will overlap these zones. The summation of the above comments is that the proposed placement of the turbines specified above, representing 61% of the total proposed development, are critically close to the edge of the safety parameters for the bats. Again, this requires a close and in-depth scrutiny before such narrow margins of safety can be considered adequate for approval. As with the observations above, regarding the avifauna report, so too, the placement of turbines in areas sandwiched tightly between "No Go" areas for the bats should be studied for the reality of their effectiveness, as opposed to neat delineation on a map. Bats are unlikely to restrain themselves to such man conceived, rigid boundaries; they will, without doubt, transgress. Here again, are some examples of areas denoted as acceptable whilst being tightly sandwiched by "No Go" areas. It is important to note the scale of these diagrams, where the maroon toned "No Go" zones are 200 meters wide. It clearly shows the scale of the so deemed "safe" zones (yellow) for turbine placement. These from figure 3.4 on pages 166 and 167 of the bat report. .To a layman's eye the above proposed "safe" deployments of turbines in areas surrounded by "No Go" zones is highly skeptical and requires rigorous critical examination. I, further, do not share the opinion of Gaia Environmental when they state on page 160: Based on the current guidelines for thresholds of bat fatality by ecoregion (Macewan et al., 2018) the threshold for bat fatality at the proposed Boulders Wind Farm is 55 bats of a single species per annum. Once the number of bat fatalities reaches this threshold, a curtailment plan must be put in place. I would question why one must first have bats die to establish mortality? West Coast 1 lies directly adjacent to the proposed site and has been operating for years. Figures of post construction bat mortality for West Coast 1 should be studied, and the findings thereof applied as mitigation before development. To propose the reverse is rather like to trying to find out if there are brakes on the bus after one has pushed it down the hill. No one would volunteer for such an experiment and for the bats the same regard must be applied.</p>			<p>Specifically for the results of the WC1 monitoring (first year of operation) stated in Mr. Peter Pickford's comment, referring to a total number of 54 birds found dead near the turbines during a period of 14/15 months – resulting in fatality estimations of 329 mortalities – and the relation with the high number of bird movements that were registered by the radar (30 546 movements for a 147 hour-nocturnal survey in the summer): Through an exercise of conducting a direct analysis between the estimated fatalities and the number of bird movements, one sees that the percentage of dead birds / number movements per hour is minimal (&lt;0,01%). If taken literally, this could suggest that not only the proportion of bird fatalities is not significant, but also that there is no barrier effect being caused by the presence of the WEF. Regardless of this small exercise, it must be noted that the bird specialist team is not neglecting the potential fatalities, nor was this type of rough analysis made in the final specialist bird IA report.</p> <p>Noted regarding cumulative impacts. Please be advised that cumulative impacts were assessed in the final specialist IA report.</p> <p>The bird specialist team notes that the comment about the technical capabilities of the bird specialist team seems to be based on personal opinion, and may be influenced by the peer-review conducted by AVISENSE Consulting. These types of subjective comments are not based on specific facts. The specialist team will not dwell on this matter and has nothing to add to what is stated in response to comment #6 and the responses in the direct comments extracted through a detailed analysis of Mr. Andrew Jenkins' peer review report (AVISENSE Consulting; comments #32 to #63).</p> <p>The specialist acknowledges all comments on the final bat specialist report. Although Bioinsight conducted field work for the bat component of this project, we confirm that we are not the appointed specialist for the impact assessment, and therefore encourage the appointed bat specialist to respond accordingly, if deemed necessary. Furthermore, the subjective comments on the technical capabilities of Bioinsight as bat specialists are unfounded and unjustified. The specialist has extensive experience in both local and international bat specialist studies. A detailed list of works conducted, and publications can be provided upon request.</p>





#	I&AP Comments on Birds	I&AP	Date	Response
26	<p>And then, for me as an animal rescuer and being involved in animal welfare, the idea of those turbines killing our West Coast birds (and bats not even mentioned in the report) while they claim to be environmentally friendly and “green” energy, is the most hypocritical feature of this whole application!</p> <p>Did you know that we have an Owl sanctuary just around the corner at Blueberry Hill? It is called the Owl Orphanage, started by Jacques Nel, and rescued owls as well as other wild birds are rehabilitated here until they are ready to be re-introduced to nature. They are then released in the green area (the farm area) next to Brittanica Heights, which can put them on a direct path of collision with the Boulders Wind Farm’s turbines! <a href="https://www.facebook.com/owlorphanage/">https://www.facebook.com/owlorphanage/</a> Don’t tell me about the amount of birds being killed by high buildings or Eskom power lines or cars - the fact is that those birds in our protected area won’t be killed if there are no turbines in that specific area! Why choose this sensitive site with so many No Go areas and “sensitive” areas to build ANOTHER wind farm? Why not choose a site already damaged by industrial development, like the area around the IDZ in Saldanha’s vicinity? I had the opportunity to view the “Peer review of the bird impact study for the proposed Boulders Wind Farm, by Andrew Jenkins, AVISENSE Consulting, prepared in June 2019 for a group of concerned residents. His comments were really disturbing, for instance: “p 25, para 5 lists “other wind energy projects present in or planned for the general area”. Are there any future plans to develop the NW half of the Vredenburg Wind Farms potential development area, perhaps as a second phase of the company’s overall development plan? If so, this intention should be openly acknowledged in the report and considered in assessments of possible cumulative impacts on the area’s birds.” We fear that the Boulders Wind Farm would only be the second stage in a planned strategy to squeeze MORE wind farm development into our area, with these developer having no perception of our challenges in South Africa, living with crime and political instability and corruption. South Africa is NOT Germany or Holland or Denmark, we have a different set of challenges that those First World countries can not even comprehend. The recommendations in the Bird impact study for the proposed Boulders Wind Farm had me stunned: “Construction phase •Minimise areas of construction to the maximum extent possible; •Clearing of natural vegetation during construction should be kept to a minimum; •Proper training should be provided to all the construction personnel. Everybody working in the area should be aware of the sensitive areas and be alert to the potential impacts of the construction phase on the bird community; • The removal of trees should be minimised and undertaken with extreme care due to its importance as roosting, nesting and as foraging habitat for birds. • Structures should be designed to reduce the availability of perching sites in the area close to the turbines. • All power lines linking wind turbines to each other and to the internal substation should be buried. In cases where this is not feasible, lines must be fitted with bird flight diverters and bird flappers and must be made visible especially during the night time. Eskom-approved bird friendly pole structures should be used. • The use of guyed towers should be minimised and if necessary steps should be taken to increase the visibility of the guy wires through the use of markers, especially visible at night. •No chemical spills or any other material dumps should be conducted within the intervention area, with special focus in areas nearby riparian vegetation or drainage lines. All the maintenance of vehicles must be carried out in specially designated areas to prevent any type of pollution on the area.”</p> <p>•Specific mitigation within the 2000m buffer around the Secretarybird nest: An Environmental Control Officer (ECO) should use this opportunity to firstly identify if this nest is currently still in use or not – which will serve as important information for subsequent project phases. This ECO should also oversee the construction work and inform workers if there is a need to stop work (due to a risk situation), with specific reference to the secretarybird nest. If an ECO cannot oversee this task, then it will be compulsory for an avifaunal specialist to do so. Regardless, an appropriate avifaunal specialist should train the ECO in identifying risk situations. This mitigation measure applies to the general breeding season of the species, but should place specific emphasis on the fledging period, which is estimated to occur between November and February. It also only applies to the buffered</p>	Engels, Anneline	02-Jul	<p><b>Avifaunal Specialist Response:</b> The bird specialist team would like to thank you for the information on the owl orphanage and reaffirm that all groups of birds were assessed during the pre-construction monitoring programme and impact assessment process. Thus, owl species were also recorded and considered during the final specialist IA report.</p> <p>Regarding the comment on site selection and selecting a different potential location; your comment is noted and recommended for the developer to respond to with their decision-making process for site selection. From an avifaunal point of view, no-go areas are defined as part of any impact assessment process - to help assist in the reduction of potential impacts.</p> <p>For the comment on development in the NW half of the potential development area; the bird specialist considered all cumulative projects that were listed on the Department of Environmental Affairs’ database, with information that is considered in the final IA report. This information can be viewed in the “cumulative impacts” section. The specialist also acknowledges that should the developer plan on constructing additional wind farms in that area, then a response should be supplied by them – in order to better inform you of their long- term goals/intentions. Regarding the personal opinion stated in this comment affirming that the all the proposed “mitigation measures will never be implemented”, as the bird specialist team, it is not our position to comment on our local workforce, but if certain measures are written into the EMP, then the developer is obliged to follow those measures. Nevertheless, we cannot talk on behalf of the inspection/supervision members nor environmental authorities, in this particular regard. It is a matter for the EAP to respond to, if deemed necessary.</p> <p>On the topics of this comment citing the contents on the peer review report produced for this public consultation purposes, the bird specialist team would like to clarify that as written on page 43 of the final specialist IA report, the document does not state that there were no significant impacts on birds at the WC1 WEF. It states that little evidence existed to demonstrate any significant effect that the facility was having on the bird community, in terms of their abundance or diversity. This can be also read in WC1 WEF monitoring report for the first year of operation (Jenkins et al., 2017) on page 3, where it says: "We found very little evidence in the data we collected to suggest that the operating wind farm had a significant effect on the abundance or diversity of birds in the area, or that the turbines had a meaningful influence on patterns of bird movement".</p> <p>The bird specialist acknowledges the concerns stated in the comment about particular species such as the Blue Crane and the secretarybird. For these topics, we respectfully suggest the reading of topics provided by the bird specialist team as response to comments #8 / #10/ #25.</p> <p>The bird specialist team adds that all information on baseline data collected from the monitoring campaign is duly presented in the final Monitoring Report for Boulders WEF pre-construction phase (Bioinsight 2018). Most of the concerns raised in the comment appear to be based on the referred peer review report and can be easily enlightened through a reading of the aforementioned Monitoring Report. Kindly request to obtain said report directly from the client.</p> <p>The bird specialist team also notes that the comment about the technical capabilities of the bird specialist team seems to be based on personal opinion, suggesting a complete lack of confidence in the overall bird IA Report that may be influenced by the peer-review conducted by AVISENSE Consulting. These types of subjective comments are not based in specific facts. The specialist team will not dwell on this matter and has nothing to add to what is stated in response to comment #6 and the responses in the direct comments extracted through a detailed analysis of Mr. Andrew</p>



#	I&AP Comments on Birds	I&AP	Date	Response
	<p>areas around the secretary bird nest. Where possible, construction work should preferably be planned to avoid these crucial periods.” “Operation phase: Considering that the hypothesis of bird fatalities occurring at the Boulders WF cannot be excluded, a monitoring plan is recommended during operational phase and, if significant mortalities are observed during this phase, then management actions should be put into action to mitigate fatality. Besides this, the following actions are recommended as a minimum: • Maintenance staff should be encouraged to keep noise and other disturbances to a minimum. If any confirmed nesting location of sensitive species is confirmed within the wind farm maintenance should take place outside of the breeding season of the respective species, if possible. • Maintenance staff should report bird mortalities through a formalised reporting system. This should be additional to formal carcass searches. • It is recommended that any sheep or cattle carcasses be removed from the surroundings of the turbines as soon as possible. This could attract carrion birds and some raptors that act as facultative scavengers. • Hunting of birdlife should be prohibited on site. • The utilisation of guyed infrastructures should be avoided (e.g. meteorological and communication towers) or if unavoidable, visible markers should be used to improve the visibility of the wires (APLIC 2012). Bird carcass searches around these structures should be included in the operation phase monitoring programme and conducted on a regular basis. • If turbines are to be lit at night, lighting should be kept to a minimum and should preferably not be white light. Flashing strobe-like lights should be used where possible; •All lighting of the wind farm should be kept to a minimum, as too much light could attract insects and subsequently insectivorous bird species. Additoinally, lights should be directed downwards, wherever possible – to avoid disturbance of bird species in the area. •Specific mitigation around the Secretarybird nest: it is recommended that regular monitoring during the operational phase monitoring programme is conducted at this nest, in order to first see whether or not the nest is still in use. If in use, this monitoring will be important to gain a better understanding of the species’ behaviour and movements around the nest. Should any significant event occur (e.g. fatalities or above average use of the airspace close to wind turbines) that could be to the detriment of the species, then it will be necessary for appropriate measures to be designed and followed. These can include habitat management, and/or shut-down on demand technology, and/or the installation of deterrence systems. • Specific mitigation within the Pasture and Cropland areas: as lots of bird activity was observed in these areas (labelled as medium sensitivity aras), it is recommended that as a minimum, a two year post construction monitoring campaign is implemented (together with carcass searches and scavenger/bias trials) across the whole site – to study the interactions between the local avifauna and the wind farm. Should significant events (e.g. fatalities) occur, then appropriate management actions should be put into action to mitigate the impacts. These actions can include: habitat management, and/or shut-down on demand technology, and/or the installation of deterrence systems. Considering that the hypothesis of bird fatalities occurring at the Boulders Wind Farm cannot be excluded and the need to properly evaluate the disturbance and displacement effects of the construction activities and ancillary infrastructures will have on the bird community, a targeted monitoring/mitigation programme is recommended during the construction phase of the project, while a full monitoring programme is recommended to be implemented during the operational phase of the project, as previously mentioned. A proposal for these campaigns is outlined in section 5.” All these “mitigation” measures will NEVER be implemented, of this I am truly convinced, knowing our work force in the construction industry! “Everybody working in the area should be aware of the sensitive areas and be alert to the potential impacts of the construction phase on the bird community; All power lines ...must be fitted with bird flight diverters and bird flappers and must be made visible especially during the night time, All the maintenance of vehicles must be carried out in specially designated areas to prevent any type of pollution on the area. Maintenance staff should be encouraged to keep noise and other disturbances to a minimum. If any confirmed nesting location of sensitive species is confirmed within the wind farm maintenance should take place outside of the breeding season of</p>			<p>Jenkins’ peer review report (AVISENSE Consulting; comments #32 to #63). We respect and thank you for all comments that were received and understand the concerns that were raised. However, after a detailed analysis of the contents of the comment, we found no evidence or facts that may lead to changes in the overall conclusions of the final specialist IA Report.</p>





#	I&AP Comments on Birds	I&AP	Date	Response
	<p>the respective species, if possible, etc. See video of turbines killing birds and bats...<a href="https://www.youtube.com/attribution_link?a=07FxnT3i2Kc&amp;u=%2Fwatch%3Fv%3DclYLA7n912o%26feature%3Dshare&amp;fbclid=IwAR37Kpz9s3egimAYwYc5NdLdtrMMIUtQM4HX9jVbuDVXhkbiUIMLw-BR750">https://www.youtube.com/attribution_link?a=07FxnT3i2Kc&amp;u=%2Fwatch%3Fv%3DclYLA7n912o%26feature%3Dshare&amp;fbclid=IwAR37Kpz9s3egimAYwYc5NdLdtrMMIUtQM4HX9jVbuDVXhkbiUIMLw-BR750</a></p> <p>These are all ideas that seem to be wishful thinking on the part of the developers and environmentalists. I don't believe for one second this will really be practical and feasible in our country. Transnet was recently responsible for masses of young pink flamingo's being killed after colliding with their power lines close to the Kamfer Dam near Kimberley, because of bird flappers gone missing from these lines and never being replaced. Exactly the same will happen with the Boulders Wind Farm mitigation recommendations. This is South Africa! "Transnet did put up bird diverters along the lines, but not the entire length around Kamfers Dam. Since then many have fallen off or broken due to wear and tear (as expected) and others have slid to the middle of a section of line. So they are no longer effective and never really were 100% effective. Transnet has been negligent in its duty to check those diverters and to replace missing and broken ones with the most effective, newest diverters since 2012."</p> <p><a href="https://www.facebook.com/groups/18851482307/?ref=group_header">https://www.facebook.com/groups/18851482307/?ref=group_header</a></p> <p>Andrew Jenkins had other drastic problems with this bird study report, i.e. 1. "The Secretary bird nest located within the potential development envelope was an important find of the study and is appropriately highlighted as an important component of the impact profile of the proposed WF. However, the buffer distances put forward – 500 m no-go and 2 km High Sensitivity – may not be sufficient considering the red-list status of the species, its wide-ranging nature, and the scarcity of known nest sites in the West Coast region. In my opinion the clearances around this site should be much larger – 2 km No-Go, 5 km - High Sensitivity...?" 2. p 43, para 8 makes reference to the findings of the Year 1 West Coast One post-construction bird study and concludes that this study found no significant impacts on birds. This was definitely not the case. In fact, the report (Jenkins et al. 2017) states that the collision rates of raptors at West Coast One were unacceptably high, possibly unsustainable, and warranted further intensive and dedicated research to determine causality and options for operational mitigation. The report fails to adequately acknowledge the severity of raptor fatality rates recorded at the nearby, operational West Coast One facility (Jenkins et al. 2017) and the strong likelihood that the Boulders WF will record similar numbers of collisions by birds of prey. 3. Also, the report refers to the lack of Blue Crane collisions reported at West Coast One but doesn't allow for the possibility that the Boulders development area supports much larger numbers of cranes and hence could feature an escalated risk of collision for this species. In my opinion, these two failings render the Medium pre-mitigation impact rating for collision at Boulders as too permissive. West Coast One is already inflicting unpredicted and (as yet) unmitigated impacts on the birds of prey of the Columbine Peninsula (Jenkins et al. 2017)." 4. "The risk remains real and would surely be increased by the significant extension of the turbine-populated area on the peninsula resulting from the construction and operation of the proposed Boulders WF. Allowing for these concerns alone, it is difficult to see how the residual cumulative impact ratings for the Boulders project could be considered Medium. Again, this finding suggests a bias towards development, a refusal to concede the possible importance of key uncertainties in the assessment process, and a failure to assess and report strictly in terms of the Precautionary Principle." (Andrew Jenkins, AVISENSE Consulting, June 2019. These comments from Andrew Jenkins convinced me that the study reports presented by CES are NOT reliable, and that we should not TRUST any further presentations from this Environmental impact assessment. Clearly they don't have our local environment's best interests at heart, and it's all about making money for the developers. My suggestion: there are many other sites in our country that can be successfully developed as wind farms.</p>			





#	I&AP Comments on Birds	I&AP	Date	Response
27	Another critical piece of information which has been intentionally withheld by the EAP is the radar report undertaken as part of the avifaunal impact assessment for the proposed BWEF. Mr. Peter Pickford, a registered I&AP requested this report on no less than 3 occasions, but without success, per:... 31. The refusal of the EAP to provide the radar report to Mr. Pickford is a direct violation of EIA Regulation 40(2)(d)(j) in so far as the radar study has presumably, or should have, contributed significant data to the avifaunal information upon which the avifaunal impacts of the proposed BWEF are based. The extent to which this is true is unable to be determined by Mr. Pickford or this reviewer.	AVSA Consultants Andre van der Spuy	16-Jun	<b>Avifaunal Specialist Response:</b> The requested information - the referred Radar report - is not property of the specialist team and thus we encourage you to please request it directly from the client.
28	Avifaunal Impact not properly assessed and considered. 85 This review has not extended itself to the issue of potential bird impact since the radar report from the earlier bird monitoring program has still not been provided despite numerous recorded request by Mr. Peter Pickford. 86 Once the radar report is received then this critically important issue will be able to be properly reviewed according to all the information which has lead to the presented impact findings. It is appropriate therefore to simply record that critically important information is missing in the EIA and to reserve all rights of review in this regard.	AVSA Consultants Andre van der Spuy	16-Jun	<b>Avifaunal Specialist Response:</b> The requested information - the referred Radar report - is not property of the specialist team and thus we encourage you to please request it directly from the client.
29	Off-sets should be considered and are where a development finances conservation of local endangered habitats to compensate for the loss of habitat due to the development. There are areas on the West Coast, for example the WWF area at Jacob’s Bay.	West Coast Bird Club	02-Jul	<b>Avifaunal Specialist Response:</b> Regarding offsets and potential financing for the conservation of endangered habitats, over which the comment focuses, the bird specialist team has nothing to add, and it is requested for a response to be provided by the appropriate specialist or EAP.
30	Pierre raised his concerns and anger about the people who are opposing the wind farm and trying to stop it from going ahead. They raise issues about birds being killed but more birds are killed by tourist vehicles on the roads than by the wind turbines. They also do not complain about the other illegal developments like cell phone towers which they benefit from but they oppose this development. We are struggling to farm here and we really need this development to continue to farm. If this development is not approved because of them then I will take this issue to court.	Farmers Focus Group Meeting 19 June 2019	19-Jun	<b>Avifaunal Specialist Response:</b> The bird specialist team thanks for the comment provided and has nothing to answer or add. We encourage the appropriate specialist or EAP to respond in this regard, if deemed necessary.
31	Birdlife has recently proposed a new IBA flight path in this area for the migratory birds. This needs to be factored into the analysis.	Paternoster Focus Group Mtg, 18 <sup>th</sup> June	18-Jun	<b>Avifaunal Specialist Response:</b> The bird specialist team reaffirms what was stated in several previous responses to comments. A potential flight path between the Berg River Estuary and West Coast National Park & Saldanha Bay Islands have been considered and assessed in the final specialist IA report. Should this not be the flight path that the comment means to refer to, please be so kind as to clarify which proposed “new IBA flight path” is suggested to be considered.
32	Given the scale of the proposed wind farm and the potential impacts of the development on the birdlife of the receiving environment, it seems appropriate to question whether or not the project team had the requisite knowledge, experience and qualifications to conduct the study. Information on the credentials of the survey technical team provided on page 3 of the report suggest possibly not. While the assembled team is relatively large with a strong emphasis on “technical coordination”, the quality of the observational data informing the study is essentially dependent on the inputs of one locally-based field technician with limited practical experience and even more limited formal training in ornithology. The remainder of the listed team may have reasonable levels of academic qualification, but the majority would seem to be Portugal-based, or else with the vast majority of their time spent doing avian impact assessment work accumulated in southern Europe, with little experience of or expertise in South African birds. At a time when there are growing concerns about the quality of EIA work being done in South Africa, and increasing scrutiny of the competency of EIA specialists to deliver independent studies of a suitably high standard, the make-up of the Bioinsight team deployed on this project is far from ideal – a deficiency that is reflected in the overall calibre of the present report.	Dr A Jenkins on behalf of P Pickford & Associates	Jun-2019	<b>Avifaunal Specialist Response:</b> The bird specialist team will start by making an overall appreciation of the Peer Review report compiled by Mr. Andrew Jenkins (AVISENSE Consulting) that was requested by Mr. Peter Pickford during the PPP. Although the document is “Peer review” and expected to reflect an impartial analysis on the final bird specialist IA report, it seems to fail to do that. An analysis of the overall report suggests a highly subjective opinion about the technical capabilities of the bird specialist team and the assessment that was carried out, which can be seen right from the start, beginning at this topic (#32).  A Peer Review process is based on a fact-based assessment carried out by a competent person. Mr. Jenkins’s technical competence is not questioned by the specialist team, but one cannot fail to question the emotional conditions and even ethical code in this particular situation. Impartiality is a fundamental assumption in a Peer Review process, something that one questions if it can be applied to Mr. Jenkins, who seems to want to act as regulator, performer and judge. The reason for this questioning is related to the fact that Mr. Jenkins is represented in the group that defined the Best Practice guidelines (Jenkins et al., 2015) and at the same time acts as a Specialist consultant on behalf of AVISENSE Consulting. AVISENSE Consulting is clearly a competing environmental consulting company for Bioinsight, which possibly explains the negative connotation to some of the comments of Mr. Jenkins in regarding Bioinsight’s work. For this reason, the bird specialist team reinforces the statements that were already made in response to comment #6 of this responses trail. The competence of the Bioinsight team it is not clearly denied in the Peer Review report, but it is suggested that the team has no quality and / or competence to perform the impact assessment



#	I&AP Comments on Birds	I&AP	Date	Response
				<p>study. This suggestion ignores the fact that the lead specialist investigator is registered as professional member in compliance with the Natural Scientific Professions Act of 2003 which aims to "Provide for the establishment of the South African Council of Natural Scientific Professions (SACNASP)". Regarding the rest of the Bioinsight team, all technicians are competent and highly qualified to perform the study. Any statement suggesting otherwise is unfounded and unjustified. 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 - local knowledge through local technicians who conducted the field surveys among other aspects of the work; but also to the technical coverage of overall impact assessment processes and knowledge of potential WEF impacts on biodiversity, monitoring, mitigation, etc. - not only from local South African projects, but international knowledge as a result of a wide range of projects concerning Wind Energy and other renewable energy projects conducted in Europe, Africa and South America. If Mr. Jenkins wishes to request Bioinsight's technicians curriculum vitae, the team is happy to provide it.</p> <p>The bird specialist team highlights that, as also acknowledged in the Peer review report, the final specialist IA Report for Boulders WEF proposed project development is "broadly compliant with national best practice (Jenkins et al. 2015)". It should also be noted that the scientific support used to build the Best Practice Guidelines is substantially based in international studies (including several European references). In fact, 82% (69 out of 84) of the scientific references cited on the Best Practice Guidelines are from foreign studies, thus acknowledging the importance of international know-how. Apart from this, two (2) references are made to Bioinsight peer-reviewed work on windfarm-wildlife conflict.</p> <p>The Peer Review report was received as an attachment to one of the comments in the PPP, provided by Mr. Peter Pickford (#25), Mr. Andrew Jenkins did not register as an I&amp;AP in the PPP. Nevertheless, the complete report was seriously and carefully analysed; and all the opinions and questions made in the report were considered and added to the comment trail list (#32 to #63), as follows. Since throughout the report the team was confronted with a number of comments that suggest a lack of impartiality in Mr. Jenkins analysis, the bird specialist team will refrain from dwelling on this type of comments, as they do not contribute to a public discussion process.</p> <p>Lastly, the bird specialist team also clarifies that, contrary to what is stated in the present comment (#32), the field work was not conducted only by one local field technician. Rather, in every field survey, sampling was conducted by two local field technicians that were simultaneously present in the study area.</p>
33	<p>The Bioinsight baseline study for the Boulders Wind Farm is superficially sound but lacking in substance and detail, while aspects of the study are suggestive of a lack of real knowledge and experience of the affected avifauna. Although broadly compliant with national best practice (Jenkins et al. 2015), important elements of execution and detail are deficient. The duration of the study (12 months) and the frequency of visits to the site throughout the study period (10 site visits, covering all seasons) are adequate for purpose. However, samples of only six walked transects (to quantify small passerine diversity, community structure and densities), four vantage point watches (VPs; to observe, plot and quantify flight behaviour of birds through the site) and three radar placements (to remotely track all bird movements through the site, both night and day) were completed per site visit (computing to about 1 transect per 850 ha, one VP per 1300 ha, and one radar placement per 1700 ha for a proposed development area of about 5100 ha). While the required intensity of sampling is not explicitly stated in the BLSA/EWT guidelines document (Jenkins et al. 2012, 2015), and the intention is to achieve representative rather than absolute coverage, the level of effort applied per site visit during the Boulders study is at best barely sufficient, and probably falls below the spirit of the guidelines if not the letter</p>	<p>Dr Andrew Jenkins, on behalf of Mr. Peter Pickford &amp; Associates</p>	<p>Jun-2019</p>	<p><b>Avifaunal Specialist Response:</b> This comment includes subjective notes about the bird specialist team. Please refer to the answer to comment #32 in this matter.</p> <p>The bird specialist team notes that as stated in the comment, the IA specialist report is compliant with the Best practice Guidelines (Jenkins et al, 2015). Regarding the pre-construction Monitoring campaign, as stated in the comment the required intensity of the sampling is not defined in the BLSA/EWT guidelines (Jenkins et al, 2012; 2015). According to Jenkins et al. 2015 "Pre-construction monitoring data should be collected over a 12 months period and should include samples representative of the full spectrum of environmental conditions likely to occur within the annual cycle. Surveys should be as frequent as practically possible, with a minimum of four surveys a year". Thus, we highlight that not only the sampling design was defined in compliance with best practice, but in fact the number of site visits was more than twice the minimum effort required in the referred document. On the topic of the number of and sampling units, once again all the experimental design applied when conducting the monitoring programme corresponded to the coverage deemed representative to adequately collect baseline data. All the detailed information</p>





#	I&AP Comments on Birds	I&AP	Date	Response
				concerning the pre-construction monitoring campaign is duly presented in the final Monitoring Report for Boulders WEF pre-construction phase (Bioinsight 2018). Please request to obtain directly from the client.
34	A further significant deficiency of the Boulders baseline study as it is presented in the report (Bioinsight 2018) is the complete absence of hard data to substantiate the claimed results and the conclusions reached. While the practical scope of the field work may have been somewhat limited, presumably data were collected in order to establish an empirical and objective understanding of the birdlife present on the site and the extent to which high priority taxa may be exposed to impact risk. And yet the report contains no quantitative information on the diversity or densities of birds present, the frequency with which birds flew through the proposed development area, or the exposure of key species to the risk of impact. In addition, while the report makes frequent reference to a radar-based study aimed at increasing the quantity and spatial accuracy of information collected to describe bird movements through the site, including critical coverage of nocturnal flight behaviour, the Echotrack report derived directly from this study was not made available for review. Compounding this problem, none of the maps or numerical data that the radar report presumably contains are reproduced in any way in Bioinsight's integrated baseline report. Without sight of any of the quantitative information collected by these studies it clearly isn't possible to properly interrogate the veracity of the overall findings, and the completely unsubstantiated references to the outcomes of the radar study are rendered effectively inadmissible in any rigorous examination of the quality of the baseline study or the validity of the bird impact assessment.	Dr A Jenkins on behalf of P Pickford & Associates	Jun-2019	<b>Avifaunal Specialist Response:</b> All the detailed information concerning the pre-construction monitoring campaign is duly presented in the final Monitoring Report for Boulders WEF pre-construction phase (Bioinsight 2018). Please request to obtain from the client. The referred Radar report (Millikin, 2015), is not property of the specialist team and thus we cannot provide it. Please request to obtain it directly from the client.
35	To illustrate this point, the Bioinsight report makes frequent references to the low sighting frequencies, minimal numbers of flights through the study area or through the rotor swept area of the proposed turbine layout, and low risks of impact for established priority species such as Black Harrier <i>Circus maurus</i> , Secretarybird <i>Sagittarius serpentarius</i> , Blue Crane <i>Grus paradiseus</i> , Martial Eagle <i>Polemaetus bellicosus</i> , Lanner Falcon <i>Falco biarmicus</i> (e.g. p 38, para 4; p 41, para 2). But no actual sighting frequencies, densities, flight passage rates, maps of flights observed or tracked by the radar, or collision risk figures appear anywhere in the report. This is an important omission and immediately leads the critical reader to question why there is such a lack of transparency in the presentation of the findings of the study.	Dr A Jenkins on behalf of P Pickford & Associates	Jun-2019	<b>Avifaunal Specialist Response:</b> All the detailed information concerning the pre-construction monitoring campaign is duly presented in the final Monitoring Report for Boulders WEF pre-construction phase (Bioinsight 2018). Please request to obtain directly from the client. The referred Radar report (Millikin, 2015), is not property of the specialist team and thus we cannot provide it. Please request to obtain from client.





#	I&AP Comments on Birds	I&AP	Date	Response
36	A related problem concerns qualitative references in the report to taxon-specific outcomes of the radar study (eg p 43, paras 1-4). Distinguishing different groups of birds or individual species from the mass of tracking data generated by a radar study of this kind is notoriously complex and difficult, particularly for different birds of similar sizes. Certainly, this level of resolution was not achieved in either the pre- or post-construction radar studies carried out by the same service provider on the neighbouring West Coast One wind farm (Jenkins et al. 2017). Without even a superficial explanation of the way in which key species or groups of species were filtered from the generic matrix of radar detected flight tracks, any conclusions of the baseline study (and hence the impact assessment) substantially based on the findings of the radar study should be considered questionable.	Dr A Jenkins on behalf of P Pickford & Associates	Jun-2019	<b>Avifaunal Specialist Response:</b> According to information supplied in the radar report (Millikin, 2015), a biologist observed movements of all birds through the area. These observations provided confirmed species identification of radar flight paths for calibration of the radar. Calibration was by done by using many flights of several co-observed species. Additionally, the specialist notes that the referred Radar report (Millikin, 2015), is not property of the specialist team and thus we cannot distribute it. Please request to obtain directly from the client.
37	The Executive Summary (p 45) reads more like an impact statement than a summary of findings and is conspicuously lacking in references to specific findings backed up by hard data.	Dr A Jenkins on behalf of P Pickford & Associates	Jun-2019	<b>Avifaunal Specialist Response:</b> The referred Chapter (Executive Summary) aims to summarise the main findings of an impact assessment study. Statement duly noted with nothing to add by the specialist team.
38	In the Preface (p 6/ para 4), underlined text reads: "...it is important to note that the majority of the wind energy facilities operating internationally report low levels of bird fatalities from collisions with wind turbine blades." Why is it important to note this, and why has this point been underlined? Suggestive of an inherent bias in favour of development...?	Dr A Jenkins on behalf of P Pickford & Associates	Jun-2019	<b>Avifaunal Specialist Response:</b> This comment includes subjective notes about the bird specialist team. Please refer to the answer to comment #32 in this matter.  The referred chapter (Preface) presents a general statement on the theme of ""Mortality from collision with wind turbines"". The bird specialist team verified that the statement in the comment and the transcription of the text directly from the IA specialist report is out of context. The stated text is in fact written in the specialist report, but several bibliographic references are also in the text. On this topic, the bird specialist team also adds that the contents in the Preface also refer to the importance of cumulative impacts as well as new installations in places with low or no human activity, as factors to have to take into consideration in the impact assessment. Moreover, the Preface also includes text referring to some high fatality episodes reported in bibliography.
39	Table 1 (p 11) cites Taylor 2014. This citation is repeated throughout the report. The correct citation is Taylor <i>et al.</i> 2015 (as listed in the references).	Dr A Jenkins on behalf of P Pickford & Associates	Jun-2019	<b>Avifaunal Specialist Response:</b> Thank you. Statement duly noted.
40	p 15, para 5 states that the study area is relatively flat. In fact, the topography of the site is quite steeply undulating, with (as stated) an altitudinal range of nearly 200 m.	Dr A Jenkins on behalf of P Pickford & Associates	Jun-2019	<b>Avifaunal Specialist Response:</b> The specialist defined it as relatively flat, as the area does not present any form of steep mountainous / cliff features that would usually classify it as being steep.
41	p 16, para 7 refers to coastal species that might be inclined to travel overland through the development area, listing Caspian Tern <i>Hydroprogne caspia</i> but failing to include Swift Tern <i>Thalasseus bergii</i> – a far more likely species to commute through the wind farm in numbers, particularly at night.	Dr A Jenkins on behalf of P Pickford & Associates	Jun-2019	<b>Avifaunal Specialist Response:</b> The bird specialist team reaffirms that all groups of birds were assessed during the pre-construction monitoring programme, and that in the final version of the specialist IA report, the Swift tern is included.
42	p 17, para 3 refers to trees as habitat refugia for species such as Sickle-winged Chat <i>Cercomela sinuata</i> and Cloud Cisticola <i>Cisticola textrix</i> . Both of these are essentially ground- dwelling, open-country species highly unlikely to make use of trees at any time.	Dr A Jenkins on behalf of P Pickford & Associates	Jun-2019	<b>Avifaunal Specialist Response:</b> Thank you. Statement duly noted.
43	p 19, para 1 – Important Bird Areas are now referred to as Important Bird and Biodiversity Areas (Marnewick <i>et al.</i> 2015).	Dr A Jenkins on behalf of P Pickford & Associates	Jun-2019	<b>Avifaunal Specialist Response:</b> Thank you. Statement duly noted.



#	I&AP Comments on Birds	I&AP	Date	Response
44	Fig. 1, p 19 characterises the biotopes present in the WF area, including mapping of fields at varying stages in the crop cycle. Surely this condition is transient depending on ongoing management decisions by landowners...?	Dr A Jenkins on behalf of P Pickford & Associates	Jun-2019	<b>Avifaunal Specialist Response:</b> The bird specialist team clarifies that the contents in the final specialist IA report refer to the current situation as seen during the time of the assessment. Yes, the condition may be transient, however the statement in the comment is common to every property that it is directly managed by its landowners. It is not an exclusive situation for the proposed Boulders WEF. As the bird specialist team, we cannot talk on behalf of the local landowners and / or managers.
45	p 25, para 5 lists other wind energy projects present in or planned for the general area. Are there any future plans to develop the NW half of the Vredenburg Wind Farms potential development area, perhaps as a second phase of the company's overall development plan. If so, this intention should be openly acknowledged in the report and considered in assessments of possible cumulative impacts on the area's birds.	Dr A Jenkins on behalf of P Pickford & Associates	Jun-2019	<b>Avifaunal Specialist Response:</b> The bird specialist considered all cumulative projects that were listed on the Department of Environmental Affairs' database, with information that is considered in the final IA report. This information can be viewed in the "cumulative impacts" section. The specialist also acknowledges that should the developer plan on constructing additional wind farms in that area (not listed on the DEA database), then a response should be supplied by them – in order to better inform you of their long-term goals/intentions.
46	p 26, para 5 mentions a brief site visit conducted in October 2017 to determine whether or not the avifauna had changed since the fieldwork informing the impact study was completed in 2015. How long was this site visit, what did it involve and how was it determined that the avifauna was unchanged?	Dr A Jenkins on behalf of P Pickford & Associates	Jun-2019	<b>Avifaunal Specialist Response:</b> The bird specialist team clarifies that the criteria and main findings of the site visit conducted in October 2017 is detailed in Chapter 2.5, page 37 of the final specialist IA Report.
47	p 27, para 3 refers to the collection of field data at a suitable control area. Were the control site data statistically compared with the equivalent data collected on the WF site in order to verify that the area selected was sufficiently similar to validate subsequent before:after comparisons in determining the impacts of the wind farm? If so, why aren't the results of such a comparison presented?	Dr A Jenkins on behalf of P Pickford & Associates	Jun-2019	<b>Avifaunal Specialist Response:</b> All the detailed information concerning the pre-construction monitoring campaign is duly presented in the final Monitoring Report for Boulders WEF pre-construction phase (Bioinsight 2018). Please request to obtain directly from the client.
48	p 28, para 2 lists three parameters measured using the small species walked transect data. Why are there no actual figures for these parameters mentioned anywhere in the report?	Dr A Jenkins on behalf of P Pickford & Associates	Jun-2019	<b>Avifaunal Specialist Response:</b> All the detailed information concerning the pre-construction monitoring campaign is duly presented in the final Monitoring Report for Boulders WEF pre-construction phase (Bioinsight 2018). Please request to obtain directly from the client.
49	p 29, para 7, lists five parameters measured using the vantage point data. Why are there no actual figures for these parameters mentioned anywhere in the report?	Dr A Jenkins on behalf of P Pickford & Associates	Jun-2019	<b>Avifaunal Specialist Response:</b> All the detailed information concerning the pre-construction monitoring campaign is duly presented in the final Monitoring Report for Boulders WEF pre-construction phase (Bioinsight 2018). Please request to obtain directly from the client.
50	p 38, para 3 asserts that Blue Crane rarely flew at rotor height – where are the data to support this statement, where were observed high-risk flights located and when did they occur...?	Dr A Jenkins on behalf of P Pickford & Associates	Jun-2019	<b>Avifaunal Specialist Response:</b> All the detailed information concerning the pre-construction monitoring campaign is duly presented in the final Monitoring Report for Boulders WEF pre-construction phase (Bioinsight 2018). Please request to obtain directly from the client.
51	p 38, para 4 asserts that Black Harrier, Lanner Falcon and Secretarybird seldom flew at rotor height - where are the data to support this statement, where were observed high-risk flights located and when did they occur...?	Dr A Jenkins on behalf of P Pickford & Associates	Jun-2019	<b>Avifaunal Specialist Response:</b> All the detailed information concerning the pre-construction monitoring campaign is duly presented in the final Monitoring Report for Boulders WEF pre-construction phase (Bioinsight 2018). Please request to obtain directly from the client.
52	p 39, para 3 mentions a "Pre-construction bird monitoring report". Is this the document that contains all the hard data derived from the field study, mapping of observations and results of statistical analyses? If so, why is this report not cited in the present report, and why has this document not been made available for scrutiny and review?	Dr A Jenkins on behalf of P Pickford & Associates	Jun-2019	<b>Avifaunal Specialist Response:</b> Duly noted. This was an accidental omission. Regardless, the appropriate citation for the monitoring report is: "Bioinsight (2018). Boulders wind energy facility - Bird Monitoring. Pre-construction phase. Final Monitoring Report 2014/2015."
53	p 41, para 3 suggests that Jackal Buzzard collisions at West Coast 1 may be associated with the presence of natural vegetation. This was demonstrably NOT the case. In fact, the occurrence and behaviour of Jackal Buzzards <i>Buteo rufofuscus</i> (and most other raptor species seen on site at West Coast 1) was clearly influenced by the cereal crop cycle and (presumably) associated changes in the availability of rodent prey. Any supposed link established between collision risk in this species and the distribution of vestigial patches of natural vegetation is at best highly speculative and at worst misleading.	Dr A Jenkins on behalf of P Pickford & Associates	Jun-2019	<b>Avifaunal Specialist Response:</b> The bird specialist team clarifies that it is mentioned in the final specialist IA report that this is unconfirmed and merely a potential explanation.



#	I&AP Comments on Birds	I&AP	Date	Response
54	p 42, para 3 reference to the possibility of Lesser Kestrel <i>Falco naumanni</i> breeding in the Paternoster area is clearly nonsense and should be treated as such. Lesser Kestrel is a Palaearctic migrant that breeds in Eurasia and spends the austral summer in southern Africa, gathering in colonial night-time roosts. Currently, the nearest such roost to the WF site is at Wellington, about 130 km to the southeast.	Dr A Jenkins on behalf of P Pickford & Associates	Jun-2019	<b>Avifaunal Specialist Response:</b> Regarding the breeding of Lesser Kestrel, the specialist adds that the occurrence of this species is listed only as a possibility in the area, and that no observations were ever made. This information was gathered from local residents and considered during the Scoping phase of the project, as these sources indicated that they have allegedly observed groups of migrating Kestrels from Europe that come to Paternoster in Summer to breed. This remains unconfirmed and it is stated in the final IA report that this is an alleged observation.
55	p 42, para 4 lists the nest sites located and monitored during the study. It seems that the Kasteelberg rock outcrop located close to the proposed development area was not surveyed or monitored, nor was a large, disused stone quarry located about 3.5 km NE of the WF. Both of these sites are known or likely to support breeding pairs of raptors. Why weren't they included in the nest survey work for the project? Also, the well-known Langebaan quarry Verreaux's Eagle nest site (25 km SE of the Boulders WF area) is included in discussions about possible impacts on this species, but known Martial Eagle nest sites located 23 km to the SE and 28 km to the SSE are not. How come?	Dr A Jenkins on behalf of P Pickford & Associates	Jun-2019	<b>Avifaunal Specialist Response:</b> The specialist confirms that Kasteelberg was initially considered in the pre-construction monitoring programme. However, access to Kasteelberg was unfortunately denied by the landowner. As such, the team was not able to conduct monitoring at Kasteelberg. Furthermore, the specialist confirms that for all other nests mentioned, the specialist physically searched for as many possible nests in the area, with the aid of literature and shared knowledge that was known and made available to the team at the time, and subsequently monitored them.
56	The Secretarybird nest located within the potential development envelope was an important find of the study and is appropriately highlighted as an important component of the impact profile of the proposed WF. However, the buffer distances put forward – 500 m no-go and 2 km High Sensitivity – may not be sufficient considering the red-list status of the species, its wide-ranging nature, and the scarcity of known nest sites in the West Coast region. In my opinion the clearances around this site should be much larger – 2 km no-go, 5 km High Sensitivity...?	Dr A Jenkins on behalf of P Pickford & Associates	Jun-2019	<b>Avifaunal Specialist Response:</b> This is an overall opinionative comment. Nevertheless, the specialist notes the relevant ecological characteristics put forward, and adds that given all the results of the monitoring surveys that were conducted for Boulders WEF project, including radar study, the evidences found in the overall assessment lead to the conclusion and the recommendations stated in the specialist IA report. Additionally, it is noted that the most recent mitigated turbine layout shows that the nearest wind turbine is located approximately 1390m away from the nest in question - exceeding the recommended 500m buffer distance by more than double.
57	p 42, para 4 refers to the way in which Secretarybirds were observed using the general area and the low incidence of flights into the proposed development area and at rotor height. Where are the data and mapping to support these statements?	Dr A Jenkins on behalf of P Pickford & Associates	Jun-2019	<b>Avifaunal Specialist Response:</b> All the detailed information concerning the pre-construction monitoring campaign is duly presented in the final Monitoring Report for Boulders WEF pre-construction phase (Bioinsight 2018). Please request to obtain directly from the client.
58	p 42, paras 1-4 suggests that the radar study recorded low passage rates of key species through the development area and indicates that it was possible to identify Secretarybird, Blue Crane, Ludwig's Bustard <i>Neotis ludwigii</i> , Black Harrier, Southern Black Korhaan <i>Afrotis afra</i> , Martial Eagle, Lanner Falcon... flight tracks from the mass of remotely recorded radar tracks of airborne wildlife. How was this done, and where are the data to substantiate this important claim? (Note: to answer this Q there is no need for the radar specialist to divulge patented analytical methods – merely to add meaningful substance, explanation and fact to a 'result' otherwise completely unsupported by hard data).	Dr A Jenkins on behalf of P Pickford & Associates	Jun-2019	<b>Avifaunal Specialist Response:</b> According to information supplied in the radar report (Millikin, 2015), a biologist observed movements of all birds through the area. These observations provided confirmed species identification of radar flight paths for calibration of the radar. Calibration was by done by using many flights of several co-observed species. Additionally, the specialist notes that the referred Radar report (Millikin, 2015), is not property of the specialist team and thus we cannot distribute it. Please request to obtain directly from the client.
59	p 43, para 8 makes reference to the findings of the Year 1 West Coast One post-construction bird study and concludes that this study found no significant impacts on birds. This was definitely not the case. In fact, the report (Jenkins <i>et al.</i> 2017) states that the collision rates of raptors at West Coast One were unacceptably high, possibly unsustainable, and warranted further intensive and dedicated research to determine causality and options for operational mitigation.	Dr A Jenkins on behalf of P Pickford & Associates	Jun-2019	<b>Avifaunal Specialist Response:</b> The specialist team notes that the comment seems to be out of context regarding the contents in the specialist IA Report. With regards to the statement in question, it is stated in the specialist IA report that little evidence existed to demonstrate any significant affect that the facility was having on the local bird community, <u>in terms of their abundance or diversity</u> . This is directly derived from a statement in the WC1 Year 1 operational monitoring report (Jenkins, 2017) (pg 3, para 5) which states: "We found very little evidence in the data we collected to suggest that the operating wind farm had a significant effect on the abundance or diversity of birds in the area, or that the turbines had a meaningful influence on patterns of bird movement."
60	Procedurally, the bird impact assessment in the Bionsight report appears to be adequate. However, while asserting in the preamble that any uncertainties around possible impacts will invoke the Precautionary Principle (p 5, heading 2), the study consistently does the opposite, and consistently underplays possible impacts on priority species, some of which are present in the area in relatively large numbers	Dr A Jenkins on behalf of P Pickford & Associates	Jun-2019	<b>Avifaunal Specialist Response:</b> On this topic, the team notes the statement in the comment: "Procedurally, the bird impact assessment in the Bioinsight report appears to be adequate". The specialist also highlights that all aspects of sensitivity have been assessed for the proposed development, and that certain areas have been recommended to be excluded from development - which they subsequently have. This takes into account possible impacts on priority species that may occur in the area. As such, it is maintained that the precautionary principle has been adequately followed. We respectfully suggest the reading of topics provided by the bird specialist team in response to comments #10 / #25.



