KUDUSBERG WIND FARM (PTY) LTD

Proposed Development of the 325MW Kudusberg Wind Energy Facility and associated infrastructure, between Matjiesfontein and Sutherland in the Western and Northern Cape Provinces

Draft Environmental Authorisation (EA) Amendment Assessment Report

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For:	Kudusberg Wind Farm (Pty) Ltd

Confidentiality Statement

KUDUSBERG WIND FARM (PTY) LTD

DRAFT ENVIRONMENTAL AUTHORISATION (EA) AMENDMENT ASSESSMENT REPORT

EXECUTIVE SUMMARY

Kudusberg Wind Farm (Pty) Ltd (hereafter referred to as "Kudusberg Wind Farm") was issued with an Environmental Authorisation (EA) for the proposed construction of the 325MW Kudusberg Wind Energy Facility (WEF) and associated infrastructure, between Matjiesfontein and Sutherland in the Western and Northern Cape Provinces. The EA was granted on 25 March 2019 (**DEFF Reference No.:** 14/12/16/3/3/1/1976) (**Appendix A**), and subsequently amended on 04 April 2019 to correct a minor naming error (14/12/16/3/3/1/1976/AM1). The layout for the authorised Kudusberg WEF is presented in **Figure i** below.

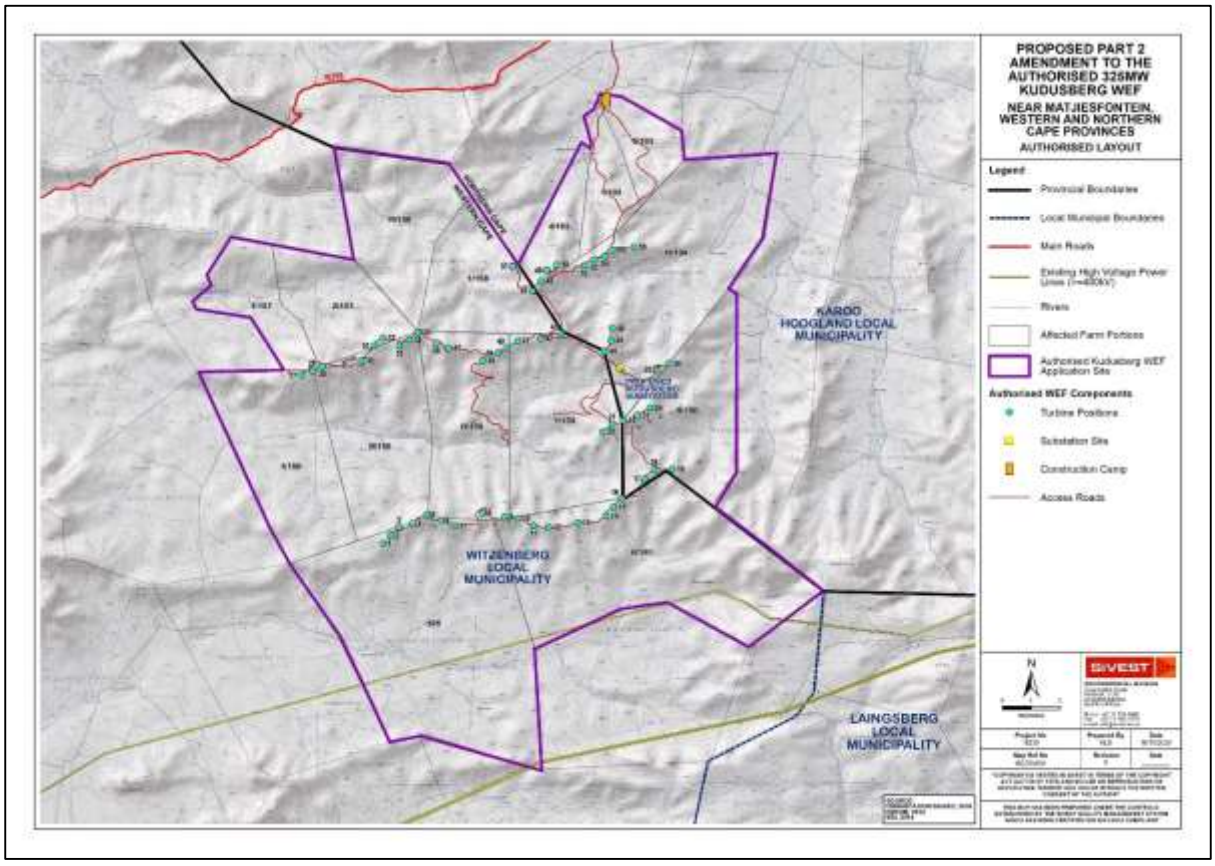

Figure i: Layout map for authorised Kudusberg WEF (14/12/16/3/3/1/1976/AM1)

Kudusberg Wind Farm is now proposing to submit a Part 2 EA Amendment Application to split the authorised Kudusberg WEF (14/12/16/3/3/1/1976/AM1) into two (2) separate smaller WEF projects, namely the Kudusberg WEF and Oya WEF, which will result in a number of technical and administrative changes detailed below in **Table i** below. The split is being proposed to allow the projects to be suitable for numerous opportunities such as either the Renewable Energy Independent Power Producer Procurement Programme (REIPPPP), Risk Mitigation Independent Power Producer Procurement Programme (RMIPPPP), other government run procurement programmes that may arise or for sale to private entities, if enabled and/or required in the drive for energy security in South Africa.

Following the split, the northern section of the authorised WEF will become the Oya WEF (**Figure ii**), while the southern section of the authorised WEF will remain known as the Kudusberg WEF (authorised under 14/12/16/3/3/1/1976/AM1) (**Table i**) (**Figure iii**). In addition to the split, the final layout for the Oya WEF is being submitted which has been informed by detailed specialist walk-throughs and on-site micro-siting as per condition 29 of the Kudusberg EA[1].

The respective layouts for the proposed Kudusberg WEF (southern section of the authorised WEF) and Oya WEF (northern section of the authorised WEF) are presented in **Figure ii** and **Figure iii** below.

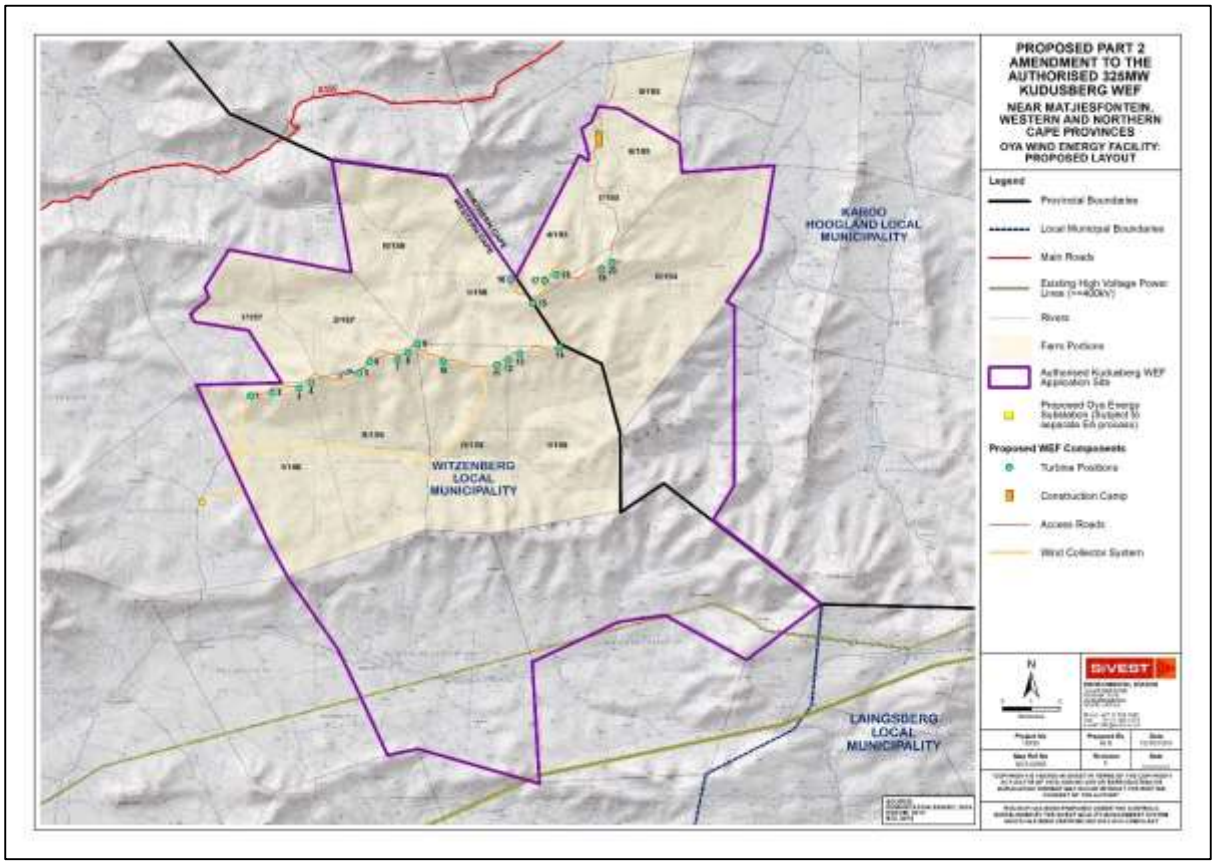

Figure ii: Layout map for proposed Oya WEF (northern section of the authorised WEF)

[1] Condition 29 of Kudusberg EA (**DEFF Ref:** 14/12/16/3/3/1/1976/AM1) – Page 15 of EA (page 17 of full document): *the final placement of turbines must follow a micro siting procedure involving a walk-through and identification of any sensitive areas by ecological, avifaunal, bat, surface water and heritage specialists.*

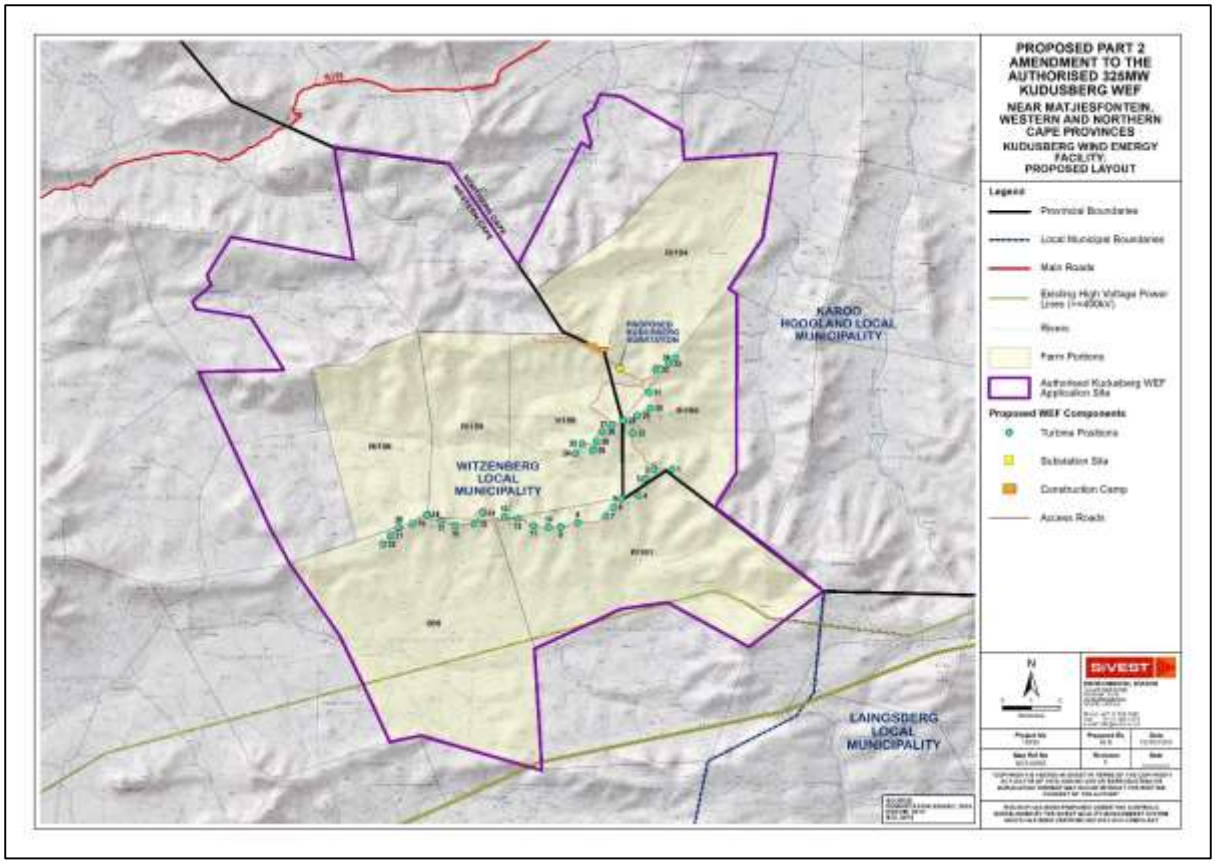

Figure iii: Layout map for proposed Kudusberg WEF (southern section of the authorised WEF)

Furthermore, the approved EMPr authorised as part of the Kudusberg EA is being amended to each WEF. The Oya EMPr is also being updated to incorporate the final layout for the Oya WEF, management plans and the walk-throughs.

