



RICHARD SUMMERS INC.
A T T O R N E Y S

resources as a result of the proposed Albany WEF, but then failing to implement any measures to avoid and/or mitigate this high adverse impact.

- 5.6.9. The impact of lighting at night from critical viewpoints has not been addressed at all.
- 5.6.10. The EAP's attempt to justify the high visual impact on the landscape by stating that the lifespan of the project is only 20- 25 years is highly questionable and unscientific.
- 5.6.11. The VIA report contains too many omissions and inaccuracies, and does not serve as a basis for informed recommendations or assessments regarding the visual acceptability of the proposed Albany WEF.
- 5.7. Due to the errors and inaccuracies in the VIA, the findings in the DEIR regarding visual impacts are disputed and not regarded as credible for the purposes of satisfying the national environmental management principles in section 2 of NEMA. It is plainly evident that the concerns previously raised by I&APs about significant adverse visual impacts have been ignored and this constitutes a fatal flaw in the EIA process.
- 5.8. In terms of the implications of the significance ratings, the VIA report states: Negative impacts that are ranked as being of "VERY HIGH" and "HIGH" significance will also "*assist decision makers i.e. numerous HIGH negative impacts may bring about a negative decision.*"⁴¹ In light of the large number of turbines that gives rise to significant negative impacts ranked as being of "VERY HIGH" and "HIGH" significance, coupled with the material flaws, inaccuracies and omissions in the VIA report, the Department would be justified in refusing the application. The Oberholzer / Lawson review concludes that large portions of the proposed Albany WEF represent a fatal flaw based on the sensitivity maps analysed as part of the review.
- 5.9. The DEIR explicitly states⁴² that turbines should not be erected in direct view of lodges and

⁴¹ Page 49, VIA report.

⁴² Pages 110 and 186, DEIR.



RICHARD SUMMERS INC.
A T T O R N E Y S

strategic viewpoints on surrounding game reserves such as Kwandwe. Notwithstanding, the proposed Albany WEF layout has not only not undergone any changes in response to the EIA findings, but the impact avoidance option is blatantly ignored. No attempt at all has been made to reduce “high significant” impacts on visual sensitive receptors such as Kwandwe through mitigation in order to avoid adverse impacts.

- 5.10. The concern that the visual impacts (both during day and night) of the proposed Albany WEF on Kwandwe Private Game Reserve gives rise to unacceptably high impacts which will damage the landscape and undermine the integrity of the visual scenic resource is confirmed by the independent assessment by Oberholzer and Lawson. This in turn will have a direct detrimental effect on the tourism experience offered by Kwandwe and will negatively affect the sustainability of its ecotourism and hospitality business and the marketability of the tourism product it is able to offer. In the longer term, this will undermine the financial viability and sustainability of the environmental management of the landholding and its conservation outcomes. On this basis alone, the NEMA application for the proposed Albany WEF should be refused outright.

6. SOCIO-ECONOMIC IMPACTS

- 6.1. This section counters the evidence and conclusions put forward by the Applicant in the DEIR suggesting that the socio-economic impacts of the proposed WEF on the surrounding game farms and the tourism sector have been assessed. The DEIR misleadingly states the position as follows:

“The potential socio-economic sector has been well outlined and assessed as part of the Socio-Economic Impact Assessment. This report draws on evidence and conclusions obtained during an extensive study”⁴³

- 6.2. The purpose of this section is to prove that the DEIR’s reliance on the argument that

⁴³ Page 32, DEIR.



RICHARD SUMMERS INC.
A T T O R N E E Y S

potential socio-economic sector has been well outlined and assessed in the Socio-Economic Impact Assessment Report⁴⁴ (SIA report) is factually incorrect. In doing so, we address several fundamental and critical limitations to the assessment and findings in the SIA report. In addition, we address the research relied upon by the SIA specialist by *inter alia* referencing other relevant literature related to impacts on tourism associated with wind farms.

Information gaps / omissions

- 6.3. The EAP has submitted the SIA report in support of the overall EIA findings but ignores the fact that the data and methodology used in the SIA report are unsuitable to infer anything about the project socio-economic impacts of the proposed Albany WEF on the surrounding game farms and ecotourism operations. The reasons for this comment include:
- 6.3.1. The SIA report is styled as a socio-economic impact assessment, but the report is prepared by a social specialist. There is no evidence that the specialist is appropriately qualified to undertake a economic impact assessment or has the necessary qualifications and expertise required to compile a specialist economic impact assessment report, or to assess and determine the significance of the socio-economic impacts required by NEMA.
- 6.3.2. Section 4 of the SIA report recognises the contradiction in the purported scope of the study. It describes the “*primary purpose of a SIA is to determine and analyse the likely impacts of a proposed development or event on a specific group of people or a community’s way of life, character and social cohesion.*”⁴⁵ The self-stated purpose of the SIA report makes no reference to the assessment of economic impacts and reaffirms that the primary focus is on social impacts.
- 6.3.3. The SIA report relies on generic benefits (such as those associated with the REIPPP) without providing any project specific information or data about the perceived socio-economic benefits relied upon by the specialist to serve as motivation for the project.

⁴⁴ Dated March 2020 prepared by Integrated Rural & Urban Development Expertise (Pty) Ltd t/a INDEX.

⁴⁵ Page 19, SIA report.



RICHARD SUMMERS INC.
A T T O R N E Y S

Limited project specific data is taken into consideration, as this information is categorised in the SIA report as an “*unknown*”.⁴⁶

- 6.3.4. The SIA report relies on *other projects* to argue that local employment benefits associated with the proposed Albany WEF are “*probable*”, but the percentage of local employment at other wind farm developments in the area (the SIA only refers to Waainek Wind Farm) is classified as *unknown* and the SIA report concedes the cumulative impact cannot be rated.⁴⁷ This is a critical information gap which has not been resolved.
- 6.3.5. The SIA report reveals that the confidence rating is low in many areas of the impact evaluation due to the lack of evidence and absence of key information. Each of these represents a critical information gap in the EIA which has not been resolved:
- 6.3.5.1. Details of the procurement process and strategy for the proposed Albany WEF are unknown.⁴⁸
- 6.3.5.2. Details of specific training and skills development for the proposed Albany WEF are unknown.⁴⁹
- 6.3.5.3. The monetary value of the contribution of the proposed Albany WEF towards the local economy is unknown.⁵⁰
- 6.3.5.4. Regarding potential impact on land values, the SIA report notes “***insufficient information*** is available (*monetary values, concrete evidence of farm values, etc.*)”⁵¹
- 6.3.5.5. Impacts perceived during the decommissioning phase were not rated in the SIA report,

⁴⁶ Page vii, SIA report.