#	I&AP Comments on Birds	I&AP	Date	Response
61	The impact ratings presented across the board are entirely dependent on data generated by baseline study. These data are not presented or even summarized in any quantitative way in the report, making it very difficult to gauge the absolute or relative scale of the possible impact issues inherent in the proposed development. Even allowing for this uncertainty, I would argue that some of the more important impact ratings are pitched too low and should be revised. Firstly, given the presence of a locally if not regionally significant Secretarybird nest on the Boulders WF site, coupled with the relative abundance of Blue Cranes (and the distinct possibility that this species also breeds on the site), there is considerable potential for construction and operational activities to cause harmful disturbance to priority species, and the significance of such impacts should be rated as High. With generous no-go buffering, careful monitoring of disturbance and adaptive scheduling of harmful activities it may be possible to reduce the significance of these impacts to Medium. A residual impact rating of Low is overly optimistic, too generous to the development proposal, and certainly not indicative of a commitment to the Precautionary Principle.	Dr A Jenkins on behalf of P Pickford & Associates	Jun-2019	<p><b>Avifaunal Specialist Response:</b> All the detailed information concerning the pre-construction monitoring campaign is duly presented in the final Monitoring Report for Boulders WEF pre-construction phase (Bioinsight 2018). Please request to obtain this directly from the client. Regarding the argument that impact ratings should be revised is largely subjective to each/any specialist at any facility. Decisions are made based on monitoring campaigns and available literature and inform the ratings as such. For Secretarybird and Blue Crane assessment considerations we respectfully suggest the reading of topics provided by the bird specialist team in response to comments #8 / #9 / #10.</p> <p>In addition to this, for sensitive breeding species such as the Secretarybird it has been recommended that in order to further avoid disturbance, an Environmental Control Officer (ECO) / bird specialist should oversee construction work during the construction phase, and make sure that construction work should stop if risk situations for the species using the nest become evident.</p>
62	The impact ratings for collision mortality are even more problematic. The report fails to adequately acknowledge the severity of raptor fatality rates recorded at the nearby, operational West Coast One facility (Jenkins et al. 2017) and the strong likelihood that the Boulders WF will record similar numbers of collisions by birds of prey. Also, the report refers to the lack of Blue Crane collisions reported at West Coast One but doesn't allow for the possibility that the Boulders development area supports much larger numbers of cranes and hence could feature an escalated risk of collision for this species. In my opinion, these two failings render the Medium pre-mitigation impact rating for collision at Boulders as too permissive. Compounding this, the West Coast One study detected insufficient pattern in raptor collisions (other than a sharp spring/summer peak) to suggest an effective way to reduce fatalities through a targeted scheme of turbine curtailment, so options for mitigating collision frequency may be limited. Given these factors, a residual impact rating for collision mortality of Low is again unrealistic and rash. In terms of the evidence to hand, avian collision impacts at Boulders should be rated as High, only possibly reduced to Medium if ongoing studies at West Coast One suggest an effective means to reduce raptor collisions at that facility.	Dr A Jenkins on behalf of P Pickford & Associates	Jun-2019	<p><b>Avifaunal Specialist Response:</b> The comment seems to be misleading or out of context. The specialist confirms that raptor fatalities on West Coast One have been noted in the specialist IA report. Furthermore, it is stated in Mr. Jenkins' comment that in his opinion there is a strong likelihood that similar numbers of collisions will occur at Boulders WEF. The specialist team is in agreement that bird fatalities may potentially occur, and possibly in numbers that may raise concern. However, as stated in response to comment #11, there is always uncertainty surrounding this. However, so far, no evidence was provided that allow to affirm with certainty that that situation will happen (we also suggest the reading of topics provided by the bird specialist team in response to comments #8 / #9). Also, due to the fact that real impacts during WEF operation cannot be 100% predicted, the bird specialist team highlights that besides following the mitigation hierarchy, one must also use an adaptive management approach when dealing with mitigation strategies and adjust them whenever necessary, given the monitoring programme results - of which the development and implementation thereof has in fact already been recommended by the specialist team in the final IA report. Regarding Blue Cranes, we reaffirm that even if the Boulders facility were to support larger numbers of Blue Cranes, no conclusive evidence from the monitoring data exists to suggest that the species might be significantly affected by collisions, at this stage. Furthermore, Pearson (2019) also demonstrated results from the third year of monitoring at the adjacent West Coast One WEF, which appear to show no evidence of displacement or disturbance for the birds occurring in that area, and that successful breeding of Blue Crane was in fact recorded in the vicinity of the WEF. Finally, it is important to note that the comment on how the impact ratings should be different is largely subjective to each/any specialist at any facility. Decisions are made based on monitoring campaigns and available literature and inform the ratings as such.</p> <p>Regarding this specific comment, one cannot fail to acknowledge that it is noteworthy that Mr. Jenkins can in the same Report accuse Bioinsight of making non-data-based impact assessments (something already shown not to be true along this trail of comments) but, at the same time, he himself is not able to conclude on the significance of negative impacts. These conclusions were suggested by Mr. Jenkins even without having data to substantiate them, since as stated several times throughout the Peer review report, the final pre- construction Monitoring Report for Boulders WEF was not made available during the PPP. On this topic, the team also reaffirms that all the detailed information concerning the pre-construction monitoring campaign is duly presented in the final Monitoring Report for Boulders WEF pre-construction phase (Bioinsight 2018). Please request to obtain this directly from the client.</p>
63	Issues expressed above with the bird impact ratings given for the Boulders WF alone are magnified in an assessment of the cumulative impacts of Boulders and West Coast One WFs together (with the possibility of other wind farms being built in the general area in the short-medium term). West Coast One is already inflicting unpredicted and (as yet) unmitigated impacts on the birds of prey of	Dr A Jenkins on behalf of P Pickford & Associates	Jun-2019	<p><b>Avifaunal Specialist Response:</b> The specialist notes that cumulative impacts were assessed in the final specialist IA Report, and takes the West Coast One WEF and other relevant facilities into account. Regarding the fatalities of wetland and coastal birds, we agree that the risk remains real. However, at this stage, due to low fatalities recorded at the West Coast One WEF, and due to the</p>



#	I&AP Comments on Birds	I&AP	Date	Response
	<p>the Columbine Peninsula (Jenkins et al. 2017). Effectively doubling the number of turbines present in an unbroken barrier extending across the central area of the peninsula will at least double the scale of this problem and possibly worse. Furthermore, although the predicted fatalities of wetland and coastal birds commuting either diurnally, nocturnally or both through the West Coast One WF have not yet been recorded, the risk remains real and would surely be increased by the significant extension of the turbine-populated area on the peninsula resulting from the construction and operation of the proposed Boulders WF. Allowing for these concerns alone, it is difficult to see how the residual cumulative impact ratings for the Boulders project could be considered Medium. Again, this finding suggests a bias towards development, a refusal to concede the possible importance of key uncertainties in the assessment process, and a failure to assess and report strictly in terms of the Precautionary Principle. A more considered, objective and precautionary approach could easily and defensibly deliver a fatal flaw finding for this proposal in terms of possible cumulative impacts of birds.</p>			<p>low numbers of observations obtained from the monitoring campaign and radar data, it is not considered to warrant the risk as being extremely significant. That being said, this matter will be further assessed during subsequent monitoring programmes which have already been recommended for implementation, as described in the final specialist IA report. It is important to note that the comment on how the impact ratings should be different is largely subjective to each/any specialist at any facility. Decisions are made based on monitoring campaigns and available literature and inform the ratings as such. The specialist notes that all aspects of sensitivity have been assessed for the proposed development, and that certain areas have been recommended to be excluded from development - which they subsequently have. This takes into account possible impacts on priority species that may occur in the area. As such, it is maintained that the precautionary principle has been adequately followed.</p>
				<p><b>Avifaunal References cites</b></p> <ul style="list-style-type: none"> <li>• AWWI (American Wind Wildlife Institute) (2019). <i>AWWI Technical Report: A Summary of Bird Fatality Data in a Nationwide Database</i>. Washington, DC. Available at <a href="http://www.awwi.org">www.awwi.org</a>.</li> <li>• BBOP (2012) <i>Standard on Biodiversity Offsets</i>. Business and Biodiversity Offsets Programme, Washington, DC, USA.</li> <li>• IFC (International Finance Corporation). (2012). <i>Performance Standard 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources</i>. World Bank Group, Washington, DC.</li> <li>• Bioinsight (2018). <i>Boulders wind energy facility – Bird monitoring</i>. Pre-construction phase. Final Monitoring Report 2014/2016.</li> <li>• Drewitt, A. L., &amp; Langston, R. H. (2006). Assessing the impacts of wind farms on birds. <i>Ibis</i>, 148, 29-42.</li> <li>• Farfán, M. A., Vargas, J. M., Duarte, J., &amp; Real, R. (2009). What is the impact of wind farms on birds? A case study in southern Spain. <i>Biodiversity and Conservation</i>, 18(14), 3743.</li> <li>• Hernández, M., &amp; Margalida, A. (2009). Poison-related mortality effects in the endangered Egyptian vulture (<i>Neophron percnopterus</i>) population in Spain. <i>European Journal of Wildlife Research</i>, 55(4), 415-423.</li> <li>• Hötker, H., Thomsen, K.-M. &amp; H. Jeromin (2006). <i>Impacts on biodiversity of exploitation of renewable energy sources: the example of birds and bats - facts, gaps in knowledge, demands for further research, and ornithological guidelines for the development of renewable energy exploitation</i>. Michael-Otto-Institut im NABU, Bergenhusen.</li> <li>• Jenkins, A.R., van Rooyen, C.S., Smallie, J.J., Harrison, J.A., Diamond, M., Smit-Robinson, H.A. &amp; Ralston-Paton, S. (2015) <i>Best-Practice Guidelines for Assessing and Monitoring the Impact of Wind-Energy Facilities on Birds in Southern Africa</i>.</li> <li>• Jenkins, A.R., du Plessis, J., Millikin &amp; Benn, G. (2017). <i>West Coast One Wind Energy Facility. Post-construction avian impacts and mitigation study. Year 1: 2015-2016</i>.</li> <li>• Masden, E. A., Haydon, D. T., Fox, A. D., &amp; Furness, R. W. (2010). Barriers to movement: modelling energetic costs of avoiding marine wind farms amongst breeding seabirds. <i>Marine Pollution Bulletin</i>, 60(7), 1085-1091.</li> <li>• Millikin, R.L. (2015). <i>Radar-Based Assessment of Airborne Species Risk and Mitigation for the IPD Vredenburg Wind Energy Facility</i>.</li> <li>• Ogada, D., Shaw, P., Beyers, R. L., Buij, R., Murn, C., Thiollay, J. M., ... &amp; Krüger, S. C. (2016). Another continental vulture crisis: Africa's vultures collapsing toward extinction. <i>Conservation Letters</i>, 9(2), 89-97.</li> <li>• Oro, D., Margalida, A., Carrete, M., Heredia, R., &amp; Donázar, J. A. (2008). Testing the goodness of supplementary feeding to enhance population viability in an endangered vulture. <i>PloS One</i>, 3(12), e4084.</li> <li>• Pearson, A. (2019) <i>Bird and Bat Operational Monitoring at two Wind Energy Facilities in the Western Cape, South Africa</i>. Wind Energy and Biodiversity Summit (WIBIS) South Africa, 28 May 2019, Johannesburg [oral presentation].</li> <li>• Ralston-Paton, S., Smallie J., Pearson A., &amp; Ramalho R. 2017. <i>Wind energy's impacts on birds in South Africa: A preliminary review of the results of operational monitoring at the first wind farms of the Renewable Energy Independent Power Producer Procurement Programme in South Africa</i>. BirdLife South</li> </ul>





#	I&AP Comments on Birds	I&AP	Date	Response
				<p>Africa Occasional Report Series No. 2. BirdLife South Africa, Johannesburg, South Africa.</p> <ul style="list-style-type: none"> <li>Rydell, J., Engström, H., Hedenström, A., Kyed Larsen, J., Pettersson, J. &amp; Green, M. (2012). <i>The effect of wind power on birds and bats – A synthesis</i>. Report 6511. Swedish Environmental Protection Agency.</li> <li>Sanz-Aguilar, A., Sánchez-Zapata, J. A., Carrete, M., Benítez, J. R., Ávila, E., Arenas, R., &amp; Donazar, J. A. (2015). Action on multiple fronts, illegal poisoning and wind farm planning, is required to reverse the decline of the Egyptian vulture in southern Spain. <i>Biological Conservation</i>, 187, 10-18.</li> <li>Thaxter, C. B., Buchanan, G. M., Carr, J., Butchart, S. H., Newbold, T., Green, R. E., ... &amp; Pearce-Higgins, J. W. (2017). Bird and bat species' global vulnerability to collision mortality at wind farms revealed through a trait-based assessment. <i>Proceedings of the Royal Society B: Biological Sciences</i>, 284(1862).</li> </ul> <p>Thiollay, J. M. (2007). Raptor declines in West Africa: comparisons between protected, buffer and cultivated areas. <i>Oryx</i>, 41(3), 322-329.</p>





## 8 BAT ISSUES

#	I&AP Comments on Bat Impacts	I&AP	Date	EAP Response
1	I note that the avifauna report by BioInsight for the proposed Boulders Wind Farm makes mention of a radar report. Such radar report does not appear to be attached to any of the reports or be submitted as an independent report. Please can I ask for a copy of the said radar report as it bears on the avifauna impact of the proposed Boulders Wind Farm and as a consideration of the conclusions in the BioInsight report it is most relevant. I would further note that this same report was mentioned by Ms Karen Jodas of Savannah Environmental as the then EAP during the public meeting at Paternoster where I asked for a copy of the said report. I note that I never received this and did mention such lack of receipt in my comments on the scoping report. I trust that you will be able to amend the omission.	Pickford, Peter	29-May	<b>Specialist Response:</b> With regards to the bat report, the radar report was not, to our knowledge, analysed for bat activity, nor was it made available to the bat specialists for analysis. Analysis of this data (differentiation of bat flight paths) was also not included in the scope of the bat study (and may not have been possible without simultaneous echolocation recordings) and thus this data did not form part of the bat study. <b>CES Response:</b> see response number 4 in the Requests for Information section of the CRR.
2	We have found little reference in the draft EIA to post-construction monitoring of bird and bat fatalities at the West Coast 1. Although we are now aware that this information is available and it seems logical that it should have informed both the scoping report and the draft EIA. Please could you indicate if the findings from these reports have studied and where in the draft EIA this information is reflected?	Ralphs, Mary	25-Jun	<b>Specialist Response:</b> With regards to the bat specialist report, this monitoring data was available to the specialist through their involvement in the monitoring of the WC1 development and was reviewed and assessed by the specialist and considered in the cumulative impact assessment (section 3.2.1, pages 155-158). Unfortunately, the results of the post-construction study at West Coast One development can only be shared with public with permission of West Coast One. Such requests have been made but permission has not yet been obtained.
3	where is accountability when you knowingly endorse a proposal to plant another 45 massive turbines in the direct flight path of thousands of birds ? how do you calculate the acceptable bird and bat fatalities , without even mentioning, much less evaluating the millions of creatures up and down the foodchain that are put at risk in this area by these wholly unnecessary deaths? oh yes, humans dont yet fully understand biodiversity, or how the rapid extinction of species, particularly on this peninsula might impact our future survival. yet the assumption seems to be, lets kill them now anyway and picket the profits, and someone, someday will find a new technology that will solve the problem later	Ralphs, Mary	30-Jun	<b>Specialist Response:</b> With regards to impacts on bat populations and the ecological consequences of these, every effort has been made to quantify these impacts in an objective manner based on scientific evidence and knowledge of bat fauna and ecology in the impact assessment report. This is the objective of the bat study as a whole. Based on these findings and recommendations are made regarding the development, to inform the decision made by the DEA.
4	5. Placing of wind turbines. This comment is made based on the information in Fig 1-2: Project Layout of the proposed Boulders Wind Farm contained in the DRAFT Environmental Impact Assessment Report – May 2019. It is common cause that variations have been made to the final proposed layout, and that I&APs have not been provided with this information as required by the Act and neither has the diagram Figure 1-2 of the Report available on the CES website been amended. The comment, however, is made with reference to both the documented layout as well as to any revised layout. The draft refers to Environmental Sensitivity Mapping which reflects no-go areas located within the project site. The Sensitivity Map reflects a particularly broken up, patchwork series of no-go areas, over the entire proposed site, with some non-no-go areas wholly, or almost wholly, encircled by no-go areas. The patchwork nature of the defined no-go areas is not acceptable. A discrete monolithic area should be defined as such, without a patchwork of go areas encircled by the larger no-go area. To design the wind turbine siting as is, is almost an invitation for birds will fly in the greater no-go area, only for them to be confronted, here and there, by wind turbines. On the farm Het Schuytje 21, the row of turbines 28, 29, 30, 32,34 35 is placed adjacent to a no-go area and the row of turbines 15, 22, 23, 24, 25 is similarly placed adjacent to another no-go area situated with a distance of approximately 300 – 400 m between the two rows of wind turbines. With the wind turbines having a blade disc diameter of ± 90m and allowing for the rotor swept area not impinging on the no-go areas and for spacing between wind turbines, the corridor between the rotor swept areas of the wind turbines could be less than 100m. Turbines 12, 14, 16, 17, 18 and 20 are placed in no-go areas or immediately adjacent to no-go areas. It is an unacceptable risk to compel birds to attempt to navigate the proposed lethal hazard. As it is not possible for birds to determine the immediate transition from no-go to go to no-go areas, there should be a medium sensitivity (transition) buffer of at least 200m around any no-go area. This proposed equipment is backed up by the statement by the Avifaunal Report consultants regarding 200m no-go areas and more	de Kock, C	01-Jul	<b>Specialist Response:</b> With regards to the bat specialist study, the delineation of no-go areas is clearly and thoroughly guided by the SAGPG for Surveying Bats at proposed WEF Developments, as endorsed by SABAAP. All no-go areas have to be well validated based on habitat features and bat activity data, as has taken place in the mapping of these no-go (and sensitivity) areas within the proposed development. It should also be noted that no part of the wind turbine infrastructure, including the blade, can be positioned within these buffer zones.  <b>CES Response:</b> The individual specialist sensitivity maps have now been compiled in VOLUME 1 - Final EIR – Appendix A-4.





#	I&AP Comments on Bat Impacts	I&AP	Date	EAP Response
	<p>particularly by the 2000m medium sensitivity buffer requirement noted in the extract below: '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.' The result of rational sensitivity mapping including no-go and transition areas, and excluding irrational patchwork, would mean that there is no likelihood of this proposed development being able to comply. Mention is made of a minimum blade tip height of 55m above ground level. On level ground this may well allow for some slight measure of avoidance, however, on this site the hilly nature of the site means that whilst individual blade tip heights may be no less than 55m above the immediate ground level, a bird flying through the wind farm would be faced by an array of wind turbines placed at various heights., which is unacceptable. The conclusion in the extract noted below is questionable as the birds would have been flying above sloping ground well below sight horizon height and would have, at best, provided questionable radar returns. Once again, the withholding by the developer of radar data is questioned. Overall, of all flights recorded by the radar, only 1% of flights were shown to occur within the rotor swept zone, and most of these flights were recorded along lines of natural vegetation and along slopes facing the dominant prevailing winds in the area (SW). The mention of 'less than 10m height' noted in the extract below is generally incorrect as Blue Cranes are regularly sighted at heights in excess of 20 - 30m, particularly when transiting between feeding and/or breeding areas. It is common cause that flights post-flushing are usually for a short distance and of low height merely to exit the immediate area when disturbed. 'Due to its abundance and conservation status, the Blue Crane is a species of concern since it may be prone to collision at certain times (e.g. when commuting between roosting and feeding sites or commuting after farming activities which increase food availability). However, the species has been observed flying at rotor height only during very brief periods during the monitoring programme. In the remaining observations, Blue Cranes were mostly observed close to drainage lines and the associated habitats in the southern section of the study area, in large flocks, feeding or resting on the ground. On some occasions, the observers' presence flushed some birds. However, flights were still generally very low (less than 10m height) and short distanced.' Of concern is the fact which the report downplays of the disturbances throughout the duration of the construction contract is that the total time-line of project activities from road creation to final commissioning of the WEF, which will impact directly, and negatively, on the resident bird populations. The time-line which could be up to three years would extend through at least two, and possibly three, breeding seasons, thereby causing breeding disturbance and the high likelihood of causing abandonment of further breeding and elimination of currently resident species. All of this disturbance would be prior to the long-term after-effects of an operational windfarm. It has been difficult to obtain during-construction and post-construction records of bird fatalities from many WEF's in the Western Cape area as alluded to in the extract below. The potential impacts of wind turbines on South African bird communities are still largely unknown and still being determined and refined as more information is made available (Ralston-Paton et al., 2017). Therefore, data collection and further investigation is needed and pre- and post-construction monitoring should be implemented to fill these gaps and promote the sustainability of wind energy developments in South Africa. A contractual mechanism which ensures the public availability of the results of such monitoring must be put in place.</p>			
5	<p>3 Why are the operational monitoring results from WC1 not available for bird and bat impacts to allow for mitigating measures to be put in place during the construction phase instead of waiting for the deaths of these creatures to be observed during the operational stage at BWF before mitigating measures are put in place?</p>	Todd, A&J	01-Jul	<p><b>Specialist Response:</b> With regards to the bat specialist report, this monitoring data was reviewed and assessed by the specialist and considered in the cumulative impact assessment (section 3.2.1, pages 155-158). Mitigation measures are recommended in the pre-construction monitoring report. Please refer to section 3.3 (pages 159-168). The results of the post-construction study at West Coast One can only be shared with permission of West Coast One and it was requested that the EAP make this report available.</p> <p><b>CES Response:</b> Various attempts to obtain this data from the WC1 developers were</p>





#	I&AP Comments on Bat Impacts	I&AP	Date	EAP Response
				unsuccessful.
6	BIRDLIFE AND BATS. It is a universally known fact that wind turbines have a highly detrimental impact on birds and bats. The location chosen for the Boulders WEF is rich in many species of birds. As a resident, I regularly observe numerous species of raptors, including the rare Verreaux's eagle. I have the privilege of hearing daily the distinctive calls of blue cranes, who live in the field adjacent to our property. In addition to these birds, it is well known that, at night, birds commute from St Helena Bay/Berg River across the proposed site of Boulders WEF to Saldanha Bay. Whilst the Draft EIA Report goes into detail about the exclusion zones where turbines will not be sited, to allow bird access, such an exercise is entirely unrealistic as birdlife cannot read maps and tend to fly in straight lines. I would state that in my view the avian impact study is deficient as in certain sections, the specialist refers to certain birds &/or behaviours that suggest the specialist actually has a lack of knowledge of South African birds. As a long-time resident of Britannica heights, we have never had a problem with mosquitoes. However, in the last 2 years the number of mosquitoes invading our house during summer has risen to the point that we have been forced to buy a mosquito net. As we are in a period of drought and there is no standing water in our environment, the only conclusion I can draw is that the bat mortality rate due to the West Coast One WEF is so high that the mosquito population is no longer under control. If this is true then, Boulders WEF will only compound this problem. This is a small point, but yet another reason why the Boulders WEF application is requesting an inappropriate location.	Portsmouth, Dou	02-Jul	<b>Specialist Response:</b> With regards to bats, the impacts of West Coast One, in combination with the proposed development, were reviewed and assessed by the specialist and considered in the cumulative impact assessment (section 3.2.1, pages 155-158) as far as was possible. It is possible that the observed increase in mosquito populations may be related to changes in the local bat populations, but this cannot be verified without proper study of current trends in both bat and insect populations. Mitigation measures are recommended to minimise these impacts as far as possible (section 3.3; pages 159-168).
7	2. Boulders is to be built adjacent to West Coast No.1 with no corridor between the two sites. The priority is to extract 140 MW from available land. A map is required showing the position of turbines for both sites along the boundary at 23, 28 30,4,42 and 1. There appears to be a wide gap going over the ridge and all that is required is a 200 metre wide corridor. This section is where African Fish Eagles from the Berg River cross the ridge on their way to Paternoster, return by flying over the sea. This corridor will also be mitigation for Bats hunting the northern ridge.	WEST COAST BIRD CLUB	02-Jul	<b>Specialist Response:</b> With regards to the bat specialist study, the delineation of no-go areas is clearly and thoroughly guided by the SAGPG for Surveying Bats at proposed WEF Developments, as endorsed by SABAAP. All no-go areas have to be well validated based on habitat features and bat activity data, as has taken place in the mapping of these no-go (and sensitivity) areas within the proposed development. These should allow for bat migration corridors between the two sites. However, additional corridors may further benefit migrating and commuting bats.
8	4. Collisions are not all caused by turbine blades, there are collisions with the towers and infrastructure, transformers and buildings, could towers and buildings be painted a more distinctive colour (not black birds do not see black)?	WEST COAST BIRD CLUB	02-Jul	<b>Specialist Response:</b> This is not a concern for bats as stationary targets do not pose a problem for bats.
9	5. Outside lights to be motion activated so as not to cause light pollution and attracting insects. This would also be mitigation for Bats.	WEST COAST BIRD CLUB	02-Jul	<b>Specialist Response:</b> Minimisation of lights as far as is possible would be an additional mitigation measure for bat activity, as this would minimise attracting insects to the area. The effect of this mitigation measure would be minor, however, in comparison to the other mitigation measures identified in the bat study.
10	7. The area is a large 'natural' habitat where natural fauna has had access, therefore access points must be designed in sections of fences to allow large mammals passage to their traditional feeding areas. Similarly, sections of fencing to be raised above ground level to allow small mammals and reptiles passage. All farm, turbine and natural dead animal and bird carcasses to be immediately removed upon finding to prevent the attraction of carrion feeding birds to the site, which can result in collisions.	WEST COAST BIRD CLUB	02-Jul	<b>Specialist Response:</b> Post-construction monitoring of bird and bat carcasses has been recommended by the bat impact assessment study and should be included in the Environmental Management Plan.
11	14. Bats, the report indicates weather conditions have a significant bearing upon bat activity, temperature below 11 degrees C, rain for the night above 4mm and wind speed above 9 m/sec. could these be factored into start up procedures? Bat activity on the North West edge can during daylight be mirrored by the swifts and swallows which can be seen feeding upon insects blown over the ridge by the South wind.	WEST COAST BIRD CLUB	02-Jul	<b>Specialist Response:</b> To minimise bat fatality on site, turbine activity can be reduced and/or halted under the environmental conditions when bat activity is greatest, as identified in the Bat Impact Assessment report. However, these data can be further refined by further monitoring of bat activity and environmental conditions during construction and once the estimated bat fatality exceeds the designated threshold for fatality, this mitigation (curtailment) must be enacted, as per the bat impact assessment report.



#	I&AP Comments on Bat Impacts	I&AP	Date	EAP Response
12	<p>Bat Report: It is noted that the Bat Report is a desktop study by Gaia Environmental using the field information provided by Bio Insight. In this regard, it is noted that Bio Insight are not specifically qualified Bat Specialists and as such their field research may require investigation by the specialists of Gaia Environmental as to its validity and application. And especially so, as the Scoping Report was done by Gaia Environmental and that much of the observations and recommendations thereof have been carried over into this 1st draft EIA report. It becomes obvious in learning the cumulative results of the bat report, that without mitigation, the Proposed Boulders Wind Farm would be disastrous to the bat population and render the project fatally flawed. Figure 3.6 on page 155 refers: It states: Consequence: Potential significant declines in local bat populations of species which fly at rotor-sweep height. Currently locally abundant bat species may become locally threatened. The mitigation required to avoid this must therefore be scrutinized with extreme care. In doing this, it is quite apparent that the principal mitigation is the placement of turbines outside areas of risk and yet Gaia Environmental acknowledge on page 163 of their report: When comparing the previous layout with the current layout, turbine 19 has been moved to a location which should decrease it's impacts on bats, while turbines 15, 33 and 43 have moved to locations which may have a greater impact on bats. The blade sweep area of turbine 43 may overlap with a high sensitivity zone. Furthermore, 2 more turbines (18) are located in moderate sensitivity areas. And further on page 162: provided that no part of the wind turbine infrastructure, including the blade, overlaps with these zones. This is difficult for the specialist to determine based on a google earth layout with turbine points and must be ensured by the developer. This is particularly important at turbines 8, 9 and 45. No turbines fall within high sensitivity zones. Turbines 5, 10, 11, 13, 14, 15, 16, 20, 22, 23, 24, 29, 32, 33, 36, 42, 43 and 45 (18 turbines) fall in moderate sensitivity zones and could be moved out of these zones to minimise the impact of the proposed activity on bats, And further on page 162: In particular, turbines 18, 36 and 43 are located very close to moderate sensitivity zones and it is likely that the turbine blade will overlap these zones. The summation of the above comments is that the proposed placement of the turbines specified above, representing 61% of the total proposed development, are critically close to the edge of the safety parameters for the bats. Again, this requires a close and in-depth scrutiny before such narrow margins of safety can be considered adequate for approval. As with the observations above, regarding the avifauna report, so too, the placement of turbines in areas sandwiched tightly between "No Go" areas for the bats should be studied for the reality of their effectiveness, as opposed to neat delineation on a map. Bats are unlikely to restrain themselves to such man conceived, rigid boundaries; they will, without doubt, transgress. Here again, are some examples of areas denoted as acceptable whilst being tightly sandwiched by "No Go" areas. It is important to note the scale of these diagrams, where the maroon toned "No Go" zones are 200 meters wide. It clearly shows the scale of the so deemed "safe" zones (yellow) for turbine placement. These from figure 3.4 on pages 166 and 167 of the bat report. .To a layman's eye the above proposed "safe" deployments of turbines in areas surrounded by "No Go" zones is highly skeptical and requires rigorous critical examination. I, further, do not share the opinion of Gaia Environmental when they state on page 160: Based on the current guidelines for thresholds of bat fatality by ecoregion (Macewan et al., 2018) the threshold for bat fatality at the proposed Boulders Wind Farm is 55 bats of a single species per annum. Once the number of bat fatalities reaches this threshold, a curtailment plan must be put in place. I would question why one must first have bats die to establish mortality? West Coast 1 lies directly adjacent to the proposed site and has been operating for years. Figures of post construction bat mortality for West Coast 1 should be studied, and the findings thereof applied as mitigation before development. To propose the reverse is rather like to trying to find out if there are brakes on the bus after one has pushed it down the hill. No one would volunteer for such an experiment and for the bats the same regard must be applied.</p>	Pickford, Peter & Associates	2 July 2019	<p><b>Specialist Response:</b> Response 4 above is also relevant here. GES reviewed and approved the fieldwork methodology carried out by BioInsight. The delineation of buffer zones has to be well validated and standardized to be accepted. This may result in small areas where development is allowed between no-go zones, which is not ideal for mobile animals, such as bats, but unavoidable. The use of a mortality threshold is a standard in the industry, to allow for a more accurate representation of the impact of a facility on local species assemblages based on projected population numbers per ecoregion. This number is calculated based on the size of the actual WEF and thus would be a higher number if the area of WC1 was included. The fatality threshold is also based on the corrected fatality estimate and not observed fatality. Furthermore, the death of a single individual of a threatened species will also trigger mitigation.</p> <p><b>CES Response:</b> With regard to the involvement of Bioinsight in the data collection – see response by Bioinsight – number 25.</p>





## 9 ECOLOGICAL ISSUES

#	Comments on Ecological Impacts	I&APs	Date	Response
1	BOTANICAL: —Please register the West Coast branch of Botanical Society as I&AP again,it seems it got lost in the re-registration process. I will be the contact person. — I draw your attention to WC1 10.2.12 re Contract nature reserve and strongly suggest that the area around Kasteelberg go into Stewardship. —I suggest that SANBI/CREW be allowed to walk the areas now in the growing season to draw up an independent plant list if they deem it necessary.	Slabig, Hedwig	03-Jul	<b>CES Response:</b> The suggestion of securing a stewardship is noted and will be considered. This is something that will require the willingness and agreement of the farmer and the nature conservation authorities.
2	Although agricultural activities have transformed large portions of most of the site there are some remaining remnants of natural vegetation have been determined as Critical Biodiversity Areas (CBA's)2 due to the presence of endangered vegetation the presence of rare and endangered plant species and special habitats. The findings of the botanical specialist has confirmed this. We are therefore pleased to note that no turbines will be located within areas of natural vegetation and that new roads will not pass through any high sensitivity areas. The mitigation measures recommended for watercourse crossings should be adequate to reduce potential impacts on fresh water ecology and must be strictly implemented and monitored. We are generally satisfied with the monitoring and findings of the bat specialist study. Post-construction monitoring should occur for at least 2 years post-construction. Impacts on Avifauna remain of some concern especially as the adjacent wind energy facility, West Coast One is known to be causing fatalities of certain species and the potential cumulative impact is difficult to ascertain. As stated previously, the expected impacts based on the pre-construction data for West Coast One have been quite different to the actual impacts recorded post-construction. The avifaunal specialist report did not provide detailed data regarding numbers of birds and flight paths and it is therefore difficult to determine whether the proposed mitigation measures are sufficient (although admittedly these are fairly standard across most wind farms). The report also does not evaluate the powerline linking the windfarm substation to the Eskom grid as the route had not yet been determined at the time that avifaunal specialist report was compiled. However, BioInsight have stated that where powerlines must cross sensitive avifaunal sites, that the powerlines must be marked (with bird diverters) and the poles must be "bird-friendly" which CapeNature supports. Taking into account the layout of the turbines, it is of some concern regarding how the construction teams are going to access all 45 of the turbine sites without impacting on the avifaunal no-go areas. There are a number of existing farm roads, but these will have to be upgraded to enable transport of the large and heavy equipment. Where these roads pass through sensitive avifaunal sites, upgrades must be kept to an absolute minimum and new roads should not be located in the sensitive avifaunal area at all. We do note that one improved aspect of the proposed layout is that large portions of the north and west parts of the site are now free of turbines. This area has been determined to support substantial bird activity (specifically water birds). The key part of the mitigation is post-construction monitoring. The specialists have used the term "adaptive management" and this is important as situations change not only seasonally, but also over the course of several years. The applicant must be made aware of the range of mitigation measures laid out in the DEIR and EMPr and a statement from the applicant that he is willing and able to implement all proposed mitigation measures should be provided. The EMPr provided is very comprehensive and we support the inclusion of inter alia a detailed rehabilitation plan and open space management plan. Strict and thorough implementation of the EMPr should ensure that environmental degradation is kept to an acceptable level. With regards to plant and animal species relocations, please ensure that the necessary permits are applied for well in advance of site clearing needing to take place.	CapeNature	21-Jun	<b>CES Response:</b> Comments, recommendations and suggestions are welcomed and have been integrated into the EIR and EMRr (see Volumes 1 and 3 of the final EIR submission).





#	Comments on Ecological Impacts	I&APs	Date	Response
3	The Directorate: Biodiversity conservation reviewed and evaluated the aforementioned report and its specialist studies. The does not have any objection to the proposed development. It was noted that the site falls within the Critical Biodiversity Areas (CBAs) and most of which are in a natural state and also falls within the West Coast Biosphere Reserve. In order to achieve the overall objective of minimising the loss of biodiversity, the following recommendations must be included in the final environmental impact assessment report: The directorate recommend that a site visit be conducted, together with CapeNature and western cape department of environmental affairs and development planning before final environmental impact assessment report is finalised. Turbines must not be placed within high or very high sensitive areas within the proposed development site and away from important habitat features for bats as well as for bat roosts. The search and rescue of all protected species and species of biodiversity concern must be conducted before areas are cleared; and the plant rescue and protection plan must be compiled by ecological specialist and be implemented. The affected species must be translocated to a similar habitat outside the development footprint and marked for monitoring purposes. All sensitive habitats must be clearly demarcated as no-go areas with fencing or orange mesh netting. barricading measures to be utilised must not restrict movement of fauna in the project area. No structures should be located within 32m of any surface water feature, such as the water courses, wetlands and farm dams. CapeNature and Western Cape Department of Environmental Affairs and Development planning must be consulted for recommendations. Concurrent rehabilitation and alien vegetation control program within all sensitive areas must be implemented. the recommendations proposed in the ecological, avifauna and bats assessment specialist reports are supported and must be implemented during construction and operational phases; and all protected fauna and flora species of conservation concern must not be disturbed or removed prior to permit approval from relevant national and provincial authorities. The major impacts due to the proposed development, include habitat destruction and loss of protected plant species. Therefore in order to achieve the objective biodiversity, the above mentioned recommendations must be adhered to.	DEA (national)	05-Jul	<b>CES Response:</b> A site visit with CapeNature and DEA&DP prior to submission of the final EIR, is noted. The remainder of the suggested recommendations have been integrated into the Environmental Management Programme and associated plans. These should also be fed into the conditions of the Environmental Authorisation.
4	7. The applicant is reminded of the “general duty of care towards the environment” as prescribed in section 28 of the NEMA, which states that “Every person who causes, has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring, or, in so far as such harm to the environment is authorised by law or cannot reasonably be avoided or stopped, to minimise and rectify such pollution or degradation of the environment.”	DEA&DP	02-Jul	<b>CES Response:</b> Statement. These aspects are addressed in the EIA process.
5	2.1.4 Comments xxvi and xxvii: An environmental sensitivity map indicating environmental sensitive areas and features identified during the EIA process. A map combining the final layout map superimposed (overlain) on the environmental sensitivity map. The applicable specialist studies did provide a layout map of the proposed wind turbines and associated infrastructure superimposed on the environmental sensitivities/constraints. Ideally, the environmental sensitivity map of each specialist study should have been included in Section 9 (Key Findings of the Specialist Studies) of the Draft EIA Report. Since the location Page 3 of 8 of the proposed wind turbines and associated infrastructure were not indicated in Figure 11-3: (Specialist Specific Site Sensitivities) of the Draft EIA Report, it is difficult to determine how the various environmental sensitivities were considered in determining the final development layout. It is further recommended that a separate appendix containing the environmental sensitivity map of each specialist study, be included in the Final EIA Report.	DEA&DP	02-Jul	<b>CES Response:</b> Request to include the sensitivity maps of each specialist report into the Final EIR is noted and has been included in Volume 1 – Final EIA – Appendix A-4.
6	2.2.1 Comments iv and v: An environmental sensitivity map indicating environmental sensitive areas and features identified during the EIA process. A map combining the final layout map superimposed (overlain) on the environmental sensitivity map. Please see paragraph 2.1.4 above for comment regarding this requirement.	DEA&DP	02-Jul	<b>CES Response:</b> Request to overlay the Final layout map onto the sensitivity map in the Final EIR is noted (see Volume 1 – Final EIA – Appendix A-3 and A-4).
7	2.2.2 Comments vi – xvi: Various plans to be included in the EMPr (i.e. Alien Invasive Management Plan; Plant Rescue and Protection Plan; Avifauna Monitoring and Management Plan; Re-Vegetation and Habitat Rehabilitation Plan; Open Space Management Plan; Traffic Management Plan; Transportation Plan; Storm Water Management Plan; Fire Management Plan; Erosion Management Plan and Fuel Storage Measures) are very generic and not specific to the proposed development and the proposed site. A revision of the plans, with specialist input, is required.	DEA&DP	02-Jul	<b>CES Response:</b> The plans will be revised with site specific information and inputs from specialist reports.
8	Sensitivity Map (Figure 7) of the Fauna & Flora Specialist Impact Assessment Report compiled by 3Foxes Biodiversity Solutions dated December 2018 must be updated to indicate the following: 2.9.1 Numbering of the wind turbines; and 2.9.2 Provide a legend to indicate what the environmental sensitivities are (e.g. red = critical biodiversity area).	DEA&DP	02-Jul	<b>CES Response:</b> A sensitivity map with the numbering of the turbines and a legend has been included in the Ecological Specialist Report and in Volume 1 – Final EIA – Appendix A-3 and A-4.



## 10 HERITAGE ISSUES

#	I&AP Comments on Heritage Impacts and Issues	I&AP	Date	EAP Response
1	<p>5.1. Background. If you are not aware, my farm Boebezaks Kraal 0/40 and 4/40 was part of The West Coast One Wind Energy Facility project but was excluded from the project due to a 3,5 km no wind turbine buffer zone around Kasteelberg (KBS) set by Heritage Western Cape (HWC Case Number 1152) and no turbines within 2km on both the western and eastern side of the Stompneusbay gravel road(P2160). These heritage buffer zones resulted in my farm being excluded from the WEF resulting in a huge loss of income for me, my family and farmworkers. 5.2.History. During the EIA process and development of the West Coast One WEF (WC1 WEF), 19 turbines was placed on my farm on the lower slopes of Kasteelberg and to the Southern part of my farm. The heritage specialists as part of the EIA process, recommended in the HIA, not less than 2km buffer zone around Kasteelberg and a 500 m buffer on both sides of Stompneusbay road. These Heritage buffer zones resulted in less footprint for turbines on my farm and the remaining 12 turbines was placed on the southern part of my farm outside of Kasteelberg 2km and road 500 m buffer zones suggested by HIA specialists. Heritage Western Cape (HWC) then commented on EIA on 3 November 2010 (attached please find HwcCommentonEIA.pdf) and recommended a NO GO option for the West Coast One WEF with the reasons stipulated. The DEA somehow disregarded this comment by HWC and the Environmental Authorisation(EA) was granted on 13 March 2011 with the 2km buffer around Kasteelberg, with condition that the Heritage buffer zones be further discussed and agreed upon between WEF developer and HWC(please find WCOneAuthMarch2011.pdf) on page 14 and 15 (10.7.1 and 10.7.4). HWC then appealed against Environmental Authorisation on 19 April 2011 (please find HWCAppealWC1.pdf) and in this document HWC clearly states reasons for the High Heritage Significance of Kasteelberg and the NO GO option for the WEF. a) The High Heritage Significance of the Kasteelberg Archaeological sites. b) Impacts of Sense of Place and Cultural Landscape. The grounds for appeal was given on page 3 of this document and at the bottom of page 3 and top of page 4, HWC clearly states that 2 km buffer zone around Kasteelberg was inadequate and that a buffer of at least 5 km, possibly more should be placed. The NO GO option for the West Coast One WEF was given by HWC. This document was signed by CEO of HWC, Mr. Andrew Hall. The developers of WC1 WEF and myself tried numerous times to persuade the CEO of HWC to reduce the 5 km buffer zone, by corresponding with HWC with no positive response. The WEF developers asked HWC if a mitigated layout of no turbines on western side of gravel road to Stompneusbay would be approved, but still no positive response from HWC. On 14 September 2011 Kasteelberg was nominated as Provincial Heritage Site (PHS) due to its importance as Grade 2 Heritage site by HWC. Me and my family was worried about security and asked for more information from HWC due to people visiting this PHS without our consent, with no reply from HWC. At this stage the developers mitigated the layout of the WC1 WEF to only having turbines on the Eastern side of Stompneusbay road (P2160) with 500 m buffer from this road on eastern side, with no turbines on western side, excluding my farm from WC1 WEF completely, due to the 5 km buffer zone set by CEO of HWC. The developers replied to DEA, against Appeal from HWC, and asked for approval if they set a 3.5 km buffer around Kasteelberg with no turbines placed on western side of the road, excluding my farm from the WEF. 5.3. Decision. On 2 November 2011 at an Impact Assessment Meeting held at offices of HWC, the CEO of HWC and IACOM members agreed to support the mitigated layout of the WC1 WEF developers with the 3.5 km buffer around Kasteelberg. I was present at this meeting where the CEO of HWC, Mr. Andrew Hall supported this revised layout and set the 3.5 km buffer zone around Kasteelberg and 2km on either side of Stompneusbay road (P2160) for future development. The Minutes of this meeting was done by Me. Jenna Lavin. The lack of feedback from HWC resulted in the nomination for PHS of Kasteelberg being put on hold. The DEA then approved and amended the EA for WC1 WEF. My farm was excluded from the WC1 WEF and that was the reason why the buffer zone was not changed in the amended EA. This decision made by the CEO of HWC, Mr. Andrew Hall resulted in my farm being excluded from the West Coast One WEF, resulting in total loss of income from this WEF, for my family and farm workers. 5.3 New Heritage Impact Assessment. The Heritage Impact Assessment (HIA) from Archeological Contracts Office (ACO) for the Boulders windfarm varies drastically from the HIA for West Coast One Wind Farm also compiled by ACO! A Heritage officer/ specialist of ACO was present at the IACOM meeting held on 2 November 2011 at HWC where the 3.5 km buffer zone was implemented. So</p>	Kotze, Danie	30-Jun	<p><b>Heritage specialist response:</b> ACO's revision of the proposed no-go zone was taken in light of the restricted distribution of sites on and around the koppie, which is well established, and HWC's failure in the time the since West Coast 1 study was undertaken, to declare Kasteelberg a PHS. Until such time as the site is declared, and such buffers are gazetted, any recommendations are open to revision. HWC undertaking to revisit the declaration process is commendable, and, as such, the 2km buffer as stipulated in the Environmental Authorisation for WC1 (8 April 2013; Appendix 2.4) has been respected until such time as the site is officially declared.</p>



#	I&AP Comments on Heritage Impacts and Issues	I&AP	Date	EAP Response
	ACO should know the extreme significance of this site, and should have implemented a 3.5 km buffer zone from the start. It is exactly the same kind of development and impacts stay exactly the same, so the outcome of the HIA should be exactly the same or even higher buffer zones should have been implemented. Why was? a) The 2km buffer zone around Kasteelberg reduced to 1.5km on eastern side. b) The 500 m buffer zone from Stompneusbay road was reduced from 500 m to 250 m c) Why is this proposed PHS Kasteelberg with Grade 2 Significance now suddenly not so important by ACO? The reasons given by ACO in HIA are unfair and ungrounded and was merely the opinion of one of their own heritage specialists. The viewsheds from the existing WC1 WEF towards Kasteelberg is still unchanged. The viewsheds from Vredenburg on Stompneusbay road towards Kasteelberg to the western side is still unchanged. The viewsheds from Britannica Heights(Stompneusbay/St Helena Bay) to Kasteelberg is unchanged with turbines to the far east, 3.5 km away. The viewsheds from Paternoster PHS and the sea to Kasteelberg is unchanged with turbines in the far back with 3.5 km space in between. Apparently the independence and integrity of ACO was compromised in the compiling of this HIA, or my farm was apparently victimized by ACO during the compiling of WC1 WEF HIA?			
2	I have a Heritage resource on my farm (KBS) Kasteelberg and there are a 3.5 km no wind turbine buffer zone around it set by Heritage Western Cape's CEO Mr. Andrew Hall on 2 November 2011 and no turbines within 2km on both Western and Eastern Side of the Stompneusbay gravel road(P2160) to protect sense of place of this Grade 2 Heritage site.	Kotze, Danie	30-Jun	<b>Heritage specialist response:</b> Should HWC chose to enforce the 500m buffer around the Vredenburg-Stompneus Bay road, in light of their decision to pursue declaring Kasteelberg, they will need to indicate this, as, again, the reduced buffer was recommended in light of the stalling of the declaration process.
3	1. Can CES please clarify whether the seven turbines (15, 19, 21, 27, 31 ,33 , 43) moved from West to East were as a result of the Kasteelberg Heritage site, OR so as to not cause conflict when CES's other project for the proposed mine prospecting gets underway. 2. Although the seven turbines have been moved Eastwards "to avoid impacting on Kasteelberg", they have now been moved further into the faces of Britannica Heights residents, especially those one Km further East from where the CES presentation took place and which no one from CES has visited.	Todd, A&J	01-Jul	<b>Heritage specialist response</b> 1) The turbines were moved after the first HIA draft indicated that area as unsuitable for turbines due to the visual impacts to Kasteelberg. 2) Britannica Heights retains extensive views of Paternoster and the coast, and only partial, although unfortunate, occlusion of Kasteelberg.
4	The Heritage Impact Assessment (the "HIA"). I would like to bring the following to the attention of Ms Smuts, the author of the VIA: (i) My comments in respect of the VIA above; (ii) My comments respect of the UE report above and that the UE report seems fundamentally flawed; (iii) My comments respect of the SIA above; (iv) On page VII she confirms that the impacts to the cultural landscape are unmitigable except by removal of the turbines from the landscape. She however seems to assume that the value of the socio-economic benefits exceeds the damage to the cultural landscape by such a margin that the project should still be considered. I could not find a valuation of the socio-economic benefits in order to evaluate this assumption and requires this valuation.	Brand, Deon	02-Jul	<b>Heritage specialist response:</b> The preferred outcome is the removal of all turbines west of the Vredenburg-Stompneus Bay road.  <b>CES response:</b> The financial viability of removing or relocating more turbines needs to be borne in mind. The proposed mitigated layout with turbines west of Stompneusbaai Road only on the Southern part, has been considered acceptable by the Heritage Specialist, even if not preferred option. See also response from Heritage specialist in row 8 below on the difference between the heritage and normal visual impacts. The responses to the visual, tourism/property and social impacts are responded to in the relevant sections of the CRR dealing with those issues. A valuation of the social benefits was not required as part of the EIA and specialist studies, and would also have been an onerous and extremely expensive research and modelling exercise to undertake for an EIA.
5	3] HERITAGE. —Were any representatives from the Khoi-Khoi approached to comment about Kasteelberg? It is now finally agreed that all Turbines will be 2 km from Kasteelberg? Turbines of the same hight as WC1 will be far more acceptable. All the roads around Kasteelberg have recently being included in a heritage and cultural study done for SBM by O'donahue and Kaplan as a Scenic route/drive. This report has been accepted by the SBM. It therefor follows that WC1 10.7.4 must strictly be adhered to and that turbines must be placed at least 2 km from the local road from Vredenburg to Stompneus Bay. It would also makes sense to ask for an offset in the form of the landowner agreeing to the formal declaration of Kasteelberg as provincial heritage site.	Slabig, Hedwig	02-Jul-19	<b>Heritage specialist response:</b> Public comment is open to all, and the West Coast Aboriginal Council, the HWC registered conservation body for the region, were notified. Yes, and a reduction in height has been recommended. The O'Donoghue report has not yet been ratified by Heritage Western Cape and, as such, remains only a recommendation. The 500m buffer around the Vredenburg-Stompneus Bay road was reduced in light of the stalling of the declaration process.  <b>CES response:</b> While the VIA and HIA specialist studies recommend lowering the turbines to reduce the visual impact, this is countered by recommendations from the Avifaunal expert to increase the height to avoid bird flight paths. Aviation regulations also need to be taken into consideration, as do the financial feasibility constraints for the developers.