The amendments detailed in **Table i** below are proposed for each of the two (2) WEFs mentioned above:

Table i: Proposed Amendments

Aspect to be amended	Authorised	Proposed Amendment	
		Oya WEF	**Kudusberg WEF**
Administrative Aspects			
Amend the holder of the EA's	Kudusberg Wind Farm (Pty) Ltd	Oya Energy (Pty) Ltd	Kudusberg Wind Farm (Pty) Ltd
Amend the name of the WEFs	Kudusberg Wind Energy Facility	Oya Wind Energy Facility	Kudusberg Wind Energy Facility
Contact Details	kudusberg@g7energies.com	oya@g7energies.com	kudusberg@g7energies.com
Extend the validity of the EA	This activity must commence within a period of five (05) years from the date of issue of this environmental authorisation	This activity must commence within a period of five (05) years from the date of issue of this amended environmental authorisation	This activity must commence within a period of five (05) years from the date of issue of this amended environmental authorisation
Location of Activity and SG codes	**Western Cape** 1. Portion 1 of 156 Gats Rivier Farm: C01900000000015600001 2. Portion 3 of 156 Gats River Farm: C01900000000015600002 3. Remainder of 156 Gats Rivier Farm: C01900000000015600000 4. Portion 1 of 157 Riet Fontein Farm: C01900000000015700001 5. Portion 1 of 158 Amandelbloom Farm: C01900000000015800001 6. Remainder of 158 Amandelboom Farm: C01900000000015800000 7. Portion 1 of 159 Oliviers Berg Farm: C01900000000015900001 8. Remainder of 159 Oliviers Berg Farm: C01900000000015900000 9. Portion 2 of 157 Riet Fontein Farm: C01900000000015700002 10. Remainder of 161 Muishond Rivier Farm: C01900000000016100000	**Western Cape** 1. Portion 1 of the Farm Gats Rivier No 156: C01900000000015600001 2. Portion 2 of the Farm Gats Rivier No 156: C01900000000015600002 3. Remainder of the Farm Gats Rivier No 156: C01900000000015600000 4. Portion 1 of the Farm Riet Fontein No 157: C01900000000015700001 5. Portion 2 of the Farm Riet Fontein No 157: C01900000000015700002 6. Portion 1 of the Farm Amandelbloom No 158: C01900000000015800001 7. Remainder of the Farm Amandelboom No 158: C01900000000015800000 8. Portion 1 of the Farm Oliviers Berg No 159: C01900000000015900001 9. Remainder of the Farm Oliviers Berg No 159: C01900000000015900000	**Western Cape** 1. Portion 1 of the Farm Gats Rivier No 156: C01900000000015600001 2. Remainder of the Farm Gats Rivier No 156: C01900000000015600000 3. Portion 1 of the Farm Oliviers Berg No 159; C01900000000015900001 4. Remainder of the Farm Oliviers Berg No 159: C01900000000015900000 5. Klipbanks Fontein No 395: C01900000000039500000 6. Remainder of the Farm Muishond Rivier No 159: C01900000000016100000 **Northern Cape** 7. Remainder of the Farm Karee Kloof No 196: C07200000000019600000 8. Remainder of the Farm Matjes Fontein No 194: C07200000000019400000

	11. Remainder of 395 Klipbanks Fontein Farm: C01900000000019500000 **Northern Cape** 12. Portion 4 of 193 Urias Gat Farm: C07200000000019300004 13. Portion 6 of 193 Urias Gat Farm: C07200000000019300006 14. Remainder of 193 Urias Gat Farm: C07200000000019300000 15. Remainder of 194 Matjes Fontein Farm: C07200000000019400000 16. Remainder of 196 Karree Kloof Farm: C07200000000019600000 **Properties affected by public road:** 17. 169 Zeekoegat Farm: C07200000000016900000 18. Portion 1 of 170 Roodeheuvel Farm: C07200000000017000001 19. Remainder of 170 Roodeheuvel Farm: C07200000000017000000 20. Remainder of 190 Wind Heuvel Farm: C07200000000019000000 21. Portion 1 of 190 Wind Heuvel Farm: C07200000000019000001 22. Portion 5 of 193 Urias Gat Farm: C07200000000019300005 23. Remainder of 171 Vinke Kuil Farm: C07200000000017100000 24. Alkant Re/220 Farm: C07200000000022000000 25. Portion 1 of 174 Lange Huis Farm: C07200000000017400001	**Northern Cape** 10. Portion 4 of the Farm Urias Gat No 193: C07200000000019300004 11. Portion 6 of the Farm Urias Gat No 193: C07200000000019300006 12. Remainder of the Farm Urias Gat No 193: C07200000000019300000 13. Remainder of the Farm Matjies Fontein No 194: C07200000000019400000 14. Portion 5 of the Farm Urias Gat No 193: C07200000000019300005 **Properties affected by access road:** 15. Zeekoegat Farm No 169: C07200000000016900000 16. Portion 1 of the Farm Roodeheuvel No 170: C07200000000017000001 17. Remainder of the Farm Roodeheuvel No 170: C07200000000017000000 18. Remainder of the Farm Wind Heuvel No 190: C07200000000019000000 19. Portion 1 of the Farm Wind Heuvel No 190: C07200000000019000001 20. Portion 5 of the Farm Urias Gat No 193: C07200000000019300005 21. Remainder of the Farm Vinke Kuil No 171: C07200000000017100000 22. Alkant Farm No 220: C07200000000022000000 23. Portion 1 of the Farm Lange Huis No 174: C07200000000017400001	**Properties affected by public road:** 9. Zeekoegat Farm No 169: C07200000000016900000 10. Portion 1 of the Farm Roodeheuvel No 170: C07200000000017000001 11. Remainder of the Farm Roodeheuvel No 170: C07200000000017000000 12. Remainder of the Farm Wind Heuvel No 190: C07200000000019000000 13. Portion 1 of the Farm Wind Heuvel No 190: C07200000000019000001 14. Portion 5 of the Farm Urias Gat No 193: C07200000000019300005 15. Remainder of the Farm Vinke Kuil No 171: C07200000000017100000 16. The Farm Alkant No 220: C07200000000022000000 17. Portion 1 of the Farm Lange Huis No 174: C07200000000017400001
Co-ordinates	**Centre:** 32°50’ 56.0868”S 20°19’ 25.0608”E	**APPLICATION SITE:** **Coordinates at Corner Points (DD MM SS.sss)**	**APPLICATION SITE:** **Coordinates at Corner Points (DD MM SS.sss)**

	North: 32°40’ 29.8812”S 20°24’ 57.78”E **East:** 32°43’ 53.8212”S 20°29’ 32.28”E **South-East:** 32°54’ 6.66”S 20°23’ 3.7788”E **South-West:** 32°55’ 32.0412”S 20°16’ 24.8988”E **West:** 32°52’ 12.7812”S 20°14’ 20.6988”E	1. S32° 46' 11.757" E20° 21' 39.554" 2. S32° 45' 55.571" E20° 23' 32.919" 3. S32° 47' 3.530" E20° 23' 8.115" 4. S32° 48' 14.853" E20° 23' 15.057" 5. S32° 48' 7.939" E20° 25' 19.086" 6. S32° 49' 44.075" E20° 24' 59.144" 7. S32° 50' 41.159" E20° 24' 13.445" 8. S32° 53' 6.441" E20° 21' 52.752" 9. S32° 53' 8.532" E20° 21' 53.539" 10. S32° 54' 36.732" E20° 21' 50.816" 11. S32° 55' 2.170" E20° 18' 58.064" 12. S32° 54' 57.184" E20° 17' 28.053" 13. S32° 55' 48.840" E20° 14' 21.666" 14. S32° 55' 7.517" E20° 13' 55.356" 15. S32° 54' 28.981" E20° 13' 34.753" 16. S32° 52' 11.464" E20° 12' 21.280" 17. S32° 52' 9.896" E20° 14' 16.133" 18. S32° 51' 10.304" E20° 13' 32.215" 19. S32° 51' 0.223" E20° 12' 19.238"	1. S32° 48' 14.853" E20° 23' 15.057" 2. S32° 48' 7.939" E20° 25' 19.086" 3. S32° 49' 44.075" E20° 24' 59.144" 4. S32° 50' 41.159" E20° 24' 13.445" 5. S32° 50' 46.823" E20° 24' 24.286" 6. S32° 54' 9.411" E20° 24' 22.544" 7. S32° 54' 48.192" E20° 23' 53.935" 8. S32° 56' 23.562" E20° 26' 18.389" 9. S32° 57' 26.788" E20° 24' 38.101" 10. S32° 56' 35.721" E20° 22' 48.877" 11. S32° 56' 42.813" E20° 21' 46.490" 12. S32° 57' 27.491" E20° 19' 50.038" 13. S32° 59' 45.215" E20° 19' 58.513" 14. S32° 59' 5.070" E20° 17' 15.888" 15. S32° 59' 11.874" E20° 16' 34.719" 16. S32° 57' 11.539" E20° 15' 29.007" 17. S32° 55' 48.840" E20° 14' 21.666" 18. S32° 55' 23.944" E20° 15' 52.693" 19. S32° 52' 9.370" E20° 14' 54.031"

		20. S32° 50' 51.343" E20° 12' 14.058" 21. S32° 50' 33.384" E20° 12' 39.312" 22. S32° 50' 21.482" E20° 12' 33.983" 23. S32° 49' 38.848" E20° 13' 6.405" 24. S32° 50' 5.733" E20° 15' 50.817" 25. S32° 47' 57.718" E20° 15' 25.332" 26. S32° 48' 16.924" E20° 17' 59.136" 27. S32° 50' 12.452" E20° 19' 31.355" 28. S32° 47' 54.581" E20° 20' 57.293" 29. S32° 48' 1.255" E20° 21' 9.303" 30. S32° 47' 54.387" E20° 21' 10.181" 31. S32° 47' 24.673" E20° 21' 0.698" 32. S32° 47' 17.149" E20° 21' 13.982" 33. S32° 46' 59.938" E20° 21' 22.475" 34. S32° 46' 56.504" E20° 21' 29.064" **Coordinates at Centre Point (DD MM SS.sss)** 35. S32° 51' 21.895" E20° 18' 41.467" **CONSTRUCTION CAMP:**	20. S32° 52' 4.579" E20° 15' 50.647" 21. S32° 51' 44.360" E20° 16' 19.552" 22. S32° 51' 27.665" E20° 17' 16.598" 23. S32° 51' 31.913" E20° 20' 32.550" 24. S32° 50' 41.238" E20° 19' 54.404" 25. S32° 49' 35.741" E20° 21' 44.517" **Coordinates at Centre Point (DD MM SS.sss)** 26. S32° 54' 10.102" 27. E20° 20' 14.737" **CONSTRUCTION CAMP:** **Coordinates at Centre Point (DD MM SS.sss)** **CENTRE:** S32° 51' 46.797" E20° 21' 16.710" **Coordinates at Corner Points:** **CC1_01:** S32° 51' 41.254" E20° 21' 2.209" **CC1_02:** S32° 51' 40.895" E20° 21' 11.315" **CC1_03:** S32° 51' 46.466" E20° 21' 19.638" **CC1_04:** S32° 51' 45.812" E20° 21' 26.156" **CC1_05:** S32° 51' 47.063" E20° 21' 32.475" **CC1_06:** S32° 51' 50.861" E20° 21' 30.264" **CC1_07:** S32° 51' 51.339"

		Coordinates at Centre Point (DD MM SS.sss) **CENTRE:** S32° 47' 36.876" E20° 21' 23.588" **Coordinates at Corner Points:** **CC1_01:** S32° 47' 28.108" E20° 21' 19.647" **CC1_02:** S32° 47' 28.329" E20° 21' 28.144" **CC1_03:** S32° 47' 45.815" E20° 21' 27.943" **CC1_04:** S32° 47' 45.598" E20° 21' 19.332" **CC1_05:** S32° 47' 43.103" E20° 21' 20.053" **CC1_06:** S32° 47' 40.376" E20° 21' 20.085" **CC1_07:** S32° 47' 38.132" E20° 21' 19.168" **CC1_08:** S32° 47' 35.632" E20° 21' 19.015" **CC1_09:** S32° 47' 34.407" E20° 21' 18.760" **SUBSTATION:** **Coordinates at Centre Point (DD MM SS.sss):** **CENTRE:** S32° 54' 24.333" E20° 12' 28.366" **Coordinates at Corner Points (DD MM SS.sss):** **SS1_01:** S32° 54' 19.886" E20° 12' 26.843" **SS1_02:** S32° 54' 23.125" E20° 12' 33.613" **SS1_03:** S32° 54' 28.772" E20° 12' 29.816" **SS1_04:** S32° 54' 25.569"	E20° 21' 26.005" **CC1_08:** S32° 51' 53.100" E20° 21' 24.630" **CC1_09:** S32° 51' 43.651" E20° 21' 0.749" **SUBSTATION:** **Coordinates at Corner Points (DD MM SS.sss):** **SS1_01:** S32° 52' 4.061" E20° 21' 48.372" **SS1_02:** S32° 52' 10.456" E20° 21' 53.934" **SS1_03:** S32° 52' 15.215" E20° 21' 45.714" **SS1_04:** S32° 52' 9.014" E20° 21' 40.229" **Coordinates at Centre Point (DD MM SS.sss):** **CENTRE:** S32° 52' 9.655" E20° 21' 47.079"

		E20° 12' 23.122"	
Technical Aspects			
Aspect to be amended	**Authorised**	**Proposed Amendment**	
		Oya WEF	**Kudusberg WEF**
Overall Capacity	325 MW	86 MW	239 MW
Number of turbines	56	20	36
Hub height	Up to 140 m	92 m above the foundation	No Change i.e. up to 140 m
Rotor diameter	Up to 180 m	150 m	No Change i.e. up to 180 m
Blade length	Up to 90 m	75 m	No Change i.e. up to 90 m
Wind Measuring Lattice Masts	Up to 4 x 140 m high depending the final hub height	2 x met masts (same as hub height)	2 x up to 140 m high depending the final hub height
Layout	-	Layout submitted for final approval. The layout to be approved are contained in **Appendix J4**. Associated turbine GPS locations will be provided in the Final EA Amendment Report.	Final layout to be submitted prior to the start of construction
EMPr	The EMPr submitted as part of the Application for EA is hereby approved.	Approve Final EMPr	To be submitted based on final approval of layout.