⁴⁷ Page 66, SIA report.

⁴⁸ Page 68, SIA report.

⁴⁹ Page 75, SIA report.

⁵⁰ Page 108, SIA report.

⁵¹ Page 105, SIA report. Emphasis added.



RICHARD SUMMERS INC.
A T T O R N E Y S

and the specialist concedes that this is due to the limited information available.⁵²

- 6.3.5.6. The percentage of social and economic development contributions to be committed by the proposed Albany WEF is not defined and depends on REIPPP tender documents *“which are yet to be released by the DMRE and on EDF Renewables’ bidding strategy”*.⁵³
- 6.3.5.7. Where detailed information was not available, data of *other* projects in the Eastern Cape was used by the SIA specialist as baseline to determine the significance of the socio-economic impacts for *this* project. There is insufficient data /evidence to show that the reliance on other projects is a credible basis to quantify the impacts associated with the proposed Albany WEF project.
- 6.3.6. The SIA report is self-contradictory. On the one hand it acknowledges the need for the details in the Applicant’s Social and Economic Development plans to be transparently available to the local government and the community, but then detailing *“exactly what commitments the Albany WEF makes on each element would not be prudent at this stage as they are unknown.”*⁵⁴
- 6.3.7. The uncertainty regarding key impacts and lack of relevant data is compounded by the SIA report which relies on unsubstantiated statements regarding the perceived project benefits, including:
- 6.3.7.1. The number of foreigners/expatriates employed on renewable energy projects has decreased over time, as skills have gradually been transferred to South Africans.⁵⁵
- 6.3.7.2. Skilled professional would be available locally due to experience gained during

⁵² Page v, SIA report.

⁵³ Page 11, SIA report.

⁵⁴ Page v, SIA report.

⁵⁵ Page 65, SIA report.



RICHARD SUMMERS INC.
ATTORNEYS

construction of the Waainek Windfarm and similar projects in the Eastern Cape.⁵⁶

- 6.3.8. The entire premise upon which perceived value / benefits for the proposed Albany WEF contribute to the local economy is thus inaccurate and unquantified. This severe limitation in the EIA is compounded by the acknowledged relevance of this information to a credible assessment. The SIA report itself recognises that *“All SED and ED plans should be transparently available to the local government and the community.”*⁵⁷ This has not happened. There is no transparent or accountable basis for enabling I&APs to make meaningful and informed representations regarding the relative socio-economic costs and benefits of the project due to the lack of key information.

Conclusions drawn in the SIA report

- 6.4. Overall, the SIA report cannot be relied upon as a basis for the findings in the DEIR regarding perceived socio-economic impacts for the proposed Albany WEF. The SIA specialist concedes that the assessment is fatally flawed as *“currently no direct evidence exists to state the assessment of the unique circumstances as true nor false.”*⁵⁸
- 6.5. There are several reasons why the approach in the SIA is flawed, and thus fails to provide evidence that the proposed Albany WEF’s **impact on the tourism sector** has been dealt with satisfactorily:
- 6.5.1. The SIA uses no primary research or empirical data to account for the failure to quantify the impact on tourism in connection with this project, despite the explicit recognition that negative impacts are “possible”.
- 6.5.2. No acceptable methodology was used to test the hypothesis that *“initial negative perceptions by tourists (if any) could decline overtime”*.⁵⁹

⁵⁶ Page 17, SIA report.

⁵⁷ Page 114, SIA report.

⁵⁸ Page 103, SIA report.

⁵⁹ Page 103, SIA report.



RICHARD SUMMERS INC.
A T T O R N E Y S

- 6.5.3. The SIA report relies heavily on “*international research with regards to wind farms impact on tourism*”⁶⁰ but consults only a select and limited number of international studies which does not equate to, and is no valid substitute for, robust primary research.
- 6.5.4. Many of the international studies relied upon by the SIA relate to developments in Europe, some of which are offshore wind farms, and none of which is comparable to the specific project or the study area in terms of its landscape character and the unique aesthetic qualities of the scenic resources. The studies cited by the SIA are not representative of the proposed Albany WEF study area or the specific project-related impacts.
- 6.5.5. Situations equivalent to the proposed Albany WEF have not been considered or assessed in the SIA report.
- 6.5.6. In referencing “*international research*”, the SIA report makes no attempt at distinguishing between neutral, peer-reviewed academic papers and those studies which are recognised as biased and commissioned by stakeholders with a vested interest in the outcome *viz* industry commissioned studies.
- 6.5.7. The finding that “*No evidence has transpired to demonstrate or support the assertion that any wind farm development overseas has resulted in any adverse impact on tourism*” is highly questionable.
- 6.5.8. The failure to cite any reliable data is not justified by the fact that no development of the same scale as Albany WEF has been approved in this particular location, where landscapes and scenic resources with high tourist potential and attractiveness would be directly threatened and impacted (as proven by the VIA). A precautionary approach is therefore called for in these circumstances.

⁶⁰ Page 100, SIA report.