#	I&AP Comments on Heritage Impacts and Issues	I&AP	Date	EAP Response
6	<p>HERITAGE IMPACT. • According to Klein &amp; Cruz-Urbe 1989; Smith et al 1991 there is to be no development/change to this heritage area within a 2km radius from Kasteelberg . However this stipulation does not specify from what point of Kasteelberg (top of the koppie or where the ritual sites were?) The difference may well have an effect of an extra 1km, which might impact on 5 turbine positions. • One of the demonstrated supporters (K Sadr- School of Geography, Archaeology and Environmental Studies at WITS) put in a conditional support, stating- as long as no turbines and associated infrastructure are constructed anywhere higher than the 80m (above sea level) contour line of the hill Kasteelberg. Most of the proposed turbines are positioned at more than 80m above sea level. Considering that both tops of Britannia Heights and Kasteelberg are approximately 150m above sea level and the turbines positioned at an average level of 95m plus 165m will dwarf Kasteelberg with more than 100m. This leaves little ambience for a heritage site.</p>	<p>No Boulders Wind Farm Email Petition (31 submissions) &amp; Roon(Aksie Paternoster Aksie) Petition with 114 signatures</p>	<p>1&amp;2 July</p>	<p><b>Heritage specialist response:</b> 1) Given the nature of archaeology, which is usually located below ground level, it is customary to use the centre point of a site as the location from which to establish a buffer zone. The centre of Kasteelberg has been used in this instance, although the extensive research undertaken at the site has provided us with a clearer than usual understanding of the likely limits of the site. This, in turn, has implications for the second part of the comment. 2) The 80m restriction, as indicated by Prof. Sadr, refers only to the “80 m (above sea level) contour line of the Rooiheuvel portion of the hill Kasteelberg”, with 40m indicated on “the farm Uitkomst to the northwest of Rooiheuvel”. These restrictions pertain to the distribution of archaeological sites on and around the koppie, and do not speak to the visual impacts to the site. 3) The Boulders turbines are all more than 3km from the Vredenburg-Paternoster road, and, for the most part will be seen against the backdrop of WC1 turbines. 4) This EA was supplanted by the EA of 8 April 2013, and that 500m buffer was reduced in the AIA in recognition of the lack of formal protection of Kasteelberg or the landscape. 5) The removal of the westernmost turbines, as recommended, will serve to limit the impacts to a part of the landscape already affected. 6) A reduction in turbine height is recommended, as is restriction of turbines to the east of the Vredenburg-Stompneus Bay road, both of which will reduce the visual impacts on Paternoster.</p> <p><b>CES response:</b> The proposed mitigated layout with turbines west of Stompneusbaai Road only on the Southern part, has been considered acceptable by the Heritage Specialist, even if not preferred option. That reduced turbine size will not have a material effect of mitigating high visual impacts. The Heritage (and Kasteelberg) impact has been referred to in the VIA and has intensely been address in the HIA, which relies on the VIA as a term of reference.</p>
7	<p>SENSE OF PLACE. I am concerned that the sense of place that is enjoyed by our communities and businesses will be destroyed by the intrusion of the Boulders WEF. The countryside between Britannica Heights and Paternoster creates a unique and beautiful sense of place. It is a rare part of the country where a harmonic balance between coast, landscape, agriculture and nature has been established over a long period of time. It is for this sense of place that our local tourism economy is so long established and successful. It is my belief that the unacceptable risk of loss of the sense of place creates a fatal flaw to this application.</p>	<p>Portsmouth, Doug</p>	<p>02-Jul</p>	<p><b>Heritage specialist response:</b> Britannica Heights itself has expanded greatly, much of that expansion taking place since the construction of WC1. While loss of views is unfortunate, Britannica Heights itself is not a heritage resource, nor are views towards Paternoster occluded, with the impingement on views ranging from 12° through 33°.</p>





#	I&AP Comments on Heritage Impacts and Issues	I&AP	Date	EAP Response
8	<p>Heritage Impact Assessment findings significant (but irrational conclusion).                      63 An integrated Heritage Impact assessment by Katie Smuts is included as Appendix D7 of the DEIR. 64 The proposed BWEF receiving environment was found to have significant paleontological deposits and archaeological sites. The Kasteelberg site is of particular concern and which Heritage Western Cape (HWC) has tried to declare a Provincial Heritage Site but without success as yet. The HIA recognizes the scenic and cultural value of the potentially affected landscape. 65 The HIA agrees with most of the impact ratings and findings of the LoGIS VIA and regards the removal of the 7 turbines north of Kasteelberg as being effective in reducing the associated High negative potential impact to “moderate” whereas the LoGIS VIA states that ALL of the turbines to the west of the Stompneus Bay road are required to be removed in order to reduce the High negative impact rating. This is an important difference and it is relevant to point out that the LoGIS VIA findings must take precedent over the HIA finding in this instance on account of the “risk averse and cautious approach” that must be followed in pursuit of achieving sustainable development. In other words the removal of just the 7 turbines may be an “acceptable” mitigation to Ms. Smuts but it is not so to Mr. Du Plessis (it is merely regarded by him as being “a step in the right direction”). 66 The HIA states that, “(t)he most important visual impacts to heritage resources will be to the character and sense of place of the region, specifically to the rural cultural landscape and, to a lesser extent, the historic coastal towns. While the VIA notes that the viewer incidence in the project site is low, the intrinsic value of both the cultural landscape and the site of Kasteelberg is of unquestionable significance and not dependent on visual receptors.” 67 Various recommended mitigation measures are derived from the HIA (page vii) and the following pertinent ones are extracted here: 67.1 The viability of reducing the turbine size to match that of the West Coast 1 turbines should be investigated;                      23 67.2 At the minimum, the seven wind turbines west of the Vredenburg-Stompneus Bay road should be removed or relocated (Turbines 15, 19, 21, 27, 31, 33 and 43); 67.3 The relocation or removal of various combinations of the north western turbines should be considered – these are the turbines visible from the historic town of Paternoster and from its beach (Turbines 11, 13, 15, 19, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 33, 34, 35, 37, 38, 39, 40, 41, 43, 44, 45);                      67.4 The viability of reducing the turbine size to match that of the West Coast 1 turbines should be investigated;                      68 Based on the information in the DEIR the Applicant has only implemented the second mitigation measure above and has ignored the rest. It is fair to say then the Applicant has made very limited effort to mitigate the significant high negative visual impacts on cultural resources and the landscape and it is thus difficult to understand how Ms. Smuts can therefore come to an objective conclusion that, “It is the opinion of this specialist that, provided the recommendations below are implemented and incorporated into the EMPr, that Environmental Authorisation for this project should be awarded.”. Accordingly, we now examine her rationale in reaching such an opinion, bearing in mind that Appendix 6 of the EIA Regulations require that any appointed specialist be objective (and independent). 69 In so far as Ms Smuts’ recommends that the HIA mitigations measures be included in the “EMPr” it is pointed out that this is impractical and irrational. For instance, one of the tabled mitigation measures, the reduction of turbine height to match that of the West Coast 1 WEF, is a measure that will have to be decided upon by the Applicant before submission of the FEIR. To reduce the turbine height as part of the EMPr implementation (i.e. after possible approval fo the application) will violate the EA that must be delivered by the Competent Authority and which will specify then the height of turbines that will be authorized (or not). The point is that the Applicant has to commit, or not, to the implementation of (some) technical-based mitigation measures now during the current EIA phase and before submission of the FEIR for decisionmaking by the Competent Authority. Failure to do otherwise will constitute incremental development of the proposed BWEF at a known ultimate cost to the environment and local community – this approach is illegal. 70 Under Section 5.3 of the HIA the specialist makes a critical error as she steps outside of her field of expertise and “borrows” the proclaimed social and economic benefits outlined in the SIA (Barbour and van der Merwe, 2018) to justify approval of the 24 proposed BWEF over the significant negative impacts determined by her own findings. Under Section 8.1 “Conclusion” Ms. Smuts states: “The proposed construction of the Boulders WEF will likely result in local economic growth, job creation and skills transfer, while also contributing much needed clean energy to the national grid.” The above issues have no place in the consideration of heritage issues and it is rather the duty of the EAP to conduct the final inter-disciplinary weigh-up of potential impact findings. NEMA</p>	<p>AVDS Enviro Consulting (Andre vd Spuy)</p>	<p>19-Jun</p>	<p><b>Heritage specialist response:</b> 63-69. The HIA provides an integration of specialist reports, in this case palaeontological, archaeological and visual. The VIA as relevant to the HIA pertains only to visual impacts to heritage resources, and not visual impacts more broadly. As such, recommendations made in the VIA are not necessarily pertinent to heritage resources, nor “must” they take precedence. The HIA contends that the project is not fatally flawed from a heritage perspective with the current layout, but that further improvements could be affected by removal of all turbines west of the Vredenburg-Stompneus Bay road and reduction in turbine heights. HWC indicating that they will pursue declaration of Kasteelberg is welcomed, but still does not demand the removal of the south western turbines to be affected. As such, my recommendations stand. The final comment by HWC will determine what does go into the EMPr. 70-73. HWC’s “ Guidelines for Heritage Impact Assessments required in terms of Section 38 of the National Heritage Resources Act (Act 25 of 1999)” (2016) stipulates the following as a minimum requirement for an HIA: An evaluation of the impact of the development on heritage resources relative to the sustainable social and economic benefits to be derived from the development; As such, the inclusion of the consideration of socio-economic impacts is not a “critical error”.</p>



#	I&AP Comments on Heritage Impacts and Issues	I&AP	Date	EAP Response
	<p>Section 2 provides specific criteria for consideration in the integration of different disciplinary issues in order to assess the sustainability for a particular proposed activity. It most definitely is not the duty of a specialist such as Ms. Smuts to undertake this task especially as she will have no full knowledge of the complete range of potential impact findings from amongst other specialist studies. 71 Ms. Smuts has used selected findings, plus her crude and flawed personal views, to justify her reasoning for approving of the proposed development. However, we find no information anywhere as evidence of her being an energy expert or economist. In fact the opposite is can be justifiable said of her personal views and the facts show that wind farms do NOT create permanent jobs and that they ultimately will result in huge electricity costs to the national population and which consequences in South Africa will be most sorely felt by the poorest. As case evidence of these high costs of renewable energy, and its failure to curb carbon emissions, one need look no further than the rapidly failing example of Germany's "Energiewende" (see Appendix A). The real costs (not price) of large-scale renewable energy to South Africans will far exceed (see Appendix B which is an assessment by Rob Jeffery, a credible economist operating in the field of costs of energy generation) those of any other power generation source (in fact they already are). 72 There is no provision in the EIA Regulations for a specialist to operate outside of his/ her field of expertise and to use selected outside information in a subjective and unquantified manner such as Ms. Smuts has done. Further more, this review reveals that the proclaimed benefits seen in the SIA are unfounded themselves, and exaggerated for the benefit of the Applicant's interests. Ms. Smuts makes herself complicit in such actions by adopting flawed information, from outside of her discipline, into her analysis. Her final opinion is therefore irrational and not objective and must be dismissed accordingly. Ms. Smuts will no doubt be concerned to see that a rational and objective analysis, in this review, of all the impacts related to the proposed BWEF finds that 87% of all the potential impacts are negative, and this analysis includes the impact assessments made in the SIA and which she has borrowed from. 73 In conclusion, when Ms. Smuts HIA assessment is considered in terms of only the facts and findings of its own discipline (i.e. removing her personal views related to the flawed social, economic and energy information which she has introduced) the proposed BWEF poses in fact a real and significantly high potential negative impact and should probably not be receiving her conditional approval. Whatever the case, Ms. Smuts will be obliged to revisit her study and reconsider her conclusion properly and rationally.</p>			





# 11 VISUAL ISSUES

#	I&AP Comments on Visual Impacts	I&AP	Date	EAP Response
1	<p>I am concerned that the boulders wef will visually intrude on the views that we enjoy from our property in Britannica heights. Britannica Heights is a residential suburb of St Helena Bay that sits on top of the escarpment overlooking the proposed boulders WEF. The West Coast One WEF is partially intrusive to our views, but fortunately it is situated out of the direct view down the valley to Paternoster. the WEF provides us with a direct visual reference to be able to state that the Boulders WEF must not be allowed to encroach beyond the line of site between us and West Coast One WEF. The Visual Impact Assessment Report has concluded that the visual impact of Boulders WEF will be severe. nevertheless, the visual impact assessment is deficient in its pictorial portrayal of the visual impact of the wind turbines as viewed from Britannica Heights. Despite my request at the scoping report stage for a pictorial representation to be made from my &amp; neighbouring properties, the specialist chose to show only one property, which is further away from the turbines. in light of this I have to question the impartiality of both CES and the specialist as they are either ignoring the request or are taking steps to avoid the negative effect that a number of proper visual representations will make to the application. further, whilst mitigation of the visual impacts is strongly recommended in visual impact assessment, the nature of the landscape allows for no mitigation. it is my belief that the severity of the visual impacts creates a fatal flaw to this application</p>	<p>Portsmouth, Doug (BH)</p>	<p>02-Jul</p>	<p><b>CES Response:</b> The high negative visual impacts, particularly for those residents and owners of developed and vacant properties along the top of the Britannica Heights (BH) development with a westward view), has been identified and acknowledged in the Visual Specialist Study and the EIR. While the layout of the proposed wind farm was concentrated during the EIA phase of the assessment into the farms immediately adjacent to the WC1 development to try to reduce the visual impacts, the visual impacts for these residents remain high and cannot be further mitigated. This is a acknowledged in the Specialist study and the EIR.</p> <p>CES acknowledges that the quality of the images in the reports made available on the CES website were degraded due to the compressed PDF format. Mary Ralph raised this issue during the PPP. CES then requested full quality photo simulations and sent these to Mary Ralph. She also asked if she could share these with her Britannica Heights neighbours. The full quality images were also available in the hardcopy printed reports made available during the public review period and were printed on A0 posters that were presented at the focus group meetings and public open day.</p> <p><b>Response from Specialist:</b></p> <ol style="list-style-type: none"> <li>1) The project proponent specifically attempted to keep the line of sight visibility from Britannica Heights to Paternoster and the Atlantic seaboard clear by not placing wind turbines within the visual corridor between these two entities. Refer to Map 1. Turbines located between the West Coast 1 wind farm and Britannica Heights will however be visible and the visual impact is expected to be high.</li> <li>2) I was not made aware of such specific request by the previous EAP, which I suspect was made after our site visit and photo recognisance of the area. The EAP provided the photograph used in Figure 27 which was meant to be a representative sample (together with Figure 25) of what the Boulders wind farm may look like from Britannica Heights. It is unfortunately not possible to do photo simulations from all properties within the study area. It is further noted from the VIA report available from CES' website that the quality of the images in this report have been severely degraded due to the compressed PDF format. I recommend that the original (uncompressed) quality report and images be made available to I&amp;APs upon request so as to more clearly convey the original intended assessment and visualisation of potential visual impacts in the VIA report.</li> <li>3) Conventional mitigation of visual impacts related to wind farms is generally not possible, or at best not likely to succeed. It is stated as such in the VIA report.</li> <li>4) It is clear that the wind farm is intended to be constructed on private property and as such the VIA have no legal grounds to pronounce it as fatally flawed, but only to state the potentially high visual impacts, and to appeal to the deciding authority to consider these when reviewing the development application (see below). Extract from the report:</li> </ol> <p><i>It is clear from the above (when weighing the visual advantages and disadvantages) that it would be difficult to endorse the construction of the Boulders WF from a visual impact perspective. If no mitigation (e.g. removal of selected wind turbines) is undertaken the potential visual impacts and especially the potential cumulative visual impacts may exceed acceptable levels within the context of the receiving environment.</i></p> <p><i>In spite of the above statement this does not imply that the Boulders WF project is fatally flawed. If the Paternoster plateau and/or Kasteelberg cultural/historical landscape had formal environmental or heritage protection status (e.g. if it was a Protected Heritage Site or National/Natural Heritage Site) it would have been considered a fatal flaw from a visual impact (and land use conflict) perspective. This does not, however, exonerate the project proponent and authorities from considering the potentially</i></p>





#	I&AP Comments on Visual Impacts	I&AP	Date	EAP Response
				<i>high levels of visual impact associated with the wind farm project (as proposed), when reviewing the desirability of the proposed development within the receiving environment.</i>
2	With regards to above proposed Boulders Wind Energy Facility I wish to register as an interested/affected party. In addition, I strongly object to this proposal for the following primary reasons: 1. The proposal represents gross visual pollution in terms of its location in the heart of a popular tourism hotspot as well as a pristine unspoiled natural area. 2. The proposal will lead to noise pollution, vibrations and consequent interference with natural birdlife and migratory paths. 3. There are more than sufficient alternative areas on the West Coast for such proposed installations, where no established and existing development/infrastructure will be adversely affected by introducing new wind energy developments. 4. The “polluting” effect of the proposed wind farm activities will seriously affect tourism development in the greater St Helena Bay area as investors in property in this area are those seeking an unspoiled natural environment	Mr Robert Morley	11-Jun-19	<p><b>CES:</b> 1) As above. 2) Noise and Bird issues are responded to by the relevant specialists in that section of the CRR. 3) This was not the only site considered for this project. Additional information on the Developer’s site selection process has been added to Chapter 5 of the Final EIR. See also responses to the issues about alternative sites in the Alternatives section of the CRR. 4) A Property Values, Tourism and Economic Issues Assessment was conducted. The impact of tourism was addressed in this study.</p> <p><b>Specialist Response:</b> 1) The visual impact is expected to be high as stated in the VIA report. The study area is however not considered to be naturally pristine, but rather of a rural and pastoral character with high scenic value. 2) N.A. 3) Noted. 4) A tourist impact study may shed light on the potential impact on tourism development within the region.</p>
3	Why are two visual impact studies included in the draft EIA and why does the main report largely ignore the findings of the LOGIS study?	Mary Ralph	17-Jun-19	<p><b>CES:</b> This is an incorrect statement. The original VIA (Logis) is the one referred to and spoken to in the Draft EIR. The CES VIA is in addition to the LOGIS VIA and is only attached as an appendix. The findings of the CES VIA were not used to inform the EIR.</p> <p>This confirms that Mr v/d Spuy’s comments about CES trying to dilute the high visual impacts are incorrect.</p> <p><b>Visual Specialist Response:</b> I was unaware (until recently) of the second VIA study and can therefore not comment.</p>
4	The heritage report states: "Impacts anticipated as a result of the proposed WEF to visual character and sense of place are not possible to mitigate. There is also no mitigation to ameliorate the negative visual impacts on tourist access routes and tourist destinations within the region." Please clarify why the conclusions of the main report ignore these statements.	Mary Ralph	17-Jun-19	<p><b>CES:</b> CES has not ignored these statements in its conclusions. It acknowledges that the visual impacts are high and cannot be further mitigated. Our conclusions are based on an overall assessment of all the impacts and issues. CES has provided further justification for its conclusions in the concluding section of the Final EIR</p>
5	1) The West Coast District Municipality deems the visual impact of the proposed Boulders WEF unacceptable.	Doretha Kotze	18-Jun-19	<p><b>CES:</b> As above.</p> <p><b>Visual Specialist Response:</b> 1) Noted. They are however not the deciding authority but can definitely provide input and comments.</p>
6	2) The existing West Coast One WEF already has a negative visual impact on the environment and an additional WEF will exacerbate this situation	Doretha Kotze	18-Jun-19	<p><b>Visual Specialist Response:</b> 2) and 3) Section 6.2. of the VIA report deals with the cumulative visual impacts as well as the increased turbine dimensions (see below). Extract: <i>“It is expected that the overall cumulative visual impact will be of high significance due to:</i></p>
7	3) Furthermore, the turbines proposed for the Boulders WEF will be significantly higher than those at West Coast One WEF.	Doretha Kotze	18-Jun-19	<ul style="list-style-type: none"> <li>• <i>The open landscape context of the Paternoster plateau (wide panoramic views valued by residents and visitors alike);</i></li> <li>• <i>The activities of the residents and visitors (outdoor recreation related to the tourism industry of the region);</i></li> <li>• <i>Sensitivity of the visual receptors to wind farm developments (based on comments, responses and objections); and</i></li> <li>• <i>The magnitude of the cumulative change to the landscape (in terms of the scale, nature and frequency of combined or sequential views of the turbine structures).”</i></li> </ul>
8	The visual impact, especially for the properties on Britannica Heights which will have the WEF in their front yards.	Todd, A&J	18-Jun-19	<p><b>CES:</b> As in 1 above.</p> <p><b>Specialist Response:</b> Noted and thus stated in the VIA.</p>



#	I&AP Comments on Visual Impacts	I&AP	Date	EAP Response
9	Residents in this area do not want a WEF farm which will be seen from the local towns and for many kilometres around. (From the initial EIA, an area of at least 4500 sq.km.) Why is this the only site being considered and no alternative sites investigated?	Todd, A&J	18-Jun-19	<p><b>CES:</b> This was not the only site considered for this project. Additional information on the Developer's site selection process has been added to the Final EIR. See also responses to the issues about alternative sites in the Alternatives section of the CRR.</p> <p><b>Specialist Response:</b> No comment.</p>
10	The proposed Wind Turbines have a direct highly negative visual effect on the properties of Britannica Heights. We bought our properties here because of the uninterrupted views of the natural/rural environment	Country Cabin, St helena	26-Jun	<p><b>CES:</b> As in 1 above</p> <p><b>Specialist Response:</b> Noted and thus stated in the VIA.</p>
11	The natural beauty and bird life of this area would be replaced with a forest of moving structures of a height that is higher than all the buildings in Cape Town	Country Cabin, St helena	2019/06/26	<p><b>CES:</b> As in 1 above. An avifaunal Specialist Study was conducted and assesses the impact that the proposed project will have on birds.</p> <p><b>Specialist Response:</b> Noted and thus stated in the VIA. The report also indicates which areas and which sensitive visual receptors are expected to be influenced.</p>
12	The West Coast One Wind Farm is situated nearby and the closest wind turbines to my house is 2.4 km. When the dominant wind from the southeast or east are blowing the swoosh sound from the turbine blades can be heard very easily. The shadow flicker during the day and night flickering of the lights would definitely be a disturbance, but the effect thereof cannot be determined, because I have not lived closer than 2.4 km from a turbine before? I do not know if the close proximity of the proposed turbines would cause sleep disturbance for my family or farm workers or not? The residents of Klipheuvel farm (part of the West Coast One WEF) was evacuated due to noise and visual impacts. Why do the residents of Britannica Heights and Paternoster have the right to decide that the visual and noise impacts from the proposed windfarm would be disturbing and that the developer mitigated the layout to support this, but my family and farm workers don't? The people living close or nearby turbines are generously compensated by income from the wind turbines on their property, but my family and farm workers won't. A buffer zone of 500 m from my house is definitely inadequate for visual and noise impacts for my family and farm workers.	Kotzee, Danie	30-Jun	<p><b>CES:</b> Noise issues are responded to by the Noise specialist to that section of the CRR.</p> <p><b>Visual Specialist Response:</b> Extract from the VIA report: "1) <i>Shadow flicker only occurs when the sky is clear, and when the turbine rotor blades are between the sun and the receptor (i.e. when the sun is low). De Gryse in Scenic Landscape Architecture (2006) found that "most shadow impact is associated with 3-4 times the height of the object". Based on this research, a 660m buffer along the edge of the outer most turbines is identified as the zone within which there is a risk of shadow flicker occurring. There are no major roads or places of residence within the 660m buffer. The significance of shadow flicker is therefore anticipated to be low to negligible.</i>" The report states: The visual impact of night-time aircraft warning lights is expected to be high for observers with an aversion to the wind farm. Also see previous comment regarding day-time aircraft warning lights.</p>
13	I am concerned that the Boulders WEF will visually intrude on the views that we enjoy from our property on Britannica Heights. Britannica Heights is a residential suburb of St Helena Bay that sits on top of the escarpment overlooking the proposed Boulders WEF. The West Coast One WEF is partially intrusive to our views, but fortunately it is situated out of the direct view down the valley to Paternoster. This WEF provides us with a direct visual reference to be able to state that the Boulders WEF must not be allowed to encroach beyond the line of sight between us and West Coast One WEF. The Visual Impact Assessment Report has concluded that the visual impact of Boulders WEF will be severe. Nevertheless, the Visual Impact Assessment is deficient in its pictorial portrayal of the visual impact of the wind turbines as viewed from Britannica Heights. Despite my request at the scoping report stage for a pictorial representation to be made from my & neighbouring properties, the specialist chose to show only one property, which is further away from the turbines. In the light of this I have to question the impartiality of both CES and the specialist as they are either ignoring the request or are taking steps to avoid the negative effect that a number of proper visual representations will make to the application. Further, whilst mitigation of the visual impact is strongly recommended in visual impact assessment, the nature of the landscape allows for no mitigation. It is my belief that the severity of the visual impact creates a fatal flaw to this application.	Portsmouth, Doug	30-Jun	<p><b>CES:</b> This comment was received twice. Please see response in 1.</p>



#	I&AP Comments on Visual Impacts	I&AP	Date	EAP Response
14	<p>Insake voorgestelde Boulders Windplaas, Ek wil graag hiermee ernstige beswaar maak teen die ontwikkeling van die beoogde Boulders Windplaas om die volgende redes: 1. Negatiewe visuele inpak. • Ek besit 'n huis op 'n kleinhoewe op Britannica Heights met onbelemmerde uitsig op Paternoster en die see. Die oprigting van windturbines gaan ongetwyfeld 'n negatiewe inpak op my uitsig hê. • Die rustige landelike atmosfeer gaan beslis versteur word. • Die hoogte bo die horison van die turbines en die beweging daarvan sal lei tot ernstige belemmering van my uitsig. • Die flitsende ligte dag en nag gaan ernstig steurend wees.</p> <p><b>Negative visual impact (English translation)</b> • I own a house on a smallholding at Britannica Heights with unobstructed views of Paternoster and the sea. The construction of wind turbines will undoubtedly have a negative impact on my view. • The peaceful rural atmosphere will definitely be disturbed. • The height above the horizon of the turbines and its movement will lead to serious obstruction of my view. • The flashing lights day and night will be seriously disturbing.</p>	Engels, Louis	01-Jul	<p><b>CES:</b> As in 1 above.</p> <p><b>Visual Specialist Response</b> 1) The project proponent specifically attempted to keep the line of sight visibility from Britannica Heights to paternoster and the Atlantic seaboard clear by not placing wind turbines within the <i>visual corridor</i> between these two entities. Refer to Map 1. Turbines located between the West Coast 1 wind farm and Britannica Heights will however be visible and the visual impact is expected to be high. 2) and 3) Noted. 4) The visual impact of night-time aircraft warning lights is expected to be high for observers with an aversion to the wind farm. The author is however not aware of the requirement of day-time aircraft warning lights if the turbines are painted <i>bright white</i> (see below). Extract: "<i>Alternative colour schemes (i.e. painting the turbines sky-blue, grey or darker shades of white) are not permissible as the CAA's Marking of Obstacles expressly states, "Wind turbines shall be painted bright white to provide the maximum daytime conspicuousness".</i>"</p>
15	<p>The attached photos show the existing WC1 which give a better view of what the area will look like than the dull superimposed WT's in the picture shown by CES. Now one must add another 45 turbines, 10% larger, and one can understand the visual impact on the environment. These are from the Duyker Eiland – Paternoster dune road, fourteen km's away, which is used by many tourists, and not from the much closer Britannica Heights.</p>	Todd, A&J	01-Jul	<p><b>CES:</b> CES acknowledges that the quality of the images in the reports made available on the CES website were degraded due to the compressed PDF format. Mary Ralph raised this issue during the PPP. CES then requested full quality photo simulations and sent these to Mary Ralph. She also asked if she could share these with her Britannica Heights neighbours.</p> <p>The full quality images were also available in the hardcopy printed reports made available during the public review period and were printed on A0 posters that were presented at the focus group meetings and public open day.</p> <p><b>Visual Specialist Response:</b> Noted, but no photographs were attached. It is further noted from the VIA report available from CES' website that the quality of the images in this report have been severely degraded due to the compressed PDF format. I recommend that the original (uncompressed) quality report and images be made available to I&amp;APs upon request so as to more clearly convey the original intended assessment and visualisation of potential visual impacts in the VIA report.</p>
16	<p>1) Visual Effects: if implemented, the Windfarm would totally destroy the view from our property over the farmland towards Paternoster and the tranquility of the area, which is the main reason why we settled here. When Eskom for example planned the extension of their power line to Stompneus Bay, a prospective buyer of the plot adjacent to ours withdrew his offer. Following objections from plot owners of Britannica Heights, Eskom rerouted the Power line along the valley on the adjacent farm. The visual impact of the proposed Wind farm would be INFINITELY WORSE THAN THE POWER LINE.</p>	Adendorf, AM	02-Jul	<p><b>Visual Specialist Response:</b> 1) The project proponent specifically attempted to keep the line of sight visibility from Britannica Heights to paternoster and the Atlantic seaboard clear by not placing wind turbines within the <i>visual corridor</i> between these two entities. Refer to Map 1. Turbines located between the West Coast 1 wind farm and Britannica Heights will however be visible and the visual impact is expected to be high. Also, refer to previous comments related to the potential visual impacts on residents of Britannica Heights.</p>
17	<p>VISUAL IMPACT: PROPOSED BWEF "FATALLY FLAWED".46. It is evident from the two VIAs conducted, plus the comments of local community members and organizations, that the proposed BWEF is sited within a visually sensitive area and region and that such is regarded as a very valuable asset underpinning the existing socio-economic value of the community and general area. This is supported by the DEIR (page 114) which states, "(a)s indicated in the table, the most common impact raised by I&amp;APs who did identify impacts was the visual impact (65%)."</p>	Andre v/d Spuy	02-Jul-19	<p><b>Visual Specialist Response</b> 46) It is clear that the wind farm is intended to be constructed on private property and as such the VIA have no legal grounds to pronounce it as fatally flawed, but only to state the potentially high visual impacts, and to appeal to the deciding authority to consider these when reviewing the development application.</p>
18	<p>47. Inter-related and associated issues of loss of "sense of place"; loss in property value, and, negative impacts on tourism" also featured as main concerns raised by the local community (DEIR, Section 8.1.6). In other words, the potential visual impact of the proposed development has numerous ramifications and far-reaching (potential) and important impacts (sometimes called "secondary impacts").</p>	Andre v/d Spuy	02-Jul-19	<p><b>CES:</b> A Property Values, Tourism and Economic Issues Assessment was conducted. The impact on tourism and property values was addressed in this study. They found no discernable impact on tourism or property values and rated this potential impact as low and indiscernible.</p> <p><b>Visual Specialist Response</b> 47) Please refer to the Economic impact study which assessed the</p>



#	I&AP Comments on Visual Impacts	I&AP	Date	EAP Response
				potential impact on tourism and property values.
19	48. From review of the DEIR and the two VIAs (Appendices D12 and D13 of the DEIR) it is clear that the visual impact of the proposed BWEF will be of very high negative significance in terms of its intensity and the spatial extent. It is also evident that the socioeconomic “secondary” impacts that will arise (mainly) from the predicted very high negative visual impact will also be significantly negative (although this is understated by the EAP in its impact assessment). LoGIS Visual Impact Assessment (November 2018):	Andre v/d Spuy	02-Jul-19	<b>Visual Specialist Response 48)</b> Noted. The visual impacts are stated in the VIA report.
20	49. A VIA by Mr. Lourens du Plessis of LoGIS is included as Appendix D12 to the DEIR. This VIA is dated November 2018.	Andre v/d Spuy	02-Jul-19	<b>Visual Specialist Response 49)</b> Noted.
21	50.1 In its impact classification system the greatest achievable level of impact significance (positive or negative) is “High” and where the specialist has determined that this is “where the impact must have an influence on the decision to develop in the area”, (LoGIS VIA, Section 6.7). Note that there is no “Very High” significance category. In terms of the LoGIS VIA rating system, a potential impact rated to be of “high” significance “must” profoundly determine whether the subject proposed development should be approved (High positive) or not (High negative).	Andre v/d Spuy	02-Jul-19	<b>CES:</b> CES considers the impact rating system adopted by the previous EAP to be reasonable and in line with industry best practice and relevant EIA Regulations.  <b>Visual Specialist Response 50.1)</b> The rating system was prescribed by the original EAP in order for them to standardise their impact rating tables across all specialist studies. The subsequent EAP did not query the rating system, nor did they prescribe another.
22	50.2 The LoGIS VIA (Section 10) finds that ALL of the identified 10 potential visual impacts of the proposed BWEF development (i.e. the Revised Option with 5 of 13 turbines removed from western side of the Stompneus Bay Road and the other 2 relocated southwards) will be negative and that 6 of these will be High negative, after the very limited mitigation implemented (see below). It is important to note that:	Andre v/d Spuy	02-Jul-19	<b>Visual Specialist Response 50.2.)</b> Noted
23	50.2.1 The very limited and incomplete mitigation implemented by the Applicant means that the post-mitigation impact ratings for the two impacts related to, respectively, the Kasteelberg heritage area and cumulative impact are not achieved. Thus these 2 impacts must maintain their pre-mitigation impact ratings of High negative. This is not reflected in the DEIR.	Andre v/d Spuy	02-Jul-19	<b>Visual Specialist Response 50.2.1.)</b> Noted and agreed.  <b>CES:</b> The cumulative visual impact has been noted as high negative in the EIR. Refer to Specialist Section 9.11 in the EIR. However, in terms of Kasteelberg heritage site, the LOGIS VIA (pg. 89) states the following: “The acceptability or effectiveness of the relocation of the seven turbines in mitigating the visual impact on the Kasteelberg hill and cultural landscape should ultimately be determined by the HIA that first raised this as a concern.” The HIA has concluded that the proposed relocation of the 7 turbines (i.e. layout alternative 2) reduces the likely impact of the development to the cultural landscape to moderate and within acceptable limits of change.
24	50.2.2 Two of the listed identified visual impacts are given as being High-Moderate and where no mitigation is possible. The allocation of a dual category is based upon some visual receptors subjectively being very offended (High negative) by the proposed development and others being offended to a lesser extent (Moderate negative). Proper understanding of the NEMA and integrated environmental management would recognize that under inter alia the required “risk averse and cautious approach” the most severe rating must be recorded alone and this is then mean that only the High negative rating must correctly be presented. These 2 impacts are therefore to be regarded by this reviewer as constituting high negative visual impacts alone.	Andre v/d Spuy	02-Jul-19	<b>Visual Specialist Response 50.2.2.)</b> Where the magnitude of the potential visual impact in the impact tables was indicated as moderate-high, the high value (8) were used and not the moderate value (6). See the footnote for section 6.7. in the report. This still calculated to a value of 60 for the impact significance ratings provided by the original EAP. Rating values shown below. <i>The significance weighting for each potential visual impact (as calculated above) is as follows:</i> <b>&lt;30 points: Low</b> (where the impact would not have a direct influence on the decision to develop in the area) <b>30-60 points: Medium/moderate</b> (where the impact could influence the decision to develop in the area) <b>&gt;60: High</b> (where the impact must have an influence on the decision to develop in the area) Using these categories of the significance value, the concluded impact would have been moderate (value = 60 (greater than 60 would have been high)). This ambiguous value based on this rigid rating table allows for some uncertainty whether a theoretical value of 60.1 or 59.9 could irrefutably place the impact within either a high or moderate category. I hence decided to err on the side of caution and concluded that the impact significance may in fact be high, especially considering the comments



#	I&AP Comments on Visual Impacts	I&AP	Date	EAP Response
				from I&APs located within marginal (or borderline) proximity to the proposed wind farm. I am therefor in agreement that, if there is a doubt, the higher of the two categories should apply.
25	50.3 All except two of the identified different potential visual impacts are beyond effective mitigation and the post-mitigation impact ratings remain unchanged. It was identified in the LoGIS VIA that the cumulative visual impact of the proposed BWEF (with the West Coast 1 WEF) and the visual impact on the Kasteelberg hill, the cultural landscape and sense of place related to this cultural/historical feature, and views of the Atlantic seaboard at Paternoster from the Vredenburg- Stompneus Bay, can be reduced from High negative. Recommended mitigation by the specialist was: 50.3.1 Relocation or removal of ALL of the turbines located west of the Stompneus Bay Road, 50.3.2 Reduction of the size of the BWEF turbines to equate those of the adjacent West Coast 1 WEF turbines (which are 50% smaller). 50.3.3 Consideration of the recommendations expressed in the final HIA report should be consulted in order to inform decision-making regarding the potential impact on the Kasteelberg cultural-historical feature.	Andre v/d Spuy	02-Jul-19	<b>Visual Specialist Response</b> 50.3.) Noted and agreed. <b>CES Response:</b> See also response 4 in Heritage section of the CRR.
26	50.4 Importantly, despite the recommended mitigation measures the LoGIS VIA Specialist warns (page 89) that, “The relocation of the turbine positions is not expected to influence the overall visual impact of the Boulders WF, due to the fact that the viewshed pattern will largely remain the same, with wind turbines still visible from all of the receptor sites.”	Andre v/d Spuy	02-Jul-19	<b>Visual Specialist Response</b> 50.4.) Noted and agreed. <b>CES Response:</b> See also response 4 in Heritage section of the CRR.
27	50.5 The Applicant only partly complied with the LoGIS VIA specialist’s recommended mitigation measures by relocating but five of the 13 turbines from the western side of the Stompneus Bay road. Two turbines were shifted from a northern position near Kasteelberg southwards but remain on the western side of the road. Neither did the Applicant act to have the turbines of the proposed BWEF reduced in size to match those of the West Coast 1 WEF. The LoGIS VIA states that the partial implementation of only one of the mitigation measures “falls short of meeting all of the visual impact mitigation requirements” (VIA , page 89)). This is a critical failure by the Applicant since the specialist has also stated (page 91 of the VIA) in reference to his recommendation that ALL of the turbines west fo the Stompneus Bay road be removed or relocated to the eastern side of the road, that, “It is recommended that the project proponent investigate the viability of relocating these wind turbines in light of the conclusions of the VIA, as well as the potential to reduce the overall wind turbine size in order to match the West Coast 1 wind turbine dimensions. Failing this the Boulders Wind Farm may not offer an ideal operating scenario from a visual impact perspective.”	Andre v/d Spuy	02-Jul-19	<b>Visual Specialist Response</b> 50.5.) Noted. <b>CES:</b> Seven turbines were relocated. This represents a concession on the part of the Applicant. While this represents an improvement, the overall impacts remain high. See also response 4 in Heritage section of the CRR.
28	50.6 Given the partial implementation of but a single mitigation measure (moving only 5 turbines across the road) no effective mitigation of all the other remaining high negative visual impacts is possible (a point acknowledged in Section 6.10 and elsewhere in the LoGIS VIA and confirmed in the “post-mitigation” impact ratings). Section 6.10 states; “The primary visual impact, namely the appearance of the WF (the wind turbines) is not possible to mitigate. The functional design of the turbines cannot be changed in order to reduce visual impacts,” and “Secondary impacts anticipated as a result of the proposed WF (i.e. visual character and sense of place) are not possible to mitigate. There is also no mitigation to ameliorate the negative visual impacts on roads frequented by tourists and which provides access to tourist destinations within the region.” Thus the specialist explicitly confirms that neither the “primary visual impact” nor the anticipated “secondary impacts” of the proposed BWEF are possible to mitigate. This is an exceptionally damning finding to the hopes of the Applicant, (and which was clearly recognized	Andre v/d Spuy	02-Jul-19	<b>Visual Specialist Response</b> 50.5.) Noted. <b>CES:</b> The CES VIA has been completed in addition to the LOGIS VIA and is only attached as an appendix (see Volume 1 – Final EIA – Appendix D-2). The findings of the LoGIS VIA were used to inform the EIR which has been submitted to the DEA.





#	I&AP Comments on Visual Impacts	I&AP	Date	EAP Response
	by the EAP and immediately resulted in the production of a second more Applicant-favoured second VIA by CES a thereafter).			
29	50.7 In terms of the LoGIS VIA criteria, the beyond-mitigation High negative potential visual impacts of the proposed BWEF determine that the proposed BWEF should not be approved. The potential high negative visual impacts amount to a “fatal flaw” in the proposed BWEF environmental application. This is clearly recognized by Mr. Du Plessis but he is unwilling to condemn his client’s BWEF project by concluding so. Instead he adopts a “fence-sitting” position by first stating that, “...it would be difficult to endorse the construction of the Boulders WF from a visual impact perspective. If no mitigation is undertaken the potential visual impacts and especially the potential cumulative visual impacts may exceed acceptable levels within the context of the receiving environment...”, but then he goes on to say that, “In spite of the above statement this does not imply that the Boulders WF project is fatally flawed.” It is clear that Mr. Du Plessis, by the objective criteria set by his own VIA, and then its findings, recognizes that there is indeed a “fatal flaw” situation but he decides instead to indirectly record such as a possibility under the circumstances and then to leave the required final critical conclusion of his findings in the hands of the authorities, per, “This does not, however, exonerate the project proponent and authorities from considering the potentially high levels of visual impact associated with the wind farm project (as proposed), when reviewing the desirability of the proposed development within the receiving environment”.	Andre v/d Spuy	02-Jul-19	<p><b>CES:</b> High visual impacts do not imply a fatal flaw.</p> <p><b>Visual Specialist Response 50.7.)</b> It is clear that the wind farm is intended to be constructed on private property and as such the VIA have no legal grounds to pronounce it as fatally flawed, but only to state the potentially high visual impacts, and to appeal to the deciding authority to consider these when reviewing the development application.</p>
30	50.8 The lack of courage of Mr. Du Plessis to condemn outright and clearly the proposed BWEF, as dictated by his very own results and findings, is unacceptable but does nothing to undermine the necessary conclusion: that the proposed BWEF is indeed “fatally flawed” on account of its high negative visual impacts and which are beyond mitigation. CES Visual Impact Assessment (December 2018):	Andre v/d Spuy	02-Jul-19	<p><b>Visual Specialist Response</b> It’s not a question of courage, but rather a question of conviction that prevents me from unequivocally denouncing the proposed wind farm as fatally flawed. A fatal flaw occurs when: 1) There is non-compliance with Acts, Ordinances, By-laws and adopted policies relating to visual pollution, scenic routes, special areas or proclaimed heritage sites. 2) Non-compliance with conditions of existing Records of Decision. 3) Impacts that may be evaluated to be of high significance and that are considered by the majority of stakeholders and decision-makers to be unacceptable. <i>Source: Oberholzer, B. 2005.</i> 1) As mentioned before, the area in question does not have protected natural or heritage status. 2) I’m not aware of any non-compliance related to existing Records of Decision. 3) That the impacts are expected to be high is undisputed. What worries me is that I am not sure what constitutes a <b>majority of stakeholders and decision-makers</b> in this case. I do not have access to all the relevant information to determine this <i>statistical majority</i>. I therefor leave it to the deciding authority to consider the impacts when reviewing the development application and to weigh in on the matter of whether the majority of stakeholders consider the impacts to be unacceptable, and thus fatally flawed.</p> <p><b>CES:</b> A high visual impact does not imply a fatal flaw.</p>
31	51 In circumstances which are unheard of in this reviewer’s 28 experience the DEIR is accompanied by a second, supposedly equal in weight, VIA to that of the LoGIS VIA. The second VIA has been conducted by the CES, the same firm as that from which the EAP and other employees managing the EIA hail. Most surprisingly is the fact that the CES VIA is dated December 2018 which is a mere month after the LoGIS VIA.	Andre v/d Spuy	02-Jul-19	<p><b>CES:</b> The CES VIA is in addition to the LOGIS VIA and is only attached as an appendix. The findings of the LoGIS VIA were used to inform the EIR.</p> <p><b>Visual Specialist Response 51.)</b> Noted.</p>
32	52 The superficial reason given for the CES VIA is alleged, by the DEIR, to be in order “to verify the findings of the Logis VIA”. The reason why the EAP has found it necessary to verify the findings of the LoGIS VIA is not stated anywhere – this omission of reason is a critical “oversight” since the reason for the proclaimed need is unknown to I&APs and others and the existence of the LoGIS VIA, which has already informed the DEIR, is sufficient. The EIA Regulations make no provision for a specialist impact assessment to be verified by another of the same kind.	Andre v/d Spuy	02-Jul-19	<p><b>Visual Specialist Response 52.)</b> Noted. The regulations do however allow for peer reviews of specialist reports.</p> <p><b>CES:</b> Given the importance of visual impacts, the Applicants considered it prudent to verify the findings of the Logis VIA. The CES VIA is in addition to the LOGIS VIA and is only attached as an appendix (see Volume 1 – Final EIA – Appendix D-2). Only the findings of the LoGIS VIA were used to inform the EIR.</p>





#	I&AP Comments on Visual Impacts	I&AP	Date	EAP Response
33	53 The CES VIA is a brief study that was conducted after the LoGIS VIA, the latter being a much more extensive study that was commissioned in 2017 already. The CES VIA clearly borrows heavily from the data and contents of the LoGIS VIA. The CES VIA notably makes no reference at all to the LoGIS VIA. It is suspected that the intention of the applicant-biased EAP is that the LoGIS VIA will fall away completely from the FEIR that is ultimately intended to be submitted to the DEA (such action would be illegal). I&APs would be well-advised to track the progress of the LoGIS VIA until final submission and with which it must be included.	Andre v/d Spuy	02-Jul-19	<b>CES:</b> At no stage will the CES VIA replace the LoGIS VIA. The CES VIA is in addition to the LOGIS VIA and is only attached as an appendix (see Volume 1 – Final EIA – Appendix D-2). Only the findings of the LoGIS VIA were used to inform the EIR which has been submitted to the DEA.  <b>Visual Specialist Response 53.)</b> Noted.
34	54 The CES VIA was undertaken by Mr. Michael Johnson (“author”) of CES who was still a student at the time that the LoGIS VIA was already almost complete. A certain Dr. Alan Carter is presented as being the “reviewer”.	Andre v/d Spuy	02-Jul-19	<b>Visual Specialist Response 54.)</b> Noted.
35	55 The EIA Regulations, Appendix 6, item 1, require that the credentials of the specialist be stated in the specialist report. Review of Mr. Johnson’s, the “specialist”, credentials reveal a professional who is significantly short of experience in the field of visual impact assessment (or any environmental field for that matter). The Applicant biased CES have attempted to counter this significant failing by appointing a reviewer (Dr. Carter) of Mr. Johnson’s work from within their ranks. Appendix 6 provides no provision for such a reviewer and it is expected that the specialist alone will be competent and experienced enough to fulfill the task without the oversight of another person. Mr. Carter has no legal empowerment to participate or interfere in the Appendix 6 duties of “the specialist” and his involvement has further damaged the credibility of the CES VIA report and its findings.	Andre v/d Spuy	02-Jul-19	<b>CES:</b> CES will not be drawn into Mr van der Spuy’s personal defamatory statements of its employees and their qualifications. The VIA will include the full list of team members, CV’s and specialist declarations, as per the regulations.  <b>Visual Specialist Response 55.)</b> Noted.
36	56 Another critical failure of the CES VIA is that it is not permitted in terms of the “accepted” (by the Competent Authority) Plan of Study for EIA. Section 8 (Plan of Study for EIA) of the Final Scoping Report by Savannah Environmental and dated April 2018 specifically states that: “The following assessments will inform the findings of the EIA... Visual Impact Assessment to be undertaken by Lourens du Plessis of LoGIS...”. According to the DEIR, the Plan of Study for EIA was approved by the DEA in June 2018. We can find no copy of this important documentation but according rely upon the advice of the FSR (which was accepted by the DEA) and the current DEIR. The Plan of Study for EIA cannot therefore be deviated from, as the EAP has allowed in this instance, without reverting back to the scoping stage and undertaking the necessary PPP towards producing a different Plan of Study which is informed by public engagement and would then have to be “accepted” by the DEA.	Andre v/d Spuy	02-Jul-19	<b>CES:</b> Mr v/d Spuy’s statement is incorrect. The CES VIA is in addition to the LOGIS VIA and is only attached as an appendix (see Volume 1 – Final EIA – Appendix D-2). Only the findings of the LoGIS VIA were used to inform the EIR which has been submitted to the DEA.  <b>Visual Specialist Response 56.)</b> Noted.
37	57 In light of the above serious procedural flaw the CES VIA must be dismissed from all consideration in the EIA. However, the problem for the applicant now arises that the CES VIA has been used to inform the findings of the DEIR to a very significant extent and thus the DEIA itself and its findings are invalidated by this unmandated VIA. The LoGIS VIA is thus the only VIA that has credibility in the proposed BWEF environmental application.	Andre v/d Spuy	02-Jul-19	<b>CES:</b> This statement is incorrect. As mentioned above there is no procedural flaw. The CES VIA is in addition to the LOGIS VIA and is only attached as an appendix (see Volume 1 – Final EIA – Appendix D-2). Only the findings of the LoGIS VIA were used to inform the EIR which has been submitted to the DEA.  <b>Visual Specialist Response 57.)</b> Noted.