The authorised Kudusberg WEF is situated approximately 45km south-west of the town of Sutherland in the Northern and Western Cape Provinces. In addition, the WEF is located in the Witzenberg and Karoo Hoogland Local Municipalities, which fall within the Cape Winelands and Namakwa District Municipalities respectively. It should also be noted that the authorised Kudusberg WEF falls entirely within the Renewable Energy Zone (REDZ) 2 (i.e. Komsberg REDZ), which was Gazetted in February 2018 by the Minister of Environmental Affairs (GN 114), and therefore the proposed Oya WEF will also fall entirely within the above-mentioned REDZ (**Figure iv**).

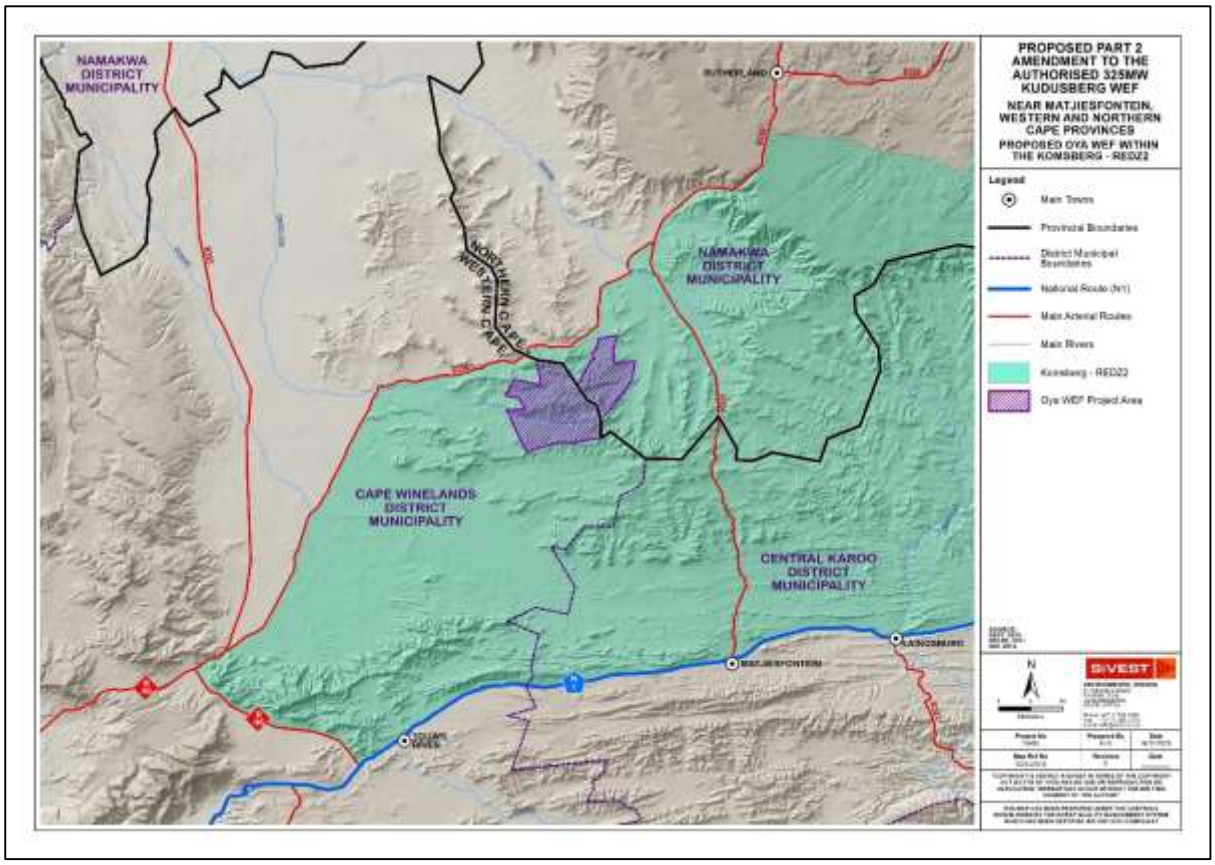

Figure iv: Location of proposed Oya WEF in relation to REDZ

The proposed amendments in themselves are not listed activities according to Government Notice (GN) R326, R327, R325 and R324 of the Environmental Impact Assessment (EIA) Regulations (as amended on 07 April 2017 and 13 July 2018), and do not trigger any new listed activity. In addition, the proposed amendments are within the original authorised development footprint, and do not change the scope of the EA.

The following amendment is being submitted in terms of Condition 5 of the EA and Chapter 5 of the EIA Regulations of December 2014 (as amended on 07 April 2017 and 13 July 2018), it is possible for an applicant to apply, in writing, to the competent authority for a change or deviation from the project description to be approved. The amendment of the EMPr is being undertaken in accordance with Condition 17 of the EA.

Accordingly, Kudusberg Wind Farm has appointed SiVEST SA (Pty) Ltd to act as the independent Environmental Assessment Practitioner (EAP) to undertake the Part 2 EA Amendment process as required in terms of Regulation 32 of GN R. 326 of the EIA Regulations, 2014 (as amended on 07 April 2017 and 13 July 2018), as well as Regulation 37 of GN R. 326 pertaining to amendments of EMPrs.

This EA Amendment Motivation Report has thus been compiled in accordance with the provisions of Regulation 32 (1) and 37 of the EIA Regulations 2014 (as amended).

As part of the original Basic Assessment (BA) process[2] for the proposed Kudusberg WEF undertaken in 2018/2019, the following specialist studies were undertaken:

- Agricultural Assessment;
- Avifaunal Assessment;
- Bat Assessment;
- Biodiversity (including fauna and flora) Assessment;
- Heritage Assessment;
- Noise Impact Assessment;
- Socio-Economic Impact Assessment;
- Surface Water / Aquatic Impact Assessment;
- Transportation Assessment, and
- Visual Impact Assessment.

The above-mentioned specialist studies were commissioned to assess the impacts associated with the proposed amendments.

In addition, the following specialist have undertaken detailed walk-throughs and micro-siting of the Oya WEF in accordance with the recommendations contained in the approved EMPr and in accordance with condition 29 of the EA[1]:

- Avifauna;
- Bats;
- Surface Water / Aquatic
- Ecology; and
- Heritage (including Arcchaeology, Palaeontology and Cultural Landscapes).

The above-mentioned walk-throughs were undertaken to identify any additional sensitive / "no-go" areas based on the final layout and/or any other special features which need to be avoided. Furthermore, the necessary specialists were commissioned to compile the requisite management plans detailed in the EMPr[3].

Based on the assessment of the proposed amendments undertaken by the respective specialists, no new environmental risks or impacts were identified and it was concluded that the impacts identified and mitigation measures and/or recommendations proposed as part of the BA process for the original Kudusberg WEF in 2018 would remain unchanged. The 2020 Freshwater Assessment (du Prrez, 2020) which replaces the original Surface Water Impact Assessment (BlueScience, 2018) also concluded that impacts can be mitigated to acceptably low levels after the implementation of the recommended mitigation measures.

[2] BA process undertaken for original Kudusberg WEF (**DEFF Ref:** 14/12/16/3/3/1/1976/AM1) as proposed WEF falls entirely within REDZ 2 (namely the Komsberg REDZ), which was formally gazetted on 16 February 2018 by Minister of Environmental Affairs (GN 114)

[3] Includes Alien and Invasive Plant Species Management Plan; Plant Rescue Management Plan; Vegetation Rehabilitation Plan; Heritage Management Plan; Watercourse Rehabilitation & Maintenance Management Plan; Hydrological Assessment (including Storm Water Management & Erosion Control Plan); Traffic and Transport Management Plan; Post-Construction Avifaunal Monitoring Plan; Fire Management Plan and Waste Management Plan

With regards to the specialist walk-throughs which were undertaken, no fatal flaws or additional environmental sensitivities were identified and all specialists found the proposed layout for the Oya WEF to be acceptable. Additionally, all specialists recommended that the layout should be approved. Very few new (previously unknown) heritage resources were identified during the Heritage walk-through, however, it was confirmed by the specialist that they do not fall within the development footprint and will not be directly impacted. It should be noted that the Ecologist recommended (not critical) shifting Turbine 1 a minimum of 90m eastwards and locating the crane pad to the east of the new position if a possible Vulnerable plant species (tentatively identified as *Octopoma quadrisepalum*) is identified within 40m of Turbine 1. If this is not technically feasible due to the terrain an application can be submitted for a permit to relocate the plant or destroy it. No additional layout changes were however recommended from a Terrestrial Ecology perspective.

From a Surface Water perspective, it was found that the proposed Oya WEF overhead collector power line will traverse several watercourses, however, the pylons will be constructed outside the 32m NEMA zone of regulation. It was however determined that should the above infrastructure components be moved to be located at least 32m from a watercourse and the watercourse road crossings only be constructed during the driest period of the year, the impacts significance for the construction and operation for these components can be considered low with mitigation. In addition, no fatal flaws in terms of freshwater ecological aspects were identified. In terms of the walk-down, recommended amendments to the Oya WEF layout were made, in order to limit the infrastructure components within the watercourses and the 32m NEMA and 100m GN 509 zones of regulation. These amendments are however **not considered critical** for the protection of watercourses (as the risk assessment determined a Low Risk significance for linear infrastructure within the watercourses), but are suggested as best practice and to further reduce impacts on the receiving natural environment as a whole. The proposed Oya WEF layout respects the required buffers and is however considered acceptable from a freshwater ecological perspective, provided the recommended mitigation measure be applied, and should be granted EA.

It should be noted that none of the specialists identified any fatal flaws and all specialists (including the Ecologist and Surface Water Specialist) subsequently recommended that the layout should be approved. Various management plans[3] have also been compiled by some of the specialists for incorporation into the EMPr and subsequent implementation.

The advantages and disadvantages of the proposed amendment were explored to provide an indication of the potential benefits and drawbacks. Based on the feedback received from the specialists, it is evident that the advantages outweigh the disadvantages, mainly due to the fact that the amended layout is more beneficial as wind turbines have been removed and re-positioned outside of very high sensitivity areas and are located in optimal positions. Additionally, most specialist found that the layout did not differ too significantly from the original findings as the total number of turbines has remained unchanged. It should also be noted that none of the specialists found that the proposed amendments and subsequent addition of the proposed Oya WEF (northern section of authorised WEF) would change the original cumulative impact ratings or result in fatal flaws from a cumulative impact perspective. This is mainly due to the fact that the overall number of turbines will still remain the same and the two (2) proposed WEFs will be clustered in a REDZ (namely REDZ – Komsberg REDZ), in line with the REDZ intention.

Considering the information above, the proposed amendments are acceptable from an overall environmental perspective.

The EA Amendment Assessment Report is being circulated for public participation for a period of 30 days (excluding public holidays and the DEFF's December closure period) from 18 November 2020

until 11 January 2021. In light of the countrywide restriction enforced in terms of Government Gazette 43096[4], which has resulted in the entire country being placed in a national state of disaster, which limits the movement and gathering of people in an effort to curb the spread CoVID-19, the public participation process has been amended and adjusted in light of these restrictions. In response, SiVEST has formulated a unique Public Participation process which is as closely related to the requirements of Regulations 39 to 44 of the EIA Regulations, 2014, as amended, (GNR 326) as possible (**Appendix E9**).