RICHARD SUMMERS INC.
A T T O R N E Y S

- 6.6. An objective review of the international literature reveals that there are very few case studies which conclusively demonstrate that tourism is unaffected by developments of this nature. The more pertinent and relevant question is not whether or not there will be an impact (the SIA identifies that such impacts are possible) but rather the extent, severity and duration of the identified impact. This has not been quantified.
- 6.7. The studies cited in the SIA report are inadequate for several reasons, including the significance of impact is related to the scale of these projects, and many projects referenced in the international literature is entirely different from the proposed Albany WEF. Further, the location, community affected, and nature of the major tourism activity affected in the case studies is totally different from the proposed Albany WEF.
- 6.8. The SIA report makes sweeping unsubstantiated statements, including (1) that individuals become “*desensitised*” towards man-made structures; and (2) that communities become more “*tolerant*” of WEFs as they recognise the advantages of green energy. This is speculative and is unsupported by empirical data or primary research. The claim that initial negative perceptions by tourists could decline over time is a crude over-simplification (as illustrated below).
- 6.9. A more balanced account of relevant international studies in this field shows:
- 6.9.1. There is no support in the literature for the view that wind farms do not damage the tourism industry.
- 6.9.2. The reaction to turbines is affected by the landscape and where they see them. Tourists generally prefer to not see any turbines in pristine, wilderness places or coastal locations (Fialte Ireland, 2008).
- 6.9.3. The general consensus in terms of landscape protection and EIA best practice is that turbines must be located away from designated areas (e.g. protected areas, national



RICHARD SUMMERS INC.
A T T O R N E E Y S

parks and Areas of Outstanding Natural Beauty, and scenic areas) and rather situated in areas where the visual and environmental impacts on tourism would be minimised (Frantal and Kunc, 2011).

- 6.9.4. The premium paid for tourism / hospitality accommodation increases by as much 25% where the view was not compromised.⁶¹
- 6.9.5. The negative socio-economic impacts are not offset or compensated by the suggestion that there is positive interest in turbines. Various studies have shown that the initial positive interest by tourists in WEFs (if any) is short lived as the novelty factor soon wears off (Tourism Co. 2012). There is no evidence that stakeholders become “*desensitised*” or used to turbines which impact on scenic landscapes.
- 6.9.6. If a small minority of tourists are negative about the visual impacts of the proposed Albany WEF and who believe that turbines compromise the landscape and tourism experience, this translates into potentially serious negative socio-economic impacts with far reaching consequences. In a study by VisitScotland (2008), 25% of tourists were concerned by wind farms. In a study by Frantal and Kunc (2011), 27% of tourists would not return to the area affected. In terms of socio-economic impacts, even a minority can equate to a very significant adverse impact and can give rise to significant adverse economic impacts (Riddington et al, 2008: Fialte Ireland, 2007).
- 6.9.7. Other studies shows that the perception of stakeholders is actually aggravated over time as more projects of a similar scale and nature are developed within the study area / receiving environment.⁶² This results in an increasing aversion to WEFs and is directly proportional to the number of wind farm developments in the area as the cumulative impacts increasingly negatively affect the integrity of the landscape and the scenic resource.

⁶¹ Riddington *et al* (2010).

⁶² Mountaineering Council of Scotland (2014).



RICHARD SUMMERS INC.
A T T O R N E Y S

- 6.10. Generic assumptions and perceptions relied upon in the SIA make no provision for project specific details which are central to project specific impacts. We point out the following aspects which have not been taken into the account:
- 6.10.1. The tourism industry is highly competitive, sensitive and susceptible to subtle changes in market conditions.
- 6.10.2. The nature, severity and significance of the impact depends on the number of turbines, the specific characteristics of tourism activity in each location, and the source of the economic drivers for ecotourism of the sector.
- 6.10.3. The socio-economic impact of any activity detrimental to tourism manifests from a reduction in expenditure from two sources: a reduction in the number of visitors and all of the multiplier effects that follow from that; and a reduction in prices that could be charged for hotel accommodation.
- 6.10.4. The assumptions and conclusions drawn in the SIA makes no account for the highly sensitive nature of tourism sector. It is incontrovertible that in a fragile economy many businesses will fail in times of economic hardship and stress, and the SIA makes no account for this.

Client survey

- 6.11. There has been no attempt by the SIA specialist to engage tourists with personal experience of Kwandwe about the potential impacts of the proposed Albany WEF. Due to the speculative nature of the SIA report and the EIA regarding impact on tourism and the failure to engage directly with the sector most affected by the development, Kwandwe Private Game Reserve has engaged and consulted its client base in order to offer an insight of how its clients would respond to the construction of the proposed Albany WEF in close proximity to Kwandwe and how that development would be perceived by tourists who are familiar



RICHARD SUMMERS INC.
ATTORNEYS

with the landscape and the ecotourism product offered by Kwandwe.

- 6.12. The purpose of undertaking the survey is to offer an insight into the views of existing clients which is a critical gap in the EA process. The survey is not intended to be a scientific assessment and nor does it purport to replace the need for the Applicant to undertake an adequate impact evaluation and assessment in accordance with the requirements of the EIA Regulations. It is however a strong indicator of the personal views of various of Kwandwe's clients who have visited the Game Reserve in the past and it offers tangible evidence of how tourists perceive windfarm related impacts as well as how it might influence their behavior and choices in future regarding tourism destinations. The survey results underlie the seriousness of the threat posed by inappropriately located developments (such as the proposed Albany WEF) to the long-term sustainability of Kwandwe's ecotourism operations.
- 6.13. A copy of Kwandwe's client survey results is attached hereto marked "B".

Summary of comments on the SIA findings

- 6.14. In summary, the large number of data categories classified as unknown, the reliance in the SIA on generic assumptions and untested conclusions is problematic and is no substitute for primary research on the project specific impacts in connection with the proposed Albany WEF.
- 6.15. The failure to assess and quantify the socio-economic impacts on the tourism sector is highly problematic. The case for a detailed evaluation and assessment of this impact is compelling, particularly as the SIA report recognises the significance and importance of the Indalo PE and associated game reserves (such as Kwandwe) in achieving "*conservation and protection of vegetation biodiversity targets*" and the "*wildlife conservation value*", and the ecosystem protection it offers. Moreover, the SIA report identifies that this conservation and ecosystem value "*hinges entirely on the continued economic viability of the eco-tourism*



RICHARD SUMMERS INC.
A T T O R N E Y S

*businesses underpinning the nine game reserves*⁶³ comprising the Indalo PE.

- 6.16. In conclusion, the SIA fails to provide evidence of no impact on tourism following the construction of the proposed Albany WEF and it fails to quantify this impact although it is recognised as a likely outcome of the project.