#	I&AP Comments on Visual Impacts	I&AP	Date	EAP Response
38	58 Review of the CES VIA reveals that its real purpose is to attempt to neutralise the damning mitigation measures recommended in the LoGIS VIA and which are required in order to mitigate a few specific negative visual impacts. As the LoGIS VIA specialist concluded in his non-committal manner, even implementing all of the LoGIS VIA mitigation measures may not necessarily be sufficient to allow approval of the proposed BWEF. However, failure to implement all of the recommended mitigation measures will definitely render the BWEF as being “fatally flawed”. The Applicant, with the aid of the EAP and other employees of CES, has attempted to circumvent these limiting conditions by commissioning the CES VIA in order to nullify the unwelcome consequences of the LoGIS VIA recommended mitigation measures. The CES VIA attempts to do this by overstating the real, close to negligible, benefits of the Applicant’s implemented partial mitigation actions (i.e. relocating just 5 of the 13 identified turbines across the road and which Mr. Du Plessis sees as no more than “a step in the right direction”).	Andre v/d Spuy	02-Jul-19	<p><b>Visual Specialist Response 58.)</b> Noted.</p> <p><b>CES:</b> Given the importance of visual impacts, the Applicants considered it prudent to verify the findings of the Logis VIA. CES was therefore commissioned to conduct an independent VIA to confirm or deny the assessment of visual impacts per the Logis VIA were reasonable. The CES VIA assessed the final layout and their impact ratings were the same as those of the Logis VIA . The CES VIA is in addition to the LOGIS VIA and is only attached as an appendix (see Volume 1 – Final EIA – Appendix D-2). Only the findings of the LoGIS VIA were used to inform the EIR which has been submitted to the DEA.</p> <p>It should also be noted that in terms of Kasteelberg heritage site, the LOGIS VIA (pg 89) states the following: <i>“The acceptability or effectiveness of the relocation of the seven turbines in mitigating the visual impact on the Kasteelberg hill and cultural landscape should ultimately be determined by the HIA that first raised this as a concern.”</i></p> <p>The HIA has concluded that the proposed relocation of the 7 turbines (i.e. layout alternative 2) reduces the likely impact of the development to the cultural landscape to moderate and within acceptable limits of change. See also response 8 in the Heritage section of the CRR where the specialist argues: <i>“The VIA as relevant to the HIA pertains only to visual impacts to heritage resources, and not visual impacts more broadly. As such, recommendations made in the VIA are not necessarily pertinent to heritage resources, nor “must” they take precedence. The HIA contends 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.”</i></p> <p><b>BWF Representative Response:</b> Due to the acceptability of the remaining layout, the competitive nature of the Department of Energy’s programme, and to maximise Social Economic Development contributions, further mitigation was not feasible for the Applicant.</p>
39	59 Comparison of the 10 identified visual impacts of the LoGIS VIA with those of the CES VIA (Table on page iii) show that the CES has manipulated and amalgamated the visual impacts in such a manner as to reduce the number of high negative visual impacts, and more importantly, to create the impression that the recommended mitigation (as suggested by the LoGIS VIA), as partially implemented by the applicant, is indeed sufficiently effective to regard the potential visual impact of the BWEF as not being a fatal flaw. The manipulated efforts of the Mr. Johnson and Dr. Carter of the CES are seen in the following examples from Table on page iii of the ES VIA:	Andre v/d Spuy	02-Jul-19	<p><b>CES:</b> As can be seen in the responses that follow. This is not true.</p> <p><b>Visual Specialist Response 59.)</b> Noted.</p>
40	59.1 The impact given as “2e: Visual impact of wind turbines on Kasteelberg” is allocated a high negative rating pre- and post-mitigation. In other words mitigation is not possible for this particular impact according to the CES VIA. The implication of this is that there now rests no obligation on the Applicant to implement any mitigation measures. Such is however untrue according to the Logis VIA which has stated that “(m)itigation of this (high negative) impact is possible and entails the relocation of the wind turbines west of this road to the east of the road” and consideration of the findings of the HIA and the effectiveness of such mitigation is seen by Mr. Du Plessis to reduce the High negative impact rating to a Low negative rating (LoGIS VIA, Section 10, 3 <sup>rd</sup> bullet point).	Andre v/d Spuy	02-Jul-19	<p><b>Visual Specialist Response 59.1)</b> Noted.</p> <p><b>CES:</b> The CES VIA assessed the final layout (i.e. layout alternative 2). This layout attempted to mitigate the impact by moving the 7 turbines originally located north of Kasteelberg.</p> <p>The HIA has concluded that the proposed relocation of the 7 turbines (i.e. layout alternative 2) reduces the likely impact of the development to the cultural landscape to moderate and within acceptable limits of change. Given the findings of the HIA this impact has been reduced to MODERATE in the CES VIA before and after mitigation.</p>





#	I&AP Comments on Visual Impacts	I&AP	Date	EAP Response
41	59.2 Also, the impact given as “Cumulative Impact 1: Visual impact of facility construction and operation ” is allocated a high negative rating pre- and postmitigation. In other words mitigation is not possible for this particular impact according to the CES VIA. As before, the implication of this is that there now rests no obligation on the Applicant to implement any mitigation measures whatsoever. Such is however untrue according to the Logis VIA which has stated hat “(m)itigation of this (high negative) impact is possible, and entails the selective removal or relocation of specifically identified wind turbine positions in relation to specified sensitive visual receptors. Additional to this the potential reduction in size of the proposed turbine structures should be considered. The post mitigation cumulative visual impact is expected to be of moderate-low significance”, (LoGIS VIA, Section 10, 4th bullet point, page 92).	Andre v/d Spuy	02-Jul-19	<b>Visual Specialist Response 59.2)</b> Noted.  <b>CES:</b> As mentioned above, The CES VIA assessed the final layout. This layout attempted to mitigate the impact by moving the 7 turbines originally located north of Kasteelberg. Further mitigation is not feasible and thus the impact will remain high post-mitigation.
42	59.3 The CES VIA is liberally characterized by euphemistic (and inaccurate) statements designed to downplay the real high negative visual impacts of the proposed BWEF whereas the LoGIS VIA states that the “construction and operation of the proposed Boulders Wind Farm and its associated infrastructure, will have a high visual impact on the study area”. For instance the CES VIA states that “the HIGH residual visual impacts cannot be completely mitigated” – the truth is that they can hardly be mitigated at all! In attempting to protect the Applicant’s interests the Mr. Johnson goes further to unashamedly step outside of its proclaimed field of expertise in an attempt to motivate and justify the proposed BWEF (page iii – iv) according to unsubstantiated ideas but which are anyway irrelevant to the disciple of visual impact assessment. But the CES VIA does not stop there – it claims that these benefits are sufficiently large to justify the “potential losses of scenic resources” and then Mr. Johnson and Dr. Carter recommend that the proposed BWEF “proceed”.	Andre v/d Spuy	02-Jul-19	<b>CES:</b> The executive summary and conclusion has been amended in the CES VIA (see Final EIR Specialist Report Volume 2 - L.  <b>Visual Specialist Response 59.3)</b> Noted.
43	60 It must be concluded from the credible evidence (which excludes that produced by the CES VIA) that the Applicant has implemented only one of the recommended mitigation measures, and that only partially. Thus the BWF is definitely fatally flawed from a visual impact (and secondary impact) perspective. It is important to note that even if the Applicant had implemented all of the recommended mitigation measures the proposed BWEF would still not necessarily be spared the incurrence of a “fatal flaw” from the visual impact aspect	Andre v/d Spuy	02-Jul-19	<b>CES:</b> This issue is dealt with in the items above.  <b>Visual Specialist Response 60.)</b> Noted. Also refer to 50.7.
44	61 This review has established that the Mr. Johnson and Dr. Carter, and CES, have intentionally manipulated the EIA in order to favour the Applicant’s interests. They also have no legal empowerment to be involved in any capacity in the environmental application. Their work lacks any credibility and they have contaminated the environmental application beyond repair.	Andre v/d Spuy	02-Jul-19	<b>CES:</b> CES will not be drawn into Mr van der Spuy’s personal defamatory statements of its employees and their qualifications. The VIA will include the full list of team members, CV’s and specialist declarations, as per the regulations.  <b>Visual Specialist Response 61.)</b> Noted.
45	62 In dealing with the potential visual impacts, the DEIR (Section 9.11.1) itself conveniently (to the Applicant) carries through the basic findings and unjustified motivations of the CES VIA and concludes that “potential losses of scenic resources are not sufficiently significant to present a fatal flaw to the proposed project”. The truth and accuracy of this conclusion however relies directly upon the fatally flawed CES VIA. Accordingly, the CES VIA now similarly flaws and discredits the DEIR and its findings. The EAP’s willingness to allow and evidently participate in such a corrupt and unethical manipulation of the EIA process deserves formal redress. The same applies to others of CES who lack the legal mandate to be involved in the management of the application.	Andre v/d Spuy	02-Jul-19	<b>CES:</b> The CES VIA is in addition to the LOGIS VIA and is not included in the Specialist Assessment at Section 9 but only appears as an appendix (see Volume 1 – Final EIA – Appendix D-2). Only the findings of the LoGIS VIA were used to inform the EIR which has been submitted to the DEA.  <b>Visual Specialist Response 62.)</b> Noted.





#	I&AP Comments on Visual Impacts	I&AP	Date	EAP Response
46	VISUAL IMPACT: We purchased this property for the peace, serenity and uninterrupted views it offers. Now we are being "bullied" into having these HUGE, ugly, noisy structures erected right in front of our properties overlooking Paternoster.	Bootha, Christa (Britannica Heights)	02-Jul	<b>CES:</b> As in 1 above.  <b>Visual Specialist Response:</b> Noted. The potential visual impact from Britannica Heights is stated in the VIA report.
47	HEALTH: Then there is the FLICKERING of light by day AND night, as well as the blades glinting in the sun. How on earth can we as residents who were here FIRST be subjected to this????	Botha, Christa	2019/07/02	See response 12 above
48	I would like to bring the following to the attention of Mr Du Plessis, the author of the VIA: (i) Langstrand, the beach to the north of Paternoster which stretches between first and second Mosselbank, is the main walking beach of inhabitants and visitors to Paternoster. It is the beach which international tourists often refer to as one of the best beaches in the world and is one of the most important tourist attractions in Paternoster. A viewshed analysis is therefore required from this beach especially in respect of the proposed turbines to the north of Kasteelberg. (ii) Par 6.8.1 includes a list of properties within a 5 km radius of the wind turbine structures which will experience a high visual impact. We own the following properties which are included in this list: (a) Swartrug, (b) Portion 37/23, (c) Portion 36/23, (d) Farm 1050, and e) Stand 1518 which borders the above properties and on which SOBH is built, should be added to this list. Mr Du Plessis states that no mitigation is possible in respect of these properties. Viewshed from these properties are required to evaluate the visual impact. (iii) Seemingly the author did not consider that in terms of the Saldanha Bay Spatial Development Framework two of these properties, Farm 1050 and Portion 37/23, had already been designated for the future extension of the town — see Annexure "A". These areas front onto Langstrand and cover approximately 35 ha. They are being targeted for the development of tourism facilities which will have a connection to (i) Strandloper Ocean Boutique Hotel (SOBH). When the question was raised at one of the recent public participation meeting in Paternoster, as to how these areas were treated in the VIA, the response was that only already developed areas were taken into account. Although it is acknowledged that an EIA still needs to be done for this area, this approach seems incorrect as it is highly likely that these areas will be developed. Some approvals in fact already exist and Farm 1050 had been re-zoned to "Resort 2". A more realistic approach would be to allocate a realistic probability to the development of these areas which should then be taken into account in the VIA. Furthermore, an in principle agreement had been reached with Groot Paternoster Nature Reserve ("GPNR") that the remaining area between the northern border of the town on the SDF and GPNR as well as a part of Swartrug, will be re-wilded and consolidated into the GPNR. A number of glamping sites will be established on the re-wilded areas. It needs to be considered that these highly impacted areas will be populated by highly sensitive receptors who will especially be affected by the turbines to the North of Kasteelberg. (iv) The authors impact statement on page 91 states that the construction of the proposed BWF would have a high visual impact on the Kasteelberg Hill and proposed as mitigation that the wind turbines to the west of the Vredenburg-Stompneus Road be relocated to the east of this road. This mitigation had not been included in the current proposals. He also proposed that the reduction of the wind turbine size to match that of WC1, but this has also not been included. He continues in his conclusion that if the Paternoster plateau and/or Kasteelberg had a formal environmental status it would have been considered a fatal flaw from a visual impact perspective. I want to bring to his attention that the only reason why Kasteelberg had not been declared as a heritage site (grade II) is because the land owners refused to sign such a declaration. A conflict of interest also exists as one of the land owners (Kasteelberg straddles over two farms), is also a proponent of the BWF project. HWC indicated during a recent meeting that for purposes of the evaluation of the proposed BWF project that Kasteelberg should be treated as a heritage site despite the fact that the declaration could not have been completed	Brand, Deon	02-Jul	<b>CES:</b> In response to the relevance to considering 'future' potential developments, this is not appropriate or required given that these have not yet been proven, have not yet been authorised and may not be authorised particularly in sensitive coastal areas.  <b>Visual Specialist response:</b> i) I was not made aware of Langstrand being a specific sensitive visual receptor (such as the Paternoster main beach was – refer Section 6.4.) by the previous EAP. The Langstrand is however addressed during Section 6.6. (relating to the <i>Potential visual exposure of the Boulders Wind Farm wind turbines to Paternoster and surrounds</i> ) and the visual exposure of the wind turbines on this area is indicated on Map 16. Even though it was not mentioned by name the viewshed indicated "... that <b>the beach</b> further northwards will be shielded from the turbines by the coastal dune east of the beach". The top of the dune itself and the properties (Farms 1050, 37/23 and 36/23) will however be exposed to the turbines. ii) As stated above the viewshed (visual exposure) of these properties to the wind turbine structures are indicated on said map (see below). Extract: <i>"The adjacent landowners (indicated as Farms 1050, 37/23 and 36/23) will also be exposed to the wind turbine structures. These properties are undeveloped at present, but objections have been lodged against the Boulders WF, due to the wind farm's proximity to the farms and its perceived visual impact on the future development potential of these properties."</i> iii) These properties were treated the same as any of the other sensitive visual receptors in the report, due to objections raised by the landowner(s). The statement "that only already developed areas were taken into account" is untrue as these properties are expressly stated in Section 6.6. as potentially experiencing a high visual impact. This statement is made regardless of the development status of these properties (see below). Extract: <i>"The WF may have a high visual impact on the following observers: Residents of: Kaalberg/Britannica Heights, Morkelsdam, Swartrug, Portion 37/23 (adjacent land owner), Portion 36/23 (adjacent land owner), Farm 1050 (Strandloper Investment Trust), Uitkomst, Besterskraal, Noodhulp, Sandfontein, Nieuwe Rust, Waterklip, Droëvlei."</i> iv) There is a section (6.8.3.) in the report that deals with this potential visual impact on the Kasteelberg hill (informed by the HIA as a sensitive visual receptor), that is deemed to be of high significance and which provides potential mitigation measures in the form of the removal of selected wind turbines. The impacts are expressly stated and mitigation measures are proposed. The <b>reason</b> why this area is not formally protected is irrelevant to the outcome of the VIA, and if there is any assumed protected heritage status granted to it by HWC, it should form part of, and be addressed in the HIA. To that end, the statement in the VIA is relevant until such time as the Kasteelberg Hill is promulgated (legally declared) as a protected heritage site."



#	I&AP Comments on Visual Impacts	I&AP	Date	EAP Response
	when it was attempted in the past.			
49	Langstrand beach As mentioned in 2 (i) above, Langstrand, the beach to the north of Paternoster is the main walking beach for inhabitants and visitors to Paternoster. It is the beach which international tourists often refer to as one of the best beaches in the world and is one of the most important tourism attractions in Paternoster. The proposed turbines to the north of Kasteelberg will directly come into the view of this beach.	Brand, Deon	02-Jul	The responses in 61 above are also relevant here.
50	WIND FARMS VISUAL IMPACT ASSESSMENT: Assessing the visual impact of wind farms: A comprehensive local solution 4. December 14th, 2017, Published in Articles: Energize 5. by Mike Rycroft, EE Publishers "Objections to large structures such as mobile phone towers, electricity pylons and other large structures are common, and justified. Large wind farms can have significant visual impacts for affected receptors, particularly those related to the tourism industry. Scenic resources also form part of the 'National estate' and are therefore protected by heritage legislation. Wind energy producers need to understand these issues when planning a wind farm to be successful in their applications." "Many wind farm applications worldwide have been rejected because of visual aspects. This seems to be common in England and Scotland, which are understandably lands of great scenic beauty. Objections to wind farms are based on a number of common issues, included alleged health problems, threat to wild life, and in some cases claims that they are stealing the wind, but the visual aspects seems to be the most common, the most reasonable and also the most assessable." In spite of there being unrealistic objections, there is no doubt that some planners have attempted to steamroller any objection to wind, and to play down the impact of wind farms on a community or a place. Common arguments are based on the greater common good and financial benefits. One argument offered is that they are symbolic of the change to clean energy and should therefore be accepted irrespective of their impact. No doubt an obsession with renewable energy, and the profit motive has clouded the vision and dulled the sensibilities of numerous people, who fail to see any problems with wind turbines." Assessment methods, standards and practices "Although there are a number of accepted impact assessment methods and standards in use, there appears to be a wide variation in interpretation and application. In an attempt to develop a "best practice" approach for visual specialists, EIA practitioners and authorities involved in the EIA process, a visual Guideline document has been established by the Department of Environmental Affairs and Development Planning (DEA and DP) of the provincial government of the Western Cape (PGWC), [3] which cover the VIA portion of an EIA on any project, not specifically related to wind farms. These guidelines are applied in a specific manner when assessing wind farms."https://www.ee.co.za/article/assessing-visual-impact-wind-farms-comprehensive-local-solution. Even with a VIA there are many interrelated problems [1]: The sites selected for wind farms, based on wind potential, are often in conflict with scenic and heritage resources, as well as protected wilderness areas. There is an inherent conflict between renewable energy resources and landscape. Wind turbines not placed in urban areas but in the country, which naturally increases the chance of encroaching on country or scenic areas which are valued. High wind sites are often located on ridges or high places, which are seen as local scenic places. Unlike heritage resources, for which there is a national data base and rating system, as well as legislation, there is no similar data base for our scenic resources, or even what	Engels, Anneline	02-Jul	<b>Visual Specialist response:</b> Noted. The potential visual impacts are stated within the VIA report. The report also indicates which areas and which sensitive visual receptors are expected to be influenced, as well as providing a clear description of the affected environment and land uses. The VIA report further concedes that there are shortcomings in uniformly assessing the visual impacts, especially when addressing cumulative visual impacts (see below). Extract: <i>"The visual impact assessor is required (by the competent authority) to identify and quantify the cumulative visual impacts and to propose potential mitigating measures. This is often problematic as most regulatory bodies do not have specific rules, regulations or standards for completing a cumulative visual assessment, nor do they offer meaningful guidance regarding appropriate assessment methods. There are also not any authoritative thresholds or restrictions related to the capacity of certain landscapes to absorb the cumulative visual impacts of wind turbines."</i> I can however state that I am familiar with the accepted procedures and processes required for VIAs (e.g. Guidelines for Involving Visual and Aesthetic Specialists in EIA Processes – DEA&DP), as referenced in the above quoted article, and I utilise the principles and recommendations stated therein to successfully undertake visual impact assessments. Also, please refer to a previous response regarding the quantification of the visual impact, and the requirements of impartiality and independence of the VIA practitioner.





#	I&AP Comments on Visual Impacts	I&AP	Date	EAP Response
	<p>constitutes a scenic resource. Scenic value and “sense of place” can be very subjective. Although guidelines are available for visual specialists, there are still wide discrepancies in approaches to visual assessments and rating of scenic resources.” “A wide range in the standard of visual impact assessments (VIA) that are carried out. The guideline lists some of the current problems associated with visual and aesthetic assessments undertaken as part of the EIA process include the following [4]: A lack of understanding of the landscape processes that are responsible for specific visual qualities or scenic resources of the area. A lack of clarity in the methodology and determination of impact ratings, as well as inconsistency between different assessments. A lack of objectivity, or conflict of interests, especially where the assessment is carried out by the same firm that is representing the proponent. The risk that the ratings of impacts are tempered by the fact that the proponent is paying for the VIA. • Guidelines, • The guidelines have simplified the process by means of a matrix formed by the visual rating of the area and the category of development involved. Table 1 shows the categories of development covered in the guideline.” From Table 1 it can be seen that wind farms fall into category 5. Table 2 lists the degree of impact expected. The impact matrix is shown in Table 3. From Table 3 can be seen that wind turbines should normally range from moderate to very high visual impact, and would justify a visual impact assessment in all cases. From this visual Guideline document it can be seen that wind farms fall into category 5 - “Very high visual impact expected ” regarding “Areas or routes of high scenic, cultural, historical significance,” which is what we have in this area with Brittanica Heights, Paternoster and other surrounding holiday or tourist destinations. See the following extract: “Incorporating the visibility of coastal energy infrastructure into multi-criteria siting decisions” Panel: RobertGriffinaNicolasChaumontaDouglasDenuaAnneGuerrybChoong-KiKimcMaryRuckelshausb  <a href="https://www.sciencedirect.com/science/article/pii/S0308597X15002754">https://www.sciencedirect.com/science/article/pii/S0308597X15002754</a>. Visual features on the landscape play significant and wide-ranging roles in people’s lives. Research has found links between nature viewing and many aspects of well-being [1], [2], real estate prices and views [3], [4], and a general public preference for natural and agricultural views accompanied by modest levels of development [5], [6]. Recent high profile opposition to offshore wind farms in the U.S. and Europe has demonstrated how visual impacts can play a significant role in determining the level of public support for large scale development in sparsely developed land and seascapes [7], [8], [9], [10]. Commonly standing 100 m or more, wind turbines are visible from as far as 30 km away [11]. The exposure that produces favourable wind conditions coincides with high inherent visibility and the potential for negative visual impacts to neighbouring communities. Evidence from communities adjacent to land-based wind farms indicates that, while support for development is conditional on many factors [12], visibility concerns are consistently and frequently cited [13], [14]. In coastal settings they are a top concern [7], [15] and surveys have shown that coastal residents [16], [17], [18] and visitors [19], [20] are willing to pay to site wind farms further from shore where they are less visible. Public opposition to infrastructure development imposes a financial burden on local communities and developers via costly litigation and, in the context of wind energy, threatens the growth prospects of a globally important renewable energy source. Despite this, landscape-level siting decisions for wind energy development are largely conducted without formal consideration for visibility prior to the siting decision. While visual impact analysis has reached a remarkable degree of sophistication over the last 30 years [21], the post-hoc nature of this analysis means that site selection is missing potentially important impacts and tradeoffs related to visibility, resulting in social welfare losses even in the absence of litigation [22]. To incorporate visibility considerations into infrastructure siting requires inverting the traditional lens of analysis from assessing visibility from a given point source to assessing where people in the study area can see over the landscape. The 360° range of visibility from an observation point, commonly known as a viewshed, is limited by such factors as the acuity of the human eye, intervening topography,</p>			





#	I&AP Comments on Visual Impacts	I&AP	Date	EAP Response
	<p>the curvature of the earth, and weather .In the fields of landscape planning and archaeology, overall landscape visibility has been conceptualized by the term cumulative viewsheds, the aggregate visibility from multiple observation points [23]. This approach is beginning to attract attention in siting infrastructure [24], [25]; however to-date it has been conducted only from the perspective of a handful of observation points – generally scenic overlooks and population centers.” As a tourist destination which attracts large numbers of tourists and creating an increasing number of jobs in the tourist industry, as well as a quiet and safe retirement destiny for a large number of elderly people, it would be detrimental rather than beneficial to develop another ugly industrial wind farm killing birds and bats, and covering large areas of rural farm land otherwise contributing to the beautiful scenery and “feel” of our West coast fisherman’s villages. Who would find it acceptable to develop a wind farm with 45 turbines right next to a retirement village? Britannica Heights mostly has elderly retired/ residents, a lot of these small holding property owners are overseas or elsewhere, and were never contacted to inform them of this proposed development right next to their investments!</p>			
51	<p>So how can the presented study of property values being affected or not, by J.F. du Toit, PROPERTY EVALUATION STUDY REPORT of 27 July 2018 even TRY to convince us that our properties would be higher in value, or even easily sold with the close proximity of the 45 wind turbines forming this typical “forest effect,” with mitigation on a much smaller area and combined with West Coast One? No, we are NOT convinced! Objections raised by me during the former Savannah Environmental company’s EIA were ignored in the recent proposal, convincing me that the developers and assessors have NO concern for us as residents and view our objections as irrelevant! See previous objections: “The most important issues that are likely to be raised and will need to be assessed during the EIA include: Local communities and individuals - Potential impact on rural sense of place (this will be closely linked to the visual impacts);</p>	Engels, Anneline	02-Jul	<p><b>CES Response:</b> The first response above is also relevant here. Please see response number 8 to your comments in the Tourism/Property values section of the CRR.</p>
52	<p>The comments below are the last part of a lengthy submission, most of which has been posted in the EIA Process section of the CRR. Only the visually related comments are included here.</p> <p>5. The Visionary: This poor soul is burdened with one of the most glaring impacts of the wind farm. The LOGIS chap had a good bash at the visual impact study. For some reason, CES seems to have repeated the study, using the skills of the rather youthful, but capable Mr Johnson and rubber-stamped by a PhD of plant science / accountant - huh? Both studies seem to rely on some procedure which attempts to quantify or assign a "ranking" to the unquantifiable. Visual impact can be very simply assessed by considering the following parameters: • To what degree does the imposed structure differ from the arena in which it will be placed? How does the size of the installation compare with the size of the dominant features / terrain of the arena? The proposed wind farm's visual impact is staggeringly high on both counts. It doesn't "take- off" from anything in its local environment. A vast army of glaringly white towers, 120 m high, each supporting a huge 103 m rotor - which happens to be moving for part of its life. Taller than the local hills and ridges! Flashing lights at night. And the local arena? Low level scrubland, farm land, very small pockets of rural settlement and a few low hills and ridges. Anything in common? Nothing at all.</p> <p>The main EIR blatantly diminishes the impact of the wind farm by greatly inflating the distance of Britannica Heights (part of St Helena Bay for those who don't know) from the wind farm. The nearest turbine is about 3.9 km from Britannica Heights. The "7 km" given in the text puts St Helena Bay about 1 km into the sea. Nothing like a bit of number massaging. The main EIR also downplays the scale of the wind farm. Limiting the calculation of the size of the installation to the sum of the areas of equipment footprints and roadways ignores the massive area and volume spanned by the installation. The road areas and turbine foundation areas contribute little to the visual impact. The spanned area and spanned volume are what matter. The spanned area of the installation is above 800 ha, while the spanned volume is about 1.5 km<sup>3</sup>. Compare that to the 24 ha given in the report. The volumetric span isn't even mentioned. For comparison,</p>	Marx, Matthew (BH)	02-Jul	<p><b>Visual Specialist Response regarding the quantification of the visual impact:</b></p> <p>In spite of the fact that <i>visual impact</i> is inherently a subjective concept, I have to be impartial, independent and as scientific about it as possible or else I stand to lose all credibility as a specialist consultant. I include an extract from the report stating as much: “<i>The visual impact assessment practitioner takes great care to ensure that all the spatial analyses and mapping is as accurate as possible. The intention is to quantify, using visibility analyses, proximity analyses, photo simulations and the identification of sensitive receptors, the potential visual impacts associated with the Boulders WF. These processes are deemed to be transparent and scientifically defensible when interrogated.</i>”</p> <p><b>But, visual impact is ultimately a subjective concept. The subjects in this case are the residents and visitors of the Paternoster plateau, and all Interested and Affected Parties (I&amp;APs) who registered comments, complaints and concerns through the Public Participation Process (PPP) of this EIA process. They, together with the spatial analyses, inform the VIA practitioner as to the severity and ultimately the significance of the potential visual impact.</b></p> <p>Response regarding comments on the photo-simulations: The VIA report available from CES’ website has been severely degraded (i.e. the quality of the images in this report is poor) due to the compressed PDF format. I recommend that the original (uncompressed) quality report and images be made available to I&amp;APs upon request so as to more clearly convey the original intended assessment and visualisation of potential visual impacts in the VIA report.</p> <p><b>CES:</b> The VIA has included the full list of team members, CV’s and specialist declarations, as per the regulations. Relevant experience of each team member in the field on VIA’s is also noted in the VIA.</p> <p>However, it should be noted that Dr Alan Carter, is a member of Environmental Assessment Practitioners Association of South Africa (EAPASA); South African Council for Natural Scientific Professions (SACNASP); and International Association for Impact Assessment (IAIA) under which he has taken oaths to undertake his duties as an EAP as per their stringent criteria. Furthermore, Dr Alan</p>



#	I&AP Comments on Visual Impacts	I&AP	Date	EAP Response
	<p>Tesla's gargantuan Gigafactories have a footprint of about 100 ha and are one to two stories high. Small fry! Would anybody seriously propose putting a gigafactory in the valley? Lord forbid!</p> <p>And finally, there are the visual simulations of the installation from various view points. The most visually affected area is unquestionably Britannica Height. The valley towards Paternoster is the main view and from its elevated perch - about 160 m above sea level - the most breathtaking view. This was made very clear to the CES folks who met up with I&amp;AP's on the hill during June 2019. What was also made clear was the stark visibility of the existing West Coast One wind turbines. The LOGIS study made some attempt to simulate the future view by superimposing the new turbines on a landscape view clearly taken with a camera. Anybody who has used a camera to try and capture the majesty of a big, red sun at sunset or a big, white moon at moonrise, will know the disappointment that follows the discovery that cameras are not good at capturing the scale of distant objects. They don't see vistas like the human eye. The LOGIS images fail on three counts: 1) The exaggerated diminishing of distant objects in the image</p> <p>2) The image was taken from immediately behind one of the local houses. 3) Cameras greatly exaggerate the size of nearby objects. Thus we have a huge house in the foreground, making the wind turbines look very small. The horizon behind the wind farm happened to be hazy and white, masking the white turbine blades in the image. The CES simulation was almost comically bad. It would be comical if it wasn't so shocking at biasing this major impact out of the picture as it were. The terrain looks bizarre, as if CES didn't even bother to take his photograph from the site, but rather employed a "stand-up" view from google.maps. The location doesn't even resemble the local terrain, with the hills and ridges smoothed out and the foreground presenting as a blur of God-knows-what. The "before" shot of West Coast One shows turbines that are barely perceptible without the use of a magnifying glass. Pleasingly for the Paymaster, the new giants are also not obviously present. But everybody at the June 2019 meeting with CES agreed on one thing - the view of West Coast One in the studies bore no remote resemblance in scale to what they could actually see from site. If just one example of outrageous bias could fatally flaw this EIA, this would be it.</p>			<p>Carter has extensive experience with the Visual Impact Assessments of Wind Energy Facilities.</p> <p>Site visits were conducted by both visual specialists. The LOGIS report represented Photomontages and the CES report represented 3-D simulations. CES acknowledges that the quality of the images in the reports made available on the CES website were degraded due to the compressed PDF format. Mary Ralph raised this issue during the PPP. CES then requested full quality photo simulations and sent these to Mary Ralph. She also asked if she could share these with her Britannica Heights neighbours. The full quality images were also in the hardcopy printed reports which were made available during the public review period and were printed on A0 posters that were presented at the focus group meetings and public open day.</p>
53	<p>It is noted that in the Visual Impact report of Logis (November 2018) that in paragraph 6.1, the paragraph designating "Towns, homesteads and roads expected to be visually influenced include:" that the Groot Paternoster Nature Reserve is not included. As a resident of the Groot Paternoster Nature Reserve I hereby certify that West Coast 1, and therefore the Proposed Boulders Wind Farm, which will be much closer, is clearly visible from the road which runs through the centre of the Reserve, the access road and a number of the homesteads. The flashing lights of the turbines at night are also the only light pollution intruding into the rural inland view. The above exclusion, and subsequent rebuttal of the validity of this exclusion, renders the Logis Visual Impact Report thereby dubious in the validity of its statements and throws into question the constraints applied throughout the said report of the distance from which viewsheds are to be considered of validity.</p> <p>The CES Visual Impact Report in the "Summary of Impacts" table on page 57 of the said report, states in Impact 3, Impact of Night Lights on Landscape is designated as moderate. As per the above, and viewed from close proximity of the coast and at a linear distance of 11,5 km, the lights of West Coast 1 are clearly visible and are an unavoidable intrusion on the night view. The nighttime impact of the lights of the Proposed Boulders Wind Farm which will be closer in its proximity to the coast, must therefore considered of HIGH visual impact. I also find that the statement made on page iii of the Executive Summary of the Visual Impact Report stands in direct contradiction of the findings of the report. Such statement being in the Concluding Remarks: "While the HIGH residual visual impacts cannot be completely mitigated, these should</p>	Pickford, Peter	02-Jul	<p><b>Visual Specialist Response:</b> 1) I was not made aware that the Groot Paternoster Nature Reserve (in its entirety) was a specific and objecting sensitive visual receptor by the previous EAP. The residences on this reserve are however indicated as such (Map 15: Proximity analysis and potential sensitive visual receptors). These residences were indicated as not being visually exposed to the proposed Boulders wind farm, although higher-lying areas within the reserve will be exposed at distances exceeding 5km. Had the entire reserve been included as a sensitive visual receptor the visual impact within exposed areas would be indicated as moderate-high (depending on the observers' aversion to the wind farm), and would similarly have been included under the following section of 6.8.1. (See below). Extract: <i>"The following receptors are provisionally included (as having a visual impact of potentially high significance), due to their status in marginal proximity (5-6km) to the wind turbine structures, and due to the observer's potential aversion/sensitivity to the wind farm development. Residents of/visitors to: Kalkoond; Paternoster (incl. scenic viewpoints, Stand 1518 and all receptors located in and in close proximity to the town); Pelgrimsrust; Die Krans; Groot Paternoster Private Nature Reserve.</i> Recommendation: That the entire Reserve be included as a specific (objecting) sensitive visual receptor within Section 6.4. (Viewer incidence / viewer perception). That the potential visual impact be reflected in Section 6.6. and Section 6.8.1. (as above). That the position of the affected areas within the reserve be indicated on Map 18 (Potentially affected sensitive visual receptors).</p> <p><b>CES:</b> The overall significance of nightlights has been identified as moderate. One needs to consider that this is not a new impact (i.e. there are already flashing lights from the WC1), not all turbines will</p>



#	I&AP Comments on Visual Impacts	I&AP	Date	EAP Response
	<p>be considered within the context of the following: The wind farm is not permanent, and the turbines and other superstructure will be removed on decommissioning of the wind farm; The visual impacts cannot in ANY WAY be mitigated. And further: The above statement is long stretch of the term “not permanent”. The wind farm is proposed for a period of 25 years which is the period associated with a whole generation in terms of society and is considered as LIFE in terms of a prison sentence. The above statement does NOT in any way mitigate the visual impact of the Proposed Boulders Wind Farm and is further directly contradicted by CES as the authors of the report themselves, when on page 42 they state: “Table 7: Criteria used to rate the significance of an impact .Long term - Between 20 and 40 years (From a human perspective almost permanent).”</p> <p>It is the opinion of the author that, read in conjunction with the Opening Statement of this record of comment and further, in consideration of the very high potential of the visual impact to have far reaching ramifications on the socio economic circumstance of the West Coast Peninsula, the Visual Impact Report, recording the visual impact of the Proposed Boulders Wind Farm as HIGH for all factors including local, distant and very distant viewsheds, renders the Proposed Boulders Wind Farm fatally flawed for the proposed site. Alternative sites must be investigated. In addition to the above, I wish to endorse and hold as valid the report and findings of Mr. Andre van der Spuy of AVDS Environmental Consultants, employed by the conservation bodies and individuals of the West Coast Peninsula community, to examine the draft EIR and his comments on the Visual Impact Report reports of CES and Logis, which report is attached with this letter of comment as annexure B.</p>			<p>have lights installed, generally, people are indoors at night and the primary view of most houses is towards to ocean.</p> <p>The temporal scale of the impact is one criteria that is considered when rating the significance. The wind farm is proposed for 20 years after which the turbines and other superstructure will be removed on decommissioning. The site will then be rehabilitated. Therefore, the impact will be long-term and not permanent.</p> <p>This was not the only site considered for this project. Additional information on the Developer’s site selection process has been added to the Final EIR. See also responses to the issues about alternative sites in the Alternatives section of the CRR.</p> <p>A high visual impact does not imply a fatal flaw. 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. The EIR presents the findings of these reports of which CES has considered when making the recommendation.</p>
54	<p><b>Turbine Height:</b> General: It is noted that the turbines of the Proposed Boulders Wind Farm are to have a hub height of 120 meters and a blade height of 165 meters. I include a figure of comparison here between the Proposed BWF and the established West Coast 1 Wind Farm. The central turbine in the diagram below being the comparative size for West Coast 1 and the turbine to the right being representative of the Proposed Boulders Wind Farm .This renders the entire Proposed Boulders Wind Farm development of substantially greater overall impact than the established West Coast 1, with the hub height being 40 meters higher than that of West Coast 1, and the blade height and radius being extended by 5 meters to 45 meters and the radius being 50 meters. This has high impact consequences for all considerations, but most importantly with regard to the visual impact and the exponential potential mortality of birds and bats.</p>	Peter Pickford and Associates	02/07/2019	<p><b>CES:</b> It is correct that the BWF turbines will be bigger than WC1 turbines. Reducing the turbine size may marginally reduce the visual intrusion of the turbines, however the overall significance of the visual impact will remain high.</p> <p>Specific recommendations have been made by the bird and bat specialists to mitigate the impacts on birds and bats. One such measure was to ensure that there is a clearance of 55m between the ground and the lowest blade tip. Please refer to the Avifaunal and Bat specialist reports as well as those sections in the CRR.</p>
55	<p>VISUAL IMPACT: 1) Wind turbines change the silhouette of the environment and have an adverse impact on the attractive appearance of Paternoster currently seen as the fisherman's village in an intact natural/rural environment. 2) Where the West Coast One turbines are approximately 150m high, the Boulders proposal is for even 15m higher turbines. 3) The most disturbing effect is the white flashing lights during the day and red at night, - as if you were heading down the main street in Johannesburg instead of walking along a wide open beach. According to the Report 3.4.5 The anticipated visual impact of lighting of the WEF at night is likely to be moderate The Report under 6.2.8 refers to Residents and visitors to this area are therefore seen as sensitive visual receptors. Within a 10km radius, viewer incidence increases. We argue the example of Hopefield Wind Farm, which is a visual distraction at night already at a 30km distance on the road from Malmesbury. The total proposed number of 45 turbines (in addition to the West Coast One Wind Farm), create the effect of a forest of moving structures with a height higher than all buildings in Cape Town. 4) The Noticeable negative visual effect, without a doubt, will result in a decline in tourism. 5) The R45 towards Paternoster is regarded a scenic route and as such may not be spoiled by the Boulder project. The Integrated Heritage Impact Assessment and Assessment of Economic Impacts both refer to the importance of Vredenburg-Stompneus Bay and Paternoster- Stompneus Bay roads but totally ignore the</p>	No Boulders Wind Farm Email Petition (31 submissions) & Roon (Aksie Paternoster Aksie) Petition with 114 signatures	1&2 July	<p><b>CES:</b> As in 1 above. HIA specialist will also respond. The economic impact assessment found that the WC1 development has not had any discernible impact on local tourism and their overall assessment (taking into consideration all data and experience elsewhere) is that any potential negative impact on tourism from the Boulders wind farm is rated as low.</p> <p>The powerline is being assessed in a separate Basic Assessment.</p> <p><b>Visual Specialist Response:</b> 1) Noted and thus stated in the VIA. 2) Section 6.2. of the VIA report deals with the cumulative visual impacts as well as the increased turbine dimensions. See previous comment with extract from the report. 3) The report states: The visual impact of night-time aircraft warning lights is expected to be high for observers with an aversion to the wind farm. Also see previous comment regarding day-time aircraft warning lights. 4) A tourism impact study may be required to determine the impact on tourism. 5) There is a section (6.8.3.) in the report that deals with this potential visual impact on the Kasteelberg hill (informed by the HIA), that is deemed to be of high significance and which provides potential mitigation measures in the form of the removal of selected wind turbines. 6) Noted. 7)and 8) The power line, cabling, turbine foundations, etc. are all expected to generally be overshadowed by the much taller wind turbine structures. It is however</p>



#	I&AP Comments on Visual Impacts	I&AP	Date	EAP Response
	<p>historic, scenic and visual qualities of the Vredenburg-Paternoster Road, particularly in relation to views towards the visually prominent Kasteelberg koppie against a backdrop of moving wind turbines. 6) According to Conditions of the previous Environmental Authorisation 12/12/20/1581 par. 10.7.4 Turbines must be placed at least 2km from the local road to Stompneus Bay. If this was adhered to, 13 less turbines would have been placed on West Coast One project and 30 could not be placed with the Boulders proposal. 7) Another very negative aesthetic impact is caused by the construction of power lines. No visual picture is provided, and in any case should be a requirement that no new power distribution may be erected above ground. 8) The 1200 m<sup>2</sup> platform at each turbine along with the approximate doubling of roads to all turbines have a negative impact on the landscape</p> <p>SENSE OF PLACE: 9) Referring to the impact on the SENSE OF PLACE under Report 6.9.1 and 6.9.2 - An impact on the sense of place is one that alters the visual landscape to such an extent that the user experiences the environment differently, and more specifically, in a less appealing or less positive light. The potential cumulative visual impact of the wind farms on the visual quality of the landscape. - The cumulative visual impact of the West Coast 1 WEF and the Boulders WF is expected to be of high significance. 10) Paternoster is characterised by West Coast architecture that offers a picturesque view of the residential area against the backdrop of large areas of low sensitivity croplands alternating with occasional intact or near-natural fragments of indigenous vegetation and rocky outcrops. In terms of 4.1.3 the cumulative impacts, when considered in conjunction with the West Coast 1 facility, the study found the Visual Absorption Capacity of the receiving environment to be low, as a result of the vegetation and open vistas that are largely uninterrupted by urban development. This combined with the height of the proposed wind turbines results in unavoidably HIGH visual intrusion. It was also noted that the landscape is close to, if not already visually saturated and can possibly not accommodate the additional turbines without irrevocably changing the cultural landscape. Further to this, the greater size of the Boulders turbines makes them far more imposing and intrusive when viewed from the same distance as West Coast 1 turbines, and generally more visible when viewed at a distance. In addition 5.1.3 mentions that the greatest impact arising from visual intrusion is loss of sense of place and degradation of the significant rural landscape. These factors can have negative impacts on the significance of heritage resources and the cultural landscape that is difficult to mitigate due to the size of the turbines and their visibility in the landscape. 11) Even with the proposed moving of 7 turbines to the east these well-defined descriptions in the Report are still applicable and enough reason NOT to proceed.</p>			<p>conceded that they may contribute to the overall visual clutter associated with the wind farm. I don't think the power line formed part of this application? 9), 10) and 11) Noted and thus stated in the VIA.</p>





## 12 ECONOMIC, TOURISM AND PROPERTY ISSUES

#	I&AP Comments on negative Economic Tourism and Property Impacts	I&AP	Date	EAP Response
1	4) The “polluting” effect of the proposed wind farm activities will seriously affect tourism development in the greater St Helena Bay area as investors in property in this area are those seeking an unspoiled natural environment.	Mr Robert Morley	11-Jun-19	<b>Specialist Response:</b> A detailed investigation into the impact on tourism revealed that the proposed Boulders Wind Farm will alter the landscape of the area; however, the negative impact on tourist numbers is going to be markedly smaller than what is currently perceived by various stakeholders and would unlikely be detrimental to the tourism industry in the area.
2	The author of Appendix 9 on property values appears to be entirely unaware of Britannica Heights, and fails to mention the area even once in his report. Please clarify how this can be rectified?	Mary Ralph	17-Jun-19	<b>Specialist Response:</b> In the original study, Britannica Heights were considered to be part of St Helena Bay area. However, given that Britannica Heights is particularly vulnerable to the visual impact that could ensue from the proposed Boulders Wind Farm relative to the rest of the town of St Helena Bay, the report was amended to include specific references and targeted analysis of the impact on Britannica Heights.
3	The feeling of our prospective buyers is neutral – some for, some against.	Ian Wilkinson	18-Jun-19	<b>Specialist Response:</b> Noted.
4	Tracking property values since the implementation of Westcoast 1 – no negative effect on property values . Values have increased – but I cannot ascribe that to the windfarm.	Ian Wilkinson	18-Jun-19	<b>Specialist Response:</b> Noted.
5	We also have an office in Hopefield – and have had no negative comment	Ian Wilkinson	18-Jun-19	<b>Specialist Response:</b> Noted.
6	The area in question is considered important in terms of tourism in the West Coast Region and the development of another WEF on this peninsula will detract from the scenic beauty of the area and cannot be supported.	Doretha Kotze	18-Jun-19	<b>Specialist Response:</b> As stated in 2008 Moffat Report (2008), “scenery clearly has value” but the studies into relationship between tourism and wind farms continue to show conflicting results. Some studies show that wind farms “may have” impact on tourism, while others reveal that tourism is innocuous or in some instances even benefiting from wind farms (Silva & Delicado, 2017). After reviewing the literature and data related to the proposed development, the lack or presence of negative effects of wind farms on tourism could not be confirmed with confidence. Noteworthy, though, that those studies that pointed to the possible negative effects report marginal and not detrimental impact on tourism (Aitchison, 2012; Moffat Centre, 2008; The Tourism Company (2012). It appears that many other factors such as the size and range of wind farms, the demographics of tourists (international tourists and families with kids are more accepting of wind farms), the landmarks and other physical and environmental attributes of the destinations all contribute to the decision of tourists to visit or re-visit an area. It was observed though that the negative impacts on tourism are usually raised as concerns during the pre-construction phase and markedly reduce in their intensity during the operations of wind farms. This further suggests that the perceptions associated with negative impacts of wind farms on tourism do not always translate into the reality. Overall, it was determined that the negative impact on tourist numbers in the area is going to be markedly smaller than what is currently perceived by various stakeholders and would unlikely be detrimental to the local tourism industry.



#	I&AP Comments on negative Economic Tourism and Property Impacts	I&AP	Date	EAP Response
7	The possible/certain drop in the value of properties especially on Britannica Heights where the WEF will be in their front yards and faces 24/7. Even if your expert does not even mention the suburb.	Todd, A&J	18-Jun-19	<b>Specialist Response:</b> Buyers and investors have a variation of perspectives in terms of wind farms. Some buyers may be dissuaded to locate near a wind farm development. As evident from the review of development of West Coast One and Kouga Wind Farm on property values, though, there are buyers who are indifferent while a few may even be attracted by wind farm developments. An extensive study of 7 459 transactions in the USA revealed “no persuasive evidence” of having “consistent, measurable, and statistically significant effect on home sales prices” resulting from the view of the wind facilities or distance to wind facilities (Hoen, et al., 2009, p. xii). Further studies in the UK, Australia, and Scotland also confirmed no long-term negative effect on prices. In some cases, property values have seen to drop during the pre-construction phase but they recover thereafter, which suggests that the negative perceptions that buyers have prior developments of wind farms do not materialise once the facilities are built. Properties in Britannica Heights will be visually exposed to wind turbines. The Scenic Vista Sigma and Nuisance Stigma, therefore, are highly acute in the area and the concerns raised by the Potentially Affected Parties are understandable. Given the research conducted in other countries, property prices in selected instances could be negatively impacted – depending on the perceptions of the buyers with respect to wind farms and their willingness to use the presence of wind farms to negotiate costs down. Given the proximity of Britannica Heights to wind farms, it will have a greater risk of being affected than properties in the town of Paternoster, for example. However, if any property is negatively impacted, such an impact would be of a temporary nature and reverse once the wind farm is developed (if it is approved).
8	The tourism will be affected as the often used gravel road between St Helena Bay and Paternoster will lie between the turbines, and they will be visible from the popular dune tourist road between Paternoster and Duiker Eiland. To state that the turbines are aesthetically pleasing and will be a tourist attraction is absurd. Foreign tourists are going to visit the RSA to view windfarms when they probably have more than enough to view in their own country?	Todd, A&J	18-Jun-19	<b>Specialist Response:</b> Research suggests that the attitude towards wind farms either positive or negative does not always translate into action, i.e. a negative attitude towards wind farms does not imply that a tourist will not visit or come back to the area. Therefore, the actual losses of tourists, if any, are usually considerably smaller than the share of people with negative attitude towards wind farms. with respect to international tourists, international studies also found that they are often less sensitive towards wind farms and that those people who have seen wind farms before are also more likely to have a positive or at least neutral attitude towards wind farms than negative. More details can be found in the report.
9	While West Coast Biosphere Reserve, SANParks, West Coast DM, West Coast Way, AWOAHR and others are trying to promote tourism on the West Coast thus preserving and creating jobs, Vredenberg WEF's and others are trying to destroy tourism with a project that will create minimal jobs.	Todd, A&J	18-Jun-19	<b>Specialist Response:</b> The negative impact on tourism cannot be confidently stated; if any negative impact occurs, the effect on tourist numbers is going to be markedly smaller than what is currently perceived by various stakeholders and would unlikely be detrimental to the tourism industry in the area. This is based on the review of international case studies.
10	The big selling point (or one of them) is the small Fisherman town. My opinion is that large wind turbines with flashing lights will have a big impact on this. Paternoster economy revolves around tourism, from the fisherman that sells his fish to the general labourer that mix daga on site. I don't see why we should take the chance on the wind farm that might have a big impact on job opportunities	Didimala Construction	18-Jan-00	<b>Specialist Response:</b> The review of case studies in other countries suggests that the perception of negative impacts of wind farm on tourism is usually considerably higher during pre-construction and does not translate into actual impacts during operations of wind farms. If any negative impact on tourism will occur, it will be of minor significance and will not jeopardise the tourism industry in the area and as a result put the existing jobs at risk.
11	I wish to state that proposed wind farm will highly affect tourism in Paternoster in a negative way. Our return guests wont be coming anymore as peace and tranquility, no light pollution will be existing. I also fear as a consequence to lose our guesthouse Far Out which is our only way of income, nevermind our employees losing their jobs in the long run	Ludilf, Marion	19-Jun-19	<b>Specialist Response:</b> The review of case studies in other countries suggests that the perception of negative impacts of wind farm on tourism is usually considerably higher during pre-construction and does not translate into actual impacts during operations of wind farms. If any negative impact on tourism will occur, it will be of minor significance and will not jeopardise the tourism industry in the area and as a result put the existing jobs at risk.



#	I&AP Comments on negative Economic Tourism and Property Impacts	I&AP	Date	EAP Response
12	Furthermore, the windfarm will destroy the landscape, consequently property prices will drop in the long run and again, as a paternoster resident, I will lose our house as well. The flickering lights at dawn/night time will also have an impact on visibility. I fear that lots of jobs in Paternoster tourism related are at stake as, yes the windfarm will create jobs, but for how many Paternoster residents and for how long in comparison what tourism has to offer in the job sector with careers. I also wish to state that I am not against windfarms, in this case it is about the location as the proposal will affect our business as well as my private life	Ludilf, Marion	2019/06/19	<b>Specialist Response:</b> There is no evidence that suggests that the proposed development of the wind farm will negative affect the local tourism impact and have long-term consequences on property prices. There is a probably that some tourists may be dissuaded to visit the area, but given the research undertaken in other countries, such effects are usually considerably smaller than what is perceived during the pre-construction phase and are not detrimental to local tourism industries. As far as property prices are concerned, if any property prices are impacted, it is likely to be during the pre-construction phase only and as shown in international studies, property prices tend to recover once the wind farm is built.
13	Our Properties 's will drop drastically by approximately 80% and we would insist on compensation with the help of legal advice. Our Tourism Business would drop to zero. Who on earth would book a holiday looking on to flashing lights day and night?? Again we would insist on compensation for the loss of business for our B&B's and self catering establishments. We therefore suggest that you relocate your planned Wind Farm by continuing the expansion of the Westcoast One Turbines to the area of the R399, where there is no interference to residential areas and it would be financially more viable as it would be next to an already established road.	Country Cabin, St Helena	26-Jun	<b>Specialist Response:</b> There is no evidence to suggest that property prices will drop at such a rate. Research undertaken in other countries suggests that there is no empirical evidence that wind farms have "consistent, measurable, and statistically significant effect on home sales prices" (Hoen, et al., 2009, p. xii). In isolated cases where negative impact was observed, this impact was temporary, took place during the pre-construction phase when fears of the potential impact are particularly high, and dissolved once wind farms were developed.
14	Economic impacts: There is no chance of increasing the value of my property through the proposed development - only reduction. So I stand seriously against the above development	Engels, Louis	01-Jul	<b>Specialist Response:</b> The assessment revealed that properties in Britannica Heights and the town of Paternoster will be visually exposed to wind turbines. The Scenic Vista Sigma and Nuisance Stigma, therefore, are highly acute in the area. Given the research conducted in other countries, property prices in selected instances could be negatively impacted but this depends on the perceptions of the buyers with respect to wind farms and their willingness to use the presence of wind farms to negotiate costs down. Given the proximity of Britannica Heights to wind farms, it will have a greater risk of being affected than properties in the town of Paternoster. However, there is no evidence to suggest that property prices will drop as a result of the wind farm's development. Research undertaken in other countries suggests that there is no empirical evidence that wind farms have "consistent, measurable, and statistically significant effect on home sales prices" (Hoen, et al., 2009, p. xii). If any property is negatively impacted, such an impact would be of a temporary nature and reverse once the wind farm is developed (if it is approved). This has also been observed other countries in those isolated cases where negative impact was notable.
15	<b>TOURISM AND EMPLOYMENT:</b> As a rural location, employment and business opportunities in our community are very limited option. Whereas, the Draft EIA Report alludes to the creation of 17 job opportunities during its operational phase, the amount of employment that our tourism economy generates certainly dwarfs this number. As a resident of Britannica Heights, I have first-hand knowledge of the number of tourism-related businesses started and run by our community. We have ourselves just opened a tourism business, which leverages the view from our escarpment across the countryside to Kasteelberg and Paternoster. All of these tourism businesses create employment. Indeed, the main source of employment in Paternoster is undoubtedly tourism. It is of grave concern that Boulders WEF will negatively impact on the attraction of our businesses, resulting in less visitors and a consequent downturn in viability and therefore employmen	Portsmouth, Dou	02-Jul	<b>Specialist Response:</b> See response 6 above.