As a result, SiVEST have implemented a virtual and electronic public participation process, in which electronic Tablets will be located at public venues (namely the Sutherland Police Station, Witzenberg Local Municipality office and Liangsburg Local Library) in conjunction with a 'data free' website which will be set up in a way where the Draft Report can be either viewed and/or downloaded free of charge. Furthermore, an electronic copy will also be made available on a website (http://ppp.g7energies.com/K7khasco90m), whereby all registered I&APs can download the document (see **section 7.3**). This will ensure that all project related information associated with the amendment process is readily available and accessible to any person with interest in the project, enabling the public participation process to be undertaken in line with Regulations 41 to 44 of the EIA Regulations, 2014, as amended. It should be noted that a Public Participation Plan (**Appendix E9**) was compiled by the EAP and was submitted to the DEFF for review and approval on 03 November 2020. This Public Participation Plan was subsequently approved on 16 November 2020 (**Appendix 4** and **Appendix E9**).

All comments received will be responded to in a Comments and Response Report (C&RR), which will be included prior to submission of the Final EA Amendment Assessment Report and EMPr to the decision-making authority, namely the DEFF. Comments received on the Draft Report will be taken into consideration, incorporated into the report (where possible) and will be used when compiling the Final Report.

All I&APs and key stakeholders are invited to register as I&APs to be kept informed throughout the amendment process. To register as an I&AP / stakeholder and/or to obtain additional information, please submit your name, contact details (telephone number, postal address and email address) and the interest which you have in the application to SiVEST Environmental Division, as per the details below:

Contact: Hlengiwe Ntuli or Stephan Jacobs
PO Box 2921, RIVONIA, 2128
☎ Phone: (011) 798 0600
E-mail: hlengiwen@sivest.co.za / stephanj@sivest.co.za / sivest_ppp@sivest.co.za
Fax: (011) 803 7272
Websites: www.sivest.co.za

[4] General Notice issued by the DEFF on 24 March 2020, as well as Government Notice No. 650 issued by the DEFF on 05 June 2020, were being adhered to during Level 3 of the national lockdown period. However, during a meeting held with SAWEA on 25 August 2020, the DEFF indicated that the Directive issued by the Department on 05 June 2020 (Government Gazette 43412) related to level 3 lockdown, has been repealed, based on the current lockdown level. Therefore, as it stands, there is no indication that a new directive will be issued, and the "normal" EIA Regulations are currently in force. DEFF however highlighted that Applicants must continue to adhere to the applicable provisions of the Disaster Management Act and associated Regulations (e.g. restrictions on gatherings for public meetings) and hence some elements included in the lockdown directive (05 June 2020 - Government Gazette 43412), mainly as it pertains to PPP, are still relevant and that this directive can be used as a consultation guide for all new applications. Applicant will thus continue to adhere to applicable provisions of Disaster Management Act and associated Regulations

Please reference '*Kudusberg WEF*' in your correspondence. SiVEST shall keep all registered I&APs / key stakeholders informed of the EA Amendment process.

In light of the information above, it is concluded that the EA should be split into two (2) EA's and amended in line with the proposed specifications listed in **Table i**, and that the impacts identified can be mitigated to acceptable levels, provided the recommended mitigation measures are implemented. In addition, it is the EAP's reasoned opinion, based on the detailed specialist walk-throughs which were undertaken, that the **layout being proposed as part of the Oya WEF and the Final Oya EMPr (Appendix I) be approved by the DEFF as part of the Amended EA (should this be granted)**. Furthermore, it is requested that the Kudusberg EMPr **should not be approved and should be submitted along with the final layout before construction and should be included as such as part of the Amended EA (should this be granted).**

As per the EIA Regulations 2014, as amended, Regulation 32 of Government Notice Regulation (GNR) 326 (as amended) identifies the legislated requirements, which must be contained within an EA Amendment Assessment Report for the competent authority to consider and come to a decision on the amendment application. **Table ii** below details where the required information is located within this Draft EA Amendment Assessment Report (this report).

Table ii: Legislated requirements of an EA Amendment Assessment Report

Regulation 32 of GNR 326 (as amended)	Description	Relevant Report Section
1	The applicant must within 90 days of receipt by the competent authority of the application made in terms of regulation 31, submit to the competent authority:	The Final Amendment Report will be submitted to the DEFF for decision-making within 90 days of receipt of the application made in terms of Regulation 31, as per the requirements.
(a)	A report, reflecting:	
	(i) An assessment of all impacts related to the proposed change;	All impacts related to the proposed amendments are detailed in **section 4** of this report.
	(ii) Advantages and disadvantages associated with the proposed change; and	All advantages and disadvantages associated with the proposed amendments are detailed in **section 6** of this report.
	(iii) Measures to ensure avoidance, management and mitigation of impacts associated with such proposed change; and	Measures to ensure avoidance, management and mitigation of impacts associated with the proposed amendments are provided in **section 5** of this report.
	(iv) Any changes to the EMPr:	The approved EMPr authorised as part of the Kudusberg EA is being amended to each WEF. The Oya EMPr is also being updated to incorporate the final layout for the Oya WEF, management plans and the walk-throughs which were undertaken. The updated EMPrs for the proposed Oya WEF and Kudusberg WEF are attached to this report as **Appendix I1** and **Appendix I2** respectively.
	Which report – (aa) had been subjected to a public participation process, which had been agreed to by the competent authority, and which was appropriate to bring the proposed change to the attention of potential and registered interested and affected parties, including organs of state, which have jurisdiction in respect of any aspect of the relevant activity, and the competent authority; and	The public participation process being undertaken as part of the EA Amendment process is detailed in **section 7** of this report. In addition, all public participation related documentation is provided in **Appendix E**. The EA Amendment Assessment Report is being circulated for public participation for a period of 30 days (excluding public holidays and the DEFF's December closure period) from 18 November 2020 until 11 January 2021. In light of the countrywide restriction enforced in terms of Government Gazette 43096, the public participation process has been amended and adjusted. In response, SiVEST has formulated a unique Public Participation process which is as closely related to the requirements of Regulations 39 to 44 of the EIA Regulations, 2014, as

		amended, (GNR 326) as possible. SiVEST have implemented a virtual and electronic public participation process, in which electronic Tablets will be located at public venues in conjunction with a 'data free' website which will be set up in a way where the Draft Report can be either viewed and/or downloaded free of charge. Furthermore, an electronic copy will also be made available on a website which is a DFP (http://ppp.g7energies.com/K7khasco90m), whereby all registered I&APs can download the document at no data cost to themselves. It should be noted that a Public Participation Plan (**Appendix E9**) was compiled by the EAP and was submitted to the DEFF for review and approval on 03 November 2020 (**Appendix 4** and **Appendix E9**). Public Participation Plan was subsequently approved on 16 November 2020 (**Appendix 4** and **Appendix E9**).
	(bb) reflects the incorporation of comments received, including any comments of the competent authority	All comments received (including any comments of the competent authority) will be responded to in a C&RR, which will be included prior to submission of the Final EA Amendment Assessment Report and EMPr to the decision-making authority. Comments received on the Draft Report will be taken into consideration, incorporated into the report (where possible) and will be used when compiling the Final Report.
(b)	A notification in writing that the report will be submitted within 140 days of receipt of application by the competent authority, as significant changes have been made or significant new information has been added to the report, which changes or information was contained in the report consulted on during the initial public participation process contemplated in subregulation (1)(a) and that the revised report will be subjected to another public participation process of at least 30 days.	The Final Amendment Report will be submitted to the DEFF for decision-making within 90 days of receipt of the application made in terms of Regulation 31, as per the requirements. However, should significant changes be made or significant new information be added to the report, which changes or information was contained in the report consulted on during the initial public participation process contemplated in subregulation (1)(a), a notification in writing that the report will be submitted within 140 days of receipt of application by the competent authority will be submitted and the revised report will be subjected to another public participation process of at least 30 days (as agreed by the DEFF).
2	In the event where sub regulation (1)(b) applies, the report, which reflects the incorporation of comments received, including any comments of the competent authority, must be submitted to the competent authority within 140 days of receipt of the application by the competent authority	As mentioned above, the Final Amendment Report will be submitted to the DEFF for decision-making within 90 days of receipt of the application made in terms of Regulation 31, as per the requirements. However, should sub regulation (1)(b) apply, the report, which reflects the incorporation of comments received, including any comments of the competent authority, will be submitted to the competent authority within 140 days of receipt of the application by the competent authority.

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GLOSSARY OF TERMS

ABBREVIATIONS

ATNS	- Air Traffic Navigation Services
C&RR	- Comments and Response Report
CV	- Curriculum Vitae
DAFF	- Department of Agriculture, Forestry and Fisheries
DEA	- Department of Environmental Affairs
DMR	- Department of Mineral Resources
DoE	- Department of Energy
DWS	- Department of Water & Sanitation
EA	- Environmental Authorisation
EAP	- Environmental Assessment Practitioner
ECP	- Emissions Control Plan
EIA	- Environmental Impact Assessment
EIAr	- Environmental Impact Assessment Report
EMC	- Electromagnetic Compatibility
EMI	- Electromagnetic Interference
EMPr	- Environmental Management Programme
ESA	- Early Stone Age
EWT	- Endangered Wildlife Trust
FEIAr	- Final Environmental Impact Assessment Report
GIS	- Geographic Information System
GN	- Government Notice
GPS	- Global Positioning System
HIA	- Heritage Impact Assessment
I&AP(s)	- Interested and Affected Parties
IPP(s)	- Independent Power Producers
KM	- Kilometre(s)
M	- Metres
MSA	- Middle Stone Age
MW	- Megawatt
NCR	- National Noise Control Regulations
NC DENC	- Northern Cape Department of Environment and Nature Conservation
NEMA	- National Environmental Management Act (Act No. 107 of 1998)
NSD	- Noise Sensitive Development
OoS	- Organs of State
RE	- Renewable Energy
REIPPPP	- Renewable Energy Independent Power Producer Procurement Programme
RMIPPP	- Risk Mitigation Independent Power Producer Procurement Programme
PPA	- Power Purchase Agreement
PPP	- Public Participation Process
SA	- South Africa
SA CAA	- South African Civil Aviation Authority
SAHRA	- South African Heritage Resources Agency
SANRAL	- South African National Roads Agency SOC Limited
SKA	- Square Kilometre Array
VIA	- Visual Impact Assessment
WEF	- Wind Energy Facility

WESSA - Wildlife & Environment Society of South Africa
WTG - Wind Turbine Generator
ZoR - Zone of Regulation

1 INTRODUCTION

Kudusberg Wind Farm (Pty) Ltd (hereafter referred to as "Kudusberg Wind Farm") was issued with an Environmental Authorisation (EA) for the proposed construction of the 325MW Kudusberg Wind Energy Facility (WEF) and associated infrastructure, between Matjiesfontein and Sutherland in the Western and Northern Cape Provinces. The EA was granted on 25 March 2019 (**DEFF Reference No.:** 14/12/16/3/3/1/1976 (**Appendix A**), and subsequently amended on 04 April 2019 to correct a minor naming error (14/12/16/3/3/1/1976/AM1) (**Appendix A**). The layout for the authorised Kudusberg WEF is presented in **Figure 1** below.