7. EXTERNAL REVIEW

- 7.1. Richard Summers Inc commissioned Global Green Environmental Consultants (“Global Green”) - in association with the Environmental Assessment Research Group (“EARG”) from the North West University - to undertake an external review of the DEIR. The results of that review are contained in a report dated May 2020 and must be read as forming part of these comments. The Global Green review is attached as “C”. The key findings of the review are summarised below:

- 7.1.1. **Non-compliance:** The Global Green review confirms the extent to which the DEIR fails to comply with minimum legal requirements in terms of NEMA and the EIA Regulations. The overarching finding is that the content of the DEIR is not satisfactory, does not comply with NEMA requirements and cannot serve to support and inform defensible decision-making by the competent authority.

- 7.1.2. **Omissions and inadequacies:** The review identifies the following material flaws in the EIA:

- 7.1.2.1. The assessment methodology failed to apply the mitigation hierarchy with the result that avoidance as a mitigation measure is ignored or overlooked.

- 7.1.2.2. The assessment fails to deal with the most significant impact identified by I&APs viz the impact on surrounding ecotourism enterprises and game farms.

⁶³ Page 31, SIA report.



RICHARD SUMMERS INC.
A T T O R N E Y S

- 7.1.2.3. The 2017 Need and Desirability Guideline has not been consulted, and none of the questions in the Guideline has been directly and expressly addressed.
- 7.1.2.4. The assessment is incomplete because the DEIR excludes critical project infrastructure (including substations and transmission line) from the project description and project footprint calculation.
- 7.1.3. **Alternatives:** There is no evidence to show how the EIA and specialist assessments considered the 90-turbine alternative as is claimed in the DEIR (or how any alternative was assessed). Only one alternative - the 66-turbine alternative - was assessed. The inference being that the 66-turbine alternative was first decided by the Applicant and then the specialists assessed the already preferred alternative only, meaning that the outcome was predetermined and non-complaint with Section 240 of NEMA.
- 7.1.4. **Key issues raised by I&APs are unresolved** - this includes:
- 7.1.4.1. The commitment made during the scoping phase that the visual and socio-economic impacts of the WEF on sensitive visual receptors (including each affected landowner, game farm and nature reserve) and on tourism operations in the area will be assessed has not been addressed and remains unfulfilled. There is no evidence that this was done. The outcome of the DEIR on these key issues is inconclusive and speculative.
- 7.1.4.2. The impact of the WEF on land values remains unresolved despite the SIA report acknowledging that this is an issue. The SIA recommendation that this impact should be investigated and rated separately by a Land Valuer / Economist was never acted on.
- 7.1.5. **Significance ratings:** Neither the Final Scoping Report nor the DEIR explain how significance will be determined and the lack of a clear and systematic (and uniformly applied) method manifests in inconsistencies in the EIA findings. The evaluation criteria



RICHARD SUMMERS INC.
A T T O R N E Y S

presented in the Final Scoping Report is inconsistently applied in the DEIR, which calls into question the rationale as well as accuracy of the significance ratings identified by the EAP.

- 7.1.6. **Unsubstantiated claims:** The DEIR and specialist assessments contain false and unsubstantiated claims in relation to key issues and impacts, in particular in relation to the impact of the WEF on the eco-tourism industry. No attempt was made in the DEIR to quantify the impacts of WEFs on game reserves or eco-tourism facilities in any meaningful and scientifically valid way. The assessment overwhelmingly relies on the false claim in the SIA report that there is no evidence to support the assertion that any wind farm overseas has resulted in any adverse impact on tourism. This is a false generalisation based on an outdated report on the tourism impact of wind farms in Scotland (Aitchison, 2012).
- 7.1.7. **Impacts on game farms and ecotourism sector:** As above, this key issue has not been assessed. The failure to evaluate what seems to be the most significant concern with the proposed Albany WEF raised by I&APs, is a fatal flaw in the DEIR. The conclusion that no game farms are visually affected / have experienced negative economic impacts by existing wind farms is highly questionable and based on an unverifiable method and results, rather than robust verifiable and peer reviewed research.
- 7.1.8. **Inconsistent findings:** The EIA concedes that there will be an impact on lodges and strategic viewpoints on the game farms, but how significant that impact will be has not been answered. This issue is unresolved. These potential impacts are recognised in the DEIR but not consistently addressed or mitigated in any way in the DEIR.
- 7.1.9. **Public participation:** The failure to include an updated version of the comments and response table in the DEIR to explain how the various comments raised throughout the process have been addressed is a serious omission.
- 7.1.10. **Mitigation:** The DEIR fails to systematically consider and analyse how each particular impact may be avoided, minimised, restored / reversed or compensated. There is no



RICHARD SUMMERS INC.
A T T O R N E Y S

evidence of the mitigation hierarchy actually being applied. There has been no attempt to 'avoid' impacts on sensitive viewpoints, even though the option of relocating or reducing the number of turbines is explicitly recommended by the SIA specialist and the DEIR (see page 110).

- 7.1.11. **Visual impacts:** The visual impact assessment concluded a “high significance” impact on visual sensitive receptors (direct and cumulative impacts) and “moderate significance” rating for impact of night lights before and after mitigation, but there is no indication that avoidance was considered, or the impact mitigation hierarchy applied. It further stems to reason that with a minimum of 35 turbines required to make the development viable, ample scope exists to apply avoidance as a mitigation option to the proponent’s 66-turbine preferred alternative in order to resolve visual impacts of HIGH significance.
- 7.1.12. **Contradictory statements:** The SIA report states that “*No mitigation is possible as turbines cannot be screened ...*” and seems to suggest that avoidance is not considered a form of mitigation. There has been no attempt to 'avoid' impacts on sensitive viewpoints by relocating or reducing the number of turbines, even though this option is explicitly recommended by the specialists.
- 7.1.13. **Failure to respond to sensitivity mapping analysis:** The sensitivity map provides the location of highly sensitive / constraint zones with little thought given to avoiding these sensitive locations. The impression is that the geographical and environmental sensitivity was mapped and then the site layout and location of the turbines ignored the sensitivity mapping during the EIA.

Summary of Global Green external review

- 7.2. The assessment and reporting in the DEIR are not satisfactory with various significant omissions and inadequacies compromising the efficacy of the EIA process as a whole. In the result, the external review by Global Green confirms that neither the DEIR nor the level of assessment undertaken can be viewed as supporting defensible decision-making by the



RICHARD SUMMERS INC.
A T T O R N E Y S

competent authority in terms of NEMA.