#	I&AP Comments on negative Economic Tourism and Property Impacts	I&AP	Date	EAP Response
16	1) Visual Effects: if implemented, the Windfarm would totally destroy the view from our property over the farmland towards Paternoster and the tranquility of the area, which is the main reason why we settled here. When Eskom for example planned the extension of their power line to Stompneus Bay, a prospective buyer of the plot adjacent to ours withdrew his offer. Following objections from plot owners of Britannica Heights, Eskom rerouted the Power line along the valley on the adjacent farm. The visual impact of the proposed Wind farm would be INFINITELY WORSE THAN THE POWER LINE.	Adendorf, AM	02-Jul	See response 7 above.
17	I also refer him to page V of the HIA where Ms Smuts states: "The intrinsic value of both the cultural landscape and Kasteelberg is of unquestionable significance and not dependent on visual receptors." (v) I also would like to bring to his attention the tourism node which is indicated on the Saldanha Bay Municipal SDF in annexure A. This tourism node will include a hotel, restaurants, etc. It will therefore be populated by highly sensitive occupants. (vi) I also would like to bring the comment in 4.1 below to his attention. 3. Property Values, Tourism and Economic Issues Assessment Report by Urban-Econ (the "UE-report") The UE-report is flawed and does not provide a sensible analysis of the relevant issues. One of the fundamental problems is the selection of the Key Respondents interviewed. The selection is not representative of the tourism market, eg: (i) The biggest section of the tourism market in Paternoster, holiday accommodation has more than 200 cottages for rental, but only a single cottage is selected in the interview sampling process. (ii) I contacted the largest manager of holiday accommodations, stay in Paternoster to find out whether they were in any way part of the sample. Although they are managing more than 100 cottages, they were not approached at all. Similarly, ourselves who have the No 1 rated Tripadvisor holiday accommodation property (La Baleine Beach House Collection – 10 cottages), the No 1 Tripadvisor restaurant (Leeto) and the leading hotel operation (Strandloper Ocean Boutique Hotel), were also not contacted. (iii) There are strong pointers as to the importance of international tourism for the town. It is in fact home to the best restaurant in the world in 2019 and of one of South Africa's most successful international hotels – refer Annexure B, par 9. This market is not analyzed at all. (iv) The flaw of selecting a non-representable sample showed up in par 2.3 with its conclusion "Visitor numbers and revenues has decreased for the majority of the business interviewed". This shows some conflict with the statement in Par 4.1.1 that the Catering and Accommodation Services had grown by 93% over the past 5 years (Quantec 2017). This conflict was not looked into further. Our experience is totally different from their conclusion and our businesses showed growth of approximately 120% over the past 5 years. Stay in Paternoster indicated that the number of houses which they are managing also increased from around 60 to 100 over the past 5 years, an increase of more than 65%. 3.1 UE's assessment of potential wind farm effect on tourism and property values 3.1.1 Although UE states in the opening paragraph of their assessment that they would identify the factors that impact on the tourism trends historically, this was not done. Without identifying these factors and looking at any potential impact on them by the proposed project, it is not possible to determine how tourism in Paternoster can potentially be affected. Nevertheless in Par 2.3 they concluded "Considering that the location of the proposed BWF is inland and not expected to obstruct beach views for tourists visiting the coastal towns (ie Paternoster and St Helena Bay), the above-mentioned concern of obstructed beach views is likely unrealized and no potential negative on leisure tourism is expected. This is a shocking oversimplification, basically reducing the impact on tourism to beach views. It falls short in so many respects that it is challenging to even critique specifically as it is so lacking in its entirety. (i) Firstly I would like to use our experience at Strandloper Ocean Boutique Hotel to explain how important the views over the Paternoster plateau are to tourists and that it is not only the beach views which matter: We have 2 types of suites at the hotel, namely Ocean Suites and Nature Suites. The Ocean Suites	Brand, Deon	02-Jul	<b>Specialist Response:</b> see response 6 above





#	I&AP Comments on negative Economic Tourism and Property Impacts	I&AP	Date	EAP Response
	<p>are directly on the ocean and the Nature Suites overlook the Paternoster plateau. The rates for both suites are the same at around R8 000 per night during peak season December to April. It is possible to compare the experience of guests staying in these suites through their reviews on booking.com. Booking.com is the most used tourism booking portal in South Africa and also one of the largest worldwide. It requests all guest who book through them to provide a review after their stay. We are able to access these reviews which are broken down into 7 components, one of them being "Location". As part of our last rate assessments, we reviewed this rating for the previous 12 months period and the Ocean Suites had an average rating of 9.79/10 and the Nature suites 9.87/10. To put these ratings further in perspective, the only five star hotel in Cape Town which has a rating close to this is the Silo Hotel at 9.50 (followed by Cape Grace and the One and Only at 9.4); (ii) As a second step I made a historical summary of the development of Paternoster's tourism and property markets since it origins about 20 years ago – see Annexure A. This enabled me to identify the factors which most impacted tourism and property values over this period. The following ones will be negatively impacted by the proposed BWF project.</p>			
18	<p>International tourism: Although there is the following reference to international visitors in par 2.2, the international tourism market is not analyzed at all: "Other have noted that some international visitors particularly commented that wind energy were good for energy security but bad for the environment." What does this statement mean? Ironically it indicates a negative impact on international tourism which UE strangely did not notice. Environment is a key determining factor in a guests' decision where he/she will spend their holiday. If the perception is that the environment will worsen, a negative effect can be expected. This issue therefore also needs further investigation by UE.</p>	Brand, Deon	02-Jul	<p><b>Specialist Response:</b> The study and the site visit coincided with the low tourism season in the area. While all effort was made to contact tourists, the actual number of tourists that were present in the area during the site visit was minute. This limitation is acknowledged in the report and this is the reason why the analysis also considers case studies of Kouga Wind Farm and West Coast One. In the most recent amendment, the report was augmented with the international case studies investigating the effects of wind farms on tourism particularly in areas of scenic beauty. In addition, we made use of tourism related data for each town in the primary zone of influence sourced from WESGRO, which was further augmented with the information obtained during interviews with tourism product owners.</p>
19	<p><b>TOURISM:</b> — President Ramaphosa in his speech at the Tourism Indaba in Durban said that Tourism is SA's 'new Gold'. - Paternoster has been 'mining' this Gold for many years. The hotel and Tietiesbaai Camping site has had a loyal following for many many years. Until the 1990's Paternoster had no individual land ownership. Land was zoned Agricultural and the farms belonged to 3 large Fishing Companies. The houses forming the village was on Agricultural land. Early 1990's empty land were sold off to developers and Mosselbank/Bekbaai was subdivided and the SBM initiated a "building style" similar to the local vernacular and an Ethics ommittee was appointed. Kliprug residents got ownership of their houses and a selfbuild housing initiative started for other residents. With the lack of areas with zoning for Business, historical properties were converted to Shops and Restaurants, 'Granny flats' were allowed by SBM for a fast-growing self-catering market. This extra income was a good selling-point and the village was busy all year round . Local women retrenched from fishing-factories in St Helena Bay started being trained/upskilled and working in tourism-related jobs. A DTI initiative was to tar the dirt road in 2000 and Paternoster has never looked back. The historical layers , "sense of place", beautiful landscape and the sea and the beach need individuals from all walks of life that put effort and money and pride in to make Tourism work. All this is swept away as being insignificant against the "greater good "of Electricity generation (with very little direct benefit to Paternoster) that could happen in almost any windy area in SA. I suggest that your Tourism/Property/Socio-economic Studies seriously be revisited.</p>	Slabig, Hedwig	03-Jul	<p><b>Specialist Response:</b> The study was revisited and augmented with information on the international case studies investigating impacts of wind farms on tourism and property values, as well as considering the extent of visual impacts from the proposed layout of wind turbines. In light of the additional information, the impact assessment was amended accordingly.</p>





#	I&AP Comments on negative Economic Tourism and Property Impacts	I&AP	Date	EAP Response
20	Will the tourists still be interested in coming to Paternoster. If not, the shops, restaurants and rental apartments will have to close their doors and the local community that is dependent upon these tourist related activities will become poverty stricken.	Muller Coetzee	03-Jul	<b>Specialist Response:</b> A detailed investigation into the impact on tourism revealed that the proposed Boulders Wind Farm will alter the landscape of the area; however, the negative impact on tourist numbers is going to be markedly smaller than what is currently perceived by various stakeholders and would unlikely be detrimental to the tourism industry in the area.
21	<p>PROPERTY VALUES: In the meeting recently held at 26 Columbine Crescent we were told that estate agents in St. Helena Bay mentioned there have been no property values affected by Vredenburg 1 Windfarm. There are NO properties located as close to that windfarm as WE will be to the Boulders turbines, so off course that first windfarm had no affect on property values. In the USA there have been studies done by various organisations, of which one is Forbes and Jude C Forbes asks the following question: WHY WOULD ANYONE CHOOSE TO BUY A PROPERTY OVERLOOKING A WDNDFARM? Michael Mc Cann appraisal LLC based in Chicago concludes: RESIDENTIAL PROPERTY VALUES ARE ADVERSELY AND MEASURABLY IMPACTED BY CLOSE PROXIMITY OF INDUSTRIAL-SCALE WIND ENERGY TURBINE projects. Approximately up to 40%+ of value loss. Johan L. Goodwin (real estate broker in CANADA) states that wind turbines absolutely do impact property values and TURBINES COMPLICATE YOUR PROPERTY ENJOYMENT PERIOD and that alone spells depreciated values. Ontario Superior Court o Justice: determined that land owners living near large wind farms DO suffer from lower property values - up to a 55% reduction. There are too many studies to mention which have proved this point.South Africa are just erecting turbines everywhere without the proper impact studies have been made regarding erecting windfarms in close proximity to residential areas. PROPERTY VALUES: In the meeting recently held at 26 Columbine Crescent we were told that estate agents in St. Helena Bay mentioned there have been no property values affected by Vredenburg 1 Windfarm. There are NO properties located as close to that windfarm as WE will be to the Boulders turbines, so off course that first windfarm had no affect on property values. In the USA there have been studies done by various organisations, of which one is Forbes and Jude C Forbes asks the following question: WHY WOULD ANYONE CHOOSE TO BUY A PROPERTY OVERLOOKING A WDNDFARM? Michael Mc Cann appraisal LLC based in Chicago concludes: RESIDENTIAL PROPERTY VALUES ARE ADVERSELY AND MEASURABLY IMPACTED BY CLOSE PROXIMITY OF INDUSTRIAL-SCALE WIND ENERGY TURBINE projects. Approximately up to 40%+ of value loss. Johan L. Goodwin (real estate broker in CANADA) states that wind turbines absolutely do impact property values and TURBINES COMPLICATE YOUR PROPERTY ENJOYMENT PERIOD and that alone spells depreciated values. Ontario Superior Court o Justice: determined that land owners living near large wind farms DO suffer from lower property values - up to a 55% reduction. There are too many studies to mention which have proved this point. South Africa are just erecting turbines everywhere without the proper impact studies have been made regarding erecting windfarms in close proximity to residential areas. PROPERTY VALUES: In the meeting recently held at 26 Columbine Crescent we were told that estate agents in St. Helena Bay mentioned there have been no property values affected by Vredenburg 1 Windfarm. There are NO properties located as close to that windfarm as WE will be to the Boulders turbines, so off course that first windfarm had no affect on property values. In the USA there have been studies done by various organisations, of which one is Forbes and Jude C Forbes asks the following question: WHY WOULD ANYONE CHOOSE TO BUY A PROPERTY OVERLOOKING A WDNDFARM? Michael Mc Cann appraisal LLC based in Chicago concludes: RESIDENTIAL PROPERTY VALUES ARE ADVERSELY AND MEASURABLY IMPACTED BY CLOSE PROXIMITY OF INDUSTRIAL-SCALE WIND ENERGY TURBINE projects. Approximately up to 40%+ of value loss. Johan L. Goodwin (real estate broker in CANADA) states that wind turbines absolutely do impact property values and TURBINES COMPLICATE YOUR PROPERTY ENJOYMENT PERIOD and that alone spells depreciated values. Ontario Superior Court o Justice: determined that land owners living near large wind farms DO suffer from lower property values - up to a 55%</p>	Bootha, Christa	02-Jul	<b>Specialist Response:</b> An extensive study of 7 459 transactions in the USA revealed “no persuasive evidence” of having “consistent, measurable, and statistically significant effect on home sales prices” resulting from the view of the wind facilities or distance to wind facilities (Hoen, et al., 2009, p. xii). Further studies in the UK, Australia, and Scotland also confirmed no long-term negative effect on prices. However, it was noted that in some cases property values dropped during the pre-construction phase and recovered thereafter, suggesting that the negative perceptions that buyers have prior to developments of wind farms do not materialise once the facilities are built. Properties in Britannica Heights will be visually exposed to wind turbines. The Scenic Vista Sigma and Nuisance Stigma, therefore, are highly acute in the area and the concerns raised by the Potentially Affected Parties are understandable. However, given the empirical evidence in other countries and the effects of Kouga Wind Farm on property values in its own region, the risk of property values to decline is very low. if any property prices are to drop, this is expected to be of speculative nature and to take place during pre-construction phase only.





#	I&AP Comments on negative Economic Tourism and Property Impacts	I&AP	Date	EAP Response
	reduction. There are too many studies to mention which have proved this point. South Africa are just erecting turbines everywhere without the proper impact studies have been made regarding erecting windfarms in close proximity to residential areas. Johan L. Goodwin (real estate broker in CANADA) states that wind turbines absolutely do impact property values and TURBINES COMPLICATE YOUR PROPERTY ENJOYMENT PERIOD and that alone spells depreciated values.			
22	<p>PROPERTY VALUES</p> <ul style="list-style-type: none"> <li>• If the Applicant argues that some property owners may often have unsubstantiated perceptions concerning the negative impact of renewable energy projects on property prices in general, which is why it is a frequent concern raised by the I&amp;APs. The above shows that such perceptions cannot be corroborated with any empirical evidence, therefore, it is important to dispel these as early as possible i.e. during planning stages of the project. We argue the opposite, that the Developer is absolutely unable to prove that renewable energy projects have a positive effect on property prices.</li> <li>• The report refers to the increase in property values over a 10-year period, but can in no way prove that it will be better than without the BWF. The BWF cannot have a positive effect on property values.</li> <li>• The Report refers to a financial impact comparison made before and after completion of the West Coast One wind farm. This is a futile exercise because the WCO is situated largely 'behind' Paternoster and does not have the same effect as the Boulders proposal. We should rather insist on a study why European countries have stopped erecting turbines?</li> <li>• Referring to 2.3 regarding Property Values, Tourism and Economic Issues- The key causes for the declining performance, as derived from interviews with tourism facilities' owners, are the drought experienced in 2017/2018, increased competition, and affordability for the tourists. No mention is made about crime as a major factor in decline in visitors. This directly relates to the void left when job seekers cannot find employment on a permanent basis. Property prices in Paternoster did not increase at the same rate as for instance in Vredenburg. To mention that according to Four quoted overseas studies - It could find no statistically-significant evidence that proximity to a wind turbine affects home values cannot be submitted as proof, since many more overseas installations have caused a huge uproar. What reference is used when stating that some of the local tourism product owners have experienced a positive effect on their business activities as a result of the development of West Coast One Wind Farm during its construction. Our view is that MOST of the local tourism product owners have experienced a NEGATIVE effect</li> </ul>	No Boulders Wind Farm Petition Group & Roon(Aksie Paternoster Aksie)	01&02 July	<p><b>Response from Property Valuer:</b> Purely from a value impact perspective, I believe the responses are primarily emotional, which is exacerbated by the current economic slump and resultant decrease in property values. These expressed views are general in nature and not based on facts, to indicate any negative impact on values by the wind farm.</p> <p><b>CES Response:</b> While the Economic report identifies a potential low positive impact for some tourism outlets particularly during the construction phase due to additional business from the developers and service providers, they also found no discernible negative impact on tourism in the data and only identified a low improbably possibility of a loss of tourists to the area (low negative impact). The problems with isolating the impact of a wind farm development on the property values is also acknowledged, as prices are influenced by demand and supply and national and regional trends and markets, as well as local factors such as crime as well as tourism trends internationally and locally.</p>
23	<p>Goeie middag, Ek is die eienaar van verskillende eindomme in Paternoster, in die naam van my Trust, ANKER TRUST IT 1381/2004, geregistreer. Ek bly al 31 jaar in Paternoster en dit is ONDENKBAAR, om teen so 'n kosbare stukkie van ons erfenis, 'n Windplaas te bou. Hoewel nie een van ons hier teen groen energie is nie, kan ons nie toelaat dat die laaste Vissersdorpie aan ons kus, met 'n Windplaas besoedel word nie. Ek is dus heeltemal daarteen gekant en hoewel ek male sonder tal al vele beloftes gehoor het, wat NOOIT nagekom is nie en ook weet dat u Publieke deelname as net nog 'n blokkie"tick", u verseker kan wees dat die stof nie sal gaan staan oor hierdie een nie. Ek het egter vir u 'n alternatief in die posisie van die Windplaas en my deur staan oop om dit te bespreek.</p> <p>ENGLISH TRANSLATION: Good afternoon, I am the owner of various properties in Paternoster, registered in the name of my Trust, Anker Trust IT 1381/2004. I have been living in Paternoster for the past 31 years and it is UNTHINKABLE, to build a Wind Farm next to such a valuable piece of our heritage. Although none of us here are against green energy, we cannot allow for the last little Fishermans town on the coast, being contaminated with a Wind Farm. I am</p>	Andre Kleynhans	01-Jul	<p><b>Specialist Response:</b> Your objections are noted. The concerns around the Heritage, visual and tourism/property value impacts are responded to the relevant sections of the CRR. The issues around alternative sites are also dealt with in that section of the CRR. Site alternatives for the Boulders Wind Farm were investigated in their pre-feasibility phase prior to the EIA. The developer further provided the DEA with a report on the alternatives investigation they undertook during the appeal process. A summary of the site alternatives investigation and findings has been included in the Final EIR to clarify these issues (See Volume 1- Final EIR - Chapter 5). An EIA is an assessment of a WEF for a particular proposed site.</p>



#	I&AP Comments on negative Economic Tourism and Property Impacts	I&AP	Date	EAP Response
	therefore completely against it, and although I have heard many promises, that have NEVER been realised, or executed, and know that your Public participation only another block to be ticked is, you can be reassured that the dust will not settle regarding this one. I do however have an alternative for you for the position (location) of the Wind Farm, and my door is open for you to discuss it.			
24	<p>OBJECTION TO BOULDERS WIND FARM: I am a property owner of a small holding in Columbine Crescent, Britannica Heights, St Helena Bay. My husband and I bought this small holding of about 1 hectare in Columbine Crescent at the end of 2015, property transfer took place in beginning of 2016, and we thought we had a fantastic deal with retirement in sight - the small, low maintenance farmhouse with a solar power system, grey water storage tank, indigenous water saving garden, wild life like Steenbokkies, tortoises, porcupine, hare, mongoose, guinea fowl, and a selection of birdlife roaming freely on the property and on the hill of this small holding development. The building guidelines suited us perfectly: "To retain the rural character of the development, one may only clear a max of 2500 sqm of the natural fynbos for development of the homestead and garden. The remainder of the stand may not be cleared and needs to remain in its original natural state." We were impressed that farm animals were allowed: Large animals like horses, cows, donkeys, smaller animals like sheep and goats, poultry, etc. so I was happy that my dogs were allowed. (I am involved in Animal Rescue so sometimes have more than the normal amount of dogs in my foster care.) We loved the view across the valley of the neighbouring farms and Paternoster in the distance. We even had a sea view from the elevated position of our property, with no obstructions possible due to the building guidelines prescribing a height of 7m (double storey) at the highest of any dwellings in front of us. See the untouched farm views from our property across the valley to Paternoster and the sea in the background. In the next picture the turbines of West Coast One can be seen in the distance on the left hand side of our view. (The much higher turbines of Boulders Wind Farm are going to obstruct this view up to 4 km's from our property.) We are planning to retire to this quiet, peaceful and virtually crime free rural neighbourhood with our dogs as soon as we can sell our current residence in Saldanha. I have to emphasize, we were not in any stage of buying the property informed or warned either by the previous owner or the estate agency of this planned wind farm development right next to us on the neighbouring farms and in our face! If we were informed, we would not for a second have considered buying this piece of land that seemed to be everything a retired couple could wish for, after residing in a busy, industrial and crime ridden town like Saldanha.</p>	Engels, Anneline	02-Jul	<p><b>Specialist Response:</b> The revised location of turbines will not obstruct the views towards Paternoster and the ocean as none of the turbines are to be located on the direct path between Britannica Heights and Paternoster.</p> <p><b>CES Response:</b> See also responses 5-10 in the Economic Section of this CRR.</p>



#	I&AP Comments on negative Economic Tourism and Property Impacts	I&AP	Date	EAP Response
25	<p>Now we are confronted with this application for the Boulders Wind Farm introducing 45 turbines of 165m in height, with the closest one only about 4 km away! With these turbines right in our view, we would be able to see every turbine in full length, al 45 of them. And they won't be in our BACKYARD, but right in our front view where we expected to have a very scenic view of farmland and the sea. So it is understandable that at this stage we are FURIOUS and feel cheated, and we would like somebody to be held responsible for this. See extract: Sellers must disclose property defects 09 Feb 2011 The full disclosure of property defects will be made even more important with the new Consumer Protection Act (CPA) which will be published in March 2011. "What is clear is that in the residential property marketing sector, full disclosure of any defects or potential defects will become essential," says Tony Clarke, managing director of Rawson Properties."It will in fact be illegal not to mention these – and to put them in writing," says Clarke and adds that the failure to disclose a defect could lead to the cancellation of the sale agreement and the refunding of the full sale price. The seller should also then disclose upfront any problems he may have experienced with noisy neighbours (or their dogs), crime in the area, traffic or municipal services – and because this can deter a minority of buyers, he should also mention if there has been a death in the home recently. It is particularly important to reveal any short- or long-term plans for rezoning in the area, says Clarke. "Non-disclosure here could, again, be regarded as an illegal act."https://www.property24.com/articles/sellers-must-disclose-property-defects/13092 See arial view of the proposed placement of 45 Boulders turbines, very close to the NO GO areas (Dark Red, )as well as environmentally sensitive areas (Light Red.) The " pink" turbines are supposed to be moved to where the green pins are placed, still causing a highly significant obstruction of about half of our scenic view across the valley.On the next arial view, the 4 km distance between us and the nearest turbines are indicated, which is not acceptable to us and would still have a detrimental effect on our quality of life as a retired couple and the resale value of our property Now, I find myself being called one of the "NIMBY's" (Not In My Back Yard,) also called a "free rider," apparantly a much hated and ridiculed and bullied party to this whole process. Let me illustrate the unfair classification of my objection as "Nimbyism" by these following extracts:Explaining NIMBY Opposition to Wind Power Eric R. A. N. Smith http://smith.faculty.polsci.ucsb.edu/wind.pdf "Opposition to facility siting is conventionally equated with the Not-In-MyBack-Yard (NIMBY) syndrome. This phenomenon has been analysed in many different cases of infrastructure facilities (e.g., the siting of hazardous, nuclear, and conventional waste facilities, nuclear and conventional power plants, offshore oil drilling, roads, railroads etc.) and of social facilities as well (e.g., mental health care, housing, aids nursing homes etc.). Since the application of wind power began, developers have faced resistance with turbine siting, and ever since, these problems have been explained by appealing to the NIMBY argument. ("Explaining NIMBY Opposition to Wind Power " - "The criticisms presented by opponents are many. Most notably, critics identify noise, visual intrusion, electromagnetic interference, harm to birds and other wildlife, distrust of developer objectives, and lack of local ownership as the foremost reasons why they oppose wind farms (Erp 1997; Krohn and Damborg 1998; Simon 1996; Wolsink 1996)." Apparently, the common sense phrase `wind power is perfectly fine, but not in my backyard' is a very poor explanation for the opposition against wind power developments. In fact, very few people exhibit free rider behaviour in this social dilemma context. Moreover, the common sense view of NIMBY-ism is damaging to the implementation of wind power. A clear view on the NIMBY-concept is needed, because the current use of the concept has large consequences for all parties involved in the siting process ([13], p. 87). The concept simply does not allow any distinction to be made among the broad range of attitudes. By labelling all protests as NIMBY one misses the multitude of underlying motivations [16]. Looking at the possible positions people can have towards any infrastructure facility, we can distinguish different roots of opposition."</p>	Engels, Anneline	02-Jul	<p><b>CES Response:</b> The high visual impact on the affected Britannica Height properties along the top of the ridge with a west facing view, is acknowledged in the EIR and the Visual Specialist Report. See also our response to these same issues of yours about estate agents and property purchases in the "Objections" section of the CRR, comment/response number 7. In response to the NIMBY issues – we hope that you will see from this CRR that all the comments and concerns have been responded to individually. Considerable effort has also been made to meet with all the key stakeholder interest groups around the proposed development site. Unfortunately, the decisions on authorisation of a project will not depend on whether any objections were submitted and how many were submitted. There will be both negative and beneficial impacts for any development, and these will impact the various affected parties differently. In this EIR, who will be affected in what ways has been identified and assessed. All these impacts will need to be weighed up by the decision-making authority, taking into consideration the findings and recommendations of all the specialist studies and EIR, and all the comments received from I&amp;APs.</p>





#	I&AP Comments on negative Economic Tourism and Property Impacts	I&AP	Date	EAP Response
	<p>Resistance Type A: A positive attitude towards wind power, combined with opposition to the construction of a wind farm anywhere in one's own neighbourhood. This attitude-behaviour combination reflects the only true NIMBY standpoint. Resistance Type B. Rejection and opposition to a wind farm in the neighbourhood because one rejects wind turbine technology in general. This position is sometimes called 'NIABY', or Not-In-Any- Backyard. This kind of opposition is based on concerns about the general consequences of wind power on the scenery. Resistance Type C. A positive attitude towards wind power, which becomes negative as a result of the discussion surrounding the proposed construction of a wind farm. This type shows the significance of the dynamics in attitudes, as it reflects a NIABY attitude resulting from changing risk perceptions during the decision-making process. Resistance Type D. Resistance created by the fact that particular projects are considered faulty, without a rejection of the technology as a whole. This type advocates the generation of wind power, but only under some conditions. This opposition is particularly limited to proposed wind farms on specific locations, as it is based on concerns about the consequences of a wind power plant, on primarily the scenery and, to a lesser degree, on interference and nuisance. People here may be unconvinced about the suitability of the selected site. They may expect interference or they may consider the landscape on the chosen location too sensitive, especially when other available locations nearby are considered more suitable. The dominant position of utilities also creates little institutional capacity for successful siting of wind-power facilities. Rather, it underpins the planning fallacy. Although siting is recognised as the most important factor in the development of wind energy, those active in the electricity sector tend to view this as merely a 'market imperfection' or a 'bureaucratic obstacle' [20]. The consequences of such a industrial type development (which this wind farm will eventually be) on the socio-economic situation of the St Helena bay area: Should I say I find myself as a Resistance Type D Nimby, due to the following reasons: We have been residents of Saldanha Bay since 1987, for about 32 years. In our time, being beach front property owners in Saldanha Bay, we have seen this beautiful fisherman's village we found in 1987 develop into a major industrial town, suffering, amongst others, the discarded litter on our beaches from the cargo ships in the harbour, the red dust pollution due to the Transnet iron ore industry, the rise of Saldanha Steel, Namakwa Sands and the development of the IDZ, thousands of desperate jobless people streaming into fast expanding squatter camps, the rising in crime incidents almost daily in our neighbourhoods, the drop in our property values even right on the beach, (our retiring neighbour had his renovated beach front house in the market valued at R3,2 m, but it could only fetch R2m on auction!) the closing down of hundredsof businesses and restaurants in town who just couldn't survive throughout the years, and the growing trend for local residents to rather move and invest in property outside of this " industrial" town, like Langebaan, Jacobs Bay, Paternoster, St Helena Bay or Port Owen in Velddrif, where they were assured their property would increase in value, not be degraded by industrial development. Nobody wants to invest in Saldanha residential property, because there is no guarantee you will get your investment back!</p>			





#	I&AP Comments on negative Economic Tourism and Property Impacts	I&AP	Date	EAP Response
26	So, apart from major trust issues with our local government departments handing out approvals even though we as property owners seriously object against a development such as the enlargement of the exciting West Coast One Wind farm, (which also got approval although residents of Paternoster were objecting to the detrimental effects of such a development on that particular site - see newspaper article "An ill wind blows in Paternoster " - particular site - see newspaper article "An ill wind blows in Paternoster " -21 APR 2011 - FIONA MACLEOD) I believe that the different impact studies presented by CES is not representing the true implications for us as affected residents, i.e.: a) the importance of the Visual Impact study (VIA) proving the visual impact being HIGH is not taken seriously enough, b) as well as the absolute nonsense that was dished up as the BOULDERS WIND FARM PROPERTY EVALUATION STUDY REPORT of 27 July 2018 prepared by J.F. du Toit , c) and the baseline bird study that was conducted by Miguel Mascarenhas of Bioinsight South Africa, was challenged by Andrew Jenkins in June 2019 in a "Peer review of the bird impact study for the proposed Boulders Wind Farm," The shortcomings of these "unbiased" studies should be taken into careful consideration when deciding whether this application is not threatened by a "fatal flaw" regarding the impact on Paternoster and St Helena Bay. To me, the visual implications is the first and foremost detrimental effect this development is going to have on our daily lives.	Engels, Anneline	02-Jul	<b>CES Response:</b> Please see the responses to the same comments and concerns about the visual and bird impacts that are dealt with in the relevant sections of the CRR. See also the conclusions and recommendations in the Final EIR which provides a discussion and justification of these. With regards to the fatal flaw issue associated with the high visual impacts, CES argue that the lack of any discernible tangible impact on tourism and property values was a key factor in coming to the conclusion that the visual impact is not a fatal flaw. It should also be noted that the developers have not been deaf to the concerns about visual impacts on tourism and have done as much as much as they can to reduce the scale and footprint of the development to minimise the visual impacts without compromising the financial viability of their project.
27	See extractions from the Visual Impact Study by Lourens du Plessis (t/a LOGIS) 1. The turbine layout adheres to a 4km coastal protection exclusion zone, as prescribed by the Western Cape Province's Department of Environmental Affairs and Development Planning (DEA&DP) Wind SEA (Strategic Environmental Assessment). The project proponent recognises the inherent value of the Atlantic seaboard and West Coast coastline as a scenic resource and tourist attraction, and subsequently agreed to not position any wind turbines within this zone. See red arrow on above layout, which indicates the view from Britannica Heights that will be taken away from us as property owners by the 45 turbines placed across the valley. All the turbines will be clearly visible from as close as 4km away. How can this fact not have a very high visible impact from our point of view? How can our property values NOT be severely impacted as well? The "Boulders Wind Farm Property Evaluation Study Report," prepared by J.F. du Toit Professional Valuer / Chartered Surveyor (FIVSA)(MRICS) is an absolute joke. Mr du Toit should be ashamed of this report with all its irregularities and incomplete findings. Nowhere in this study is there any mention about the Britannica Heights small holding development with about 118 properties, of which about 50 on the valley side of the hill would be impacted regarding property values due to the wind farm turbines right on their front door step! And then he mentions the holiday towns "in the St Helena Bay area of the Britannia Bay, Golden Mile, Louwville, Sandy Point, Shelley Point, St Helena Views and Stompneusbaai," having no "real price influence in these towns due to the West Coast One. To correct him, Louwville is not a "holiday town," but a township for the poorer community in Vredenburg, right on the other side of the town. Maybe he meant Laingville, the township and squatter camp on the outskirts of St Helena Bay, also further removed from the wind farm than any other community. I would never call Laingville a "holiday town," it is a struggling community where many people are jobless, it's crime ridden, with drugs and gangsters causing havoc. To mention "price influence" here due to the existing wind farm is just stupid and irrelevant, as clearly West Coast One did not bring any change for them! BOULDERS WIND FARM PROPERTY EVALUATION STUDY REPORT Prepared by J.F. du Toit Professional Valuer / Chartered Surveyor (FIVSA)(MRICS) "As can be seen there is generally an upward trend in prices. Price fluctuation is primarily due to the fact that this is a holiday town, with coastal and non-coastal properties, as well as an area where a very large number of properties are for sale in the market. Also, similar reports for the holiday towns in the St Helena Bay area of the Britannia Bay, Golden Mile, Louwville, Sandy Point, Shelley Point, St Helena Views and Stompneusbaai would have been informative. I did an analyses of these and could not find any real price influence in these	Engels, Anneline	02-Jul	<b>CES Response:</b> These comments and concerns about visual impacts are responded to in the visual impact section of the CRR. The economic specialists have investigated the potential impacts on tourism and property values and found these to be low or indiscernible. In response to the concerns raised by residents of Britannica Heights, the economic specialists made further investigations into the trends in property prices and sales in this area and the potential impacts from the WC1 development. Their findings are that the BWF is not expected to have any significant impact on their property values in the long term, although there may be a temporary 'anticipatory' impact, although this is not evident in the current market trends.



#	I&AP Comments on negative Economic Tourism and Property Impacts	I&AP	Date	EAP Response
	<p>towns due to the West Coast One. As can be seen from Figure 2 some of the properties of West Coast One slope in the direction of Vredenburg, where those properties of Boulders mainly slope away from the surrounding towns, including Vredenburg, which means that visually Boulders is less amplified than West Coast One. Figure 3, which depicts the location of the West Coast One and Boulders wind turbines and the topography of the area. This shows that in addition to the slope towards Vredenburg, some of the West Coast One wind turbines are also slightly closer to this town 2.5.7 With the before mentioned in mind it can be concluded that the case study conducted by Urban Econ in this respect, points to an even less intrusive impact by Boulders than West Coast One.” This report is totally useless and I would suggest CES find a better “specialist” to conduct a realistic representation with proper viewsheds from every perspective, of what REALLY would happen with property values in ALL the affected communities surrounding the valley and the proposed site for the wind farm. The Value of a View: “A home with a view will generally sell for more than a home without one. But just how much value does a view add?” “There have been a number of court cases in recent years concerning new developments or home alterations that have threatened to obstruct the view from a neighbouring property, so there is no doubt that homebuyers put a value on having a view – of the sea, the mountains or sometimes of the city lights. This is also evident, says Gerhard Kotzé, MD of the RealNet estate agency group, from the fact that in any suburb with varied topography, the homes “on the hill” that offer a view will generally sell for more than those below. Similarly, at the coast the homes or stands with a good sea view always fetch higher prices than those without views or with only “partial” views.” <a href="https://www.privateproperty.co.za/advice/news/articles/what-should-you-pay-for-a-view/5842">https://www.privateproperty.co.za/advice/news/articles/what-should-you-pay-for-a-view/5842</a>. See court case regarding a building that “derogate from the value of the adjoining or neighbouring properties.” I can think of nothing worse that can derogate from the value of our property than 45 wind turbines at a height of 165 m on neighbouring land! “Neighbouringbuilding plansruining your cenery?” “ConstitutionalCourtrules that legitimateexpectations of property owners shouldbeconsidered” “On 19 February 2019, the Constitutional Court (CC) handed down its judgment in the consolidated matters of Trustees of the Simcha Trust v Da Cruz and Others and City of Cape Town v Da Cruz and Others (Simcha Trust) in which it had to decide whether there was an obligation on local authorities considering a building application, to apply the legitimate expectations test when considering whether the surrounding area where the building is to be erected would likely be disfigured or whether such a building would be unsightly or objectionable. Section 7 (1)(b)(ii)(aa) of the National Building Regulations and Building Standards Act (Act)sets out certain disqualifying factors whereby local authorities must refuse a building application, namely where the proposed building would: aaa) disfigure the area in which it will be erected; (bbb) be unsightly or objectionable; or (ccc) derogate from the value of the adjoining or neighbouring properties. In 2010, the CC in Camps Bay Ratepayers and Residents Association v Harrison described the legitimate expectations test as a positive obligation on a local authority to satisfy itself that a hypothetical purchaser of a neighbouring property would not harbour legitimate expectations that the proposed application would be denied because it was so unattractive or intrusive. In that case, the legitimate expectations test was only considered in relation to whether the building application would derogate from the value of neighbouring properties as envisaged in section 7(1)(b)(ii)(aa)(ccc) above and did not consider whether the legitimate expectations test would be applicable when evaluating the other disqualifying factors such as whether the proposed building would disfigure an area or where it would be unsightly or objectionable. The CC in Simcha Trust considered this question in light of a building application that had been approved by the City of Cape Town (Municipality) which allowed for the construction of four additional stories on a building owned by Simcha Trust, the effect of which would be that the newly erected stories would be built so as to touch the</p>			





#	I&AP Comments on negative Economic Tourism and Property Impacts	I&AP	Date	EAP Response
	<p>balconies on three stories of a neighbouring property. Following litigation, the Simcha Trust had re-submitted the new plans to the Municipality which invited comment from interested parties. The Municipality received a number of submissions from neighbouring property owners opposing the application and thereafter granted the application. Litigation again ensued resulting in the High Court setting aside the development approval and which ultimately led to the CC being asked on appeal to consider a narrow point of law, namely the proper interpretation of s7 (1)(b)(ii)(aa) of the Act and whether the legitimate expectations test applies to all of the disqualifying factors in the section and not just the derogation of the value of adjoining or neighbouring properties in s7(1)(b)(ii)(aa)(ccc The CC held that the legitimate expectations test is an objective test, based on the relevant facts available to the local authority and when applied to each of the disqualifying factors in s7(1)(b)(ii)(aa) is an accurate translation of the duties of local authorities under the Act and the Constitution of the Republic of South Africa, 1996. The legitimate expectations test would accordingly require the decision maker to consider the impact of the proposed development on neighbouring properties from the perspective of a hypothetical neighbour. In addition to this, the CC reaffirmed that the local authority when considering a building application, must be positively satisfied that there are no disqualifying factors present, and that such factors should be considered separately from the compliance with the other requirements of the Act. The CC also emphasised that the application of the legitimate expectations test to all of the disqualifying factors does not place any additional obligations on local authorities to consult with the public above and beyond the existing requirements of law and stated that the decision maker should consider whether the proposed building will probably, or in fact, be so disfiguring of the area, objectionable or unsightly that it would exceed the legitimate expectations of a hypothetical owner of a neighbouring property.” “This judgment is significant in that local authorities are now to apply the legitimate expectations test to all the disqualifying factors in order to make decisions which are geared towards preserving the value of surrounding properties and the appearance of the area as a whole, ultimately ensuring that the interests of property owners in the surrounding area are adequately protected.” <a href="https://www.bizcommunity.com/Article/196/368/190681.html">https://www.bizcommunity.com/Article/196/368/190681.html</a>.</p> <p>Originally the land where Britannica Heights was developed were sold by the farmers in the valley “to make money.” Still zoned as “farm land,” 118 small holdings were sold to people like us wanting nothing more than peace and quiet in the natural environment on the hill above the farms below. Now those same farmers have no problem taking away our beautiful view we thought was secured when buying the small holdings from them, they rather see us as the (selfish) enemy trying to prevent them claiming a highly desirable income per turbine in the next 25 years! See the map of the layout of the Britannica Heights small holdings, where the 47 - 50 small holdings on the valley side of the hill, marked with orange, will be visually impacted by the proposed placement of the 45 wind turbines:</p> <p>2. No wind turbines to be placed on or in close proximity (a minimum of 500m from the undisturbed (from agriculture) extent) of the Kasteelberg cultural historical site (as prescribed in the Visual Assessment Scoping Report). It must however be noted that Kasteelberg has not been formally proclaimed as a national or Ppovincial heritage site. • The delineation of a visual protection corridor aimed at preserving the visual corridor (scenic pastoral landscape) between Britannica Heights and Paternoster (see Figure 1 below). No wind turbine structures will be placed within this corridor. Only a minimum of 500m from the undisturbed (from agriculture) extent of the Kasteelberg cultural historical site, because it’s not “formally proclaimed as a heritage site! So, they don’t care, it is less worthy of being protected? 3. The Britannica Heights to Paternoster Visual Corridor, indicated as a dashed line beyond which no turbines are to be located, is a spatial representation of the landscape view featured in Figure 1 above. The intention is to ensure that no direct visual intrusion of wind turbines affect</p>			





#	I&AP Comments on negative Economic Tourism and Property Impacts	I&AP	Date	EAP Response
	<p>observers located at Britannica Heights, when they look south-west towards Paternoster and the Atlantic seaboard, thereby protecting the pastoral character of the view corridor. This line is slightly bent in order to include observers/residents further south-east of Britannica Heights (up to Sterbakenkop hill). It should further be noted that the line represents a view corridor and not a viewshed from any specific observer or vantage point. As we don't trust the impact studies presented by CES, I believe we should follow other GIS methods to follow "the visual Guideline document (that)has been established by the Department of Environmental Affairs and Development Planning (DEA and DP) of the provincial government of the Western Cape (PGWC), which cover the VIA portion of an EIA on any project, not specifically related to wind farms. These guidelines are applied in a specific manner when assessing wind farms."  <a href="https://www.ee.co.za/article/assessing-visual-impact-wind-farms-comprehensive-local-solution.html">https://www.ee.co.za/article/assessing-visual-impact-wind-farms-comprehensive-local-solution.html</a></p>			
28	<p>Paternoster as tourist destination was recently featured in a well-known holiday magazine, the "WEG." PATERNOSTER in die WEG-tydskrif.... "Jy weet al van Paternoster se heerlike seekos, maar het jy geweet dié visserdorpie is 'n uithangplek vir kunsliefhebbers? Die Paternoster-kunsroete is 2,5 km lank en huisves pragtige kuns- en beeldhouwerk en fantastiese fotografie. Die volgende galerye is ingesluit: Die At Botha-kunsgalery, Magda Art, pb Ceramics en Stone Fish Studio and Gallery. Die studio bied klasse en werksessies vir besoekers aan en word deur Di Heesom-Green besit en bestuur. Dit is ook die sameroeper van die aternoster-kunsroetes. Die roete loop ook nog langs die galerye van Uro Erichsen, Wayne en Sandy Attrill, Wilko Roon en Linda Tsanga." Translation: "You already know about Paternoster's delicious sea food, but did you know that this fisherman's village is also a hang-out for art lovers? The Paternoster Art Route is 2,5 km long where beautiful art and sculpture creations, as well as fantastic photography can be found. The following galleries are included: The At Botha art gallery, Magda Art, Ceramics and Stone Fish Studio and Gallery. The studio presents classes and work sessions to visitors and is managed by Di Heesom-Green. The studio is also the convener of the Paternoster art routes. This route also includes the galleries of Uro Erichsen, Wayne and Sandy Attrill, Wilko Roon and Linda Tsanga." <a href="https://www.netwerk24.com/Weg/Nuus/25-lekker-dinge-aan-die-weskus-20190610?fbclid=IwAR0Ovp_LrEKc4dfZQPFKsVainAFQKOlgrjDwwiqiifpOGfR seKvJDOgT6s">https://www.netwerk24.com/Weg/Nuus/25-lekker-dinge-aan-die-weskus-20190610?fbclid=IwAR0Ovp_LrEKc4dfZQPFKsVainAFQKOlgrjDwwiqiifpOGfR seKvJDOgT6s</a> Regarding West Coast One, see the newspaper article where Paternoster residents described themselves as being "bullied" by government and developers forcing the wind farm development to be erected so close to a tourist destination as well known as See newspaper article: An ill wind blows in Paternoster "Residents of scenic fishing village Paternoster on the Cape West Coast are in high dudgeon over plans to erect hundreds of wind turbines as part of a scramble to meet the government's renewable energy targets. Environmental authorisation has been granted for 55 turbines at Paternoster, north of Saldanha Bay, and locals say they fear at least 200 more are in the pipeline. The Paternoster project, called West Coast One, is the first of numerous commercial wind farms planned along the coastline from Darling to Namaqualand. It is being implemented by Moyeng Energy, jointly owned by Investec Bank and French multinational energy company GDF Suez. Keri Harvey, an environmental writer who lives in Paternoster, said residents object to the giant turbines being placed in their backyard because of the noise they make, their visual impact and their effect on the natural and historical heritage. "We have no problem with green energy, but why place the turbines in the oldest and most beautiful, traditional fishing village on the West Coast? The wind farms should be moved away from civilisation and tourist attractions," she said. Local businessman André Kleynhans said companies are buying land close to the coastal towns for wind farms with an eye to capitalising on renewable-energy</p>	Engels, Anneline	02-Jul	<p><b>CES Response:</b> There are some I&amp;APs (included in this CRR) who have accused the Developers and EAPs of 'bullying' them. This term is being used to describe the developers legal right to apply for environmental authorisation for their proposed developments. The EIA process requires considerable public engagement and review and for this to be factored into the final authorisation decisions. This cannot be described as 'bullying'. As for the activities of land speculators – these are outside the scope of this EIA and beyond the control of the Developer and the EAP. The issues you raise with regards to the alternative sites are responded to in the Alternatives section of the CRR and the EIR. Site alternatives for the Boulders Wind Farm were investigated in their pre-feasibility phase prior to the EIA. The developer further provided the DEA with a report on the alternatives investigation they undertook during the appeal process (see Volume 1 – Final EIR – Appendix D-1). A summary of the site alternatives investigation and findings has been included in the Final EIR to clarify these issues (See Chapter 5 of Volume 1 - Final EIR).</p>



#	I&AP Comments on negative Economic Tourism and Property Impacts	I&AP	Date	EAP Response
	reimbursements from the national energy regulator as well as internationally funded carbon offset programmes. “We are being bullied into this. There’s lots of wind further inland, where farmers are struggling, and hundreds of kilometres of uninhabited coastline that would be more suitable,” Kleynhans said. Paternoster’s ill winds are the first sign that government plans to increase renewable energy to 42% of new power—with wind providing 6%—and may lead to similar friction with the local green lobby as those occasioned by Europe’s “wind rush” in the past decade.			
29	Potential negative impact on tourism, both locally and regionally (this will be closely linked to the visual impacts from routes currently serving a scenic/ touristic function, specifically the MR 533 and R 399); Potential impact on property prices in the area; Influx of job seekers into the area during the construction phase. The influx of job seekers may result in an increase in sexually transmitted diseases, including HIV/AIDS; increase in prostitution; increase in alcohol and drug related incidents; increase in crime; and creation of tension and conflict in the community; Traffic impacts associated with the construction phase and impact on local residents and tourists; Cumulative impact, specifically visual and associated impact on rural sense of place and the landscape character of the area; Farmers on and adjacent to the WEF site In terms of potential impacts on local farmers in the area the following issues will need to be assessed: Potential threat to farm safety due to increased number of people in the area and construction workers; Potential damage to farm infrastructure (during the construction and operational phase); Potential damage to roads by heavy equipment and increased traffic volumes (during the construction and operational phase); Tourism as key economic growth sector The key tourist attractions include annual wildflower displays and the scenic beauty of the coastal settlements. The environmental setting plays a key role in both regards, and protection of the landscape and scenic amenity are identified as pivotal to the region’s tourism development strategy and management plan. Marketing focus should be on promoting the SBLM as preferred eco-tourism destination in the West Coast region. Focus should be on the protection and development of the region’s natural assets, especially in Paternoster, Langebaan and St Helena Bay. The siting of these projects are important from a spatial land use viewpoint in as far as large tracts of land are typically required to accommodate them. Furthermore, with regard to WEFs, the turbines are typically visible over long distances. The key principles reiterated include: Excluding commercial WEF developments from areas with high aesthetic landscape value;”	Engels, Anneline	2 July	<b>Specialist Response:</b> There is no evidence that suggests that the proposed development of the wind farm will negative affect the local tourism impact and have a long-term consequences on property prices. There is a probably that some tourists may be dissuaded to visit the area, but given the research undertaken in other countries, such effects are usually considerably smaller than what is perceived during the pre-construction phase and are not detrimental to local tourism industries. As far as property prices are concerned, if any property prices are impacted, it is likely to be during the pre-construction phase only, which as shown in international studies will recover once the wind farm is built.
30	How does WEF affect tourism & property values? Was the effect on Britannica heights residents specifically assessed by the specialists?	Public Meeting in Britannica Heights	19/06/2019	<b>CES response:</b> The Economic Specialist was asked to investigate this further. Their report was subsequently amended to include a more detailed discussion of the affected Britannica Heights properties, but this did not change the outcome of their findings and impact ratings.
31	Our properties will look directly onto the windfarm and our property values will be halved. We moved here because of the view and character of the area. This is unacceptable. We should be compensated.	Public Meeting in Britannica Heights	19/06/2019	<b>CES response:</b> There is no evidence to suggest that property prices will drop at such a rate. Research undertaken in other countries suggests that there is no empirical evidence that wind farms have “consistent, measurable, and statistically significant effect on home sales prices” (Hoen, et al., 2009, p. xii). In isolated cases where negative impact was observed, this impact was temporary, took place during the pre-construction phase when fears of the potential impact are particularly high, and dissolved once wind farms were developed.
32	6) The author of Appendix 9 on property values appears to be entirely unaware of Britannica Heights, and fails to mention the area even once in his report. Please clarify how this can be rectified?	Public Meeting in Britannica Heights	19/06/2019	<b>CES response:</b> In the original study, Britannica Heights was considered to be part of St Helena Bay area. However, given that Britannica Heights is particularly vulnerable to the visual impact that could ensue from the proposed Boulders Wind Farm relative to the rest of the town of St Helena Bay, the report was amended to include specific references and targeted analysis of the impact on Britannica Heights.