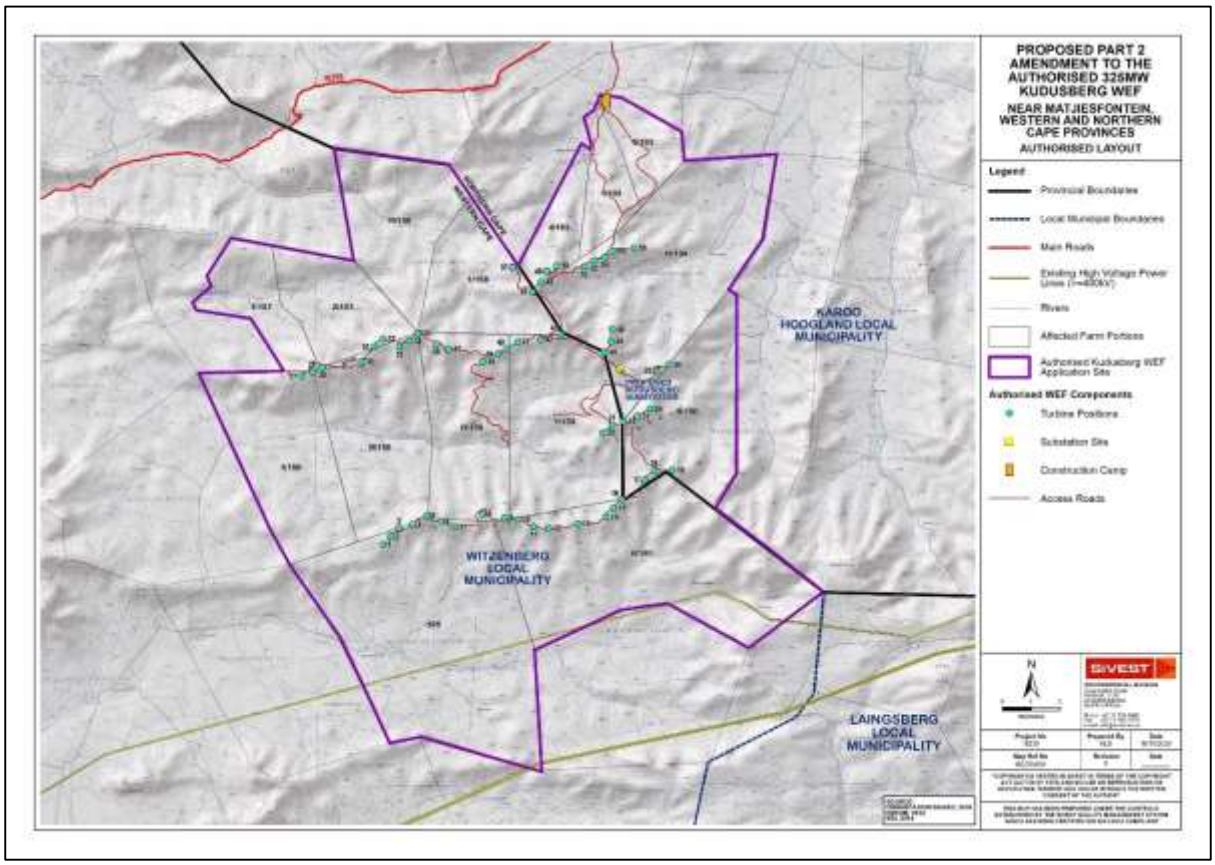

Figure 1: Layout map for authorised Kudusberg WEF (14/12/16/3/3/1/1976/AM1)

Kudusberg Wind Farm is now proposing to submit a Part 2 EA Amendment Application to split the authorised Kudusberg WEF (14/12/16/3/3/1/1976/AM1) into two (2) separate smaller WEF projects, namely the Kudusberg WEF and Oya WEF, which will result in a number of technical and administrative changes detailed below in **Table 1** below. The split is being proposed to allow the projects to be suitable for numerous opportunities such as either the Renewable Energy Independent Power Producer Procurement Programme (REIPPPP), Risk Mitigation Independent Power Producer Procurement Programme (RMIPPPP), other government run procurement programmes that may arise or for sale to private entities, if enabled and/or required in the drive for energy security in South Africa.

Following the split, the northern section of the authorised WEF will become the Oya WEF (**Figure 3**), while the southern section of the authorised WEF will remain known as the Kudusberg WEF (authorised under 14/12/16/3/3/1/1976/AM1) (**Table 1**) (**Figure 4**). In addition to the split, the final layout for the Oya WEF is being submitted which has been informed by detailed specialist walk-throughs and on site

micro-siting as per condition 29 of the Kudusberg EA[5]. Furthermore, the approved Environmental Management Programme (EMPr) authorised as part of the Kudusberg EA is being amended to each WEF. The Oya EMPR is being amended to incorporate the final layout for the Oya WEF, management plans and the walk-throughs.

The respective layouts for the proposed Kudusberg WEF (southern section of the authorised WEF) and Oya WEF (northern section of the authorised WEF) are presented in **Figure 3** and **Figure 4** in **section 2.1** of this report.

The amendments detailed in **Table 1** below are proposed for each of the two (2) WEFs mentioned above:

[5] Condition 29 of Kudusberg EA (**DEFF Ref:** 14/12/16/3/3/1/1976/AM1) – Page 15 of EA (page 17 of full document): *the final placement of turbines must follow a micro siting procedure involving a walk-through and identification of any sensitive areas by ecological, avifaunal, bat, surface water and heritage specialists.*

Table 1: Proposed Amendments

Aspect to be amended	Authorised	Proposed Amendment	
		Oya WEF	**Kudusberg WEF**
Administrative Aspects			
Amend the holder of the EA's	Kudusberg Wind Farm (Pty) Ltd	Oya Energy (Pty) Ltd	Kudusberg Wind Farm (Pty) Ltd
Amend the name of the WEFs	Kudusberg Wind Energy Facility	Oya Wind Energy Facility	Kudusberg Wind Energy Facility
Contact Details	kudusberg@g7energies.com	oya@g7energies.com	kudusberg@g7energies.com
Extend the validity of the EA	This activity must commence within a period of five (05) years from the date of issue of this environmental authorisation	This activity must commence within a period of five (05) years from the date of issue of this amended environmental authorisation	This activity must commence within a period of five (05) years from the date of issue of this amended environmental authorisation
Location of Activity and SG codes	**Western Cape** 1. Portion 1 of 156 Gats Rivier Farm: C01900000000015600001 2. Portion 3 of 156 Gats River Farm: C01900000000015600002 3. Remainder of 156 Gats Rivier Farm: C01900000000015600000 4. Portion 1 of 157 Riet Fontein Farm: C01900000000015700001 5. Portion 1 of 158 Amandelbloom Farm: C01900000000015800001 6. Remainder of 158 Amandelboom Farm: C01900000000015800000 7. Portion 1 of 159 Oliviers Berg Farm: C01900000000015900001 8. Remainder of 159 Oliviers Berg Farm: C01900000000015900000 9. Portion 2 of 157 Riet Fontein Farm: C01900000000015700002 10. Remainder of 161 Muishond Rivier Farm: C01900000000016100000 11. Remainder of 395 Klipbanks Fontein Farm: C01900000000019500000	**Western Cape** 1. Portion 1 of the Farm Gats Rivier No 156: C01900000000015600001 2. Portion 2 of the Farm Gats Rivier No 156: C01900000000015600002 3. Remainder of the Farm Gats Rivier No 156: C01900000000015600000 4. Portion 1 of the Farm Riet Fontein No 157: C01900000000015700001 5. Portion 2 of the Farm Riet Fontein No 157: C01900000000015700002 6. Portion 1 of the Farm Amandelbloom No 158: C01900000000015800001 7. Remainder of the Farm Amandelboom No 158: C01900000000015800000 8. Portion 1 of the Farm Oliviers Berg No 159: C01900000000015900001 9. Remainder of the Farm Oliviers Berg No 159: C01900000000015900000 **Northern Cape**	**Western Cape** 1. Portion 1 of the Farm Gats Rivier No 156: C01900000000015600001 2. Remainder of the Farm Gats Rivier No 156: C01900000000015600000 3. Portion 1 of the Farm Oliviers Berg No 159; C01900000000015900001 4. Remainder of the Farm Oliviers Berg No 159: C01900000000015900000 5. Klipbanks Fontein No 395: C01900000000039500000 6. Remainder of the Farm Muishond Rivier No 159: C01900000000016100000 **Northern Cape** 7. Remainder of the Farm Karee Kloof No 196: C07200000000019600000 8. Remainder of the Farm Matjes Fontein No 194: C07200000000019400000 **Properties affected by public road:**

	Northern Cape 12. Portion 4 of 193 Urias Gat Farm: C07200000000019300004 13. Portion 6 of 193 Urias Gat Farm: C07200000000019300006 14. Remainder of 193 Urias Gat Farm: C07200000000019300000 15. Remainder of 194 Matjes Fontein Farm: C07200000000019400000 16. Remainder of 196 Karree Kloof Farm: C07200000000019600000 **Properties affected by public road:** 17. 169 Zeekoegat Farm: C07200000000016900000 18. Portion 1 of 170 Roodeheuvel Farm: C07200000000017000001 19. Remainder of 170 Roodeheuvel Farm: C07200000000017000000 20. Remainder of 190 Wind Heuvel Farm: C07200000000019000000 21. Portion 1 of 190 Wind Heuvel Farm: C07200000000019000001 22. Portion 5 of 193 Urias Gat Farm: C07200000000019300005 23. Remainder of 171 Vinke Kuil Farm: C07200000000017100000 24. Alkant Re/220 Farm: C07200000000022000000 25. Portion 1 of 174 Lange Huis Farm: C07200000000017400001	10. Portion 4 of the Farm Urias Gat No 193: C07200000000019300004 11. Portion 6 of the Farm Urias Gat No 193: C07200000000019300006 12. Remainder of the Farm Urias Gat No 193: C07200000000019300000 13. Remainder of the Farm Matjies Fontein No 194: C07200000000019400000 14. Portion 5 of the Farm Urias Gat No 193: C07200000000019300005 **Properties affected by access road:** 15. Zeekoegat Farm No 169: C07200000000016900000 16. Portion 1 of the Farm Roodeheuvel No 170: C07200000000017000001 17. Remainder of the Farm Roodeheuvel No 170: C07200000000017000000 18. Remainder of the Farm Wind Heuvel No 190: C07200000000019000000 19. Portion 1 of the Farm Wind Heuvel No 190: C07200000000019000001 20. Portion 5 of the Farm Urias Gat No 193: C07200000000019300005 21. Remainder of the Farm Vinke Kuil No 171: C07200000000017100000 22. Alkant Farm No 220: C07200000000022000000 23. Portion 1 of the Farm Lange Huis No 174: C07200000000017400001	9. Zeekoegat Farm No 169: C07200000000016900000 10. Portion 1 of the Farm Roodeheuvel No 170: C07200000000017000001 11. Remainder of the Farm Roodeheuvel No 170: C07200000000017000000 12. Remainder of the Farm Wind Heuvel No 190: C07200000000019000000 13. Portion 1 of the Farm Wind Heuvel No 190: C07200000000019000001 14. Portion 5 of the Farm Urias Gat No 193: C07200000000019300005 15. Remainder of the Farm Vinke Kuil No 171: C07200000000017100000 16. The Farm Alkant No 220: C07200000000022000000 17. Portion 1 of the Farm Lange Huis No 174: C07200000000017400001
Co-ordinates	**Centre:** 32°50’ 56.0868”S 20°19’ 25.0608”E **North:** 32°40’ 29.8812”S 20°24’ 57.78”E	**APPLICATION SITE:** **Coordinates at Corner Points (DD MM SS.sss)** 1. S32° 46' 11.757" E20° 21' 39.554"	**APPLICATION SITE:** **Coordinates at Corner Points (DD MM SS.sss)** 1. S32° 48' 14.853" E20° 23' 15.057"

	East: 32°43’ 53.8212”S 20°29’ 32.28”E **South-East:** 32°54’ 6.66”S 20°23’ 3.7788”E **South-West:** 32°55’ 32.0412”S 20°16’ 24.8988”E **West:** 32°52’ 12.7812”S 20°14’ 20.6988”E	2. S32° 45' 55.571" E20° 23' 32.919" 3. S32° 47' 3.530" E20° 23' 8.115" 4. S32° 48' 14.853" E20° 23' 15.057" 5. S32° 48' 7.939" E20° 25' 19.086" 6. S32° 49' 44.075" E20° 24' 59.144" 7. S32° 50' 41.159" E20° 24' 13.445" 8. S32° 53' 6.441" E20° 21' 52.752" 9. S32° 53' 8.532" E20° 21' 53.539" 10. S32° 54' 36.732" E20° 21' 50.816" 11. S32° 55' 2.170" E20° 18' 58.064" 12. S32° 54' 57.184" E20° 17' 28.053" 13. S32° 55' 48.840" E20° 14' 21.666" 14. S32° 55' 7.517" E20° 13' 55.356" 15. S32° 54' 28.981" E20° 13' 34.753" 16. S32° 52' 11.464" E20° 12' 21.280" 17. S32° 52' 9.896" E20° 14' 16.133" 18. S32° 51' 10.304" E20° 13' 32.215" 19. S32° 51' 0.223" E20° 12' 19.238" 20. S32° 50' 51.343" E20° 12' 14.058"	2. S32° 48' 7.939" E20° 25' 19.086" 3. S32° 49' 44.075" E20° 24' 59.144" 4. S32° 50' 41.159" E20° 24' 13.445" 5. S32° 50' 46.823" E20° 24' 24.286" 6. S32° 54' 9.411" E20° 24' 22.544" 7. S32° 54' 48.192" E20° 23' 53.935" 8. S32° 56' 23.562" E20° 26' 18.389" 9. S32° 57' 26.788" E20° 24' 38.101" 10. S32° 56' 35.721" E20° 22' 48.877" 11. S32° 56' 42.813" E20° 21' 46.490" 12. S32° 57' 27.491" E20° 19' 50.038" 13. S32° 59' 45.215" E20° 19' 58.513" 14. S32° 59' 5.070" E20° 17' 15.888" 15. S32° 59' 11.874" E20° 16' 34.719" 16. S32° 57' 11.539" E20° 15' 29.007" 17. S32° 55' 48.840" E20° 14' 21.666" 18. S32° 55' 23.944" E20° 15' 52.693" 19. S32° 52' 9.370" E20° 14' 54.031" 20. S32° 52' 4.579" E20° 15' 50.647"