8. CONCLUSION

- 8.1. The EIA process in terms of NEMA and the EIA Regulations promulgated thereunder, if correctly and accurately done, is an acknowledged tool for giving effect to sustainable development. However, achieving a sustainable outcome requires a balanced integration of ALL relevant environmental, social and economic considerations identified during the EIA process. Development that is identified as potentially impacting on the viability of existing operations and/or development which gives rise to unacceptably high visual impacts (which impacts are in no way avoided nor mitigated) does not satisfy the principle of sustainability or the concept of sustainable development contemplated in the *Fuel Retailers* case.
- 8.2. These comments, which must be read together with the external reviews by Global Green and Oberholzer & Lawson confirms that: (1) the proposed Albany WEF gives rise to unacceptably high visual impacts; (2) the socio-economic impact on surrounding game reserves and eco-tourism enterprises identified is directly linked to the significance and severity of the visual impact; and (3) the DEIR fails to quantify and account for the most significant potential socio-economic impacts of the project, namely the impact of the proposed Albany WEF on existing game reserves and ecotourism operations within the tourism sector. This is a fatal flaw in the EIA process.
- 8.3. The competent authority is called on to exercise its discretion in terms of Regulation 24 of the EIA Regulations by **rejecting** the DEIR and **refusing** the application for environmental authorisation.

Yours sincerely,

RICHARD SUMMERS INC

Proposed Albany Wind Energy Facility,
Makana Municipality, Eastern Cape

Review of Visual Impact Assessment

22 April 2020

Prepared for
Richard Summers Inc.

Prepared by
Bernard Oberholzer and Quinton Lawson

Contents

1	Background to the review	3
2	Purpose of the Review	3
3	Assumptions and Limitations	3
4	Definition of 'Visual'	4
5	Role of the VIA	4
6	Comments on the Findings of the VIA Report	4
7	Peer Review of the Visual Impact Report	6
8	Site Verification	6
9	Additional Comment on the VIA Report	7
10	Visual Sensitivity Mapping	10
11	Conclusions and Recommendations	11
	References	12
	Statement of Independence	13

Abbreviations

CAA	Civil Aviation Authority
DEA	Department of Environmental Affairs
EIA	Environmental Impact Assessment
EMPr	Environmental Management Programme
HIA	Heritage Impact Assessment
HWC	Heritage Western Cape
NEMA	National Environmental Management Act
NHRA	National Heritage Resources Act
PGWC	Provincial Government of the Western Cape
REDZ	Renewable Energy Development Zone
SANBI	South African National Botanical Institute
SAPAD	South African Protected Areas Data Base
SEA	Strategic Environmental Assessment
SIA	Social Impact Assessment
VIA	Visual Impact Assessment
WEF	Wind energy facility

1 Background to the Review

A review of the Visual Impact Assessment (VIA) of the proposed Albany Wind Energy Facility (WEF) was requested by Richard Summers Inc. Attorneys, acting on behalf of Kwandwe Private Game Reserve. The Albany VIA, hereinafter referred to as 'The VIA Report', was prepared by CES Coastal and Environmental Services (March 2020), and forms part of their Draft Environmental Impact Report (DEIR) that is out for public comment. The brief for the review included the following aspects:

- *Is the description of the receiving environment and the natural landscape adequate?*
- *Is the approach in the VIA to the analysis of view catchment area, view corridors, viewpoints and receptors accurate and relevant?*
- *Is the assessment of potential visual impacts in the VIA and their relative significance accurate, including lighting impacts at night?*
- *Is the description of alternatives, mitigation measures and monitoring programmes adequate and relevant?*
- *Is the VIA appropriately informed by an (1) accurate baseline survey of visual / scenic resources; and (2) appropriate mapping of landscape, scenic units, and viewsheds?*
- *Are the digital terrain modelling, visual simulations and photomontages used in the VIA accurate and relevant?*

2 Purpose of the Review

The purpose of this Review is to give an independent expert opinion on the adequacy and credibility of the VIA Report for the proposed Albany WEF project, in particular issues relating to the natural landscape setting, sense of place and wilderness quality of the area. A further concern expressed was the quality and accuracy of the VIA Report, given that it was prepared in-house by CES, and not by an independent visual specialist.

3 Assumptions and limitations

The Review did not involve any fieldwork or ground-truthing, and assumed that the VIA would include all the relevant information and baseline studies for the proposed WEF site on which to base an informed assessment. In addition, the Reviewers have access to a range of information sources, having worked on the original landscape assessments for all the wind and solar REDZs, in collaboration with the CSIR for the then Department of Environmental Affairs.

The Reviewers also studied the Heritage Impact Assessment (HIA), and Social Impact Assessment (SIA) for the Albany WEF, because of their inter-relatedness with respect to visual issues.

4 Definition of 'Visual'

For purposes of the review, the term 'visual' is intended to cover the broad range of visual, scenic, cultural, aesthetic and spiritual aspects of the natural and cultural landscape that contribute to the overall sense of place, (Oberholzer, 2005), as mentioned in the Introduction to the VIA Report.

The NHRA (1999) defines 'cultural significance' as aesthetic, architectural, historical, scientific, social, spiritual, linguistic and technological value or significance.

These definitions are important as they imply wider considerations than merely the GIS mapping of aspects such as visual exposure, visibility and visual absorption capacity.

5 The Role of a VIA

The Environmental Impact Assessment Regulations of 2014, Appendix 8, refers to specialist reports, which are required *inter alia* to include the following:

- *The sensitivity of the site (visual sensitivity in this case);*
- *Identification of areas to be avoided, including buffers;*
- *Assumptions, uncertainties and gaps in knowledge;*
- *Mitigation measures and monitoring for inclusion in the EMP;*
- *An opinion as to whether the activity should be authorized; and*
- *Conditions for inclusion in the environmental authorization.*

In addition, the VIA is required to determine visual impact 'significance' in relation to the local or regional importance of the landscape features, the relative intactness of these, and the effect on the prevailing sense of place.

The VIA must provide a baseline study that identifies characteristics and constraints of the receiving environment in relation to the proposed WEF, including 'no-go' areas for development. These should inform the layout of the project along with mitigations to avoid or minimise potential visual impacts.