#	I&AP Comments on negative Economic Tourism and Property Impacts	I&AP	Date	EAP Response
33	Mary Ralphs concerned that the development will result in a loss of employment in local tourist sector.	Public Meeting In Britannica Heights	19/06/2019	<b>CES response:</b> A detailed investigation into the impact on tourism revealed that the proposed Boulders Wind Farm will alter the landscape of the area; however, the negative impact on tourist numbers is going to be markedly smaller than what is currently perceived by various stakeholders and would unlikely be detrimental to the tourism industry in the area.
34	You are trying to make this development fit where it doesn't.	Paternoster Tourism FGM	20/06/2019	<b>CES response:</b> The EAP and Specialists are required to assess and rate the significance of all the potential impacts of the proposed development and make recommendations on how the negative impacts can be avoided, minimised and managed, and the benefits maximised. The information on the alternative sites investigated is included in Chapter 5 of Volume 1 – Final EIR.
35	Us residents of Paternoster only see disadvantages and we are carrying the risks/negative consequences without any benefits.	Paternoster Tourism FGM	20/06/2019	<b>CES response:</b> Detailed investigations of the potential Social and Social Economic Impacts was conducted. Boulders Wind Farm will invest around R9 million on an annual basis into socio-economic and enterprise development initiatives among the communities located in the 50 km radius from Vredenburg. This investment will carry for 20 years – while the wind farm is operational – and could notably improve the socio-economic environment in some of the smaller communities, including Paternoster.
36	The value of property and tourism in the specialist reports were not in touch with common trends.	Paternoster Tourism FGM	20/06/2019	<b>CES response:</b> See response 16 above. The Economic Impact report was augmented with additional information on international research and case studies investigating impact of wind farms on tourism and property values. The assessments were also amended accordingly.
27	I&AP stated that the specialist didn't interviewed the correct (tourism and property) people.	Paternoster Tourism FGM	20/06/2019	<b>Specialist response:</b> A random sample of real estate agreements, tourism facilities owners and tourists were interviewed by the specialists. The specialist approached a total of 56 individuals representing these stakeholders and were able to interview 19, with a success rate of 34%. A few representatives cancelled on the day, the majority though were not available during the several days when the project team was in the area, which took place during the off-peak season. This limitation is acknowledged in the report and this is the reason why the analysis also considers case studies of Kouga Wind Farm and West Coast One. In the most recent amendment, the report was augmented with the international case studies investigating the effects of wind farms on tourism particularly in areas of scenic beauty. In addition, we made use of tourism related data for each town in the primary zone of influence sourced from WESGRO.
38	The highest impact on the property market and tourism is crime.	Paternoster Tourism FGM	20/06/2019	<b>CES response:</b> The Economic Report has acknowledged that crime does impact negatively on property values and tourism.

## 13 SOCIAL IMPACTS

#	I&AP Comments on Social Impacts	I&AP	Date	EAP Response
---	---------------------------------	------	------	--------------



#	I&AP Comments on Social Impacts	I&AP	Date	EAP Response
1	<p>One of the big plusses that CES puts forward is job creation. What percentage of the WT components are manufactured in RSA, or are we as tax payers creating jobs in Germany? This project will cause MANY outsiders to flood into the area seeking work, and then if they do not get work or when the work is completed they will most likely, as has happened in the past, remain in the area and not return to their original areas. This will increase the crime rate and also the pressure on SBM infrastructure with the demand for housing and services which will lead to riots when not provided, as has already happened. What guarantee do long time local residents have that they will be considered for jobs before incomers?</p>	Todd, A&J	01-Jul	<p><b>CES Response:</b> The developers indicated that the competitive nature of the bidding process for renewable energy projects and the minimum requirements to qualify and remain competitive, the developers are required to ensure 50% local content in their contracts and employ. The SIA indicates that the majority of employment opportunities will be created during the construction phase and will be temporary. The employment opportunities directly linked to the operational phase will be limited. Given the relatively small scale of the project and short duration of the construction phase, the potential for an influx of job seekers to the area is limited. The risk of crime increasing due the proposed BWF, particularly during the construction period, has been assessed in the Social Impact Assessment. To mitigate this the EIR recommends, and the developer has committed to, ensure that local labour is hired as much as possible. No workers will be resident on the site during construction and will be transported in by the contractors from local towns.</p>
2	<p>Industrialization, Fishing and Tourism are the only economic activities in the town. Even retail is just for necessities and a few souvenir shops. There is a total lack of any industrial activity. A large commercial wind farm will change this. Although feelings towards windfarms are mixed, the net impact can only be negative as some tourists will be deterred, it is only the percentage which is uncertain. The above therefore needs further investigation by a specialist</p>	Brand, Deon	02-Jul	<p><b>Response of Social Specialist:</b> The findings of the international literature review undertaken as part of the SIA indicate the impact of wind farms on tourism is limited. Experience from other parts of South Africa such as St Francis Bay, Cape St Francis and Jeffery’s Bay, indicate that the presence of wind farms in the area has not impacted on tourism.</p> <p><b>Economic Specialist response:</b> A review of international case studies that focused on assessing the effects of wind farms on areas that are associated with scenic and heritage endowments has been added to the report to provide insight into possible effects that wind farms can have on tourism numbers. The review suggested that perceptions and personal attitudes towards wind farms are integral in how local residents and tourists perceive wind farms. Various negative impacts are usually cited to be associated with wind projects (noise, land devaluation, etc.); however, it is negative impact on tourism that appears to be a recurring motivator for campaigns against wind farms (Silva &amp; Delicado, 2017). The concerns of the public with respect to the impact of wind farms on tourism stems from the attitude and perceptions by the same public that wind farms adversely impact on the valuable tourist resources or products that derive their value from visual dimension of the area and specifically the landscape (Silva &amp; Delicado, 2017). As stated in 2008 Moffat Report (2008), “scenery clearly has value” but the studies into relationship between tourism and wind farms continue to show conflicting results. Some studies show that wind farms “may have” impact on tourism, while others reveal that tourism is innocuous or in some instances even benefiting from wind farms (Silva &amp; Delicado, 2017). After reviewing the literature and data related to the proposed development, the specialists could not rule with confidence whether wind farms have or do not have a negative impact on tourism, but those studies that pointed to the possible negative effects report marginal and not detrimental impact on tourism (Aitchison, 2012; Moffat Centre, 2008; The Tourism Company , 2012). It appears that many other factors such as the size and range of wind farms, the demographics of tourists (families with kids are more accepting of wind farms), the landmarks and other physical and environmental attributes of the destinations all contribute to the decision of tourists to visit or re-visit an area. One trend that seems to be common though is that the outcry against wind farms is generally considerably greater during the pre-construction stage than during operations suggesting that initially perceived negative impacts to be associated with wind farms do not always come to fruition.</p>





#	I&AP Comments on Social Impacts	I&AP	Date	EAP Response
3	<p>3.2 Assessment of Economic impacts by Urban-Econ. From Paternoster’s point of view it is essential to estimate what the expected economic return for the town will be and how does this weigh up against the economic and other risks? This calculation should be provided by an appropriate specialist.</p> <p>4.0 The Social Impact Assessment by Mr Tony Barbour. 4.1 Wind is an abundant resource which can be harvested/”mined” in many places. WF’s differ from conventional mines in that there are abundant locations suitable for the harvesting of wind. In this case a project is proposed in a sensitive position which compromises the environment. Mr Basfour state in this regard on page ii of the SIA: Of specific relevance the West Coast Districts Municipality SDF notes that wind farms should be located where they will cause least visual impact taking into consideration the viability of the project and located where their visual and environmental impact will be the lowest. The Saldanha Bay SDF and IDP refer to the principles contained in the 2006 DEA&amp;DP Regional Methodology document, specifically that large commercial WEF developments should be excluded from areas with high aesthetic landscape value. Mr Basfour concludes in respect of the above that: These issues will need to be considered by the authorities when considering the application. Surely it must have been possible to discuss this issue with the Saldanha Bay municipality before providing I&amp;AP’s with the SIA? This is very important information which should be provided to I&amp;AP’s. 4.2 During the Construction Phase the impact from influx of job seekers and the presence of construction workers are rated as Low (-). Whilst this may be the case for the other surrounding towns, this assessment should be re-evaluated for Paternoster considering that crime had been proven to be the achilles heel of tourism in Paternoster – see Annexure B Par 16. It has to be considered that the reputational risk for Paternoster to crime has a long term effect as it takes many years to change negative perception of tourists in respect of an important issue like crime. 4.3 On completion of the Construction Phase, employment opportunities will be greatly reduced. This will increase the exposure of Paternoster to crime again. The risks in 4.2 and 4.3 should be quantified and evaluated. 4.4 Paternoster made great strides to change its economy from fishing to tourism – see Annexure B. The proposed WF project is not labour-intensive and very few jobs will accrue to Paternoster’s people. A very small part of the operation costs of the project will also flow into the Paternoster’s economy. Despite this the Paternoster economy will be exposed to considerable risks. Overall Paternoster’s economy therefore seems to benefit relatively little but carries the biggest risk of all stakeholders. This position needs to be quantified for evaluation. 4.5 Socio-economic opportunities and benefits for historically disadvantaged, rural communities are used to motivate the project. Whilst this is welcomed, it needs to be put in perspective. Real difference come foremost from the creation of jobs. If jobs get lost and are compensated for by socio economic benefits, the overall impact will most likely be negative. There must be guarded against that communities are misled by promises of small amounts in order for investors to achieve their goals. In a few years the turbines may be turning and the investors will get their returns, but the local communities will have to live with the consequences. As is the case for 4.4, this needs to be quantified. 4.6 In respect of the impact on tourism the SIA concluded that there is limited evidence to suggest that the proposed BWF would impact on the area’s tourism industry. If the EIA-preceding the WF project is done correctly, this should be the case but the Draft EIA is seriously lacking in this regard – see Par 3 above. 4.7 Impact on property values: the approach is again simplified. Most properties in Paternoster are used to earn tourism income. If this income reduces, the value of these properties will be reduced. The impact on property values in the case of Paternoster is therefore dependent on the impact on tourism. Once this is analysed, an estimate on the impact on property values should be done.</p>	Brand, Deon	02-Jul	<p><b>Social Specialist Response:</b> The findings of the SIA indicate that the impact of wind farms on tourism is limited (see above comments). The developers have indicated that ~ R9 million will be spent on social development in the area per annum. A percentage will be spent in Paternoster. The SIA includes a review of relevant planning and policy documents. Meetings were held with representatives from both SMB and WCDM. Based on the feedback from these meetings there was general support for the establishment of renewable energy projects in the area. Influx of job seekers is discussed above. Re potential for crime once the construction phase is completed. The proponent is committed to employing locals where ever possible. The non-local construction workers will form part of the staff of the contracting company appointed for the construction phase. These workers will move with the company once the construction phase is completed. Re impact on tourist activities. As indicated above, the presence of wind farms in the vicinity of St Francis Bay, Cape St Francis and Jeffry’s Bay in the Eastern Cape has not impacted on tourism to the area. Likewise, the existing wind farm near Paternoster has not impacted on tourism.</p> <p><b>Economic Specialist Response:</b> 3.2 It is not possible to quantify precisely the economic return that could be derived by the town of Paternoster from the development of the proposed Boulders Wind Farm during construction and operation phases. This is largely because Paternoster is not the only town located in the vicinity of the proposed development and distribution of economic benefits at that level linked to behaviour of residents, visitors and businesses is impossible to predict with confidence. It can though be confidently stated that some of the local tourism facilities and local catering and retail businesses will benefit from the project as a result of presence of business tourists and contractors who will be brought to work on the project during construction and who will spend money on local accommodation and personal services. Benefits of that nature have already been confirmed to be observed during the construction of West Coat One. This benefit though will be of temporary nature and will not last for more than two years. During operations, occasional visitation by business tourists (e.g. engineers) can take place but it will be marginal and will not have any notable effect on the town of Paternoster. As stated in the report, there is a risk that certain tourists may be deterred from visiting the area due to the perceived negative change in the landscape. However, research suggests that international tourists and tourists with families or younger tourists tend to be more accepting of wind farms and some may even find wind farms to be an attraction. As suggested in the report, there is a potential to create a new tourism form in the area that would allow mitigating the highly seasonal nature of tourism industry in the area, which in turn could assist in more balanced distribution of economic returns derived by the town and the surrounding areas from various activities.</p>





#	I&AP Comments on Social Impacts	I&AP	Date	EAP Response
4	<p>Eskom feeds the wind energy into the national grid which supply electricity users elsewhere in SA. What is going to happen if Eskom no longer needs the wind energy or cannot afford to pay a fair price.</p> <ul style="list-style-type: none"> <li>• Will the wind farm remain in use and be maintained? Would the farmers still have an interest in farming with milk cows, wheat etc. when they can live of the income from the wind farm leases. Are these farms going to become a windblown sandy and eroded landscape?</li> <li>• Will the tourists still be interested in coming to Paternoster. If not, the shops, restaurants and rental apartments will have to close their doors and the local community that is dependent upon these tourist related activities will become poverty stricken.</li> </ul>	Muller Coetsee	03-Jul	<p><b>Economic Specialist Response:</b> The wind farm will be operating for at least 20 years and any entity purchasing power from it, such as Eskom, will have to sign a contract for that duration. It is also our understanding that the farm owners will continue with their existing farming activities and will use the rental income derived from the wind farm as a supplement not subsidize for existing commercial activities. The issues of the impact on tourism has been addressed in other comments but in short, if any negative effect is to be observed it will be markedly smaller than what is currently perceived by the public and it could be mitigated by creating a new form of tourism that attracts younger people and families with kids and extends the tourism season beyond the months of September to February.</p> <p><b>BWF representative response:</b> The way the Department of Energy's REIPPP Programme works is that if Eskom fails to pay for the electricity under their contract, National Treasury step in and pay the IPPs. The Eskom contract is underwritten by National Treasury. So the Wind Farm will continue to be in use and will continue to be maintained.</p>
5	<p>about, all semiskilled and unskilled labour to be recruited from Paternoster, St. Helena Bay, with proven residence for 5 years or on the Voters Roll. The reasons are the negative social effects of in-migration during construction phases being without employment when construction is completed. 11. For alien species clearance and maintenance there are teams trained by local NGOs available, for example CWCBR. 12. Vehicles, of Developer, Contractors and Subcontractors to be registered with the Vredenburg Traffic Department in order that some portion of the licence fees can be utilised for road infrastructure maintenance.</p>	West Coast Bird Club	30-Jun	See response 1 above re: comments about the potential influx of job seekers.
6	<p>Draft EIR Appendix D5, Appendix D9 and Appendix D10. Socio Economic Reports: It must be noted that in all the above reports, that the Visual Impact Report of Logis, is used as the basis for the extrapolation of consequence. The Logis report has been supplemented by the more recent Visual Impact Report of CES, which report presents a drastically revised interpretation of the Visual Impact proposed by Logis, in that the Visual Impact is designated as HIGH, rather than moderate or low, and as such demands the re-review of Appendixes D5, D9 and D10 as above, of the local impact on the socio, economic impacts of the Proposed Boulders Wind Farm. Appendix D5: Urban Econ report. In paragraph 2.1.2 Urban Econ note the tourism to the areas affected by the Proposed Boulders Wind Farm, as: In the year 2016 the Saldanha Local Municipality received the greatest number of domestic visitors in the West Coast District Municipality. The effect on tourism of the proposed Boulders Wind Farm on the proposed site therefore is of major and long-term consequence. Urban Econ's statement as per paragraph 2.2 "Effects of the West Coast One Wind Farm on tourism All tourism product owners argued that the West Coast One Wind Farm did not have an effect on their business and tourism at large." Must be considered in terms of the dramatic difference in the Visual Impact of West Coast 1 versus the Proposed Boulders Wind Farm. The visual impact of West Coast 1 and the same of the Proposed Boulders Wind Farm are not equal. The radical differences on the visual surround of not only Paternoster, but all the communities of the West Coast Peninsula, from the Proposed Boulders Wind Farm, with ramifications acknowledged to be as far reaching as Velddrif, Laaiplek and Langebaan, are of little comparable similarity with those of West Coast 1. The above assumption, that West Coast 1's visual impact consequence can be used as an historical point of standard is incorrect and as such triggers the requirement that all of Urban Econ's report be read with this deficiency in mind. Urban Econ must review their report in terms of a reviewed Visual Impact Report before their report can be considered in terms of the EIA. The following statement under paragraph 2.3 Potential effect of the proposed Boulders Wind Farm on tourism in the area must be reconsidered in light of the above changes noted in the Visual Impact Report, and especially the effect of night lights on visual pollution of the landscape. "Considering that the location of the proposed Boulders Wind Farm is inland and is</p>	Pickford, Peter	02-Jul	<p><b>Social Specialist Response:</b> Comment noted.</p> <p><b>Economic Specialist Response:</b> Indeed, Saldanha Bay Local Municipality is a very popular destination among domestic tourists. It is important to note though that these tourists include business and leisure tourists, among others and that Saldanha Bay LM encompasses such popular destinations as Langebaan, Saldanha, Vredenburg, and Paternoster. Stats SA Domestic Tourism Survey data for 2017 suggests that Langebaan was the most visited town in Saldanha Bay LM. Visitors to that town make up about 50% of all visitors to the municipalities, followed by those visitors coming to Saldanha (mainly business visitors). The town of Paternoster is among the least visited among these towns. Thus, it would be prudent not to assume that any negative consequences by the wind farm on tourism, if any, would jeopardise the tourism industry in the municipality. Having said this, the visual impact assessment study does show that the visual impact of the proposed Boulders Wind Farm on the town of Paternoster, Vredenburg and Britannica Heights will be high. This means that the proposed Boulders Wind Farm will negatively impact on the visual aesthetics of the area and the scenery of the area. However, the review of various international cases studies, which have been included in the report, could not confirm the negative effects of wind farms on tourists' interest to visit the area. And although this corroborates the earlier statement that West Coast One also did not negatively impact the number of tourists visiting the area after its construction, since West Coast One was located further away from the scenic landscape that visitors to Paternoster and St Helena Bay seek, extrapolating the same trend on the Boulders Wind Farm would be incorrect. The study also revealed that in the worst-case scenario, based on the perception studies conducted in other parts of the world, between 25% and 35% of tourists generally have a negative attitude towards development of wind farms in scenic areas and may be deterred from visiting the area.</p>



#	I&AP Comments on Social Impacts	I&AP	Date	EAP Response
	<p>not expected to obstruct the beach view for tourists visiting the coastal towns (i.e. Paternoster and St Helena Bay), the above-mentioned concern of obstructed beach views is likely to be unrealised and no potential negative impact on leisure tourists is expected.” Further, in the same paragraph 2.3 is stated: The proposed development of the Boulders Wind Farm is more likely to have a positive impact on tourism in the area (i.e. through increased business tourism during construction activities of the Wind Farm) than a negative effect. The positive impact will however be temporary and will be limited to the duration of construction activities. The above statement looks only to the relatively short period of the construction phase of the Proposed Boulders Wind Farm, and makes no consideration of the possible long-term negative consequences of the effect on tourism for a quarter of a century to come of the Proposed Boulders Wind Farm. It must further be noted that should an alternative site be proposed and accepted, that the limited potential positive effects as quoted above, would remain applicable. Urban Econ further acknowledges in paragraph 3.2.1, that: Saint Helena Bay is a relatively new area in terms of investment given that Langebaan is now developed to capacity, therefore new developments are common. but fails to expand on the same to acknowledge that Britannica Heights, as part of St Helena Bay, stands as the MOST AFFECTED community with regard to Visual Impact. The above requires more rigorous investigation into the consequence of development expansion in St Helena Bay area in regard to the negative impact of visual despoiling of the view from Britannica Heights. Further in paragraph 3.2.3 Trends in property prices, the concluding paragraph states: 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 correspondent would argue that the limit intimated above is not to be attributed to a lack of objection to visual impact caused by wind energy facilities (WEFs) as suggested, but more by the fact that the public remains poorly informed of such WEF proposals. Such poor public participation being caused to a large degree by the EAP’s historically involved in WEFs on the 14 West Coast Peninsula, rigorously adhering to the MINIMUM legal requirement required of them and not actively seeking real and conclusive public participation. The attached petition reveals that a good portion of the public stand in opposition to the Proposed Boulders Wind Farm and are concerned as to the effect it would have on property value. Real and inclusive public participation should be made a more stringent requirement for the further drafts of this EIA. Further Paragraph 4 Assessment of Economic Impacts refers: “The purpose of this section is to quantify the potential economic benefits and impacts that could be derived from the construction and operation of the proposed Boulders Wind Farm. Overall, the following economic impacts are expected to take place during the construction and operation phases: » Increase in economic production and Gross Domestic Product (GDP) » Creation of employment opportunities » Increase in household income » Government earnings through rates and taxes” All of the above relates to positive impacts. The above does not consider negative impact. It further relates only to the 2-year construction period whilst ignoring the 25-year existence of the WEF. The post construction job opportunity for the Proposed Boulders Wind farm is 17 jobs. This must be compared to the potential of the tourism sector, acknowledging the exponential growth of the same and also the real skills development that the tourism sector initiates. Such examination is critical to a balanced understanding of the positive and negative implications of the Proposed Boulders Wind Farm and decisions relating thereto. The report is therefore deficient and requires review and re-submission before it can be accepted as representative of all impacts and their potential effects. It is further noted in relation to the above statement that the benefits stipulated for GDP, employment, household income and government earnings, hold true for any site upon which the proposed WEF is erected, but that the negative aspects are entirely site specific. This again points to the urgent need for alternative site examination. For paragraph 2.1.3 Potential effect on production and GDP-R during operation The above considerations of the values expressed not being site specific are again applicable and also for paragraph 2.2.2. Several other considerations are noted in paragraph 2.2.2, namely: It should be noted though, that in the case of the West Coast One Wind Farm, three quarters of all direct employment opportunities created during construction were absorbed by local labour (WindLab, 2018). This could</p>			<p>Perceived impact before construction and actual impact during operations, though, tend to differ markedly in a positive way. This means that the actual decline in tourist numbers is likely to be considerably smaller than the initially perceived 25% to 35%. Some dependence of the town of Paternoster on international visitors, who come mainly from Europe and who tend to be more exposed to wind farms due to the European energy policy, also suggests that the negative perceptions associated with wind farms will be lower and unrealised once the wind farm is constructed. Overall, it was concluded that while the development of Boulders Wind Farm will impact on the value of the scenery associated with the town of Paternoster and its surrounds, the negative impact on tourist numbers is going to be markedly smaller than what is currently perceived by various stakeholders and would unlikely be detrimental to the tourism industry in the area.</p> <p><b>CES response:</b> The CES VIA confirms the assessment of the Logis VIA and there are no “drastically” differing conclusions. Issues relating to the admissibility of the CES VIA are discussed in detail in the Visual Impact Assessment section of this CRR.</p>





#	I&AP Comments on Social Impacts	I&AP	Date	EAP Response
	<p>be achieved due to the significant portion of the work involved in the construction of renewable energy projects requiring relatively low skills. 15. In my own research of WEFs employment potential, both through desktop investigation and interviews, I have established that the work offered throughout all phases is restricted principally to labour and that the often touted “skills development and upliftment” is more lip service than actual practice. That in existing WEFs, skilled positions, rather than causing training, are preferably filled by already qualified persons and that because such person is often not locally available, that foreign specialists are employed instead. I would ask that Urban Econ and the EAP review Urban Econ’s report and investigate the same and provide the result of such investigation to all I&amp;APs, before any assumption that skills upliftment goes hand in hand with construction and ongoing employment can be made or expressed. The above is further applicable to paragraph 2.2.3 During operation, the project will employ about 17 people, majority of who will be technicians. It should be noted that although the assumption that such technicians will be local is implied, it is neither stated nor confirmed. Paragraph 6, section a) With regard to the effect on tourism This entire section requires review and resubmission in light of the revised Visual Impact Report of CES, where Visual Impact has been assessed as HIGH for all circumstances and with no mitigation possible. It is further noted that the positive inclination stated in the same paragraph that: some of the local tourism product owners have experienced a positive effect on their business activities as a result of the development of West Coast One Wind Farm during its construction This is limited to the 2-year construction phase and does not further expand on the rest of the life of the proposed WEF and further, that this positive implication remains valid regardless of site whilst the negative implications (not expressed) are site specific. It is imperative to a thorough and complete understanding of the full impacts, that both positive and negative be investigated with equal consideration and tabled in this report before this report can be deemed to be a true representation of the impact of the proposed BWF. It is further noted that the positive inclination stated in the same paragraph that: some of the local tourism product owners have experienced a positive effect on their business activities as a result of the development of West Coast One Wind Farm during its construction This is limited to the 2-year construction phase and does not further expand on the rest of the life of the proposed WEF and further, that this positive implication remains valid regardless of site whilst the negative implications (not expressed) are site specific. In Paragraph 6, section b) With regard to the effect on property values This entire section again requires review and re-submission in light of the revised Visual Impact Report of CES, stating all Visual Impacts to be HIGH and with no mitigation possible. I would end my review of Urban Econ’s report with a statement extracted from paragraph 2.2.3 of the report, which summarises the entire dilemma of the report’s tone of positive consideration, whilst ignoring the very important negative possibilities on job creation: ...”the proposed project will create a relatively small number of jobs” ..... Appendix D9 Appraisal Corporation 16. Paragraph 3.3, with reference to the whole report, which states: As can be seen from Figure 5, Map 8 of the Logis Report, the “Visual Impact Index” of Boulders varies between “Moderate”, to “Low” on the nearby towns. Whilst acknowledging in the next sentence that: The visual impact of a wind farm is by far the most influential impact on property value patterns. As per my opening comments to this section above, It must be noted that in all the above reports, that the Visual Impact Report of Logis, used as the basis for the extrapolation of consequence, has been supplemented by the more recent Visual Impact Report of CES. The CES Report presents a drastically revised interpretation of the Visual Impact proposed by Logis, not as Moderate or Low, but HIGH, for all circumstances, and as such demands the re-review of Appendixes D5, D9 and D10 as above, of the local impact on the socio-economic impacts of the Proposed Boulders Wind Farm. Appraisal Corporation’s report must therefore be reviewed and resubmitted before being considered. This is further of critical importance for paragraphs 3.4.2, 3.4.3, 3.4.5, 3.4.6 and 3.4.7 I would further comment on Appraisal Corporation’s report paragraphs 4.1.1 through to 4.1.4, that it seems that we are not comparing apples with apples, and that many of the communities cited as positive examples in the above paragraphs stood to benefit in terms of local electricity costs, tax benefits and other mitigations from the local siting of a WEF in their area. The same is not true of the Proposed Boulders</p>			





#	I&AP Comments on Social Impacts	I&AP	Date	EAP Response
	<p>Wind Farm. Paragraph 5 of Appraisal Corporation’s report (Own Research) fails entirely to address the most recent Visual Impact Report. Such Visual Impact report will, or should, dramatically revise the assumptions made in paragraph 5 and until such stage, as this critically required review is done, paragraph 5 is dismissible as relevant. The same is then true for the conclusions expressed in paragraph 6 Conclusions. Until his report is brought up to date by inclusion of the latest Visual Impact Report assessment as HIGH for all factors, Mr Saul Du Toit’s, Appraisal Corporation, conclusion is not valid and requires review. Appendix D10 Social Impact Assessment Report. On page iii of the Social Impact Assessment Report, the following assumptions are made: Potential positive impacts: •                      _Creation of employment and business opportunities, and the opportunity for skills development and on-site training; As discussed above the creation of employment remains equal outside of the site selection and therefore the site selection alternatives remains a chronic omission and requires in depth consideration towards all further reviews of the application. It should also be noted that outside of the construction phase, only 17 jobs will be created and that this Social Impact Assessment Report makes no consideration of potential negative impacts. It is further important to note that, as stated above; In my own research of WEFs employment potential, both through desktop investigation and interviews, I have established that the work offered throughout all phases is restricted principally to labor and that the often touted “skills development and upliftment” is more lip service than actual practice. That, in existing WEFs, skilled positions, rather than causing training, are preferably filled by already qualified persons and that because such person is often not loc ssumption that skills upliftment goes hand in hand with construction and ongoing employment can be made or expressed. Further, Paragraph titled Capital investment and business opportunities on page iii It should be noted that once again the points made in this paragraph remain valid irrespective of what site is chosen and so the examination of negative influences due to site selection become MORE CRITICAL than the positive criteria and this should trigger alternative site selection as a mandatory requirement of this assessment process going forward. It is noted that on page iv of the Social Impact Assessment Report under the title Potential negative impacts that no mention is made or consideration given to the potential negative impact on the local tourism industry. As tourism is a principal driver behind the local economy, this exclusion requires remedy. On page vii of the Social Impact Assessment Report, both the paragraphs Generate income for affected landowners and Socio-economic benefits for local communities Are applicable regardless of site and will apply for the local community in equal measure to any site within a 50km radius of the proposed site. On page ix of the Social Impact Assessment Report the following statements pertain: Visual impacts and impact on sense of place. This entire paragraph and its discussion is using the Visual Impact Report of Logis and must be reviewed and adjusted according to the findings of the Visual Impact Report of CES, denoted as HIGH for all circumstances. The findings of this paragraph are therefore flawed and render the entire report as a result, flawed and requiring of further review and re-submission. On page ix of the Social Impact Assessment Report the following statements pertain: Impact on property values. The impacts discussed here fail again to take cognizance of the latest Visual Impact Report with its thorough examination of the dramatically increased visual impact due to the increased size of the turbines with their height increase of 45 meters over the West Coast 1 WEF, slated as comparable. This paragraph and report must be reconsidered, re-written and re-submitted. The comparative studies of the SEIA mentioned here, fail to address 2 important factors, the consequences of the visual impact of greatly increased turbine and rotor blade height of the Proposed Boulders Wind Farm with its associated night light pollution, and any direct benefit offered as compensation to local residents. This must be addressed before this report can be deemed to be entire and complete. On page ix of the Social Impact Assessment Report under the heading Impact on tourism.It is grossly irresponsible for Mr. Barbour to suggest that, based on a desktop assessment of reviews undertaken on other continents are sufficient to propose, as he does, that:</p>			





#	I&AP Comments on Social Impacts	I&AP	Date	EAP Response
7	Based on the findings of the literature review there is limited evidence to suggest that the proposed Boulders WF would impact on impact on the areas tourism industry, specifically Paternoster. Such statements have wide and very long-term implications and MUST be thoroughly investigated and reviewed in situ before any such wide reaching assumptions can be drawn. The correspondent further notes that although Professor Aitcheson's report on the influence of WEFs in Scotland is widely quoted as relevant to the local considerations, it fails to acknowledge the limitations of such comparison in the inherent difference between the area study by Professor Aitcheson, namely cold, bleak landscapes of Scotland with little natural tourism interest bar the wind farm itself with its well designed and welcoming visitors center, and the local tourism factors surrounding the proposed site of the Boulders Wind Farm with its principally outdoor, warm and sunny ambiance in which the Outstanding Natural Beauty of the landscape becomes intrinsic and central to the enjoyment of coming to this place as a tourist. Much of what else is notable in the Social Impact Assessment Report has already been addressed above and I shall avoid the repetition for the sake of brevity. However, one very important statement remains, that made in Mr. Barbour's concluding paragraph: CONCLUSION AND RECOMMENDATIONS. In conclusion, the impact on the areas sense of place is an issue that the relevant authorities will need to consider when assessing the application. As indicated above, while the development of renewable energy (including wind farms) in the West Coast District and Saldanha Bay Local Municipality is strongly supported, the key policy and planning documents highlight the need to ensure that renewable energy facilities are appropriately located and do not impact on the areas scenic assets and ourism potential. The above statement is a concise summation of my entire comments above.	Pickford, Peter: cont	02-Jul	<b>Economic Specialist Response:</b> Response 7 is also relevant here. Additional case studies of impact of wind farms on tourisms in various localities endowed with scenic beauty were reviewed and added in the report. Pictures of these environments were also provided to give the reader some insight into those locations. With the addition of the case studies, the report also expanded on the analysis of the proposed Boulders Wind Farm on tourism in the area considering the sensitivity of various localities towards the visual impact of the landscape and insights drawn from international case studies. In conclusion it was stated that the proposed Boulders Wind Farm will alter the landscape of the area, but the negative impact on tourist numbers is going to be markedly smaller than what is currently perceived by various stakeholders and would unlikely be detrimental to the tourism industry in the area. Considering a seasonal nature of tourism in the area it was also recommended to use the wind farm as an opportunity to create a new form of tourism in the area attracting young population and families with kids, who have been noted to be more neutral and accepting of wind farms. This could also assist in extending the tourism season into off-peak months.
8	JOB OPPORTUNITIES AND SOCIAL IMPACT. • Creation of job opportunities and skills development, are largely unfounded. Experience from West Coast One, jobs did not materialize, except for one contractor appointed to erect not much more than a few carparks at the site offices. • The Report argues that- The proponent should implement a "locals first" policy, specifically with regard to unskilled and low skilled opportunities. The focus should be in communities in Paternoster and St Helena Bay. We regard the influx of a high volume of job seekers over a 2 year time span as a huge problem. Past experience has shown that at the end of their 2-year employment low skilled labourers don't return where they came from and aggravate local unemployment. This unemployment is a contributing factor to crime, which in turn is directly responsible for decrease in property values. • It would be interesting to know which training opportunities will be offered to qualified local people to be up-skilled to undertake certain roles during the construction and operation. We understand that at least a substantial number of projects are necessary to warrant a local manufacturing plant of e.g. the rotor blades. Until such time, however, this effectively means that we as taxpayers are subsidising jobs in Germany. • The Social Impact Assessment Report boasts that the procurement spend over the 20 year operation phase for BW1 to BW4, 1S2 and IS2 will be inthe region of R 75 billion – does this mean that we have to anticipate 3 further Boulders Wind farms? • The number of jobs created by the Paternoster tourism industry on a permanent basis outweighs that of the BWF many times over and cannot even start to compare.	No Boulders Wind Farm Petition Group	1&2 July	<b>Social Specialist Response:</b> See response 1 above re the influx of job seekers. The reference to "BW" refers to Bid Windows as part of the REIPPP programme, and not Boulders Wind Farm. Therefore, it does not mean that there will be 3 more Boulders Wind Farms. Re jobs, agree, that the tourism sector employs and will continue to employ more people than the proposed wind farm. However, as indicated above, the impact of wind farms on tourism is limited.
9	2. Ekonomiese inpak. • Daar is geen kans vir verhoging van waarde van my eiendom deur die voorgestelde ontwikkeling nie – slegs verlaging. Ek staan dus bogenoemde ontwikkeling ernstig teen. Die uwe. Dr. L. Engels 2. ENGLISH: Economic impact. There is no chance of increasing the value of my property by the proposed development - only reduction. I therefore seriously stand against them.	Engels, Louis	01-Jul	<b>Economic Specialist Response:</b> The assessment revealed that properties in Britannica Heights and the town of Paternoster will be visually exposed to wind turbines. The Scenic Vista Sigma and Nuisance Stigma, therefore, are highly acute in the area. Given the research conducted in other countries, property prices in selected instances could be negatively impacted but this depends on the perceptions of the buyers with respect to wind farms and their willingness to use the presence of wind farms to negotiate costs down. Given the proximity of Britannica Heights to wind farms, it will have a greater risk of being affected than properties in the town of Paternoster. However, if any property is negatively impacted, such an impact would be of a temporary nature and reverse once the wind farm is developed (if it is approved).



#	I&AP Comments on Social Impacts	I&AP	Date	EAP Response
10	<p>COMMERCIAL ENTERPRISE AND LOCATION. The developer of the above application is a commercial enterprise and thus their prime motivation and decision-making is driven by the need to maximise profit and return on investment. Within the Draft EIA Report, representations have been made that the Wind Farm project must be granted approval as it will yield benefits to many parties, ranging from The Nation to local residents seeking work. Whilst this is possibly true, these benefits will accrue wherever a wind farm is located. With this in mind, it is reasonable to draw the assumption that the real reason that the developer prefers the location selected is that it will maximise their profits and return on investment. Whilst these commercial motivations are normal in a capitalist economy, I believe that these commercial motivations should not be allowed to take precedence over and to the detriment of the existing residents, businesses and environment. The developer should be encouraged to seek an alternative location for this project, where these conflicts are not present. The West Coast is a large region with many other locations suitable for this project. If the profitability of other locations cannot match that of the location in this application, then as is normal in a commercial business, the business model must be redesigned to optimise the situation – for example lower turbine site rentals for land owners.</p>	<p>Portsmouth, Doug</p>	<p>02-Jul</p>	<p>See responses above and responses 1, 6 and 7 in the Alternatives section of the CRR.</p>
11	<p>That is also the reason we bought the smallholding in Brittanica Heights, to retire and get away from the stifling circumstances of living in a town so close to industrial zoning, with pollution and crime rising as more and more people stream to this area looking for work, but not finding any and resorting to crime. After all, the reality is, we live in South Africa, where the unemployment rate rose to 27.6 percent in the first quarter of 2019 from 27.1 percent in the previous period. It is the highest jobless rate since Q3 2017, as the number of unemployed went up by 62 thousand to 6.20 million and employment fell by 237 thousand to 16.29 million. <a href="https://tradingeconomics.com/south-africa/unemployment-rate">https://tradingeconomics.com/south-africa/unemployment-rate</a>) Apart from a huge shortage of jobs, we also have a high rate of drug and gang related crime in the local communities which got worse as industrial development were introduced and poverty increased. So, while economic and social upliftment were promised to us with the proposal of the IDZ development, it never happened! Instead we live in fear in our neighbourhoods, with residents forming volunteer neighbourhood patrols trying to keep us safe day and night due to the police being overwhelmed, outnumbered, underpaid and even corrupted. Law abiding citizens of this country are feeling progressively threatened and bullied by government departments to accept new developments claiming to benefit the socio-economic structures in their communities, but there is no trust in these claims. Why? 2. Corruption in our government, even local municipalities are running rampant. “Corruption in South Africa includes the private use of public resources, bribery, and improper favoritism.[1] The 2017 Transparency International Corruption Perceptions Index assigned South Africa an index of 43 out of 100, ranking South Africa 71 out of 180 countries.[2] This ranking represents a downward direction change with a drop of two points down from 45 (2016 CPI).[3] Countries with scores below 50 are believed to have serious corruption problems.[4] “ (<a href="https://en.wikipedia.org/wiki/Corruption_in_South_Africa">https://en.wikipedia.org/wiki/Corruption_in_South_Africa</a>) We are now so used to hear how government individuals pocketed bribe money.. “Anti-corruption efforts have not been successful as politicians and government officials seek personal gratification first at the expense of public interest..” “The cost of corruption can be divided into four main categories: political, economic, social, and environmental. “ The nature of infrastructure projects facilitates corruption. In particular, the complex contractual structure, the diversity of skills, different project phases, the large size, uniqueness and complexity of projects, the concealment of some items of work by other items, the lack of transparency in the industry, and the extent of government involvement all contribute to an environment in which bribery, extortion and fraud can be difficult to prevent and detect.” “There is no culture of transparency in the infrastructure sector. There is little or no requirement for funders, project owners or project participants to make public details of the funding, the underlying project and the identity of the project participants, including the identity of the contractor, joint venture partners, sub-contractors, consultants and agents. Costs are as far as possible not disclosed, even when public money is spent. Commercial confidentiality has historically taken</p>	<p>Engels, Anneline</p>	<p>02-Jul</p>	<p><b>Specialist response:</b> This is a general statement of concern about widespread corruption in government re approvals of proposed developments. Your concern is noted but these issues are outside of the power of the EAP or the developers to control. In the case of the BWF, the developers and the EAP are following the required environmental authorisation application process and complying with the legal requirements and guidelines.</p>





#	I&AP Comments on Social Impacts	I&AP	Date	EAP Response
	<p>precedence over public interest. There may, therefore, be inadequate inspection of books and records which could uncover malpractice. Without such transparency, it is more difficult to detect, for example, suspicious funding arrangements, suspicious relationships between the participants which may facilitate corruption, projects which may have a corrupt purpose, projects which have been granted planning permission corruptly, or fraudulent contract pricing.” The extent of government involvement in infrastructure is significant. Most major international infrastructure projects are government owned. Even privatised projects normally require government approvals, such as planning permission, or agreements with government as to the terms on which the public may use the end product. The power wielded by government officials in this regard, when combined with the structural and financial complexity of the industry referred to above, makes it relatively easy for government officials, for example, to commission projects for their own purposes or to extract large bribes in exchange for the award of contracts or for approving inflated contract prices or fraudulent claims.” (<a href="http://www.giacentre.org/why_corruption_occurs.php">http://www.giacentre.org/why_corruption_occurs.php</a>) An example of such corruption can be seen in the following article: Feathers fly over Watson wind farm plan 10 April 2019 By John Yeld Watsons planned to shoot Black Eagles, says Bosasa employee “The Watsons’ Inyanda-Roodeplaat wind farm project, high in the Groot Winterhoek mountains near Uitenhage, has received environmental approval from the national department of environmental affairs (DEA). However, several appeals have been lodged. Legally, it is environment minister Nomvula Mokonyane who must adjudicate these appeals, but testimony at the Zondo commission has linked her to massive bribes in the form of cash, goods and services from Bosasa – and hence a huge possible conflict of interest. The DEA had issued environmental approval for the wind farm. This had been recorded in a letter dated 5 April 2018, signed by Sabelo Malaza, chief director: integrated environmental authorisations Asked by GroundUp for an explanation, DEA spokesman Albi Modise confirmed that the department’s team had decided that there was a need for an external review of the avifaunal assessment and had started with the procurement process to appoint an expert. “However, due to further delays with the procurement of specialists to undertake the review and additional financial implications to the department, it was decided that a decision must be made with the available information,” Modise said. But environmentalists close to the project say conversations with officials suggest that pressure from either top-ranking DEA officials and/or political players was brought to bear for a decision to approve the EIA. The DEA minister at the time was the late Edna Molewa. Then acting Environmental Affairs Minister Lindiwe Zulu upheld five appeals against the 187.2MW, 47-turbine Inyanda-Roodeplaat wind farm. She noted that, according to the appellants, the proposed site and its surroundings had inherent conservation value as these were located in the near-pristine environment of the Groot Winterhoek Mountain and were between separate sections of Groendal Nature Reserve (Wilderness Areas) – “and thus very close to a World Heritage Site”. Also, the site was within national and provincial Protected Area Expansion Strategy Focus Areas, and most of it had been Identified as a Critical Biodiversity Area that included important habitat for a number of threatened species, including birds. She wrote that the appellants had argued that issuing the Environmental Authorisation (EA) was fatally flawed because of the impact the project would have on birds, visually and on the “sense of place”. (<a href="https://www.timeslive.co.za/news/south-africa/2019-04-10-feathers-fly-over-gavin-watson-family-wind-farm-plan/">https://www.timeslive.co.za/news/south-africa/2019-04-10-feathers-fly-over-gavin-watson-family-wind-farm-plan/</a>) Unreliable and biased study reports riddled with mistakes and irregularities: wind-farm-plan/). irregularities:</p>			





#	I&AP Comments on Social Impacts	I&AP	Date	EAP Response
12	Will Paternoster be accommodated with jobs when the construction begins?	Public meeting In Paternoster I&AP	26-Jun	<p><b>BWF representative response:</b> The department of energy sets out requirement to win a project, 50% of the jobs created must come from the local community and this could include civil workers, electrical, etc. Previous projects had 67% of the employees coming from the local community as this gave the project a competitive edge and a higher likelihood of winning the bid.</p> <p>Essentially there will be 340 jobs created during the construction phase of the project and 17 permanent jobs which will last for the lifespan of the project. The minimum requirement is that 50% of these jobs are sourced from the local community</p>
13	We are fishermen and we agree that this is 100% a fishing town, what are they going to teach our youth that would be fishermen so that they can be employed at the wind farm. Now you need a matric just to be a labourer. I myself only have a grade 10. How are they going to make it better for our children? What are they going to put back into the community? We work for 6 months of the year, the other six months we sit at home.	Public meeting In Paternoster I&AP	2019/06/26	<p><b>BWF representative response:</b> The department requires that a certain amount of the revenue needs to be spent on the local community. WC1 had to give ownership of 2,5% of the wind farm- when it was built the community loaned the percentage to pay back over 10 years before they could start seeing profits. A 1.5% revenue has to go to the community as a minimum requirement of the Department of Energy this percent translates to R9 million per year which would need to be spent on the community. When money is received, engagement with the community would be done to assess the needs, if this is education or bursaries or funding bursaries and training. The Valued Citizens Initiative is what WC1 has teamed up with to provide education as this was seen as high on the needs list. Ideally a bursary would be given to students and then they could be trained to work at the wind farm- one of the students from VCI is a manager at WC1, so this would be the ideal</p>
14	When they were building the Sahlana steel plant, they didn't bring locals on board, they brought labourers in and when they were finished they left all those people behind and this creates a bigger problem with unemployment, poverty and crime. They basically used the community to get the project as we thought we would be used as labourer, but they forgot about the community. How do we know this won't happen again?	Public meeting In Paternoster I&AP	2019/06/26	<p><b>BWF representative response:</b> The concern about a development saying that they will provide jobs- this was looked at in the social impacts and it was decided that the developers should avoid bringing outsiders in and to use local labour as much as possible. It makes sense to employ locally as it reduces the cost of transport and accommodation if labourers have to travel.</p> <p><b>CES Response:</b> There has been progress in DEA at ensuring compliance with the provisions of environmental licences. The developers are usually required in the EMP to appoint Environmental Control Officers who are responsible for monitoring and making sure that the conditions of the licence are adhered to. However, it remains important for the local residents to observe and engage with the developers to ensure that they comply with the conditions of their licence. The Department of Energy will also bring someone to audit and monitor how the project is being run and will deduct points over a year and fine the developer a lot of money if they are found to be in non-compliance at the IPPP office.</p>
15	How does WEF affect tourism & property values? Was the effect on Britannica heights residents specifically assessed by the specialists?	Public Meeting In Britannica Heights	19/06/2019	<p><b>CES Response:</b> The SIA includes a section on the impact on property values and tourism and refers to the findings of the Economic Specialists and a specialist property value study undertaken by an Appraisal Corporation. Britannica Heights was included as part of this assessment. A more detailed investigation of the affected properties in the Britannica Heights estate was undertaken after the public review period to confirm the findings for those properties.</p>



#	I&AP Comments on Social Impacts	I&AP	Date	EAP Response
16	Our properties will look directly onto the windfarm and our property values will be halved. We moved here because of the view and character of the area. This is unacceptable. We should be compensated.	Public Meeting In Britannica Heights	19/06/2019	<b>CES Response:</b> See response 10 and 16 immediately above, and responses 2, 7, 14 and 21 in the Economic, Tourism and Property section of the CRR. .
17	6) The author of Appendix 9 on property values appears to be entirely unaware of Britannica Heights, and fails to mention the area even once in his report. Please clarify how this can be rectified?	Public Meeting In Britannica Heights	19/06/2019	<b>CES Response:</b> See response 16 above and response 2 in the Economic section of the CRR
18	Mary Ralphs concerned that the development will result in a loss of employment in local tourist sector.	Public Meeting In Britannica Heights	19/06/2019	<b>CES Response:</b> See response 6 in the Economic, Tourism and Property section of the CRR.
19	You are trying to make this development fit where it doesn't.	Paternoster Tourism FGM	20/06/2019	<b>CES Response:</b> Our job as the EAP and specialists is to assess the significance of the potential positive and negative impacts of the proposed development and make recommendations on how these can be mitigated.
20	Us residents of Paternoster only see disadvantages and we are carrying the risks/negative consequences without any benefits.	Paternoster Tourism FGM	20/06/2019	<b>CES Response:</b> See response numbers 1 and 6 in the Economic section of the CRR
21	The value of property and tourism in the specialist reports were not in touch with common trends.	Paternoster Tourism FGM	20/06/2019	<b>CES Response:</b> See responses in Economic section of CRR.
22	I&AP stated that the specialist didn't interviewed the correct (tourism and property) people.	Paternoster Tourism FGM	20/06/2019	<b>CES Response:</b> See responses 9 and 17 in the EIA Process section of the CRR.
23	The highest impact on the property market and tourism is crime.	Paternoster Tourism FGM	20/06/2019	<b>CES Response:</b> The impact of crime on tourism and property values is acknowledged in the reports. Recommendations to minimize the potential for crime during the construction period are included in the Social Specialist report and the EMP. The proposed development is not expected to have a negative impact on Tourism and will therefore not increase unemployment and contribute to crime in that way. It will also increase economic opportunities and contribute to the supply of energy that is the foundation of our economic system.
24	What employment opportunities and economic benefits will there be for the residents of St Helena Bay? We have depended historically on the fishing industry which is declining now and many people are unemployed.	St Helena FGM	26/06/2019	<b>CES response:</b> The Developers indicated that there will be over 300 jobs created during the construction period and 17 during the operational phase. In addition, 1.5% of the annual income of the project (which will amount to around R9 million pa) will be spent on social development projects in the local area. The developers will also provide at minimum 5% equity for a local trust which will be able to use the dividends for social development projects once the project starts earning income and the trust loan is paid off. In addition,
25	How can we maximise the economic benefits of this development? As a result of all these concerns about visual impacts on Britannica Heights and other tourist people, the development area and size has been reduced and I am concerned that this will reduce the economic benefits of the development. Our need for employment also needs to be taken into consideration.	St Helena FGM	26/06/2019	<b>CES response:</b> There are certainly trade-offs that need to be taken into consideration by the DEA authorities in making their decisions. The developers have already reduced the size and area of the project in order to reduce the potential negative visual impacts and to enable them to secure an environmental authorisation. It is possible that this will result in fewer economic benefits than would otherwise have been the case, but this has not been quantified or assessed in the EIA.