		21. S32° 50' 33.384" E20° 12' 39.312" 22. S32° 50' 21.482" E20° 12' 33.983" 23. S32° 49' 38.848" E20° 13' 6.405" 24. S32° 50' 5.733" E20° 15' 50.817" 25. S32° 47' 57.718" E20° 15' 25.332" 26. S32° 48' 16.924" E20° 17' 59.136" 27. S32° 50' 12.452" E20° 19' 31.355" 28. S32° 47' 54.581" E20° 20' 57.293" 29. S32° 48' 1.255" E20° 21' 9.303" 30. S32° 47' 54.387" E20° 21' 10.181" 31. S32° 47' 24.673" E20° 21' 0.698" 32. S32° 47' 17.149" E20° 21' 13.982" 33. S32° 46' 59.938" E20° 21' 22.475" 34. S32° 46' 56.504" E20° 21' 29.064" **Coordinates at Centre Point (DD MM SS.sss)** 35. S32° 51' 21.895" E20° 18' 41.467" **CONSTRUCTION CAMP:** **Coordinates at Centre Point (DD MM SS.sss)** **CENTRE:** S32° 47' 36.876"	21. S32° 51' 44.360" E20° 16' 19.552" 22. S32° 51' 27.665" E20° 17' 16.598" 23. S32° 51' 31.913" E20° 20' 32.550" 24. S32° 50' 41.238" E20° 19' 54.404" 25. S32° 49' 35.741" E20° 21' 44.517" **Coordinates at Centre Point (DD MM SS.sss)** 26. S32° 54' 10.102" 27. E20° 20' 14.737" **CONSTRUCTION CAMP:** **Coordinates at Centre Point (DD MM SS.sss)** **CENTRE:** S32° 51' 46.797" E20° 21' 16.710" **Coordinates at Corner Points:** **CC1_01:** S32° 51' 41.254" E20° 21' 2.209" **CC1_02:** S32° 51' 40.895" E20° 21' 11.315" **CC1_03:** S32° 51' 46.466" E20° 21' 19.638" **CC1_04:** S32° 51' 45.812" E20° 21' 26.156" **CC1_05:** S32° 51' 47.063" E20° 21' 32.475" **CC1_06:** S32° 51' 50.861" E20° 21' 30.264" **CC1_07:** S32° 51' 51.339" E20° 21' 26.005" **CC1_08:** S32° 51' 53.100"

		E20° 21' 23.588" **Coordinates at Corner Points:** **CC1_01:** S32° 47' 28.108" E20° 21' 19.647" **CC1_02:** S32° 47' 28.329" E20° 21' 28.144" **CC1_03:** S32° 47' 45.815" E20° 21' 27.943" **CC1_04:** S32° 47' 45.598" E20° 21' 19.332" **CC1_05:** S32° 47' 43.103" E20° 21' 20.053" **CC1_06:** S32° 47' 40.376" E20° 21' 20.085" **CC1_07:** S32° 47' 38.132" E20° 21' 19.168" **CC1_08:** S32° 47' 35.632" E20° 21' 19.015" **CC1_09:** S32° 47' 34.407" E20° 21' 18.760" **SUBSTATION:** **Coordinates at Centre Point (DD MM SS.sss):** **CENTRE:** S32° 54' 24.333" E20° 12' 28.366" **Coordinates at Corner Points (DD MM SS.sss):** **SS1_01:** S32° 54' 19.886" E20° 12' 26.843" **SS1_02:** S32° 54' 23.125" E20° 12' 33.613" **SS1_03:** S32° 54' 28.772" E20° 12' 29.816" **SS1_04:** S32° 54' 25.569" E20° 12' 23.122"	E20° 21' 24.630" **CC1_09:** S32° 51' 43.651" E20° 21' 0.749" **SUBSTATION:** **Coordinates at Corner Points (DD MM SS.sss):** **SS1_01:** S32° 52' 4.061" E20° 21' 48.372" **SS1_02:** S32° 52' 10.456" E20° 21' 53.934" **SS1_03:** S32° 52' 15.215" E20° 21' 45.714" **SS1_04:** S32° 52' 9.014" E20° 21' 40.229" **Coordinates at Centre Point (DD MM SS.sss):** **CENTRE:** S32° 52' 9.655" E20° 21' 47.079"
Technical Aspects			
Aspect to be amended	**Authorised**	**Proposed Amendment**	

		Oya WEF	Kudusberg WEF
Overall Capacity	325 MW	86 MW	239 MW
Number of turbines	56	20	36
Hub height	Up to 140 m	92 m above the foundation	No Change i.e. up to 140 m
Rotor diameter	Up to 180 m	150 m	No Change i.e. up to 180 m
Blade length	Up to 90 m	75 m	No Change i.e. up to 90 m
Wind Measuring Lattice Masts	Up to 4 x 140 m high depending the final hub height	2 x met masts (same as hub height)	2 x up to 140 m high depending the final hub height
Layout	-	Layout submitted for final approval. The layout to be approved are contained in **Appendix J4**. Associated turbine GPS locations will be provided in the Final EA Amendment Report.	Final layout to be submitted prior to the start of construction
EMPr	The EMPr submitted as part of the Application for EA is hereby approved.	Approve Final EMPr	To be submitted based on final approval of layout.

The proposed amendments in themselves are not listed activities according to Government Notice (GN) R326, R327, R325 and R324 of the Environmental Impact Assessment (EIA) Regulations (as amended on 07 April 2017 and 13 July 2018), and do not trigger any new listed activity. In addition, the proposed amendments are within the original authorised development footprint, and do not change the scope of the EA.

The proposed project split may however be construed as a change in the scope of the EA and may result in changes in the associated impacts, thus requiring an amendment application in terms of Part 2 of Chapter 5 of the EIA Regulations 2014, (as amended). The following amendment is thus being submitted in terms of Condition 5 of the EA and Chapter 5 of the EIA Regulations of December 2014 (as amended on 07 April 2017). This states that it is possible for an applicant to apply, in writing, to the competent authority for a change or deviation from the project description to be approved. In addition, the amendment of the EMPr is being undertaken in accordance with Condition 17 of the EA.

Accordingly, Kudusberg Wind Farm has appointed SiVEST SA (Pty) Ltd (hereafter referred to as "SiVEST") to act as the independent Environmental Assessment Practitioner (EAP) to undertake the Part 2 EA Amendment process as required in terms of Regulation 32 of GN R326 of the EIA Regulations, 2014 (as amended on 07 April 2017 and 13 July 2018), as well as Regulation 37 of GN R. 326 pertaining to amendments of EMPrs. This EA Amendment Assessment Report has thus been compiled in accordance with the provisions of Regulation 32 (1) and 37 of the EIA Regulations 2014, (as amended), and includes:

- an assessment of all impacts related to the proposed change;
- an evaluation of the advantages and disadvantages associated with the proposed change;
- provision of measures to ensure avoidance, management and mitigation of any impacts associated with such proposed change; and
- identification of any changes required to the EMPr.

In addition, several specialists (namely Avifauna, Bats, Surface Water, Terrestrial Ecology and Heritage, which includes Archaeology, Palaeontology and Cultural Landscapes) have undertaken detailed walk-throughs and micro-siting of the Oya WEF in accordance with the recommendations contained in the approved EMPr and in accordance with condition 29 of the EA[5]. These walk-throughs were undertaken to identify any additional sensitive / "no-go" areas based on the final layout and/or any other special features which need to be avoided. Furthermore, the necessary specialists were commissioned to compile the requisite management plans detailed in the EMPr[6]. This was done in order for the layout being proposed as part of the Oya WEF and the Final EMPr (**Appendix I1**) to be approved by the DEFF as part of the Amended EA (should this be granted).

In light of the countrywide restriction enforced in terms of Government Gazette 43096, which has resulted in the entire country being placed in a national state of disaster, which limits the movement and gathering of people in an effort to curb the spread CoVID-19, the public participation process has been amended and adjusted in light of these restrictions. In response, SiVEST has formulated a unique Public Participation process which is as closely related to the requirements of Regulations 39 to 44 of the EIA Regulations, 2014, as amended, (GNR 326) as possible (**Appendix E9**).

[6] Includes Alien and Invasive Plant Species Management Plan; Plant Rescue Management Plan; Vegetation Rehabilitation Plan; Heritage Management Plan; Watercourse Rehabilitation & Maintenance Management Plan; Hydrological Assessment (including Storm Water Management & Erosion Control Plan); Traffic and Transport Management Plan; Post-Construction Avifaunal Monitoring Plan; Fire Management Plan and Waste Management Plan

It should be noted that General Notice issued by the DEFF on 24 March 2020, as well as Government Notice No. 650 issued by the DEFF on 05 June 2020, were being adhered to during Level 3 of the national lockdown period. However, during a meeting held with the South African Wind Energy Association (SAWEA) on 25 August 2020, the DEFF indicated that the Directive issued by the Department on 05 June 2020 (Government Gazette 43412) related to level 3 lockdown, has been repealed, based on the current lockdown level. Therefore, as it stands, there is no indication that a new directive will be issued, and the "normal" EIA Regulations are currently in force. DEFF however highlighted that Applicants must continue to adhere to the applicable provisions of the Disaster Management Act and associated Regulations (e.g. restrictions on gatherings for public meetings) and hence some elements included in the lockdown directive (05 June 2020 - Government Gazette 43412), mainly as it pertains to PPP, are still relevant and that this directive can be used as a consultation guide for all new applications. The Applicant will thus continue to adhere to applicable provisions of Disaster Management Act and associated Regulations.

As a result, **alternative means** of undertaking the required stakeholder engagement have been designed and implemented by SiVEST to ensure that all I&APs are afforded reasonable opportunity to engage meaningfully. As such, SiVEST proposed amendments to the public participation process. The Public Participation Plan was submitted to the DEFF for review and approval on 03 November 2020, and can be found in **Appendix E9**. The Public Participation Plan was subsequently approved by the DEFF on 16 November 2020 (**Appendix 4** and **Appendix E9**).

In light of the above, the report will be made available for public comment for a period of 30 days[7] (18 November 2020 – 118 January 2021), in-line with legislation (refer to **Appendix E9**). Comments received will be addressed and incorporated into the final report for submission to the DEFF.

1.1 Expertise of Environmental Assessment Practitioner (EAP)

SiVEST Environmental Division has considerable experience in the undertaking of BA, EIA and EA Amendment Application processes. Staff and specialists who were involved in this EA Amendment Application process and contributed to the compilation of this report are detailed in **Table 2** below.

Table 2: Project Team

Name	Organisation	Role
John Richardson	SiVEST	Lead Environmental Consultant
Liandra Scott-Shaw	SiVEST	Project Coordinator / Environmental Assessment Practitioner (EAP)
Stephan Jacobs	SiVEST	Environmental Consultant
Kerry Schwartz	SiVEST	GIS, Mapping and Visual*
Hlengiwe Ntuli	SiVEST	Public Participation Consultant
Johann Lanz	-	Agriculture & Soils Specialist
Stephan van Staden	Scientific Aquatic Services (SAS)	Surface Water Specialist
Christel du Preez	FEN Consulting – part of Scientific Aquatic Services	Surface Water Specialist

[7] DEFF have approved a 30-day Public Participation Process (Refer to **Appendix E9** – Public Participation Plan)

Name	Organisation	Role
	(SAS) Environmental Group of Companies	
Miguel Mascarenhas	BioInsight	Avifauna (Birds) Specialist
Miguel Mascarenhas	BioInsight	Bat Specialist
Jenna Lavin	CTS Heritage	Heritage Specialist
Nicholas Wiltshire	CTS Heritage	Heritage Specialist
Elena Broughton	Urban-Econ Development Economists	Socio-Economic Specialist
Marcel Theron	Urban-Econ Development Economists	Socio-Economic Specialist
David Hoare	David Hoare Consulting	Terrestrial Ecology Specialist
Iris Wink	JG Afrika	Transportation Specialist
Dr Brett Williams	SAFETECH	Noise Specialist

Specialist assessment undertaken by SiVEST's in-house specialist. Based on recent correspondence with the DEFF, it was confirmed that assessments undertaken by in-house specialists do not need to be externally reviewed as a specialist permanently employed by an EAP is regarded as independent, provided he / she has no vested interest in the project and receives fair and normal remuneration for the work. An external peer review will be required should the Competent Authority have reason to believe that the EAP or specialist is not complying or has not complied with the requirements of Regulation 13 of the EIA regulations (as amended), in respect of the application. In addition, all specialists are required to sign a Declaration of Independence (DoI). It should be noted that the respective in-house specialist is deemed to be independent, has no vested interest in the project and receives fair and normal remuneration for the work, as confirmed as part of the signed specialist DoI, all of which have been submitted with this report (Appendix H**). Refer to **Appendix J1** for proof of this correspondence with the DEFF.*

As per the requirements of the EIA Regulations 2014 (as amended), the details and level of expertise of the persons who prepared the EA Amendment Assessment Report are provided in **Table 3** below. CVs for each team member are provided in **Appendix G**.