6 Comment on the Findings of the VIA Report

The conclusion of the VIA Report states the following:

"Overall, the visual impact of the Albany WEF is considered to be HIGH, mostly due to the potential impact on sensitive visual receptors such as nearby game farm and nature reserve operators who are of the opinion that highly visible wind turbines will have a negative impact on the remote sense of place of their operations which in turn will be less attractive to hunters and tourists. The study area has a large number of game farms, and there will be areas on these farms where wind turbines will intrude on views and viewpoints.

The Albany WEF will undoubtedly have a high visual impact on the landscape. However, this impact should be considered within the context of the following:

- *The wind farm will not be a permanent development (i.e. 20-25 years life span), after which the turbines and other superstructure will be removed on decommissioning;*
- *The landscape can be restored through rehabilitation after decommissioning;*
- *Although limited, certain recommended measures can be implemented can mitigate the*
- *impacts to some extent;*
- *The landscape of the study area is not pristine or of very high scenic value; and*
- *The wind farm is partially situated within and adjacent to a Renewable Energy Development Zone (REDZ 3 - Cookhouse) and adjacent to the already approved Grahamstown Wind Farm.*

It is concluded that although the potential losses of scenic resources are high, this does not represent a fatal flaw."

These conclusions are questionable for the following reasons:

- The 20 to 25 years lifespan of the wind farm is considered to be 'long term' in accepted EIA terminology. In addition, there is no guarantee that the turbines would be removed at the end of that period. Renewable energy will be required just as much into the future, and the trend at older established wind farms is for the turbines to be replaced by larger, more efficient ones. This could occur where approvals for a wind farm on the site have been previously granted. It is therefore possible that the landscape will not be restored, unless there is a significant switch in energy technology.
- The fairly minor mitigations provided in the VIA Report, along with the admission that little can be done to screen turbines, given their large size, means that little or no mitigation would occur. On the other hand, the preferred mitigation of avoiding no-go areas and areas of high visual sensitivity of the site are not considered in the VIA Report.
- The statement that "the landscape of the study area is not pristine or of very high scenic value" lacks credibility. Although parts of the site itself can be seen as a cultural landscape, altered over time by agriculture, the areas surrounding the site, particularly to the north, have both high scenic and wilderness value, which would be directly affected by the wind farm, and the negative impact of which is not considered in the VIA Report. The scenic resources of the area can be experienced from both the N2 and R67 travelling north and east from the site and from various game farms to the north of the site. The numerous comments received during the public participation attest to the high value placed on these scenic resources, which have not been mapped in the VIA Report. In apparent self-contradiction, the VIA Report states that "the potential loss of scenic resources is high". The credibility of the Report is therefore a concern.
- The proposed wind farm is partially (about 20%) situated within the Cookhouse REDZ. A cursory examination of the REDZ visual mapping at the regional scale would have

revealed that the relevant portion of the REDZ is categorised as 'very high visual sensitivity' and therefore not ideally suitable for wind farm development. (See Maps 1 and 2 attached). There is limited evidence that any proper screening was carried out to avoid visually sensitive areas at project level of the assessment.

Given the above considerations, the final conclusion in the VIA Report that the proposed wind farm "does not represent a fatal flaw" is highly subjective and is contradicted by the finding that "the potential loss of scenic resources is high". This is confirmed by the evidence put forward in this Review. It was found during this Review that large portions of the wind farm could potentially represent a fatal flaw according to the visual sensitivity maps attached to the Review. (See Maps 3 to 18, attached).

7 Peer Review of the Visual Impact Report

Presumably, because the VIA was conducted in-house by CES, an external peer review report was obtained from LOGIS (March 2020). In the letter from the Reviewer, only the following paragraphs are devoted to the 'review':

"Please note: the peer reviewer received the VIA report at a very late stage in the process and has had very limited time to produce this peer review report.

Having stated the limitations of the time allowed for this desktop review, the reviewer is of the opinion that the VIA report have generally adopted a methodology that was sound and in line with best practice. The view sheds generated appear accurate and most mitigation measures recommended are sensible, practical and appropriate to the nature and scale of the proposed development. Additionally direct (primary), indirect (secondary) and cumulative impacts were considered and addressed.

The reviewer is generally in agreement with the significance of the visual impacts as stated within the VIA, but may require an additional opportunity and sufficient time to make specific recommendations regarding additions or alterations to the report, or whether the proposed development is acceptable in nature or fatally-flawed."

In other words, no reliance can be placed on the peer review as the author admits he did not have time to make recommendations, nor was he able to determine whether the proposed development is acceptable or fatally flawed. This means that the findings of the peer review are not credible and cannot be taken into account.

8 Site Verification

In terms of Draft Government Notice No. 648, dated 10 May 2019, there is a requirement that an Initial Site Sensitivity Verification Report be produced for a development footprint. The purpose of the Site Verification is that the report confirms or disputes the current use of the land and environmental sensitivity as identified by the national web based environmental screening tool.

For ease of reference, the Landscape Theme (visual and scenic resources) for the Cookhouse REDZ is attached (Map 1). The intention is that the Map serves as a screening tool, and that more detailed mapping at a local scale for a specific site could have confirmed or disputed the REDZ mapping.

9 Additional Comment on the VIA Report

A number of omissions and inaccuracies in the VIA Report, are identified and commented on below:

- *Baseline Description:*

Pages 21-24 of the Report include a generalized description of the affected physical environment, but provide little indication of the specific landscape features and scenic resources of the site and immediate surroundings, which would be required to inform the evaluation of visual impacts and which should also inform the layout of the proposed wind farm. For example, steep slope gradients, some of which are steeper than 1:4, have not been indicated in the Report. The location of wind turbines, each with laydown areas of 3 900m² and 14m wide access roads (during construction), on steep slopes would require cut slopes of 6m or more. This could result in potential erosion and visual scarring of the landscape. Similarly, other visually sensitive landscape features, such as wetlands, nature reserves and scenic routes have not been mapped, nor does the Report include a 'visual sensitivity map' for the site and surrounds. The 'Specialist Checklist' in the NEMA regulations stipulates the following as a requirement:

"a map superimposing the activity including the associated structures and infrastructure on the environmental sensitivities of the site (visual in this case), including areas to be avoided, and including buffers".