#	I&AP Comments on Social Impacts	I&AP	Date	EAP Response
26	You must maximise the employment and other economic benefits from the wind farm?	St Helena FGM	26/06/2019	<b>CES response:</b> The developers indicated that the competitive nature of the bidding process for renewable energy projects and the minimum requirements to qualify and remain competitive, the developers are required to ensure 30% local content in their contracts and employment practices, make a certain amount of equity available to local disadvantaged communities, and invest a % of their annual income in local social development projects. Therefore, these benefits are assured in this way, and to win the bid the developers will have to make the best offer possible, which still keeping the project financially feasibility and the cost of energy competitive. Therefore, although they will attempt to maximise the local economic benefits, there are limits to the extent they can do this and still ensure that their bid is successful.
27	SOCIAL IMPACT ASSESSMENT. 74 The DEIR includes a SIA, dated November 2018, by Tony Barbour as Appendix D10.	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	19-Jun	Statement.
28	75 Review of the SIA reveals certain critical omissions of information and assessments which are Critical to understanding whether or not the proposed BWEF constitutes properly sustainable development in terms of NEMA Section 2. Tellingly, the missing information is known to be generally unfavourable to assessment of wind farms in general and especially so in terms of social justice and equity. The NEMA Section 2(4)(c ) states that : “Environmental justice must be pursued so that adverse environmental impacts shall not be distributed in such a manner as to unfairly discriminate against any person, particularly vulnerable and disadvantaged persons.” (Underlining added)	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	19-Jun	<b>CES response:</b> The comment does not identify the "critical omissions" that are critical to understanding if the project is sustainable in terms of NEMA. AVDS also fails to list the information it refers to that is "unfavourable". Therefore, it is not possible to respond to the comment. In addition, the determination of sustainability as per NEMA is informed by a range of biophysical, social and economic factors. These factors are assessed as part of the EIA process.
29	76 This important principle of environmental management is not respected by the DEIR and application as they currently exist. The fact that impacts on local community members in terms of, for instance, property value loss and noise impacts, are not are dismissed as justified costs of the proproposed BWEF yet others such as the remuneration (unquantified) of contracted land owners and community trust beneficiaries are accorded positive impact ratings can hardly be considered to be in	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	19-Jun	<b>CES response:</b> The potential of each identified impact (positive and negative) has been thoroughly assessed and weighed up. The responses to concerns about specific impacts are responded to in the relevant sections of the CRR.
30	line with social and environmental justice. That the Applicant itself stand to make (undeclared) profits at the expense of national social and environmental resources is a violation of environmental justice. Amongst the missing information in the SIA is the following: 76.1 Determination of a mechanism for compensation for confirmed property owners who stand to suffer the confirmed property value loss (negative potential impact) that would be caused by the proposed BWEF. Given that the SIA unashamedly lauds (positive impact) and selectively presents the financial benefits that the minority selected contracted land owners (farmers) stand to receive the situation demands that Environmental justice be enacted for those at whose expense such financial gains will be made. The principle applies even more strongly to the profit-orientated goals of the Applicant and in relation to whom the same obligation exists.	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	19-Jun	<b>CES response:</b> See response 66 in the EIA process section of the CRR. <b>Specialist Response:</b> The SIA includes a section on the impact on property values and refers to the findings of the specialist Economic study and the property value study undertaken by the Appraisal Corporation.
31	76.2 The profits that stand to be made by the Applicant, a private profit-orientated entity, should the BWEF be built, have not been declared or quantified anywhere in the DEIR. Therefore, the aspects of social and environmental equity and justice cannot (and have not) been determined as required in order to assess properly whether the proposed BWEF is sustainable development. As Mr.	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	19-Jun	<b>CES Response:</b> the assessment of the financial sustainability of the project does not form part of an EIA. This is the developer’s responsibility. The developers have provided their planning financial data to the economic specialists to assess the potential impact the project spending will have on the economy.



#	I&AP Comments on Social Impacts	I&AP	Date	EAP Response
32	Barbour will be aware, the profits that are being made by wind farm developers, who are mostly of foreign origin and residence, are substantial and arguably unethical in the social context of South Africa. South African Association of Wind Energy Alliance’s previous CEO, Johan van den Berg, is quoted as having compared the awarding of a successful bid under the IPPP, as being equivalent to “winning the lottery”. It would therefore perhaps be appropriate to describe the situation of the proposed BWEF as being a new form of colonialism, this time economic, since the same principles of exploitation of vulnerable local communities is at play. The exploitation of national resources is specifically guarded against in inter alia the NEMA, Section 2(4)(o), per: “The environment is held in public trust for the people, the beneficial use of environmental resources must serve the public interest and the environment must be protected as the people’s common heritage.” The EAP and SIA appear to regard some members of the affected local community as not being part of “the people” of South Africa and their costs to be suffered by the proposed BWEF as justifiable.	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	19-Jun	<p><b>Specialist Response:</b> The Overview of the Independent Power Producers Procurement Programme (IPPPP) undertaken by the Department of Energy, National Treasury and DBSA (30 June 2017) clearly demonstrates the benefits of the renewable energy programme for the South African Economy, including the importance of foreign investment. This is summarised in the Social Impact Assessment (see specialist volume)</p> <p><b>CES Response:</b> The potential impact on the tourism and property markets have been thoroughly assessed and found to be indiscernible and rated as a low negative impact, but improbable. There are therefore not economic costs to other entities associated with the proposed development.</p> <p><b>BWF Representative Response:</b> The Department of Energy have reported the following in their results on their IPP programme. REIPPPP contributes to Broad Based Black Economic Empowerment and the creation of black industrialists. <u>Black South Africans own, on average, 33% of projects</u> that have reached financial close in previous project (i.e. projects in BW1 – BW4), which is 3% higher than the 30% target. This includes black people in local communities that have ownership in the IPP projects that operate in or nearby their vicinities. On average, <u>black local communities own 9% of projects</u> that have reached financial close. This is well above the 5% target. Shareholding by black South Africans has also been secured across the value chain. An average of <u>21% shareholding by black people in engineering, procurement and construction (EPC) contractors</u> has been attained in projects that have reached financial close under the REIPPPP. This is 1% higher than the 20% target. Furthermore, <u>shareholding by black people in operating companies of IPPs has averaged 20%</u> (against the targeted 20%) for the 63 projects in operation (i.e. in BW1, BW2 and BW3).</p>
33	77 The SIA relies heavily upon general national (and International) surveys and reports, undertaken in most instances by pro-industry entities, and also upon selected National Provincial and Local government policies. It is remarkably deficient in providing BWEF-specific information and thus proper, project-specific impact assessments. Its approach is instead to selectively identify potential impacts; quote selected general studies on such potential impacts, and then to apply Mr. Barbour’s subjective (BWEF-favourable) interpretation and opinion to the proposed BWEF case. Little to none recent and broad-ranging rigorous local social investigation informs the SIA and which is a significant deficiency.	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	19-Jun	<p><b>Specialist response:</b> The SIA refers to international studies undertaken by academic institutions. One of the studies on the impact on tourism was commissioned by the Scottish Government. The statement that the studies are in the most instances by pro-industry entities is, therefore, unfounded and incorrect.</p>
34	78 Mr. Barbour’s own personal perspectives on issues, such as proclaimed benefits of renewable energy and matters of climate change, are justified on the basis of very general and selected information (see Section 4.4.1, page 114, as example) which he then simply uses as the point of departure in his subjective rationalization of impact categorization and significance. Despite extensive credible and convincing evidence to the contrary of Mr. Barbour’s perspective (for instance, see Appendix A), he proceeds (having already framed the potential impact description so as to deliver a positive impact rating) to then apply his own exaggerated significance to the positive impact (e.g. see impact “Promotion of renewable energy projects”, (Underlining supplied) Table 5.2). In this way he manages to introduce certain exaggerated positive impacts (benefits) to his SIA without them being substantiated whatsoever by any BWEF-specific impact assessment.	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	19-Jun	<p><b>Specialist response:</b> See above comment. The SIA also refers to reports on renewable energy compiled WWF South Africa. It is also globally accepted that renewable energy is more environmentally appropriate and acceptable than fossil fuel and nuclear as an energy source, specifically given the challenges posed by Climate Change.</p>





#	I&AP Comments on Social Impacts	I&AP	Date	EAP Response
35	79 Under both Tables 5.1 (construction phase impacts) and 5.2 (operational phase impacts) potential impact description is given as “Creation of employment and business opportunities” (Underlining added) by Mr. Barbour instead of a more objective and neutral description such as “Impact on employment and businesses” which would then leave room for negative impacts on existing and future employment creators and businesses to be also factored into the particular impact assessment. Under Mr. Barbour’s Applicant-convenient approach the (confirmed) negative potential impacts on, for instance, existing (and future) tourism industry jobs and businesses are not weighed up against the proclaimed employments figures from the proposed BWEF (this is because they are likely to exceed the proclaimed employment benefits of the BWEF and which would then result in a unwanted negative potential overall impact for “impact on employment” on account of the proposed BWEF.	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	19-Jun	<b>Specialist response:</b> As indicated above the findings of the SIA indicate that the potential impact of wind farms on tourism is limited. This is based on international experience and also experience from St Francis Bay, Cape St Francis and Jeffry’s Bay.
36	80 It is noted that the SIA struggles to build a case for job employment and in the effort employs the euphemistic term “person-years” as an attempted replacement for real permanent jobs. Various figures of “full time equivalent person-years” are quoted but are revealed to amount to, at most, temporary jobs of very short duration (mostly construction stage). Eventually the SIA (page vi) declares that only 17 full-time jobs will be created by the proposed BWEF! These will then exist for the lifetime of the BWEF contract which, at 20 years, is less than half the time of the average adults working life. These are trivial “benefits” (and probably net losses) given the environmental and social risks posed by the proposed BWEF and simply demand that the proposed BWEF be abandoned or otherwise refused on this point alone.	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	19-Jun	<b>Specialist response:</b> The SIA refers to the findings of the Urban Econ Study, which refers to person years. The SIA also clearly states that the jobs associated with the construction phase are temporary, and that the jobs associated with the operational phase are limited, i.e. 17. It would also appear that AVDS has limited his review of the SIA to a review of the Executive Summary, without reading the entire report.  <b>CES Response:</b> The calculation of ‘person-years’ is a well recognised and accepted method of calculating and comparing the amount of temporary and service jobs created as part of a development. Construction jobs associated with developments cannot be considered permanent and no such claim is made.
37	81 No effort is made by Mr. Barbour or the EAP to assess the potential impact on job loss due to the proposed BWEF. The proposed BWEF is recorded as having numerous negative impacts including upon tourism. Some of these impacts have the very real possibility of ultimately resulting in job losses. The tourism industry is a significant economic driver in the region and no doubt also sustains many other “spin-off” industries . These potential impacts are not assessed in the SIA or the DEIR yet their loss has the potential to destroy entirely the existing socio-economic backbone of the affected area and local community. The omission of such obviously important potential impacts is a fatal flaw and simply indicates an awareness by Mr. Barbour and the EAP of the potential threat (to the applicant’s interests) posed by the findings of such impact assessment to the applicant’s interests.	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	19-Jun	<b>Specialist response:</b> See above comments related to impact on tourism. There is limited / negligible evidence to support AVDS statement that the proposed WF will destroy entirely the existing socio-economic backbone of the affected area and community.  <b>CES Response:</b> similar concerns are addressed more fully in the Economic section of the CRR.
38	82 It is concerning to note that the economic impact assessment (dated November 2018) by Urban Econ (Appendix D5 of the DEIR, Section 6(c )) wastes no opportunity to boost the supposed benefit of the proposed BWEF by stating that 17 “permanent” jobs will be created. Apart from the paltry number of 17 jobs, the fact that these are regarded as “permanent” begs the question as to why in almost all other assessments of potential negative impacts in the DEIR and specialist studies the impacts are regarded as being a lesser category than “permanent” (usually “long term”) on the basis of the 20 year life-span of the project. The reason is quite clear – the lesser categories, such as “long term” are allocated lower scores than a “permanent” category in the impact assessment index system and therefore the resultant negative impact significance scores produced from “long term” impacts are of less significance than those for “permanent” negative potential impacts. See Appendix B of the SIA as an example of the applied indexing system. The inherent and manipulated approach to exaggerate positive, and understate negative, potential impacts associated with the proposed BWEF is thus exposed yet again.	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	19-Jun	<b>Specialist response:</b> See above comment This is a standard and accepted methodology that is used for assessing significance ratings. If AVDS has concerns with this and similar approaches that are accepted by DEA, then this should be raised with DEA.  <b>CES Response:</b> The Economic specialist is required to identify and assess all the economic impacts, positive and negative.
39	83 Despite the subjective and deficient (Applicant-favoured) approach of the SIA, as outlined above, it is forced to agree with the LoGIS VIA (it would be an obvious conflict if it did not) that the mitigation applied to the proposed BWEF is limited and incomplete and that a residual high negative visual impact remains. The SIA approves of the Applicant’s relocation of 7 of the turbines originally located at Kasteelberg to the east of the Stompneus Bay road (5 turbines) and further south (2 turbines, but still west of the road). He justifies his approval on the basis that implementation of the full mitigation measure, as recommended by the LOGIS VIA, may compromise the financial viability of the proposed BWEF (although no evidence of this is seen anywhere in the SIA or DEIR documentation) and its	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	19-Jun	<b>Specialist response:</b> The SIA and VIA specialists liased closely with and supported each other on this issue.



#	I&AP Comments on Social Impacts	I&AP	Date	EAP Response
	proclaimed benefits.			
40	84 It is evident that the SIA has selected, framed and presented certain potential impacts so as to promote the proposed BWEF's approval. These exaggerated and inaccurate positive impact ratings are then liberally used by the EAP in the DEIR and other specialist studies (such as the HIA) to justify and override their significant negative impact findings. The SIA stands as an important study to the undeclared alternative purposes of the EAP/CES and the many other Applicant-favoured consultants who are deriving financial benefits from this project and potentially future wind farm projects too (however Mr. Du Plessis is unlikely to be similarly regarded by the Applicant and CES and has already had his VIA undermined by the introduction of CES VIA).	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	19-Jun	<b>Specialist response:</b> See above comments in response to issues raised by AVDS





## 14 NOISE IMPACTS

#	I&AP Comments on Noise Impacts	I&AP	Date	EAP Response
1	The noise factor, especially downwind from the predominant SE winds i.e. St Helena Bay and surrounding suburbs	Todd, A&J	19-Jun-19	Statement. The purpose of the noise study is to assess the potential noise impact from the operating wind turbines on people.
2	The continuous flashing lights day and night of the proposed Wind Turbines and the acoustic impact is altogether detrimental to our health.	Country Cabin, St Helena	26-Jun	<p><b>Specialist Response:</b> Flashing lights is a potential health issue and not noise.</p> <p><b>CES Response:</b> A Visual Impact Assessment and Noise Impact Assessment has been completed, and did not identify associated health risks in this regard.</p>
3	As brought up at the Britannica Heights presentation no consideration is given to the ill effects of Low Frequency Infra Sound. Why is this not given attention? Ronald Bach states "There is no scientific evidence that infrasound below human perception levels has any impact on human health" Is there any scientific evidence that infrasound below human perception levels has NO impact on human health? He then gives studies that are obviously going to back up his theory. Did Enercon recently not have to admit in open court that their wind turbines damage the health of nearby residents in Ireland? There are however other studies that dispute his statement, why does he not quote from these? "The pilot study carried out in Satakunta and Northern Ostrobothnia in Finland shows that the damage caused by infrasound from wind power plants will only decrease significantly more than 15 kilometers away from wind turbines. The study was carried out by the Finnish Association for Environmental Health (SYTe) in the spring 2016." or "Wind Turbines and Proximity to Homes, the Impact of Wind Turbine Noise on Health by B J Frey & P J Hadden", has he even bothered to read these? Obviously the ill effects of IS is a new problem and needs much more research with the latest technology, so why must residents be the guinea pigs before proper research is done?	Todd, A&J	01-Jul	<p><b>Specialist Response:</b> The following studies can be referred to for peer reviewed scientific studies of the impacts of low frequency noise from wind farms:</p> <ol style="list-style-type: none"> <li>1) The measurement of low frequency noise at three UK wind farms, Hayes Mckenzie, The Department for Trade and Industry, URN 06/1412, 2006.</li> <li>2) Environment Protection authority (2013) Infrasound levels near wind farms and in other environments [Online] Available at: <a href="http://www.epa.sa.gov.au/xstd_files/Noise/Report/infrasound.pdf">http://www.epa.sa.gov.au/xstd_files/Noise/Report/infrasound.pdf</a></li> </ol> <p>The peer reviewed scientific literature on the impacts of noise from wind farms was reviewed and could not conclusively prove a link between wind farms and health impacts from noise.</p> <p><b>CES Response:</b> During the Scoping phase the noise specialist investigated and responded to the concerns raised during the scoping phase about the potential impacts of low frequency noise (LFN). They reviewed the peer reviewed literature in the field (there are at least 4 papers specifically dealing with this that are mentioned in the reference list for this report) and made the following conclusion: "Low frequency noise is always present around us as it is produced by both man and nature. While problems have been associated with older downwind wind turbines in the 1980s, this has been considered by the wind industry and modern upwind turbines do not suffer from the same problems." This potential LFN impact has therefore been assessed and has been rated as a low negative impact. During the Scoping process the need for a health impact assessment was not identified, recommended, required or considered necessary to be undertaken as part of the EIR.</p> <p><b>BWF Representative response:</b> We can confirm that the allegation that Enercon recently admitted in an Irish court that their turbines damage the health of nearby residents is factually incorrect.</p>
4	(With respect to Noise Health and proximity of Turbines to homes). It is undeniable that turbines have adverse effects on health. The reports of international experts, WHO, UN Human right, professors, doctors, engineers, such as the one attached to this email contain and provide evidence that contradicts the reports submitted in favour of the wind industry from the gentleman that has written and attached some reports in French and German. A health problem exists and should not be ignored simply by sending contradictory reports to the corner of a table or ignoring our words without respect. We therefore request that a study report on this subject must be provided on the proposed site	Schleger, Georges	02-Jul	<p><b>CES Response:</b> The response 3 above is also relevant here.</p> <p><b>Noise Specialist Response:</b> The Frey/Hadden paper is not peer reviewed, not published, and has the same scientific standing as a newspaper clipping. The paper is subjective. This "paper" is mainly found on websites of organizations that are against wind energy. It appears never to have been published and appears to have been compiled specifically for the anti-wind energy fraternity.</p>



#	I&AP Comments on Noise Impacts	I&AP	Date	EAP Response
5	<p>It was disturbing to note that none of the CES team seemed to have even heard of infrasound when it was raised at the Britannica Heights focus group meeting. A quick google shows the issue to be a hot topic related to wind farm development internationally. It clearly needs to be brought to the attention of your noise specialist, but the fact that CES was unaware of this issue calls into question the organisation's capability when it comes to briefing specialists and assessing their input. Please therefore respond to the attached paper on infrasound provided to refute the information supplied by the developer. <a href="#">BJ Frey and PJ Hadden (2012) Wind turbines and proximity to homes, the impact of wind turbine noise on health: A literature review and discussion of the issues</a>. Virtually everything we have been forced to learn about Boulders Wind Farm is that the project is designed to pay cursory lip service to the letter of the law, but conveniently ignores the principles informing NEMA. In addition, the intentions behind the RIEPPPP appear to be entirely lost on the developers and the EAP. Perhaps it is appropriate to end by asking you to revise the draft EAP by keeping Section (2)(4)(o) of NEMA top of mind, and to demonstrate how you have done so: The environment is held in public trust for the people, the beneficial use of environmental resources must serve the public interest and the environment must be protected as the people's common heritage.</p>	Ralphs, mary	30-Jun	See responses 3 and 4 above and 6 below.
6	<p>There are numerous cases where residents near wind farms complain over the persistent humming noise, that cannot be switched off and driving them crazy.</p>	Muller Cotzee	03-Jul	<p><b>Specialist Response:</b> The purpose of a noise impact assessment is to use available information, physics and mathematics to ensure that this does not happens. A study was carried out in 2007 on behalf of the UK Department for Business, Enterprise and Regulatory Reform (BERR) by the University of Salford, which investigated the incidence of noise complaints associated with windfarms and whether these were associated with AM. The study defined AM as aerodynamic noise from wind turbines with a greater degree of fluctuation than normal at blade passing frequency. Its aims were to ascertain the prevalence of AM on UK windfarm sites, to try to gain a better understanding of the likely causes, and to establish whether further research into AM is required. The study concluded that AM had occurred at only a small number (4 of 133) of windfarms in the UK, and only for between 7% and 15% of the time. It also stated that, the causes of AM are not well understood and that prediction of the effect was not currently possible.</p> <p>This research was updated in 2013 by an in-depth study undertaken by Renewable UK , which has identified that many of the previously suggested causes of AM have little or no association to the occurrence of AM in practice. The generation of AM is based upon the interaction of a number of factors, the combination and contributions of which are unique to each site. With the current knowledge, it is not possible to predict whether any particular site is more or less likely to give rise to AM, and the incidence of AM occurring at any particular site remains low, as identified in the University of Salford study. University of Salford (2007). 'Research into aerodynamic modulation of wind turbine noise'. Report by University of Salford, The Department for Business, Enterprise and Regulatory Reform, URN 07/1235, July 2007. Renewable UK (2013). 'Wind Turbine Amplitude Modulation: Research to improve understanding as to its Cause and effects', Renewable UK, 2013.</p>



#	I&AP Comments on Noise Impacts	I&AP	Date	EAP Response
7	The West Coast One Wind Farm is situated nearby and the closest wind turbines to my house is 2.4 km. When the dominant wind from the southeast or east are blowing the swoosh sound from the turbine blades can be heard very easily. I do not know if the close proximity of the proposed turbines would cause sleep disturbance for my family or farm workers or not? The residents of Klipheuwel farm (part of the West Coast One WEF) was evacuated due to noise and visual impacts. Why do the residents of Britannica Heights and Paternoster have the right to decide that the visual and noise impacts from the proposed windfarm would be disturbing and that the developer mitigated the layout to support this, but my family and farm workers don't? The people living close or nearby turbines are generously compensated by income from the wind turbines on their property, but my family and farm workers won't.	Mr Danie Kotze (neighbouring farmer)		<p><b>Specialist Response:</b> No question but only a statement.</p> <p><b>CES Response:</b> See responses 3,4 and 6 above. All I&amp;APs have the right to participate in the Public Participation process. A 500 m NO-GO buffer was recommended by the noise specialist and used to inform the design of the wind farm layout. The only people/structures within this buffer zone the Noise specialist identified as potentially affected by noise (at night time) are on the beneficiary/directly affected farms.</p>
8	<p>HEALTH ASPECTS</p> <ul style="list-style-type: none"> <li>Although this may not be seen as important enough, animals (domestic and wild) may well be affected, specifically with regard to vibration and the stroboscopic effect of the turbines. We argue that this might chase them away even from the NO-GO areas. Can the Developer refer to studies in this regard?</li> <li>People become aware of noise as soon as this is 3– 5 dBA above the ambient noise. The report shows that the minimum effect will be more than 7dBA above ambient noise. Distance plays a major role but low frequencies (of the turbines) travel much further.</li> <li>Noise and health impact studies in the Report downplay the effect because the turbines are not positioned close (2km) to dwellings. AS per 11.3.1 The developer must investigate any reasonable and valid noise complaint if registered by a receptor staying within 2,000 m from the location where construction activities are taking place or from an operational wind turbine. It seems unlikely that in a case of such legitimate claim the turbine installation would be dismantled.</li> <li>In a recent law case in Ireland the wind energy company, Enercon had to admit in open court that their wind turbines damaged the human health of nearby residents</li> </ul>	No Boulders Wind Farm Email Petition (31 submissions) & Roon(Aksie Paternoster Aksie) Petition with 114 signatures	01&02 July	<p><b>CES Response:</b> See responses 3,4, 6 &amp; 7 above. The Ecology, Avifauna and Bat Impacts assessment assessed the potential impacts on Wild Life. See those sections of the CRR for responses to these issues. A 500 m NO-GO buffer was recommended by the noise specialist and used to inform the design of the wind farm layout. The Britannica Heights and Paternoster residents are more than 3,37km and 6,7km away respectively from the closest of the proposed wind turbines.</p> <p><b>BWF Representative response:</b> We can confirm that the allegation that Enercon recently admitted in an Irish court that their turbines damage the health of nearby residents is factually incorrect.</p>
9	Thank you for directing me to the maps. I made a copy of the map and indicated with a Red Circle the proposed wind farm areas that are too close to Britannica Heights Smallholdings - a large residential area in St Helena Bay. See picture attached. Wind towers so close to our homes will negatively impact our sleep, health, peace & quiet, views and property values. This is not what we signed up for when we bought out properties as far back as 2011. These proposed monsters will be much taller than the ones already in operation today. We strongly object against it.	Deborah Jordaan	29-May	See response 7 above. The final layout for the proposed wind farm will put the nearest turbine to Britannica Heights over 3.37 km away. The noise impact assessment rated the potential noise impacts to be low negative.
10	<p>HEALTH:</p> <p>In various studies done in many countries the following problems were affecting residents of nearby wind farms: Noise - grating and incongruous sounds that distract rest (sleep), headaches, fatigues, temporary feelings of dizziness, nausea, insomnia, palpitations, tinnitus - which are all cause a reduced quality of life. Families are suffering adverse health effects and undue hardships caused by the IRRESPONSIBLE placement of industrial wind turbines around their homes/properties. Birds/bats will be severely affected and this area is so rich in birdlife. Turbines also produce LOW FREQUENCY NOISE which causes "vibroacoustic disease" which is harmful infra sounds on the inner ear of humans. I can just imagine how this must affect all animals close to the turbines as well! We are not against wind turbines for enegy, BUT NOT right in our faces and virtually on our doorsteps as we will only be negatively affected, so will tourism, jobs will be lost and the "jobs" promised to the community by these turbine companies are not true. Specialists are imported to</p>	Botha, Christa	2019/07/02	See responses 3,4, 6 & 7 above in response to similar claims and arguments submitted by the I&APs above.



#	I&AP Comments on Noise Impacts	I&AP	Date	EAP Response
	upkeep these turbines mostly from other countries. There are MANY other perfect locations for this proposed windfarm, so please relocate Boulders to another location more suitable.			
11	NOISE IMPACT ASSESSMENT INCOMPLETE. 89 A noise impact assessment is included as Appendix D8 to the DEIR. It finds that the proposed BWEF will have noise impacts of an acceptable level that would permit the revised BWEF to be approved (with mitigation).	AVDS Enviro Consulting (Andre vd Spuy)	19-Jun	Statement confirmed
12	90 The noise study describes low frequency sound and infrasound and discusses the claimed controversies around the matter. It claims to acknowledge that there are concerns that need to be considered in this regard and then claims that the study will take a precautionous approach. Further review reveals however that it thereafter almost entirely ignores the matter of infrasound and low frequency sound and seemingly makes no effort to assess these aspects in terms of the proposed BWEF. This will need to be addressed and these specific potential impacts assessed.	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	19-Jun	See response to comment 3, 4 and 6 above.
13	91 The noise impact study finds that a moderate negative noise impact will result from the proposed BWEF and this could cause disturbance to identified noise sensitive receptors.	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	19-Jun	Statement.
14	92 On account of the potential negative impact the noise impact study (Section 11.2.1) recommends the relocation of one, or alternatively several, turbines so as to reduce the potential cumulative noise impact on identified noise sensitive receptors. It appears as if the revised BWEF layout presented in the DEIR has however not responded to the change in turbine layout that is recommended as mitigation by the noise specialist and the DEIR does not advise whether it has done so or not. This leads the reviewer to suspect the latter. If this is so, then the proposed BWEF, at the very least, needs to be amended according to the required noise study mitigation measures recommended and, if turbine locations have shifted, then the proposed BWEF needs to be reassessed again by all relevant specialists.	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	19-Jun	<b>CES Response:</b> The mitigation measure referred to by Mr van der Spuy is one of three alternative mitigation measures recommended. The affected farm residences/buildings (7-10) are all located close together inside the benefiting farmer's lands. This allows scope for the relocation of any residents who may be living in the affected structures by the farmers which is one of the potential mitigation measures. The developers were not able to consider moving more turbines in order to mitigate this impact. They are however willing to consider the third mitigation option of monitoring the noise impacts on these potential receptors and to alter the operate the turbines within the set threshold up to 45 dB at 8 m/ s during night time (as per the 3 <sup>rd</sup> mitigation option recommended). The conclusion to the Noise impact assessment (see section 14) states: "Therefore, considering the findings of this assessment, the increase in noise levels is not considered to be a fatal flaw and the development of the Boulders WF can be authorised from a noise perspective, subject to the implementation of the recommended mitigation measures. "
15	93 Evidence of the potential high negative impacts from low frequency sound and infrasound is given in Appendix C to this review. It will be noted that the effects of low frequency noise (i.e. negative impacts) may experienced up to 20km away from the source, such as wind turbines.	AVDS Enviro Consulting (Andre vd Spuy)	19-Jun	See response to comment 3, 4 and 6 above, with significant number of studies highlighting that one cannot differentiate between the LFN from wind turbines and natural sources within 1 - 2 km from a wind farm.



#	I&AP Comments on Noise Impacts	I&AP	Date	EAP Response
16	<p><b>APPENDIX C: Infrasound: A Growing Liability for Wind Power. Author: Sherri Lange, 2019. Source: <a href="http://masterresource.org/wind-power-health-effects/infrasound-growing-liability-windpower">masterresource.org/wind-power-health-effects/infrasound-growing-liability-windpower</a> (See appendix A7 of Final EIR)</b></p>	<p>AVDS Enviro Consulting (Andre Vd Spuy)</p>	<p>2 July</p>	<p><b>CES response:</b> Mr vd Spuy has included this paper in his submission to substantiate his argument that wind farms emit low noise frequencies that are a hazard on the health of affected parties and that this was not assessed in the EIA and should have been. This is an article downloaded from an online free-market energy blog (<a href="http://www.materresource.org">www.materresource.org</a>). This is not an academic or peer reviewed article but an opinion piece with lots of quotes from different persons. The about page on this website indicates that the articles posted on the site are purely the views of the authors - not the organisation. There is also no information about the author besides their name. She quotes from some interviews on an Australian anti-wind farm site which recounts the experiences of three individuals who live close to wind turbines. It also quotes a 'recent Finnish study' which apparently provides scientific evidence of the health impacts of LFN, but there is no information provided to source and review the study. As indicated in similar issues raised in the 'noise impacts' section of this CRR, the Noise specialist reviewed literature on LFN and concluded as follows: "Low frequency noise is always present around us as it is produced by both man and nature. While problems have been associated with older downwind wind turbines in the 1980s, this has been considered by the wind industry and modern upwind turbines do not suffer from the same problems." This potential LFN impact has therefore been assessed and has been rated as a low negative impact.</p>





## 15 TRAFFIC AND TRANSPORT IMPACTS

#	I&AP Comments on traffic and transport impacts	I&AP	Date	EAP Response
1	6. Numbers of the construction issues are of serious concern should permission be given for erection of the wind farm: 6.1 The excavation for a mass base for each tower means that in the order of 1800 m <sup>3</sup> (assuming base dimensions of 15m x 15m x 5m) of material will be excavated ( $\pm 1125 \text{ m}^3 + \pm 60 \% \text{ bulking}$ ) per tower. That gives total excavated material from tower bases of in excess of 80000 m <sup>3</sup> . There is no apparent indication of how and where this material will be stored during excavation or where it will be permanently disposed of. A major concern is the dispersal of this material. There are no adequate dispersal sites in the area and the potential for a major dust problem for the residents of Britannia Bay and Paternoster in windy conditions is extremely high. The tower foundations are large reinforced concrete footings. It is assumed that the material removed during excavation will be utilised within the site to create hardstand areas for the cranes and in reinstating the site after construction. The comment above from the ITS Transport Impact Assessment is incorrect in that very little, or any, of the excavated material will be suitable for such hardstands. There is no indication of any dust mitigation actions to be applied during the construction phase.	de Kock, Colin	01-Jul	<b>CES Response:</b> The excavated material will be used for the road construction and upgrades. Section 6.2 of the EMRr includes the relevant dust and erosion control mitigation measures for the construction, operational and decommissioning phases of the proposed development. There are also specific traffic mitigation measures included in the Specialist mitigation measures for the construction phase. There are also provisions in the EMPr for a site clearance plan, rehabilitation and landscape management plans, traffic & transport management plan and regular monitoring and Environmental Control officers.
2	6.2 The Stompneusbaai/Vredenburg road DR2160 is due to be upgraded and in addition, in excess of 10km of access roads will have to be constructed. The documentation refers to upgrading of farm roads for access roads. This is disingenuous as the farm roads referred to, and which will be subject to upgrade, are currently very little more than farm tracks. These tracks will have to be converted to full specification access roads ab initio so as to be able to cope with the load masses of the tower base heavy plant, the load masses of trucks removing excavated material, the load masses of pre-mix concrete delivery to each base, the load masses of the delivery of turbine elements (mast, gondola and rotor blades) and the load masses of the heavy-lift mobile cranes which will unload mast elements and then hoist mast elements, so comment referring to upgrading is disingenuous. The sub-base and wearing course material requirement will be in the area of 6 - 9 m <sup>3</sup> /linear meter of road construction, that is 6000 - 9000 m <sup>3</sup> / km of constructed access road. The internal access roads will be constructed mainly of local materials sourced from the local surrounding areas and these roads will be retained and used for inspection and maintenance of the wind turbines during the operation phase. The extract above from the ITS Transport Impact Assessment is incorrect as there is no known supply of material suitable for road construction in the local area and all such material would have to be trucked in from distant excavation sites. The volume of traffic by large tipper trucks through St Helena Bay and/or Vredenburg is unacceptably high as is the potential for damage to the existing road system. There is no indication of any dust mitigation actions to be applied during transport and storage of road materials during the construction phase.	de Kock, Colin	01-Jul	See response 1 above and 5 below.
3	6.3 The volume of concrete to be delivered to the turbine bases by mixer-trucks (1125 m <sup>3</sup> at 10 m <sup>3</sup> /load = $\pm 112,5$ return road trips/turbine base) which indicates high potential for damage and destruction for surrounding road infrastructure. Even if the concrete is mixed on site, in which case there would be further damage and degradation surrounding a batch mixing plant and its concomitant materials storage areas, the base materials (sand/stone/cement) will have to be delivered through St Helena Bay and/or Vredenburg causing serious traffic congestion and high potential for road damage for surrounding communities. The ITS Transport Impact Assessment makes no apparent finding on the impact of this material delivery from remote suppliers to the site.	de Kock, Colin	01-Jul	See response 1 above and 5 below.
4	6.4 The delivery of turbine elements will have extreme disruptive and negative impacts for traffic, and road damage, in the St Helena Bay and/or Vredenburg areas as the road infrastructure has no capacity to manage such traffic congestion. The ITS Transport Impact Assessment refers to, in comment 6.0 Existing Conditions, the dimensions and state of MR533 St Helena Bay Provincial Main Road. The reference is correct only from the R399 up to the entrance to Laingville, whereafter the road narrows, the condition of the road surface deteriorates and there are few hard shoulders. The above assessment makes no reference to the state, width and incline of Stompneus Bay Provincial Divisional Road DR 2160 from the turn off in Stompneus Bay over the hills or its suitability for the delivery of extreme loads.	de Kock, Colin	01-Jul	See response 1 above and 5 below.



#	I&AP Comments on traffic and transport impacts	I&AP	Date	EAP Response
5	How will the gravel road from Vredenburg to Stompneusbay (P2160) be maintained, because it will carry heavy loads, many trucks and other vehicles involved in this project. If not properly maintained who will be held responsible? We already struggle with the West Coast District Municipality to maintain the road, which are 95% of the time in a horrible condition. Our vehicles get a beating on these roads every day as it is and no one takes responsibility for the damages. The WCDM do not have the funds to maintain this road, according to them, and how will this be overcome?	Kotze, Danie	30-Jun	<b>CES Response:</b> See response 1 above re: the excavated material will be used for the road construction and upgrades and dust control. Section 6.1 of the EMPr which deals with the planning phase, requires the development of a traffic control plan in consultation with the local road traffic unit and obtaining the required road use permits. It also identifies the need to upgrade roads where needed, and the project proposal includes road upgrades and new road construction as part of the project. With regard to management of road impact during the operational phase,





## 16 CLIMATE CHANGE ISSUES

#	I&AP Comments on Climate Change Impacts	I&AP	Date	EAP Response
1	<b>CLIMATE CHANGE IMPACT ASSESSMENT UNFOUNDED AND SPECULATIVE.</b> 105 The DEIR (Appendix C1) includes a proclaimed “very high” positive impact (benefit) in terms of climate change amelioration for the operational phase of the proposed BWEF. The DEIR extensively uses this argument to justify the proposed BWEF and override its many negative impacts. For example on page 188 of the DEIR attempts to downplay the due consequences to the application on account of the large number of identified negative impacts and finishes by adding the following justification: <i>“There are a number of significant positive impacts (benefits) associated with the Boulders Wind Farm. These relate primarily to indirect benefits around climate change mitigation and resource (energy) conservation, and economic benefits for the surrounding communities.”</i>	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	02-Jul	The EAP is required to take an overall view of the full range of impacts. This does not mean that we can simply count the impacts and if there are seven positives and 14 negatives then the negative impacts are more important than the positives. The significance of the socio economic and political needs and potential benefits need to be weighed up relative to the potential negative impacts of all kinds. Addressing South Africa's energy needs are critical to its development potential and economic wellbeing. This aspect is dealt with under the Needs & Desirability section in the EIR and other relevant Government policy such as the National Development Plan (NDP), the SA Climate Change Strategy, etc.
2	106 Having reviewed the DEIR and the associated documentation we are however unable to find any authoritative and specialist climate change impact assessment and cannot even find a proper rational argument to justify the inclusion of this impact. The impact is drastically exaggerated since the proposed BWEF will not replace any coal generation capacity and case evidence has shown that National-scale renewable energy programs actually increase the carbon emissions (see Appendix A). This is however anyway obvious from a very basic knowledge of scientific principles.	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	02-Jul	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 DEA. It is also not necessary to have a specialist study on a particular issue, or impact that may be more general in nature in order to include it in the EIR. The imminent closure of some of the old coal power stations and the international political pressure to reduce carbon emissions, have resulted in the prioritisation the development of alternative energy sources and renewable sources of energy have been identified as critical to this process.
3	107 It is to be questioned as to whether the EAP is aware of the real world example of Germany where a concerted effort to engage renewable energy sources in the wake of the Fukushima accident has simply resulted in Germany's carbon footprint steadily increasing over time and that country and its population being burdened with the highest electricity costs in Europe.	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	02-Jul	These broader policy and energy cost issues are beyond the scope of this EIA and fall within the realm of energy policy. The situation in Germany is also not directly relevant to South Africa.
4	108 The EAP has used flawed and unsubstantiated ideology to present its climate change impact prediction related to the proposed BWEF. No substantiation at all is provided and certainly no effort is found to conduct the assessment specific to the proposed BWEF as is required. This fundamental failure has not stopped the EAP from attributing the highest possible positive impact category to the potential impact (Very High +). Clearly this is yet another fraudulent effort to promote the Applicant's interests of creating a positive impression of the proposed BWEF.	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	02-Jul	See response 1 above. This impact was included under the general impacts as did not require a specific specialist study. The significant need and desirability of the project (from an energy and greenhouse gas emissions perspective) along with all the relevant energy, emissions reductions and policy issues have been discussed in considerable detail in Chapters 3 and 4 of the EIR and support the rating of this impact as a very high positive/beneficial impact. These aspects are dealt with under the Needs & Desirability section in the EIR and other relevant Government policy such as the National Development Plan (NDP), the SA Climate Change Strategy, etc.
5	109 A proper climate change specialist must be employed to undertake a reasonable, balanced and scientific assessment of this impact, specific to the proposed BWEF, if this potential impact is to be included further in the EIA.	Andre v/d Spuy (AVDS) on behalf of P Pickford & Associates	02-Jul	The responses above are all relevant here. 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 DEA. It is also not necessary to have a specialist study on a particular issue or impact that may be more general in nature in order to include it in the EIR. The imminent closure of some of the old coal power stations and the international political pressure to reduce carbon emissions, have resulted in the prioritisation the development of alternative energy sources and renewable sources of energy have been identified as critical to this process.
6	The non-authorisation of this specific project will not jeopardise the provision of energy from renewable sources. Other renewable energy projects will be developed elsewhere. It is not appropriate to put a wind farm in this location.	Focus Group Meeting: Britannica Heights	19-Jun-19	The non-location specific benefits of clean energy have now been acknowledged in the Final EIR. The commissioning and contracting of renewable energy projects in South Africa is managed by the Ministry of Energy and is done through a competitive bidding process. If this project does not receive an environmental authorisation then other RE project elsewhere will. In that case, the national and regional benefit of RE will be secured but the local benefits of this project at this site will not be secured.



## 17 OTHER ISSUES

	I&AP Comments on Other Issues	I&AP	Date	EAP Response
1	The gravel road used by many between St Helena Bay and Vredenburg will not take all the extra heavy vehicles – especially during construction - and will become dangerous from heavy traffic and surface condition. This road is already frequently in a bad condition with ruts and corrugations and is not graded as often as necessary. In the rainy season, certain sections of the road are extremely muddy as the road is lower than the surrounding ground level and has no drainage.	Todd, A&J	18-Jun-19	A road and traffic assessment was undertaken by qualified specialists and is included in the specialist study volume of the Draft and Final EIR. This study assessed the conditions of the roads, current traffic volumes and patterns, and the expected additional volume and type of traffic due to the proposed BWF - during the construction, operational and decommissioning phases. The potential traffic impacts were rated as low and acceptable. More detailed planning and management of traffic will be needed during the design and construction phases, in consultation with the road authorities.
2	The crime and disease rate will probably/definitely increase, especially during the construction phase.	Todd, A&J	18-Jun-19	The risk of crime increasing due the proposed BWF, particularly during the construction period, has been assessed in the Social Impact Assessment. To mitigate this the EIR recommends, and the developer has committed to, ensure that local labour is hired as much as possible. No workers will be resident on the site during construction and will be transported in by the contractors from local towns.
3	The 1:10 00 orthophoto - 3217DB25 gives the highest point on Britannica heights as 164 m ASL this means that at 165m high, the turbines, even if placed at sea level, will be higher than this point, but when place on the highest ridges, as with WC1 will tower high above all surrounding areas. Are they not the height of two rugby fields end to end?	Todd, A&J	18-Jun-19	The maximum height assessed for the proposed BWF turbines (at top of blades) is 165m, but the actual height may range between 155m and 165m. The proposed BWF will also be located on lower ground than the WC1 development, and nowhere near the tops of the ridges. It is likely that the tips of be blades will be higher than the Britannica Heights ridge. As for the comparison with the length of two rugby fields, that is appropriate. Two rugby fields length to length would amount to 288m. Side by side would be 140m.
4	The draft EIA and several of the specialist studies emphasise possible project benefits, but fail to point out that these are not location dependent. In addition the report is thin on facts and information that reveals problems and flaws in the proposed wind energy facility and refuses to acknowledge that most of these are location specific.	Ralphs, Mary	30-Jun	The non-location specific benefits of RE projects have now been acknowledged in the Final EIR. These relate to clean energy and energy production. However, the other economic benefits associated with the construction of the project are locality specific. The comment and response number 6 in the Climate Change section of the CRR is also relevant here. The location specific negative impacts are acknowledged and included in the EIR report. In response to the questions about the impact on property values for those on the top of the Britannica Heights ridge looking westward, these were investigated further after the Draft EIR and the findings are included in the Final EIR and Economic Specialist Study. I suspect that this is the impact that Mary is concerned about most as she is a resident of this area.
5	This is a big concern because my farming activities mainly consist of Sheep and Cattle farming and we already have a big problem with theft of livestock. The proposed windfarm will have security at the entrances of the farms included in the project, but we as neighbours won't. How will we be protected against the rise in activity and unknown people claiming to be part of the project. At night who will be responsible for securing my livestock and assets? If any livestock loss or theft occur by workers or contractors from the proposed development, Boulders Windfarm will be held responsible!	Kotzee, Danie	30-Jun	No construction employees will be accommodated on the farms where the turbines are proposed to be constructed and will travel to the site on a daily basis from local towns and centres. The security measures put in place for the proposed development will also benefit the affected and neighbouring farmers. The Social Impact Assessment 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, relative to other developments in the IDZ. The mitigation measures recommended include 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.



	I&AP Comments on Other Issues	I&AP	Date	EAP Response
6	<p>Please receive comments on behalf of K2017432278 (SA) (Pty) Ltd, company that applied for a prospecting right for phosphates over certain portions of the farm Duyker Eiland No 6 and Schuitjesklip No 22 in the district of Malmesbury. As per the information received from you, we overlaid the proposed positions of the wind turbines and turbines 41, 39, 38, 37, 40, 45, 44 fall within the proposed prospecting area. Although it covers a relatively small area of overlap, the impact may be the sterilization of minerals in that specific area. We thus object against the proposed development of the windfarm in relation to those turbines that are overlapping on the proposed Prospecting area. Having said that though, we wish to enter into discussions with the wind farm developers and the land owners in order to reach an amenable solution.</p>	Hoek, Neels	01-Jul	<p>These concerns and request were forwarded to the BWF developers. Subsequently discussions between these parties resulted in an agreement between the parties and the withdrawal of this objection. Proof of this has been included in Volume 4 (PPP Support) - Appendix F. The BWF developers have indicated that their proposed turbine locations do not overlap much with the area this company is applying for prospecting rights on.</p>
7	<p>9 From the Google Earth map provided it is seen that many turbines are placed on the edge of No-go areas which means that the rotor, with a diameter of 103m, will encroach 51,5m into the No-go areas. Is a No-go area not a No-go area for ALL wind turbine components, access roads, power lines, etc? Also number 16 is placed in an enclosed area roughly 115m x 50m and number 17 in an area roughly 170m x 50m this means they are going to encroach heavily on No-go areas, and how will access roads be constructed and construction performed without encroaching on the No-go areas?</p> <p>10 Obviously none of the negative effects of the BWF will concern the developers (Enercon, EnergieQuelle, and Saertex) – they will be in another country taking their profits out of RSA, or CES they will be in other parts of RSA unaffected by the negative effects of the BWF – the farmers – they will be extremely well compensated which will make negative effects immaterial to them. So it is only local residents and tourists who will have to live with the “temporary” negatives for twenty five years.</p> <p>11 Are the developers in RSA because they wish to benefit the country and its people, or because there is too much opposition to WF’s in their own country, and it is easier to make money and take it home from here? From what we read electricity in France using Nuclear power is half the cost it is in Germany, which cost has risen by a reported 50% since wind and solar were introduced in 2006.</p>	Todd, A&J	01-Jul	<p>The no-go or sensitive areas to be avoided include the noise, ecological, water and heritage buffer areas. The No-Go areas for each of these areas of concern are provided in Volume 1 (Final EIR) Appendix A-3 and A-4. which has been added to the Final EIR. The location of the turbines on the boundaries of these collective sensitive areas does not necessarily represent a threat to bats or birds. Each of the specialists assessed the potential impacts of the proposed layout on aspects of the environment relevant to their study and these have largely been found to be acceptable low to moderate impacts. The proposed roads will maximise the use of existing roads and improve the river/stream crossings to reduce the impacts of existing farm roads. As for the negative impacts on tourists and tourism operators/businesses which are linked to the visual impact, these were assessed by the Economic specialists and found to be low. This included an additional more detailed assessment of the affected Britannica Heights properties. With regard to your comments on why these foreign developers are investing in South Africa, this is linked to the business opportunities associated with the South African Government's desire and policies to 1) grow the renewable energy production sector to improve energy security and reduce our reliance on fossil fuel energy production and reduce its emissions and pollution effects; and 2) promote foreign investment in South Africa and stimulate economic growth, especially the green economy. These aspects are reflected in the National Development Plan. The competitive bidding process for renewable energy projects is designed by the Department of Energy, forces all renewable energy developers to compete with one another based on the lowest price, ensuring the provision of the cheapest electricity to South African citizens. The profits are ultimately controlled by the competitive nature of the bidding programme and ensures that developers seek minimal feasible returns in order to be successfully awarded a project under the bidding programme.</p>
8	<p>13 CES states the BWF will provide “Security of electricity supply, where over the last few years, South Africa has been adversely impacted by interruptions in the supply of electricity”, has a reliable means of storing the electricity been developed for the many times when there is NO wind? From some reports WF’s are only productive 30% of the time on average. This means a reliable backup system will be necessary, which has to be maintained and operated when necessary; this needs to be added to the cost/kWh of that produced by wind, as must all the other costs applied before the electricity reaches the consumer – line fees; substation building, operation and maintenance costs; plus all the other costs ESKOM adds. This will greatly increase the cost to the consumer compared to what CES gives as the price from the developers.</p> <p>14 How will the WT components be disposed of at the end of their life cycle, how much can be recycled or will they contribute to the ever growing problem of waste and destruction of the environment?</p>	Todd, A&J	01-Jul	<p>These issues about the appropriateness of renewable energy production and the management of the electricity supply are the responsibility of the Department of Energy’s Integrated Resource Plan and are outside the scope of this EIA. Please also see our response to the 2 papers submitted by Mr van der Spuy on the risks associated with renewable energy projects - in terms of reliability of supply and the costs in Germany (see comment and responses number 35 &amp; 36 below).</p> <p>Recycling: The EMPr specifies that a material recovery strategy should be developed and implemented to optimise the use of valuable metallic materials comprising various components of the wind farm during the decommissioning phase. In addition, the site must be rehabilitated.</p>



	I&AP Comments on Other Issues	I&AP	Date	EAP Response
9	<ul style="list-style-type: none"> <li>The proposed Project is located in the immediate vicinity of the existing West Coast 1 windfarm. In its current form, the Project would cause significant interferences with West Coast 1 operating conditions;</li> <li>The proximity of the Project wind turbines with West Coast 1 wind farm would reduce the energy production of West Coast 1 and increase operating costs:               <ul style="list-style-type: none"> <li>Part of the wind energy would be captured by Project wind turbines, and would contribute to the reduction of the overall energy production of West Coast 1 Project;</li> <li>Wake effect generated by the close Project wind turbines would increase the stress on West Coast 1 wind turbines and therefore accelerate their wear and tear (increasing further operating costs);</li> <li>A wake effect impact assessment is urgently required.</li> </ul> </li> <li>While the substation is assumed to be on the Project site, the grid connection is implied to transverse over the existing West Coast 1 windfarm:               <ul style="list-style-type: none"> <li>The practicalities concerning the grid connection need to be clarified and agreed including any required outages and losses to West Coast 1 in connecting to the Aurora-Fransvlei line, proximity to West Coast 1 turbines, impact on existing land leases and impact on obligations under the EMP.</li> <li>The constraints placed by the Department of Environmental Affairs need to be consistent for all wind farms, given the Project its current form, certain concessions would need to be made for the Project.</li> </ul> </li> </ul>	WC1- Tebogo Movundlela	01-Jul	The BWF developers have initiated discussions with WC1 in March 2019 to understand and determine these impacts. Technical and commercial effects of the wind farm on any neighbouring wind farms falls outside the scope of the environment being assessed in the EIA. The Grid Connection is being assessed in a separate Basic Assessment process.
10	WEST COAST ONE WEF. My final comment concerns the West Coast One WEF, which we can see quite clearly from our property. The location of this WEF is in the direction of Vredenburg and far enough away from our view line to Paternoster so as to be partially intrusive. In short, we have learned to live with this development (even having a skyline full of blinking red lights at night). It should be noted that this development was approved with no genuine consultation with or knowledge of the residents of Britannica Heights. It is in my view, false thinking of future developers, that if we can learn to live with one WEF, then we can learn to live with more and more. The cumulative effect of adding to the West Coast One WEF is unacceptable and any plans to do so should be rejected. I hope that my concerns and reasoning are adequate for your needs. Should you require clarification of any point or additional information, please do not hesitate to contact me.	Portsmouth, Doug (Britannica Heights)	02-Jul	The cumulative visual impacts of the proposed development have been assessed and are acknowledged to be high and cannot be mitigated any further. The developers have limited the size and location of their development in an attempt to minimise the visual impact on Britannica Height and Paternoster residents/property owners and relocated seven turbines to reduce the impact on Kasteelberg heritage site. As for future potential developers, they will have to go through the same environmental authorisation application procedures and demonstrate the acceptability of their developments. The experience of this BWF and the WC1 developments are likely to affect any additional future wind farm developments.
11	Crime. From the history it is clear that crime proved to be the achilles heel of tourism in Paternoster – see Annexure B, par 16. During the construction phase there will be a big influx of job-seekers the risk of crime increase. What is even more concerning is the impact on crime in the post-construction phase when unemployment will increase. What makes these risks even worse is that the reputational risk for a tourism destination takes many years to turn around (as we are experiencing in Paternoster at the moment). The influence of crime on property prices and tourism had therefore been overlooked and need to be considered further by UE. CRIME. In order to quantify the financial impact of crime on property values, the following example in Paternoster is insightful: It deals with two stands, Stands 2043 and 2044 in Paternoster. These stands are next to each other and exactly the same size (227 m2). Stand 2044 had been sold in 2018 and Stand 2043 other only recently after a comprehensive security system was introduced in the area. The selling price of Stand 2044 was R550 000 and 2043 at a price 50% higher at R827 500.	Brand, Deon (Paternoster )	02-Jul	The response to the crime issues raised by Mr Danie Kotze in point 6 above is also relevant here. Due to the limited scale of the proposed development, the local content commitments the developers need to make in order to successfully bid for an IPPP contract, and the mitigation measures to be applied to minimize in-migration and crime, the risk of an increase in crime linked to the development is expected to be low. In addition, the impact of the development on tourism is also expected to be low and therefore not expected to impact jobs in the tourism sector. Having said this, crime is already a problem in Paternoster, as it is in most parts of South Africa due to the problems of poverty and low economic growth. In this case the collapse of the fishing industry has contributed to poverty and unemployment in Paternoster, but it has also provided conditions conducive to the growth of tourism. The economic assessment has acknowledged the influence that crime has on tourism and property values. Attributing this crime risk to the proposed BWF is, however, not appropriate as it does not pose a significant additional risk factor and could contribute to reducing these risks.
12	<b>Introduction:</b> The correspondent wishes to state that he is a professional wildlife photographer and author. Together with his wife, he has published ten books with a further title scheduled for release this year. He has 40 years of experience in the fields of wilderness and wildlife conservation. The correspondent further wishes to state that he is a keen advocate of clean and renewable energy, but of the express opinion that the implementation of any energy facility should not be undertaken at the expense of the environment, in all that the term environment encompasses, from fauna and flora to geographical, historical and social. This is particularly pertinent in the circumstances, such as those presently in South Africa, where the government and Eskom have initiated a fast track drive to introduce sources of clean energy into the country's energy supply systems. Fast-track, should not countenance irresponsible or rash	Peter Pickford and Associates (Paternoster )	02-Jul	There is a political drive to fast track energy production projects in South Africa in order to improve South Africa's energy security and reduce its carbon emissions and other pollutants from fossil fuel energy production facilities lies. These aspects are reflected in the National Development Plan. However, this does not absolve energy developers from following the legally required environmental assessment and other licencing and bidding processes. As legally required, the developers of the BWF are applying for an environmental authorisation and going through a full EIA process. This process allows all the stakeholders an opportunity to comment (and appeal) and for the full range of impacts to be assessed. All of this information will be used by DEA to make their decision on whether to authorise the BWF and under what conditions. This is not irresponsible behaviour.