Table 3: Expertise of the EAP

Lead Project Coordinator / Environmental Assessment Practitioner (EAP)	SiVEST SA (Pty) Ltd – Liandra Scott-Shaw
Contact Details	liandras@sivest.co.za
Qualifications	B.Sc. Biological Science and B.Sc. (Hons) Ecological Science
Professional Affiliations	SACNASP: 117442 IAIAsa Membership Number: 3624
Expertise	Liandra has approximately 8 years work experience specialising in undertaking and managing Environmental Impact Assessments (EIAs) and Basic Assessment (BAs), primarily related to energy generation and electrical distribution projects as well as Vegetation Ecology and Environmental Management. She has extensive experience in overseeing public participation and stakeholder engagement processes and has been involved in environmental baseline assessments, fatal flaw / feasibility assessments and environmental sensitivity analyses. She is responsible for the overall management of the SiVEST renewable energy projects and project management.

Lead Environmental Consultant	SiVEST SA (Pty) Ltd – John Richardson
Contact Details	johnr@sivest.co.za
Qualifications	B.Sc. – Geographic Science & B.Sc. Honours – Environmental Management
Professional Affiliations	Member of the International Association for Impact Assessment South Africa (IAIAsa) code of conduct and was between 2009 and 2017 a committee member of the KwaZulu-Natal branch. Elected in August 2014 as the IAIAsa KwaZulu-Natal Branch Chairman and severed as branch chairman for a two-year term. In August 2017 was then elected to serve on the IAIAsa National Executive Committee for a two year term.
Expertise	Approximately thirteen years' professional experience as an environmental scientist and GIS specialist in a range of environmental and strategic planning projects, processes and applications for private, government and commercial clients. Mr Richardson has experience in conducting Environmental Screening Assessments, Basic Assessment, Scoping and Full Environmental Impact Assessment, and Section 24G compliance process under the 2006, 2010 & 2014 National Environmental Management: Environmental Impact Assessment Regulations, his experience includes Environmental Control Officer (ECO) site auditing duties and management of the GIS mapping requirements for several Biodiversity Sector Plans, Strategic Environmental Assessments, Environmental Management Frameworks and Strategic Environmental Management Plans.
Environmental Consultant	SiVEST SA (Pty) Ltd - Stephan Jacobs
Contact Details	stephanj@sivest.co.za
Qualifications	B.Sc. Environmental Sciences (undergraduate) and B.Sc. (Hons) Environmental Management and Analysis
Professional Affiliations	IAIAsa Membership Number: 5736
Expertise	Stephan specialises in the field of Environmental Management and has been extensively involved in Environmental Impact Assessment (EIA) and Basic Assessment (BA) processes for various types of projects / developments, in particular renewable energy projects. Stephan has extensive experience in undertaking public participation and stakeholder engagement processes. Stephan has also assisted extensively in the undertaking of field work and the compilation of reports for specialist studies such as Surface Water and Visual Impact Assessments. Stephan also has considerable experience in Environmental Compliance and Auditing and has acted as an Environmental Control Officer (ECO) for several infrastructure projects.

2 PROJECT OVERVIEW

2.1 Project Location

The authorised Kudusberg WEF is situated approximately 45km south-west of the town of Sutherland, within the Witzenberg and Karoo Hoogland Local Municipalities, which fall within the Cape Winelands and Namakwa District Municipalities of the Western and Northern Cape Provinces, respectively.

The authorised Kudusberg WEF project is currently located on sixteen (16) land portions, however, the project split will result in a change in the land portions for each WEF. The land portions associated with each proposed WEF are shown in **Table 4** below.

Table 4: Farm Portions on which the Kudusberg WEF and Oya WEF are located

Farm name and Number	21- Digit SG Code	District and Local Municipality / Province	Farm Size (hectares)
Kudusberg WEF			
Remainder of the Farm Gats Rivier No 156	C01900000000015600000	Cape Winelands DM and Witzenberg LM / Western Cape	2089.4066
Portion 1 of the Farm Gats Rivier No 156	C01900000000015600001		2124.9847
Portion 1 of the Farm Oliviers Berg No 159	C01900000000015900001		2279.2114
Remainder of the Farm Oliviers Berg No 159	C01900000000015900000		1852.5062
Klipbanks Fontein No 395	C01900000000039500000		4977.4259
Remainder of the Farm Muishond Rivier No 161	C01900000000016100000		4051.7902
Remainder of the Farm Karee Kloof No 196	C07200000000019600000	Namakwa DM and Karoo Hoogland LM / Northern Cape	1859.7068
Remainder of the Farm Matjes Fontein No 194	C07200000000019400000		3730,8407
Kudusberg Properties affected by public road			
Zeekoegat Farm No 169	C07200000000016900000	Namakwa DM and Karoo Hoogland LM / Northern Cape	4160,3672
Portion 1 of the Farm Roodeheuvel No 170	C07200000000017000001		2442,9587
Remainder of the Farm Roodeheuvel No 170	C07200000000017000000		2441,9247
Remainder of the Farm Wind Heuvel No 190	C07200000000019000000		2628,9130
Portion 1 of the Farm Wind Heuvel No 190	C07200000000019000001		2628,9194
Portion 5 of the Farm Urias Gat No 193	C07200000000019300005		616,1812924920
Remainder of the Farm Vinke Kuil No 171:	C07200000000017100000		3823,0938
The Farm Alkant No 220	C07200000000022000000		1557,7400
Portion 1 of the Farm Lange Huis No 174	C07200000000017400001		852,1697
Oya WEF			
Portion 1 of the Farm Gats Rivier No 156	C01900000000015600001	Cape Winelands DM and Witzenberg LM / Western Cape	2124,9847
Portion 2 of the Farm Gats Rivier No 156	C01900000000015600002		35,6890
Remainder of the Farm Gats Rivier No 156	C01900000000015600000		2089,4066
Portion 1 of the Farm Riet Fontein No 157	C01900000000015700001		891,9104
Portion 2 of the Farm Riet Fontein No 157	C01900000000015700002		1205,0160
Portion 1 of the Farm Amandelbloom No 158	C01900000000015800001		1373,8659
Remainder of the Farm Amandelboom No 158	C01900000000015800000		1711,3566
Portion 1 of the Farm Oliviers Berg No 159	C01900000000015900001		2279,2114
Remainder of the Farm Oliviers Berg No 159	C01900000000015900000		1852,5062
Portion 4 of the Farm Urias Gat No 193	C07200000000019300004		608,1991

Portion 6 of the Farm Urias Gat No 193	C07200000000019300006	Namakwa DM and Karoo Hoogland LM / Northern Cape	607,7437
Remainder of the Farm Urias Gat No 193	C07200000000019300000		608,0949
Remainder of the Farm Matjies Fontein No 194	C07200000000019400000		3730,8407
Portion 5 of the Farm Urias Gat No 193	C07200000000019300005		616,1812924920
Oya Properties affected by public road			
Zeekoegat Farm No 169	C07200000000016900000	Namakwa DM and Karoo Hoogland LM / Northern Cape	4160,3672
Portion 1 of the Farm Roodeheuvel No 170	C07200000000017000001		2442,9587
Remainder of the Farm Roodeheuvel No 170	C07200000000017000000		2441,9247
Remainder of the Farm Wind Heuvel No 190	C07200000000019000000		2628,9130
Portion 1 of the Farm Wind Heuvel No 190	C07200000000019000001		2628,9194
Portion 5 of the Farm Urias Gat No 193	C07200000000019300005		616,1812924920
Remainder of the Farm Vinke Kuil No 171:	C07200000000017100000		3823,0938
The Farm Alkant No 220	C07200000000022000000		1557,7400
Portion 1 of the Farm Lange Huis No 174	C07200000000017400001		852,1697

The layout of the of the authorised Kudusberg WEF which was assessed in the Final Basic Assessment Report (FBAR) is indicated in **Figure 2** below.

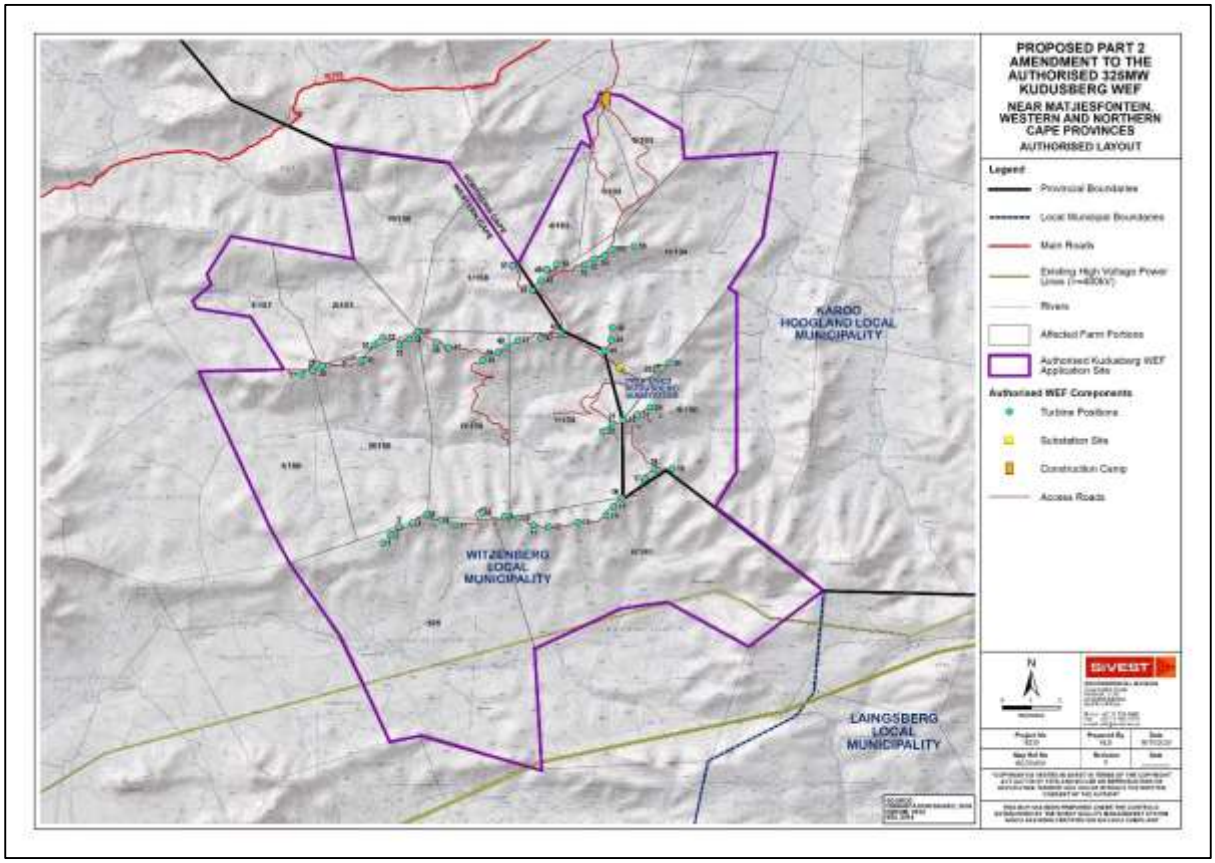

Figure 2: Layout assessed in Kudusberg WEF (14/12/16/3/3/1/1976/AM1) FBAR

The land portions affected by the proposed Kudusberg WEF (southern section of the authorised WEF) are shown in **Figure 3** below.