- *Visual Receptors:*

Page 25, Figure 6 indicates "all potential visual receptors within 20km of the proposed turbines" but this is not correct. Using available data provided by SANBI and SAPAD, a number of other game farms and guest houses (not identified in the VIA Report) in proximity to the proposed wind farm were identified by the Reviewers, as indicated on Maps 10 and 11, attached. The potential visual impact on these should have been included in the VIA, and visual buffers applied to minimise impacts. Other than a nominal 500m buffer around turbines, no visual buffers to minimise visual impact on receptors have been considered in the VIA Report.

- *Observer Points:*

Page 27, Figure 7 indicates the position of 7 selected observer viewpoints, mainly from the N2 and R67. Besides being an unusually small number of viewpoints which

compromises the credibility of the VIA, it misses numerous game farms and guest houses that would be affected by the proposed wind farm. Comment received from sensitive viewers, as part of the public participation, should have provided an indication of critical viewpoints that needed to be included. The result is that the visual montages provided on pages 28 to 34 of the VIA Report do not provide an adequate or credible representation for assessing potential visual impacts. In addition, no night views were provided, despite this having been one of the identified visual issues, which is a material omission.

- *Visual Simulations:*

Pages 28 to 34 of the VIA Report include 3D visual simulations from the viewpoints mentioned above. These have been checked by the Reviewers and appear to be relatively accurate. However, as indicated above, numerous sensitive receptors were not included in the range of selected viewpoints, with some of the simulations being too distant to provide a good or accurate representation. Except for a conceptual example, no visual simulations of the lights at night from viewpoints are provided, which is unusual given the importance of the wilderness experience and dark skies at night, highlighted in the comments made by the many game farm receptors in the immediate area. The Reviewers tested a number of viewpoints inside the Kwandwe Game Reserve and it was found that a number of turbines would be clearly visible both during the day and at night from lodges (e.g. KwaNdlovu, Fort House) at 13km distance. Other scenic viewpoints within the Reserve are only about 6km away, while the boundary of the Reserve is immediately adjacent to the proposed wind farm.

- *Viewshed:*

Page 37, Figure 15, of the VIA Report indicates the viewshed for the 66 proposed wind turbines. The viewshed delimitation has been checked by the Reviewers and appears to be accurate. However, the scale of the map is too small to determine the effect on sensitive receptors such as guest houses and farmsteads, some of which are not even indicated on any of the maps. A second viewshed with a colour gradation based on distance from the turbines would have enabled receptors to determine the level of visibility from critical viewpoints, and should have been provided.

- *Viewing Distances:*

Page 39 of the Report states that Makhanda (Grahamstown) is located approximately 5km to the south-west of the proposed wind farm. This could be misleading, as according to available maps, the nearest turbine is in fact 1,25km from the edge of the urban area. The recommended visual buffer for towns is 2km (see Table 1 and Map 12).

- *Visual Intrusion:*

Page 45 of the Report states that motorists using the N2 and R67 "are generally classified as LOW sensitivity visual receptors". This seems to ignore the importance of these visual corridors, used by hundreds of users (commuters and tourists) each day, as well as the fact that certain stretches of these routes, which have passes, or run along crests, with high scenic value have not been assessed in the VIA report. Scenic stretches, notably to the north and east of the site that will be impacted, have been identified by the Reviewers (see Maps 14-16 attached).

- *Sensitive Receptors:*

Page 56 of the Report states that "there are very few sensitive receptors within 5km of the powerline corridor". The overall visual impact significance for the 132kV powerline, switching stations and substation is given as LOW, despite the fact that these are close to the N2 and Beggar's Bush Nature Reserve, while the temporary laydown area / construction camp is inappropriately located right next to the N2. The N2 National Road (used by commuters and tourists), Beggar's Bush Nature Reserve and farmsteads need to be regarded as sensitive receptors. It is clear that the visual intrusion of switching stations and substations, along with all the transformers and battery storage have not been adequately considered, nor any meaningful mitigations, such as visual buffers or screening provided.

- *Visual Mitigations:*

Pages 51 to 58 of the Report include a number of mitigations for the various components and phases of the proposed project. These tend to be of a minor remedial nature rather than an avoidance measure. It is incumbent on visual specialists to first employ avoidance measures, which are more effective in reducing potential visual impacts, and which has not been done in the Report. This would ideally occur at the early screening stage of the project to inform the layout of the wind farm. An example would be the use of visual buffers around special landscape or scenic features and sensitive receptors, based on levels of visual sensitivity, including 'no-go' zones, such as those in Table 1, Paragraph 10 below.

- *Environmental Management and Monitoring:*

Other than the construction phase mitigations on Page 51, no other environmental management and monitoring programmes are provided in the Report, as required in the NEMA Specialist Checklist.

- *Visual Impact Significance Ratings:*

The Reviewers are in agreement with the impact significance rating for wind turbines (Operational Phase), which is stated as being HIGH both before and after mitigation. The Reviewers are not in agreement with the LOW significance rating for the powerline and

switching / substations located adjacent to the N2 National Road, because of the visual intrusiveness at close range to a major national route by these industrial-type facilities, particularly as no visual buffers or screening mitigations have been provided. The Reviewers question the MODERATE rating for lights at night, given that the red lights are more visible at a distance than during the day, particularly in a wilderness setting. (See Figure 1 below).



Figure 1: Visual simulations of potential impact of navigation lights at night seen from the Kwandwe Private Game Reserve, which indicate a worst case scenario, as the lights would need to be determined by the CAA.

10 Visual Sensitivity Mapping

A major concern in this review has been the absence of site-specific visual sensitivity mapping as part of the VIA Report. To this end the Reviewers have provided a series of maps aimed at making a more informed assessment of the visual implications of the proposed wind farm, including potential 'no-go' areas, which are summarised in Map 18 attached. It should be stressed that this mapping involved a desktop study and would need to be ground-truthed.

The visual sensitivity mapping is based on recommended visual buffers, derived from the Wind and Solar SEA (CSIR, 2015), as indicated in Table 1 below. These are not intended to be mandatory, but instead provide a useful guide in line with best practice. The buffers would be moderated by site-specific conditions, such as instances where receptors are in a view shadow.