	I&AP Comments on Other Issues	I&AP	Date	EAP Response
	development.			
13	<p><b>Dismissive Response to Comments:</b> The correspondent wishes to record that his experience of EAP's response to I&amp;AP's comments has historically been dismissive and that in this instance, the correspondent, and the bodies that he represents, will not accept such treatment of points of demand for further investigation of specialist reports. That where specialist reports are queried or noted as insufficient, inadequate or of debatable content, only the response of the specialist themselves or other suitably qualified specialists and not the EAP, will be considered as acceptable. I further endorse the statement of Mrs. Ralphs of Britannica Heights where it is noted that: "Given the very limited attempts to gather local data, much less do any real research, many of the specialist reports contain serious shortcomings that undermine the validity of the studies and make a nonsense of the findings. In addition, CES's interpretation of these reports is mechanistic and, while making claims to scientific objectivity, is clearly biased in favour of the power utility. Generously considered, the draft EIA seems to be little more than an attempt to demonstrate compliance with the minimum requirements but comes nowhere near constituting a real attempt to understand the local context or deliver a fair and balanced assessment of the facts. The correspondent therefore hereby charges the EAP to provide specialist response to all relevant comment and queries of specialist reports. This correspondent further wishes to note that his comments are not to be noted as only that of an individual but are to be counted in terms of the membership of the bodies he represents, namely: Cape Columbine Conservancy – 18 members, Groot Paternoster Nature Reserve – 15 members, Shelley Point Home Owners Association – 1207 members.</p>	Peter Pickford and Associates (Paternoster )	02-Jul	See response to the comments by Mrs Ralph on the 24th May in point number 9 in the EIA Process section of the CRR. They are also repeated in her submission of the 30th May and responded to in that same section of the CRR. In writing the EIR CES has had to synthesise and summarise all the information from 12 different in-depth specialist studies. The EIR is a summary report and much of the detailed information is actually located in the Specialist studies. The summary is necessary in order to provide an overview and synthesis which takes all the findings into consideration. This may create the perception of being mechanistic but is far from the case. In cases where some additional information was found to be needed in the Final EIR this has been added (i.e. the discussion of the alternative sites assessed and further elaboration of the conclusions). Considerable effort has been made by CES to listen and respond with consideration to the large volume of comments received - including the many additional papers and reviews submitted. In doing so CES has asked the specialists to respond and has added to their responses where this has been necessary (i.e. where the I&AP is raising issues outside of the scope of the specialist or relevant to the EIA as a whole). In addition, there were many comments about the EIA process, alternatives, conclusions and other issues that were outside the scope of the specialist studies and required the EAP to respond. This is normal practice and entirely appropriate.
14	<p><b>In conclusion:</b> I am an advocate of clean and renewable energy but not where such proposed development is rash and ill considered. I feel that the Proposed Boulders Wind Farm although worthy of consideration, remains fatally flawed in one major aspect: the choice of its site and the extensive negative ramifications this chosen site brings with it in terms of its damaging influence upon one of the driving industries behind the local economy: tourism. And further, in equal or even greater regard, the chronic disruption and irrevocable damage the site will cause to the sense of place of the local community and the potential irrevocable damage of the cumulative effect of two wind energy facilities side by side can have on the birds and bats. It will too threaten the validity of the conserved land of the Groot Paternoster Nature Reserve, which serves as a vital conservation area, lying directly adjacent to the Cape Nature Groot Paternoster Rock Islands. The West Coast Peninsula is an area of Outstanding Natural Beauty. This unique natural attribute and character has motivated settlement and tourism to the area bringing wide and long-term improvement. To threaten this without proposing alternative sites is unacceptable. We place our trust in the authority vested with the decision to review this 1st Draft EIA with this firmly in mind.</p>	Peter Pickford and Associates (Paternoster )	02-Jul	The issues raised about the assessment of alternative sites, impacts on birds and bats, and the visual impacts and associated impacts on tourism and property values have all been responded to in the sections of the CRR where these issues are addressed directly. The comment about "rash and ill considered development", is responded to above in number 13 and in the comments raised by Mrs Ralph in the EIA Process section of the CRR.
15	<p><b>Note on upliftment of perceptions of bias report:</b> The correspondent would at this juncture register his disagreement in regard to the upliftment of the Suspension of the Scoping Report for the Proposed Boulders Wind Farm by then acting Minister Ms. Zulu in response to my Report on Perceptions of Bias in the Scoping Report for the Proposed Boulders Wind Farm. In a letter to Ms. Zulu of the 17th of April 2019, I noted that the Suspension had been uplifted after interviews were held with a cross-section of the community concerned. I queried that a random sample of 7 people did not truly constitute a comprehensive cross-section of the community concerned. I have further subsequently learnt that more than half of the said 7, were in fact councilors in the local wards. I would therefore re-iterate my concern that the upliftment was invalid, based on the number of people interviewed failing to represent a real cross-section of the community. And, further, in the position and occupation within the community of the selected 7 not being a truly randomly selected group of people, but rather being very specifically selected.</p>	Pickford, Peter	02-Jul	Mr Pickford has raised these issues with the DEA in his response to their decision on the appeal. The appeal process is dealt with by the DEA appeal authority and is outside the scope of this EIA process to address.



16	I&AP Comments on Other Issues	I&AP	Date	EAP Response
	<p><b>Submission of own Specialist reviews:</b> As it is the experience of the correspondent to find that he is on occasion insufficiently qualified or experienced in specialist matters to interpret or comment on the many aspects of the specialist reports of such an EIR, I have approached the members of the bodies I represent, Cape Columbine Conservancy, Groot Paternoster Nature Reserve and the Shelley Point Home Owners Association, to employ specialists to review aspects and reports of this EIR. To this end we have asked Dr. Andrew Jenkins to review the avifauna report and Mr. Andre van der Spuy to review the draft EIR as a whole on our behalf. We, the above bodies, wish to endorse and hold as valid, the report and findings of Dr. Andrew Jenkins of Avisense, and Mr. Andre van der Spuy of AVDS Environmental Consultants, employed by the conservation bodies and individuals of the West Coast Peninsula community, to examine the Reports provided by CES. These specialists' reports in response to the reports tendered by CES are attached with this letter of comment as Annexures A and B.</p>	<p>Peter Pickford and Associates</p>	<p>02-Jul</p>	<p>Our responses to the reviews and comments submitted by Dr Andrew Jenkins (on the avifaunal issues) and Mr Andre van der Spuy (on a broad range of issues) are addressed directly in the relevant sections of this CRR. CES would however like to point out that Dr Jenkins report raise some issues of concern arising out of his monitoring data for the WC1 wind farm during its first year of operation. He was previously contracted by the WC1 developers to undertake the pre-feasibility avifaunal assessment and the subsequent specialist study for the WC1 EIA, as well as the monitoring for the first year. However, he is no longer involved in the avifaunal monitoring of that project and this work is currently being undertaken by other avifaunal specialists and he has not been privy to that data. The bird specialists involved in this EIR have however had access to all the bird monitoring data for the WC1 facility along with the Radar data.</p>
	<p><b>Changes to the character and worth of the Land:</b> It has come to my notice that, in reading through all the reports of the 1st Draft EIA and the vast amount of information included therein, that there remains something missing, a big something, and that is the evaluation of the worth of the land in the minds of the community. Perhaps, it is that such worth cannot be scientifically defined or quantified that causes its omission, but that people love land is known to all of us. Most of us would, in cases of extreme duress, where our land is threatened by outside forces, sacrifice our lives to keep it. But, we would never think of doing this say for Mexico or Greenland. That the land has worth, is possessed by people intellectually, therefore, is undeniable. This worth must then form part of the decision-making process. The difficulty becomes arriving at a value of that worth, and how to compare that value to more quantifiable monetary values. In the perspective to be derived from this 1st Draft EIA, the estimation of the worth of the land from the developer's perspective, in terms of the above, is nil. They do not live here: have neither experience of place, nor are their lives or industry in any way associated with the land's wellbeing. The land is simply a site. To the community, however, the very opposite is true. The land is the currency of our lives; the wealth by which we live. The land seeps its presence into our minds, becomes by gentle degree intrinsic in our lives, until it finally possesses us and becomes the rooted core of our identity. For many, it is an inherited and lifelong influence. For others, like myself, the choice of this place has been a conscious one. I have travelled and worked extensively on every continent on earth, and in all that I have seen the West Coast Peninsula stands as extraordinary, and became thereby my conscious choice to settle; to provide my own life with a wealth by association. I could not have been more right. The land whose worth we are now debating is exceptional in the diversity and range of its character and mood. I cannot think of a comparable alternative in South Africa. This alone must be weighed as proof of its value, when measured by quantifiable terms. In his book 'Landmarks', Robert Macfarlane describes this association: "...over time, she learnt to go into the hills aimlessly, merely to be with the mountains as one visits a friend...". Some of us walk, some drive, some just sit in contemplation, but in all of this the land surrounds us and influences how we are seeing from the inside. For each of us the land expresses subtleties that succor our being. Its familiarity brings us peace and security, even when we do not notice or acknowledge it. I have made my home in the Groot Paternoster Nature Reserve; a piece of land that has been given over by the owners as a protected wilderness area into the future. Just offshore, adjacent to the Groot Paternoster Nature Reserve, are the Groot Paternoster Rocks, an area under the jurisdiction of Cape Nature and home to a vast diversity of fauna and flora. It is essential therefore for the protection of the life on the Groot Paternoster Rocks that the adjacent land be wilderness. Further, there are already plans in progress to enlarge the area of the Groot Paternoster Nature Reserve to include neighbouring farmland, to become an even more significant wilderness area. It is for this reason that the proposal of an industrial development in the heart of this land, the country by which we define ourselves and from which the joys and</p>	<p>Peter Pickford and Associates</p>	<p>02-Jul</p>	<p>The worth of the land and the sense of place people have, depends on the interests and perspective of the residents of the land. In this case there are very different perceptions of the worth of the land and what characterises their sense of place between those more recent tourism and property developers and owners of holiday houses and the former residents of the fishing communities and the farmers. Mr Pickford describes his own perspective linked to his involvement and investments in tourism developments around the peninsula and speaking as if these apply to all residents. Attempts to quantify the 'worth' land or a sense of place are based on people's perceptions of value, or else on indirect measures of value such as the additional market value of a property due to its view, or the amount of money people are willing to spend to visit an area or conserve it. All of these are subjective and vary depending on one's interests and perspective. He also makes it clear that he and his associates are competing land owners, wanting to expand their nature reserves and tourism developments and consequently opposed to the proposed wind farm which they see as a threat to their development and conservation plans. The use of the word 'industrial' to describe the proposed development is a term often used by anti-wind farm activists as a way to invoke the idea that dirty and busy factories and urban developments are being proposed in beautiful rural landscapes and, therefore, changing the character of these areas i.e. turning them into industrial or urban areas. This is an inappropriate and manipulative use of language purposely aimed at discrediting the idea of wind farms. It also conveniently ignores the very urban nature of much of the tourism development that has already occurred along the peninsula's coastline.</p>





	I&AP Comments on Other Issues	I&AP	Date	EAP Response
	<p>satisfactions of our lives are inextricably intertwined, produces such a knee jerk reaction of rejection. To allow the land that sustains our inner self and gives worth to our lives, to be desecrated by industrial development is equivalent to allowing the amputation of the legs or arms of a friend. I hope this metaphor underlines the strength of the instinctive reaction of the community to the proposed development.</p>			
<p>18</p>	<p><b>Representation of support and opposition:</b> The reality of which can be borne out by a merely superficial inspection of the number of comments raised by the public in objection to the proposed development and further by the petition attached hereto as annexure C. It must also be noted that, in Annexure F of this 1st Draft EIA, all the quoted correspondence, which pertains exclusively to support for the development, is from persons or institutions who stand to gain direct financial benefit from the project. Those tens of thousands of others who do not, are entirely absent. The worth of the land to the communities of the West Coast Peninsula is therefore of paramount importance and merely because it evades rigid scientific evaluation, does not preclude its inclusion as a major consideration of the acceptance or rejection of the project on the proposed site.</p>	<p>Peter Pickford and Associates</p>	<p>02-Jul</p>	<p>The response to similar issues related to the letters of support raised by Mrs Ralph are also pertinent here. See comment and response number 18 (dated 19 July 2019) in the EIA Process section of the CRR. The CES response to comment 18 immediately above is also relevant here.</p>
<p>19</p>	<p>POLICY FOR SUSTAINABLE COASTAL DEVELOPMENT IN SA: RELEVANCE TO THE PROPOSED BOULDERS DEVELOPMENT NEAR PATERNOSTER. Seeing this fourth attempt now at developing the same site (each time under a different name) for a 45- turbine wind farm on actively farmed coastal land, I cannot but have a feeling of great disappointment in the way our Coastal Policy for SA, that achieved international recognition as an example of best practice policy are simply being ignored in the EIA of the above proposed wind farm. In order to demonstrate the relevance of the Coastal policy, I will highlight some of the key messages in the White Paper, “At present, management efforts related to development are typically focussed on the short-term, and are reactive, fragmented and uncoordinated. As a result, development opportunities are being squandered. A dedicated Coastal Policy is needed to promote integrated management of the coast as a system, in order to harness its resources for sustainable coastal development”. 1. Key messages of the coastal policy directly relevant to the proposed wind farm. “It is essential that coastal management contributes to achieving the Constitution’s commitment to improving the quality of life of all citizens, while protecting the natural environment for the benefit of present and future generations.” – Our coast is unique and Paternoster is probably the best example of good coastal development in SA, attracting tourists from all over the world. The proposed wind farm has the potential of reducing the quality of life, negatively impacting on the sense of place. This while the wind farm will not benefit the local community at all, except the farm owners who will be leasing their land to the Wind Farm Developer. The wind energy will be pushed into the Eskom grid and may benefit someone somewhere, but not necessary on the coast. That is if Eskom survives. The coastal town of Paternoster, needs to make many sacrifices in order to allow: • local farmers producing milk and wheat to let huge portions of their farms to a Private Energy Company that possibly has no association with Paternoster. Will the farmers still maintain an inter, • The private developer to generate wind energy that is sold to a near bankrupt Eskom. • Eskom feeds the wind energy into the national grid which supply electricity users elsewhere in SA. What is going to happen if Eskom no longer needs the wind energy or cannot afford to pay a fair price. • Will the wind farm remain in use and be maintained? • Would the farmers still have an interest in farming with milk cows, wheat etc. when they can live of the income from the wind farm leases. Are these farms going to become a windblown sandy and eroded landscape? • Will the tourists still be interested in coming to Paternoster. If not, the shops, restaurants and rental apartments will have to close their doors and the local community that is dependent upon these tourist related activities will become poverty stricken. “Failure to invest in coastal management now through a dedicated coastal policy will result in a degraded coastal environment and leave many coastal communities in poverty, thereby reducing options for future development in South Africa”. “In addition to direct and indirect benefits, to which a</p>	<p>Muller Coetzee</p>	<p>03-Jul</p>	<p>The proposed development is located 5-7 km from the coastline and is therefore not considered a coastal development. The policy relating to coastal developments is not relevant to this proposed development. This, however, does not mean that environmental law is not being adhered to. The EIA process requires that a full assessment of all potential social and environmental impacts are assessed and taken into consideration in the authorisation decision making process. This process allows for considerable public input and the need to take the comments received from the public into consideration and respond appropriately - as is evident from the large volume of comments received on this EIA for the proposed BWF. The concerns about impacts on tourism, sense of place and birds and other wildlife have been investigated and professionally assessed and reported on the by the 12 specialist studies and the EAP, in accordance with the requirements of the Environmental regulations and guidelines. The comments and responses related to these issues are provided in the relevant sections of the CRR.</p>





I&AP Comments on Other Issues	I&AP	Date	EAP Response
<p>value can be given, our coast has significant aesthetic, cultural educational, scientific and spiritual value and the attractive lifestyle, recreational and tourism opportunities offered by a coastal location. These features depend on the maintenance of a high-quality coastal environment through effective coastal management. Our valuable coastal assets and future development opportunities will be squandered, unless we maintain a healthy coastal environment. “ “The new approach moves away from a “command-and-control” approach to coastal management to one in which effective enforcement of legislation where necessary is combined with a new emphasis on creating incentives for effective coastal management. The new management style put forward in this Policy seeks to facilitate rather than simply to regulate, and to build a co-operative approach to effective coastal management. It is also a people-centred approach that recognises the importance of harnessing the positive and creative energies of all stakeholders in realising sustainable coastal development”. The question is whether public input really matters in the decision-making processes of National and Provincial Government. It is often observed that the public makes a lot of effort to make objective input to EIA processes and not even receives acknowledgement or an informed response to the comment received. “With regard to the environment, Section 24 of the Constitution states that everyone has the right to an environment that is not harmful to their health or wellbeing and the right to have the environment protected for the benefit of present and future generations.” There are numerous cases where residents near wind farms complain over the persistent humming noise, that cannot be switched off and driving them crazy. Birding in the area is also a popular tourist activity and therefore there is great concern as to how the wind farm will affect birds passing by on their migratory paths. The Coastal Policy notes that the potential exists in our West Coast Region for the development of small-scale industries that add value to fishing, horticulture and mariculture, and for tourism-promotion initiatives, including the development of rail and air links.</p> <p>“It is important to state explicitly that the development of the national vision, as well as the principles, goals and objectives for coastal management, are based on an assumption of the need to respect and cherish the rich and diverse heritage of our coast. Different parts of our coast have distinct qualities, offering comparative and competitive advantages for future development. “</p> <p>One would expect that anyone doing an EIA on the coast should at least reflect on the Vision and Principles underpinning the vision as outlined in the Coastal Policy, which Government seem to have forgotten in their often naïve commitment towards economic development at all cost. KEY PRINCIPLES. National asset. The coast must be retained as a national asset, with public rights to access and benefit from the many opportunities provided by coastal resources. Economic development</p> <p>Coastal economic development opportunities must be optimised to meet society's needs and to promote the wellbeing of coastal communities. Social equity. Coastal management efforts must ensure that all people, including future generations, enjoy the rights of human dignity, equality and freedom.</p> <p>Ecological integrity. The diversity, health and productivity of coastal ecosystems must be maintained and, where appropriate, rehabilitated. Holism. The coast must be treated as a distinctive and indivisible system, recognising the interrelationships between coastal users and ecosystems and between the land, sea and air. Risk aversion and precaution. Coastal management efforts must adopt a risk-averse and precautionary approach under conditions of uncertainty. Accountability and responsibility:</p> <p>Coastal management is a shared responsibility. All people must be held responsible for the consequences of their actions, including financial responsibility for negative impacts. Duty of care:</p> <p>All people and organisations must act with due care to avoid negative impacts on the coastal</p>			





	I&AP Comments on Other Issues	I&AP	Date	EAP Response
	<p>environment and coastal resources. Integration and participation: A dedicated, co-ordinated and integrated coastal management approach must be developed and conducted in a participatory, inclusive and transparent manner. Co-operative governance: Partnerships between government, the private sector and civil society must be built in order to ensure co-responsibility for coastal management and to empower stakeholders to participate effectively. Some other important Goals of the Coastal Policy as adopted by Government, but not applied by Government.</p> <p>COASTAL PLANNING AND DEVELOPMENT GOALS: "Goal C1 : To promote the diversity, vitality and long-term viability of coastal economies and activities, giving preference to those that are distinctly coastal or dependent on a coastal location". Surely the proposed wind farm is not coastally dependent and can be and has been developed all over the country. In any case the electricity generated by the wind farm will not be supplying electricity to Paternoster, as it will disappear in the National grid. Examples of coastally dependent development includes: Ports and related development. Mariculture, Tourism, leisure and recreation. Goal C2 : To alleviate coastal poverty through proactive coastal development initiatives that generate sustainable livelihood options. Wind farm will not contribute towards achieving this at all. In fact it may significantly compromise the ability to achieve this goal. "Goal C3: To maintain an appropriate balance between built, rural and wilderness coastal areas". Not respected by the Wind farm developers. Goal C4: To design and manage coastal settlements to be in harmony with local and regional aesthetic, amenity, biophysical and cultural opportunities and constraints. Paternoster has been able to achieve this to some extent. However, the wind farm may very well compromise the achievement of this goal. "Our coast is a special national asset that should be planned for and managed in the long-term public interest. All South Africans, particularly organs of State, have a responsibility to ensure that its use is planned and managed in the public interest.":</p> <ul style="list-style-type: none"> <li>• Prevent exclusive use,</li> <li>• Ensure that more people benefit from coast,</li> <li>• Minimise adverse impacts on environment,</li> <li>• Promote the preservation and protection of archaeological sites.</li> </ul> <p>"Coastal planning and management should be undertaken proactively to optimise sustainable development opportunities".</p> <ul style="list-style-type: none"> <li>• Diversify coastal economies,</li> <li>• Consider alternative livelihood opportunities,</li> <li>• Promote mariculture opportunities</li> <li>• Retain revenues generated in local areas,</li> <li>• Promote local benefits from tourism,</li> <li>• Promote tourism and local cultural values.</li> <li>• Improve infrastructure for tourism,</li> <li>• Encourage the establishment of buffer and transition zones,</li> <li>• retain aesthetic values,</li> </ul>			
20	Coastal Planning and Development Goal C2 : To alleviate coastal poverty through proactive coastal development initiatives that generate sustainable livelihood options. Wind farm will not contribute towards achieving this at all. In fact it may significantly compromise the ability to achieve this goal	Muller Coetzee	03-Jul	The above response relating to coastal development policy is also relevant here. The potential impact on existing tourism businesses has been assessed and found to be low or indiscernible and is therefore not expected to have any negative impact on employment or income generation in the local tourism sector. The economic benefits will also contribute to local and regional economic development and energy security (which is an essential foundation for further economic development).
21	Coastal Planning and Development Goal Goal C3: To maintain an appropriate balance between built, rural and wilderness coastal areas". Not respected by the Wind farm developers	Muller Coetzee	03-Jul	The response above re coastal development policy is also relevant here.
22	Coastal Planning and Development Goal Goal C4: To design and manage coastal settlements to be in harmony with local and regional aesthetic, amenity, biophysical and cultural opportunities and constraints. Paternoster has been able to achieve this to some extent. However, the wind farm may very well compromise the achievement of this goal.	Muller Coetzee	03-Jul	The response above re coastal development policy is also relevant here.
23	Surely the proposed wind farm is not coastally dependent and can be and has been developed all over the country. In any case the electricity generated by the wind farm will not be supplying electricity to Paternoster, as it will disappear in the National grid. Examples of coastally dependent development includes: Ports and related development. Mariculture, Tourism, leisure and recreation.	Muller Coetzee	03-Jul	The response above re coastal development policy is also relevant here. CES assume that the reference to 'developments all over the country' refers to the opportunity to develop windfarms in other parts of the country and not 'coastal' areas. In this regard, the comments related to alternative sites and the reasons why the developers selected this area for their wind farm are addressed in the 'Alternatives' section of the CRR (see comments/responses number 1 and 6).



	I&AP Comments on Other Issues	I&AP	Date	EAP Response
24	<p><b>INTERNET AND AIR SPACE</b></p> <ul style="list-style-type: none"> <li>• Problems exist with the quality of the internet due to interference from the turbines. The Report’s answer under 10.1 is If complaints are received from surrounding landowners regarding this issue, the developer must investigate and mitigate these issues to the best of their abilities. What mitigation measures are the best of their abilities?</li> <li>• As mentioned under 4.1.9 potential of wind turbine generators to interfere on radio navigation equipment the BWF falls outside the 35km distance from the Langebaanweg Aerodrome, but is only 15km away from the Saldanha Aerodrome. In addition farmers (on whose land wind turbines will be built) no longer seem to have a need for crop spraying by planes, adjacent farmers still might regard this as essential?</li> <li>• Also mentioned under 4.1.9 much care should be taken to consider visual flight rules routes, proximity of known recreational flight activity such as hang gliders, enroute navigational facilities etc. Light aircraft and microlights using the area regularly for recreation will be negatively influenced by the BWF.</li> <li>• The developer’s bird studies refer to NO-GO areas eg. water ways and beacon points (for hunting, feeding nesting grounds). Obviously birds will fly between these points and this is exactly where the turbines are supposed to be erected.</li> <li>• Referring to Bat mortality and mitigation by curtailment plans (once a threshold of fatality is reached): increasing the cut-in speed for specific turbines with high bat fatality rates at specific times of night, under specific environmental conditions when fatality is greatest. This impact may be minimised by siting turbines away from important habitat features for bats, as well as bat roosts. Our concern is that monitoring and control of the cut-in speed at night will not be enforced.</li> </ul>	No Boulders Wind Farm Email Petition (31 submissions)	1&2 July	<p>The BWF developers are liaising with the aviation authorities with regard to their regulations and needs, which will address any potential problems they may anticipate, including recreational flying activities. If there are any complaints received from I&amp;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&amp;APs, new receives would be installed to restore the signal back to the original value.</p> <p>No farmers have raised any concerns around the wind farm interfering with their farming activities. Land degradation and drought have also made cultivation in this area more and more unsustainable and marginal. The concerns about impacts on birds and bats are responded to in that section of the CRR. As for concerns about monitoring and enforcement, any authorisation/licence is issued on condition that environmental management and mitigation measures are implemented and adhered to. This includes the appointment of an Environmental Control Officer on site who is responsible for monitoring and reporting to the various licencing authorities. Non-compliance is monitored by the authorities and can result in the loss of their Environmental Authorization.</p>
25	<p><b>DECOMMISSIONING</b></p> <ul style="list-style-type: none"> <li>• When the Report 2.3.5 refers to decommissioning of the Wind Farm after say 25 years, the Applicant must not be surprised at our skepticism. Similar ‘rehabilitation’ of mines has shown that these are sold close to the end of their life expectancy with a new owner not being able to pay for these cost, conveniently going bankrupt, leaving the responsibility to the State. The State, in turn opts for doing nothing, leaving a previously beautiful area devastated for our grandchildren to ‘enjoy’.</li> <li>• In case of Non Compliance according to 10.1 Any non-compliance with the agreed procedures of the EMPr is a transgression of the various statutes and laws that define the manner by which the environment is managed. Failure to redress the cause must be reported to the relevant authority for them to deal with the transgression, as it deems fit.- This questions who would be allowed to access the farms to check compliance – for instance would bird watchers be allowed to do regular checks?</li> <li>• There should be a trust to which the developer from the beginning deposits enough money that allows for the removal of the turbines, platforms, roads, 300 to 700 tons concrete foundations, and rehabilitation of the environment</li> </ul>	No Boulders Wind Farm Email Petition (31 submissions)	1&2 July	<p>The historical problems with mines closing without rehabilitating the sites is well known and of great concern. Many of these mines were licenced prior to the introduction of environmental regulations requiring rehabilitation. The situation today is very different, and all developments must make appropriate plans and provisions (financial) for decommissioning processes as part of their authorisation/licencing processes. With regard to monitoring - see our previous comments on the ECO and licencing provisions. In the case of WC1, they have had to hire professional specialists to monitor the impacts on birds and bats. The same would apply to the proposed BWF.</p>





	I&AP Comments on Other Issues	I&AP	Date	EAP Response
26	<p><b>ALTERNATIVE ENERGY SUPPLY</b></p> <ul style="list-style-type: none"> <li>• Under Alternatives 5.3 reference to dependence of nuclear energy generation on high volumes of water preclude its development on the proposed site. This is not true with a pebble bed reactor, which is safe and is not water dependent and is not dependent on sun or wind.</li> <li>• The fact that wind conditions are less favourable during winter (when demand is highest) means that Eskom still must provide for maximum demand. Until energy from renewable resources cannot be stored, a reliable source as a back-up (eg nuclear) must be provided. If this is available, then the wind farm becomes obsolete again?</li> <li>• Gas generated electricity, (being able to switch on and off when not enough power is generated by the wind farms) is very expensive. Similarly battery systems of this magnitude are still in the beginning stage of development.</li> <li>• Furthermore the Report argues that it is essential that the Western Cape increases its resilience against external energy supply disruptions and the massive price fluctuations caused by national or international decisions with regard to energy commodities (coal, oil)-The Western Cape electricity supply has not been separated from the rest of South Africa and even were this to become reality should still not be to our detriment.</li> <li>• It is incomprehensible why the State does not have a coordinated plan with all available technologies (solar/ wind/ coal/ hydrologic/ gas etc) to establish where developers are allowed to initiate with a particular solution.</li> <li>• The Methodology For Assessing Impacts and Alternatives under 7.3.1 mentions that if An irreversible and permanent change to the affected system(s) or party(ies) which cannot be mitigated. For example the permanent loss of land. These impacts would be considered by society as constituting a major and usually permanent change to the (natural and/or social) environment, and usually result in severe or very severe effects, or beneficial or very beneficial effects. Though the turbines are presented as only a 25+year installation, we argue that even this so called temporary development has a life time negative consequence of VERY HIGH significance.</li> <li>• Boulders' ideal location, due to low cost (close to electrical- and road infra structure and nearby harbour), certainly is very profitable for the developer. We as ratepayers were instrumental in establishing this infra structure which the developer now hopes to profit from to our detriment.</li> </ul>	No Boulders Wind Farm Email Petition (31 submissions)	1&2 July	<p>The issues related to the selection of appropriate forms of energy production are dealt with under the Needs &amp; Desirability section in the EIR and other relevant Government policy such as the National Development Plan (NDP), the SA Climate Change Strategy, etc.</p> <p>See also responses to the two papers submitted by Mr van der Spuy on the energy supply issues in SA and Germany in rows 33 and 34 below, as well as the response to issues on alternative site selection in comments/responses numbered 1, 6 &amp; 7 in the 'Alternatives' section of the CRR. See also response above in number 26 with regards to monitoring issues and processes during the construction and operational phases. With regards to the comments relating to the rating of long-term or permanent impacts, the rating methodology applied in the EIR complies with the legal EIR and NEMA requirements.</p>
27	8. Road access to site, dangerous large Lorries and vehicles transporting sections of turbines cannot be routed through Vredenburg High Street. The R27 to R399 and West Coast No.1 route must be used.	WEST COAST BIRD CLUB	02-Jul	The alternative transport routes were assessed in the traffic study. This study expects that the traffic impacts will be low and recommend that any transporting of turbine sections through Vredenburg or any other build up areas be restricted to non-peak traffic hours and in accordance with an informed traffic management plan and the assistance and agreement of local traffic authorities.
28	9. Where is the large amount of excavated soil from foundations to be disposed of?	WEST COAST BIRD CLUB	02-Jul	Excavated soils from the turbine sites will be used for the upgrading of the roads wherever possible. A number of commercial material sources exist in close proximity to the Boulders Wind Farm site. These sources will need to be investigated further during the preconstruction phase to determine the ultimate suitability of the material for the purposes of wind farm and road construction. Should suitable material be available onsite, a borrow pit will be appropriately licenced through the DMR (dependent on the selection of the proposed Boulders Wind Farm as a preferred bidder).
29	What percentage of the project is foreign owned?	Focus Group Meeting: Britannica Heights	19-Jun-19	The developers include a consortium of 3 international wind energy manufacturing companies, 2 of which have opened subsidiary manufacturing companies in South Africa. In addition, the developed will need to meet, and if possible, exceed the specific local content requirements in order to successfully win a bid to supply renewable energy. These currently stand at an average of 33% BBBEE local shareholdings, and 9% local community shareholdings.



	I&AP Comments on Other Issues	I&AP	Date	EAP Response
30	7) Are you aware of other wind farm proposals in South Africa that have been successfully relocated and how was this achieved?	Focus Group Meeting: Britannica Heights	19-Jun-19	This question is confusing. Wind farms cannot be relocated. The EIA must assess this application for authorisation – on this site. If this application is not approved, then the developers will have to decide if and where they will make other applications.
31	<p>In our home in St Helena Bay, we have a solar power system saving electricity during the day and supporting us when Eskom has a power outage. This has convinced me that South Africans should rely more on these home solar power systems to be self sufficient and not rely on a bankrupt Eskom riddled with corruption. South Africa has unique problems that hinder sustainable development on all fronts. Therefore to have trust in the fair consideration of the rights of this country’s citizens, is impossible. Corruption and crime force law abiding citizens to try and survive whatever is thrown at them by politicians. International Wind Farm investors in South Africa are dependent on Eskom’s management, and wind farm developments can only be successfully implemented and sustained if all other parties are supporting the whole system. Is this possible? I don’t believe so. See article by Andrew Kenny : Renewable energy is a disaster and will collapse SA’s electricity supply system. Andrew Kenny 2019-04-12 02:01 “South Africa is lurching towards another electricity disaster to make the Eskom disaster even worse. It comes from “renewable energy”, which here usually means solar and wind. These are excellent for off-grid uses, such as solar water heating, wind pumps on farms, and small electricity supply for households. But they are useless for grid electricity (electricity on national electricity networks, such as Eskom’s). The sun never makes electricity when it is most needed – on winter evenings just after sunset. With wind you never know when it will make electricity. Both are staggeringly expensive and hopelessly unreliable. South Africa has more than three years of data showing how bad solar and wind electricity is here. This comes from REIPPPP – the Renewable Energy Independent Power Producers Procurement Program. Under it Eskom is forced to buy extremely costly solar and wind power from independent power producers. I have the production figures for REIPPPP. They are terrible, showing wild, unpredictable ups and downs in power production. According to Eskom’s latest annual report for the year ending 31 March 2018, Eskom’s average selling price is about 89 cents/kWh (kilowatt-hour). The average price it is forced to pay for renewable electricity is 222 cents/kWh – over double its selling price. But this is the price Eskom pays for REIPPPP electricity; it is not the cost to Eskom, which is much more. This is because of the system costs. The most important equation in costing renewable electricity: cost of renewable electricity = price of renewable electricity to the grid + system costs. The system costs are the huge costs of incorporating the fluctuating, unreliable solar and wind power into the grid so that it can provide reliable electricity at the right frequency and voltage. They include the back-up generators; the extra costs incurred by these generators ramping up and down to match the renewables and so using more fuel and incurring more stresses; spinning reserve (generators running at below optimum power); storage; extra transmission lines; and increased shut- downs caused by the renewables. If the price of renewables to Eskom was 20 cents/kWh, the system costs would still make it prohibitively expensive. We perhaps can get some idea of them by looking at the one honest renewable technology that covers its own system costs. This is Concentrated Solar Power (CSP) with storage. The latest CSP plants charge Eskom about 500 cents/kWh at peak times. This is probably something like the true costs to Eskom of wind power and solar PV (photovoltaic panels, making electricity directly from sunlight). The system costs explain this paradox. Week by week the greens tell us the price of renewable energy is coming down but all around the world the cost of renewable energy is going up. It is far more costly than anyone predicted twenty years ago and getting worse all the time. The system costs are ignored by green energy modellers. A prime example is the absurd model devised by the Council for Scientific and Industrial Research (CSIR) and now used by IRP2018 (our statutory plan for sources of electricity until 2030). Under this mad plan the “least cost option” is a mixture of renewables and a “flexible” energy source, meaning gas – which would be imported. The renewable power</p>	Engels, Annelina	02-Jul-19	The issues about the appropriateness of renewable energy production and the management of the electricity supply are the responsibility of the governments IPP and Eskom agencies, and are dealt with under the Needs & Desirability section in the EIR and other relevant Government policy such as the National Development Plan (NDP), the SA Climate Change Strategy, etc. Please also see our response to the 2 papers submitted by Mr van der Spuy on the risks associated with renewable energy projects - in terms of reliability of supply and the costs in Germany (see comment and responses number 35 & 36 below).





	I&AP Comments on Other Issues	I&AP	Date	EAP Response
	<p>companies are no doubt making a fortune by forcing us to buy their costly electricity. This is why their spokesmen campaign in our media for renewables. After REIPPPP had proved an expensive failure, the then minister of public enterprises, Lynne Brown, ordered Eskom to sign up for 27 more of these ruinous renewable power contracts. Malusi Gigaba, then finance minister, agreed. Eskom has been wrecked with bad management, mad ideology, awful policy decisions and rampant corruption. Our electricity supply system is heading for collapse. Forcing South Africa to abandon coal and nuclear for wind and solar will make it collapse altogether." - Andrew Kenny is a professional engineer and a freelance journalist <a href="https://city-ress.news24.com/Voices/renewable-energy-is-a-disaster-and-will-collapse-sas-electricity-supply-system-20190412">https://city-ress.news24.com/Voices/renewable-energy-is-a-disaster-and-will-collapse-sas-electricity-supply-system-20190412</a>. More bad news: "In 2018, Eskom purchased IPP power at an average cost of 222c/kWh. In the previous financial year, the power utility bought 11 529GWh of energy from IPPs at R21.7 billion, at an average cost of 188c/kWh. Eskom's general manager for energy trading, Callie Fabricius, explained the IPP programme is a government decision with limited Eskom participation in deciding which IPPs to buy from and the prices paid to it. "In terms of Regulations of Electricity Regulation Act, the minister of energy makes a determination that Eskom becomes the buyer of energy from IPPs. And regulation says we must implement this," he said. Fabricius added that the output of IPPs to the system will increase from this year to the end of the MYPD period by 64%. "Even though the relative cost of particular technologies is decreasing over time, Eskom costs associated with renewable IPPs will continue to increase due to commitments from the earlier bid windows." <a href="https://www.itweb.co.za/content/Gb3Bw7WoDRk72k6V">https://www.itweb.co.za/content/Gb3Bw7WoDRk72k6V</a>.</p>			
32	<p><b>APPENDIX A: The conversion of the German energy system lacks power plants, grids and storage. The state has wasted billions. By Frank Dohmen, Alexander Jung, Stefan Schultz, Gerald Traufetter May 03, 2019. ( See appendix A7 Of Final EIR)</b></p>	<p>Andre v/d Spuy (AVDS) on behalf of P Pickford &amp; Associates</p>	02-Jul	<p>Mr v/d Spuy includes this paper on the German experience with wind energy in his submission as evidence that renewable energy programmes result in increased emissions, (see point 16.1) and the highest energy costs in Europe and at the same time failing to effect the green energy transition (points 71 and 107 in his submission). This newspaper article (not a peer reviewed academic paper) is largely a lament about the politics of effecting the change to renewable energies in Germany, the considerable delays due to resistance and lengthy approval processes. It also profiles some tensions in this process of social change. Much of the costs Mr vd Spuy mentions are due to the political and administrative costs of making the transition and the delays due to resistance. The grid connection issues are part of this. The relevance of these issues to this EIA are highly questionable. There may be some issues of interest to SA policy makers and Eskom, but little in this paper supports a contention that the development of renewable energy projects in SA will directly result in higher energy costs.</p>
33	<p><b>APPENDIX B Weaknesses of solar and wind, Myths and Questions that require an answer Introduction. Paper by Rob Jeffrey, an Economic Risk Consultant (see appendix A7 Of Final EIR)</b></p>	<p>Andre v/d Spuy (AVDS) on behalf of P Pickford &amp; Associates</p>	2 Jul	<p>Mr vd Spuy has included this paper in his submission to substantiate his argument in his point 71 that "the real costs (not price) of large-scale renewable energy to South Africans will far exceed those of any other power generation source". It is not clear whether this was a paper commissioned by Mr vd Spuy's clients (those I&amp;APs opposing this wind farm) or whether it is published somewhere and whether it was peer reviews. An internet search did not yield any results indicating that this was a published paper, so we can only assume it was commissioned or extracted from something else. It addresses the assertion that wind and solar are the cheapest sources of energy. Mr vd Spuy is using this paper to question the appropriateness of renewable energy production in SA. On review of this paper CES found that it speaks like a justification of the continuation of coal and nuclear power in order to meet the needs of the mining sector for reliable cheap energy. It is a one sided 'risk assessment' that focuses on wind and solar. While it mentions that other forms of power generation have their own risks and costs, there is no attempt to discuss these and compare them all. The paper is also all theory and conjecture based on models (which are not specified) and provides no data to assess performance and impact on supply. We argue that this paper does not provide a sufficient basis to compare the appropriateness of different</p>



	I&AP Comments on Other Issues	I&AP	Date	EAP Response
				energy sources, but more importantly this issue is not relevant to this EIA. The costs of energy production, energy distribution and grid management are issues outside the scope of this EIA and the focus of decision making for Eskom and the Ministry of Energy. The competitive bidding process for the selection of renewable energy projects in South Africa is designed to source the cheapest and most cost-effective sources of energy.
34	Please find general information on Wind Farms. <a href="http://www.caa.co.za/Pages/Obstacles/Urgent-notices.aspx">http://www.caa.co.za/Pages/Obstacles/Urgent-notices.aspx</a> : find information on what the process requires from you as applicant and the process thereof.	Civil Aviation Authority	2 Jul	Noted. A CAA conditional approval has already been received for the Boulders Wind Farm facility, Vredenburg Windfarm (Pty) Ltd.
35	RE: BOULDERS WIND ENERGY FACILITY. This area is situated close to Cape Town International Airport, we need to determine whether the proposed will affect the safety of flights. We would have to conduct a formal Communication, Navigation and Surveillance (CNS) assessment as per South African Civil Aviation Authority (SACAA) request, the proposed should not be seen by the radar. The line of sight may be affected upon a Terrain profile assessment, as the radar extends to a 250NM radius. We request that you please update us should there be any new developments that may affect our interests. We will duly conduct assessments as required when the project is ready for construction upon a formal request. Please note there is a charge attached to this service. Furthermore, we kindly request that all queries or new applications to be forwarded to the Obstacle Evaluators on the following: <a href="mailto:ObstacleEvaluator@atns.co.za">ObstacleEvaluator@atns.co.za</a> . Please note, for us to carry out a successful assessment we require the following information: 1. LOCATION (Co-ordinates WGS84 system) for each turbine. 2. SITE/GROUND ELEVATION (AMSL). 3. HEIGHT TO TOP OF PROPOSED DEVELOPMENT (in meters). 4. THE NUMBER OF WIND TURBINES.	Civil Aviation Authority Municipal Focus Group Meeting	2 Jul	Noted. A CAA conditional approval has already been received for the Boulders Wind Farm facility, Vredenburg Windfarm (Pty) Ltd.
36	Are there any water related issues? Any idea of how much water will be required for the foundation and where this water will be drawn from. This info should be included in the EIR. Where will water be sourced? Recommended potential water sources to consider: 1) Local wastewater treatment works, 2) Saldanha Bay wastewater treatment works, and 3) Saldanha Steel	Municipal Focus Group Meeting	20-Jun	A water specialist study has been completed and mitigated layout minimizing on sensitive water areas has been prepared. Planning on using existing water crossings that are currently used by the farmers and upgrading them with culverts that will reduce the impact on the watercourses – this will be a benefit of the project. There may be the need for a Water Use Licence application depending on the water sources and volumes used. Water will not be sourced from watercourses or available farm boreholes but will be transported to site from nearby sources. The water requirements for the foundations are 220L per foundation, which totals circa. 10,000L required during construction. Boreholes have been considered, however the water crisis may prevent this. If boreholes are needed this will require a water use licence application. Alternatively, water may potentially be trucked onto site. The recommendations on water sources are notes and will be investigated by the Developers.
37	The Department has perused the abovementioned (BWF Draft EIR) documents for the establishment of a wind farm and has the following comments: ● The proposed development area is located within a 500m boundary radius from the edge of the wetland i.e. floodplain wetland, hillslope wetland and numerous channelled valley bottom wetlands. This triggers a water use in terms of section 21c “impeding or diverting the flow of water in a watercourse and section 21i “altering the bed, banks, course or characteristic of a watercourse of the National Water Act, 1998” (Act 36 of 1998). Please advise your client to apply for and obtain a Water Use Authorisation from this Department <b>prior</b> to commencing with any of the activities, as per Government Gazette No. 40229 in Government Notice 509 dated 28 August 2016, with the completion of a Risk Matrix (Appendix A). The risk matrix can be found on the Department’s website <a href="http://www.dws.gov.za">www.dws.gov.za</a> under “Document Library – Documents – Section 21 c and I” – click and scroll down to “Final Risk Assessment Matrix”. ● You are hereby advised to arrange for a water use authorisation pre-application meeting with the Department to advise on the water use application process. Please note that as from January 2018, this Department ONLY accepts electronic water use applications. ● Water use applications can be submitted by following <a href="http://www.dwa.gov.za/projects.aspx">http://www.dwa.gov.za/projects.aspx</a> and then click on e-wulaas. ● No pollution of surface or	Dept of Water & Sanitation	3 Aug 2019	<b>CES Response:</b> The developers have been sent your comments and are so advised. A Watercourse and wetland Management Plan, Pollution Prevention Plan and Storm-water and Erosion Control Management Plans are all included in the EMPr.



	I&AP Comments on Other Issues	I&AP	Date	EAP Response
	<p>ground water resources may occur due to any activity on the property. • Measures to control illegal dumping of construction waste must be put in place as this may result in pollution of the surface water run-off. • No abstraction of surface or groundwater may be done without prior authorisation from this Department, unless it is a Schedule 1 Use or an Existing Lawful Use. • Storm-water runoff must be controlled to ensure that on-site activities do not culminate into off-site pollution. • All the requirements of the National Water Act, 1998 (Act 36 of 1998) in terms of water use and pollution control management must be adhered to at all times.</p>			