Table 1: Visual sensitivity categories with recommended visual buffers

Scenic Resources/ Sensitive receptors	No-go areas	High visual sensitivity	Medium visual sensitivity
Topographic features, ridges, scarps	Feature	0-250m	-
Steep slopes	Slopes > 1:4	Slopes > 1:10	-
Water features, wetlands, dams	0-250m	250-500mm	-
Heritage sites Grade I and II	Feature	0-500m	500m-1km
Heritage sites Grade III	Feature	0-250m	250-500m
Nature Reserves	0-3km	3-5km	5-10km
Private reserves/ guest farms	0-1,5km	1,5-3km	3-5km
Game farms (site boundary)	0-1km	1-2km	2-3km
Farmsteads outside the site	0-500m	500m-1km	1-2km
Settlements / towns	0-2km	2-4km	4-6km
Provincial / arterial route	0-500m	500m-1km	1-3km
Scenic routes	0-1km	1-2,5km	2,5-5km
National road	0-1km	1-2,5km	2,5-5km
Small airfields	0-3km	-	-

11 Conclusion and Recommendations

The Reviewers are of the opinion that the VIA Report contains too many omissions and inaccuracies, to warrant an informed recommendation regarding the visual acceptability of the proposed wind farm. The desktop mapping by the Reviewers indicates that parts of the wind farm layout are clearly problematic from a visual perspective, resulting in a potential fatal flaw for the wind farm application.

Given the scale of the wind turbines, laydown areas and related infrastructure, the most meaningful visual mitigation would be visual buffers, which would involve the relocation or removal of turbines in visually sensitive positions. Certain wind turbine locations, such as those on steep slopes, are patently unsuitable and would constitute a fatal flaw.

It appears that inadequate visual screening was undertaken at an early stage of the project, using both the Cookhouse REDZ regional mapping as well as more site-specific, project-level visual sensitivity mapping.

In summary:

- The description of the receiving environment is inadequate;

- The analysis of view corridors, viewpoints and sensitive visual receptors is incomplete and inaccurate in some cases;
- The assessment of potential visual impacts and their significance is disputed, based on the evidence of this review, while the impact of lighting at night from specific viewpoints has not been addressed in the VIA Report;
- The mitigation measures do not consider avoidance measures at all and no monitoring programme has been provided;
- The VIA is not adequately informed by essential baseline information, including visual and scenic resource mapping at the project scale;
- The visual simulations / photomontages are relatively accurate, but too few in number and coverage from sensitive viewpoints, to meaningfully inform the visual assessment.

The Reviewers believe that part of the problem stems from the VIA being conducted in-house by CES, instead of by an independent visual specialist, with no opportunity afforded for an in-depth and independent peer review of the VIA Report.

It is therefore recommended that the current VIA Report in its present form be set aside, based on the findings of this Review, and the fact that it does not meet all the requirements of NEMA and the EIA regulations for impact assessments.

References

Booth Heritage Consulting, January 2020. Phase 1 Archaeological Impact Assessment: Proposed Albany Wind Energy Facility and Associated Infrastructure, near Grahamstown, Eastern Cape.

CES Environmental and Social Advisory Services, March 2020. Visual Impact Assessment: Proposed Albany Wind Energy Facility, Eastern Cape.

CES, July 2019. Albany Wind Energy facility near Makhanda, Eastern Cape. Appendix A: PPP Documentation.

CSIR, 2015. Strategic Environmental Assessment for Wind and Solar Photovoltaic Energy in South Africa, prepared for Department of Environmental Affairs.

Index, March 2020. Socio-economic Impact Assessment Report: Proposed Construction of the Albany Wind Energy Facility, Makana Local Municipality.

LOGIS, March 2020. Peer Review of Visual Impact Assessment Report.

Oberholzer, B. 2005. *Guideline for involving visual & aesthetic specialists in EIA processes: Edition 1*. CSIR Report No ENV-S-C 2005 053 F. Republic of South Africa, Provincial Government of the Western Cape, Department of Environmental Affairs & Development Planning, Cape Town.

Statement of Independence

The Reviewers declare that they are independent practitioners with expertise and wide experience in visual impact assessments, that the review has been carried out in an objective manner and complies with the relevant EIA regulations, and that all material information in their possession, which may influence a decision by the competent authority and the objectivity of the review, has been disclosed.



Bernard Oberholzer Landscape Architect

Fellow of the Institute for Landscape Architecture in South Africa (ILASA)

Professional Member, South African Council for the Landscape Architects Profession

(SACLAP) Reg. no. 87018



Quinton Lawson Architect

Professional member of the SA Council for the Architectural Profession

Member of the Cape Institute for Architects and SA Institute of Architects.

(SACAP), reg. no. 3686.

Expertise:

Bernard Oberholzer has a Bachelor of Architecture (UCT) and Master of Landscape Architecture (U. of Pennsylvania), and has more than 25 years of experience in undertaking visual impact assessments. He has presented papers on *Visual and Aesthetic Assessment Techniques*, and is the author of *Guideline for Involving Visual and Aesthetic Specialists in EIA Processes*, prepared for the Dept. of Environmental and Development Planning, Provincial Government of the Western Cape. He co-authored the 'Landscape Assessment' Report for the *National Wind and Solar PV Strategic Environmental Assessment*, in association with the CSIR, for the Department of Environmental Affairs in 2014.

Quinton Lawson has a Bachelor of Architecture (Natal), and has practiced as a professional architect since 1978, specialising in architectural and urban design, environmental design and computer visualisation. He was a senior partner at MLB Architecture and Urban Design, with specialist expertise in visual modelling and design solutions. He was in the past a visiting lecturer at UCT teaching a post-graduate course on Computer Techniques in Landscape Architecture, including visualisation and visual assessment techniques, and has previously served on the Impact Assessment Review Committee of Heritage Western Cape.

Together, they prepared the 'Landscape/Visual Assessment' report for the *National Wind and Solar PV Strategic Environmental Assessment*, as well as for the *National Electricity Grid Infrastructure SEA* in association with the CSIR, for the Department of Environmental Affairs in 2014-2015.