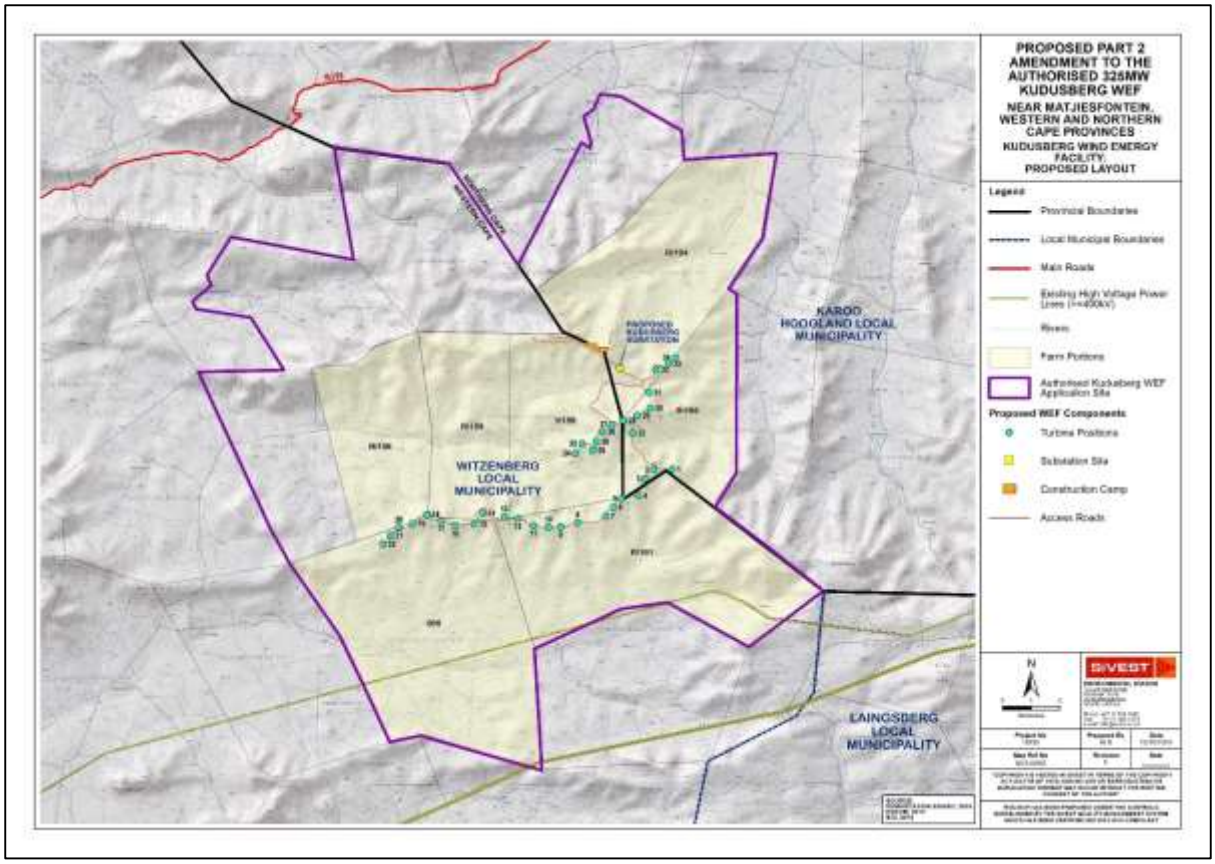

Figure 3: Layout map for proposed Kudusberg WEF (southern section of the authorised WEF)

The land portions affected by the proposed Oya WEF (northern section of the authorised WEF) are shown in **Figure 4** below.

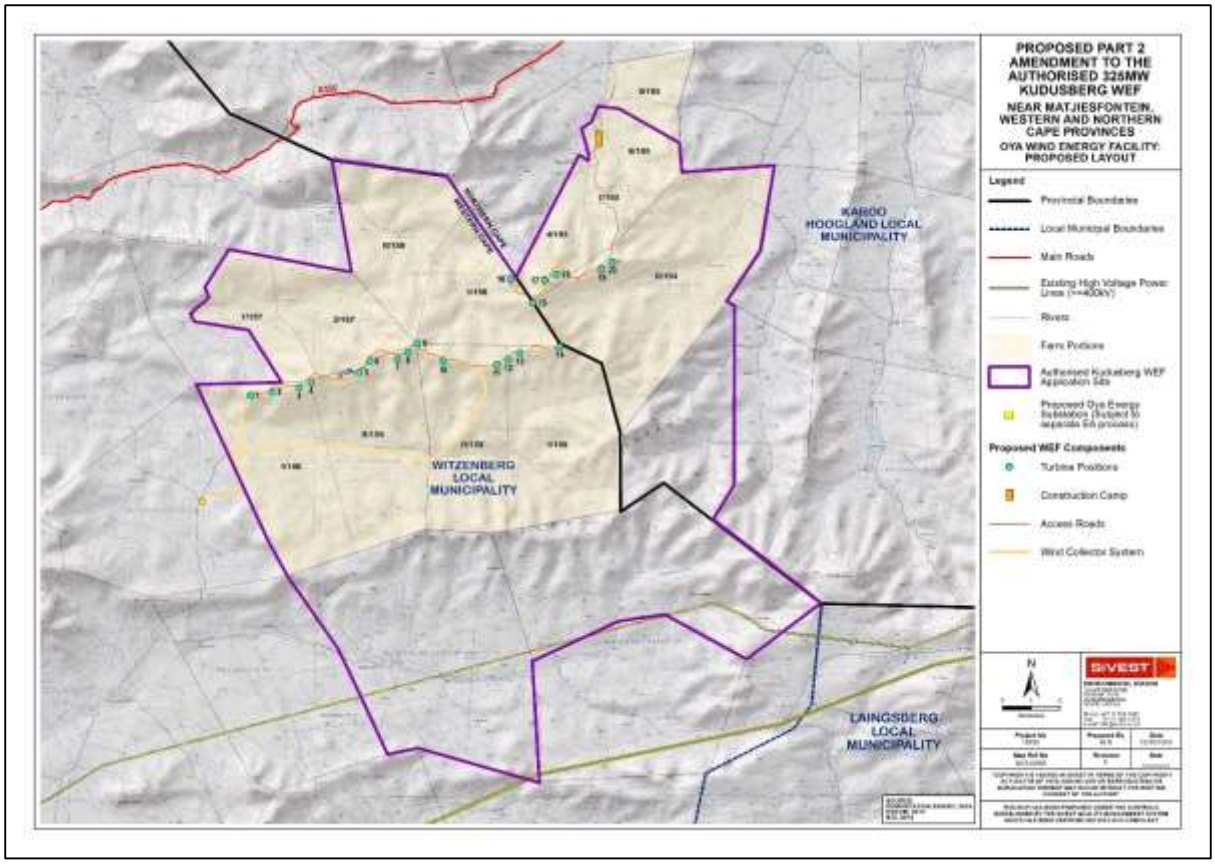

Figure 4: Layout map for proposed Oya WEF (northern section of the authorised WEF)

It should be noted that the authorised Kudusberg WEF falls entirely within the Renewable Energy Zone (REDZ) 2 (i.e. Komsberg REDZ), which was Gazetted in February 2018 by the Minister of Environmental Affairs (GN 114), and therefore the proposed Oya WEF will also fall entirely within the above-mentioned REDZ.

The location of the proposed Oya WEF in relation to the Komsberg REDZ is shown in **Figure 5** below.

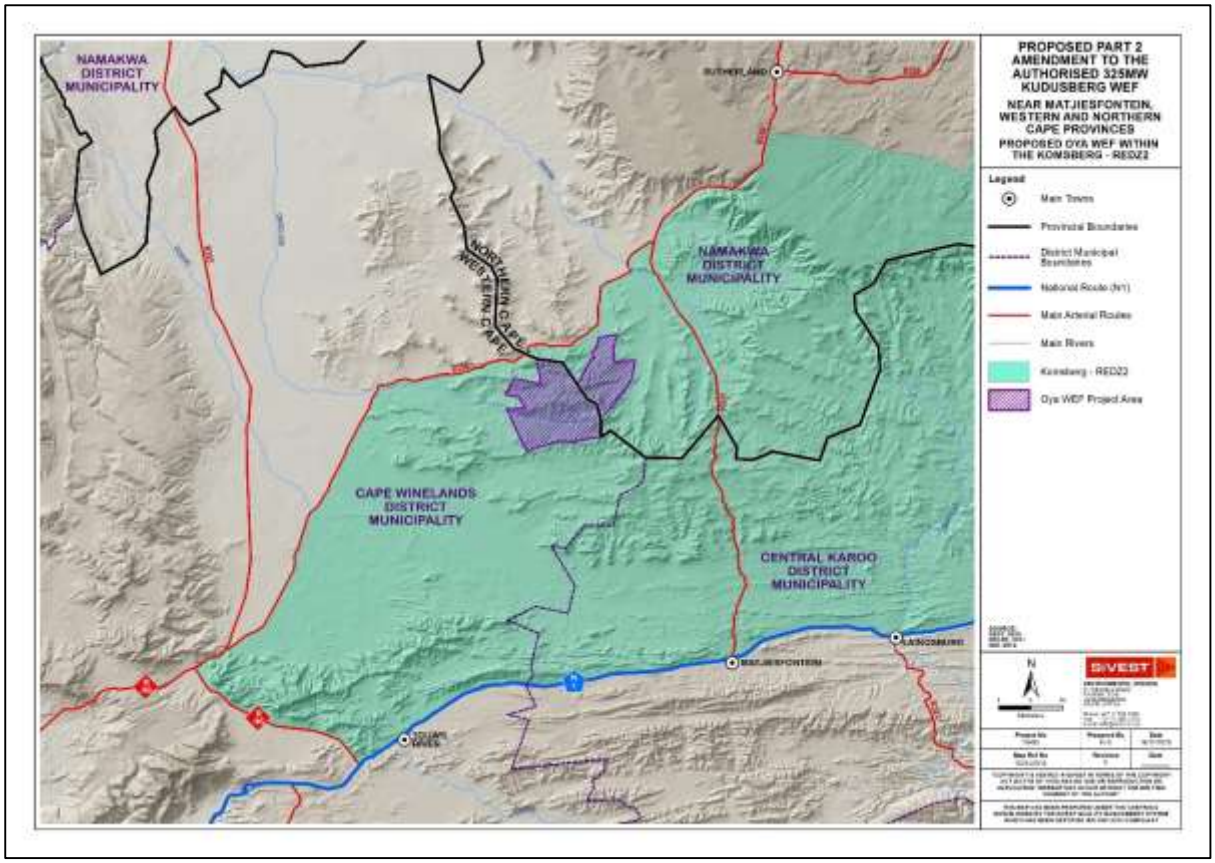

Figure 5: Location of proposed Oya WEF in relation to REDZ

As a result of the proposed amendments and the specialist walk-throughs, the layout assessed in the FBAR (2018) has been amended. The Oya WEF (northern section of the authorised Kudusberg WEF) has been optimised based on wind resources, grid access and civil designs. The final layout has also been assessed by specialists as part of the amendment and has been as informed by detailed specialist walk-throughs[8] and micro-sighting as per condition 29 of the EA[5] and the EMPr. The final Oya WEF layout is indicated in **Figure 4** above.

The Kudusberg WEF layout (southern section of the authorised Kudusberg WEF) as a result of the split is shown in **Figure 3**. The layout was not informed by detailed micro-sighting as the layout has not yet been finalised, however, the turbine positions have been assessed by the specialist as part of this amendment and are located on areas assessed as part of the original FBAR which were deemed to be acceptable. In addition, all turbine positions avoid all previously identified environmental sensitive / 'no-go' areas and none of the specialists found any fatal flaws with the proposed layouts or any reason why they should not be approved.

It should be noted that the specialists have confirmed that both layouts are acceptable and should therefore be approved as part of the amendment.

As per Condition 5 of the EA, any changes to, or deviations from, the project description set out in the EA must be approved, in writing, by the Department before such changes or deviations may be affected. **This amendment process therefore covers the proposed change in turbine number as well as**

[8] Namely Terrestrial Ecology, Surface Water, Avifauna, Bats and Heritage (including Archaeology, Palaeontology and Cultural Landscapes)

obtaining approval of the proposed changes to, or deviations from, the project description set out in the EA by the Department.

In addition, Condition 29 of the EA states that the final placement of turbines must follow a micro-siting procedure involving a walk-through and identification of any sensitive areas by ecological, avifaunal, bat, surface water and heritage specialists. It should be noted that Ecological, Avifaunal, Bat, Surface Water and Heritage (including Archaeology, Palaeontology and Cultural Landscapes) specialists have been appointed and have undertaken detailed site walk-throughs and micro-siting of the Oya WEF as part of their assessments which involved the identification of additional sensitive / "no-go" areas and/or any other special features based on the final layout which need to be avoided. The specialists also recommended whether any approvals and/or permits are required from certain authorities. This amendment **process therefore covers the micro-siting procedure involving a walk-through and identification of any sensitive areas by ecological, avifaunal, bat, surface water and heritage specialists.**

The final proposed development layout for the Oya WEF and the proposed Kudusberg WEF turbine layout has however been made available for comments as part of this amendment process. The holder of the EA will consider such comments and thereafter submit the final Oya development layout and proposed Kudusberg WEF layout to the DEFF for written approval prior to commencement of the activity. The final Oya WEF development layout has been determined as part of this EA Amendment process and therefore **obtaining approval of the Oya WEF development layout has also been covered by this amendment process. In light of this, it is requested that the layout being proposed for the Oya WEF (northern section of authorised Kudusberg WEF) as part of this EA Amendment process be approved by the DEFF**.

It should however be noted that **the layout for the propsoed Kudusberg should NOT be approved as part of this EA Amendment process.**

2.2 Authorised Project Components

In terms of the original EA for the Kudusberg WEF dated 25 March 2019 (**DEFF Ref No.:** 14/12/16/3/3/1/1976), the components listed in **Table 5** below were authorised:

Table 5: Authorised components according to EA dated 25 March 2019 (pages 9 - 10 of EA)

INFRASTRUCTURE	FOOTPRINT AND DIMENSIONS
Hub Height from ground level Up to 140m	Up to 140 m
Rotor Diameter	Up to 180 m
Blade length	Up to 90 m
Project Size/Export capacity	325MW
Capacity of on-site substation	33/132 kV
Area occupied by on-site substation	Up to 2.25 ha
Area occupied by construction camp	~12.6 ha which includes an on-site concrete batching plant for use during the construction phase and for offices, administration, operations and maintenance buildings during the operational phase.
Permanent area/Facility area occupied by the development footprint of the project	Approximately 126 ha
Area occupied by buildings	Approximately 1 ha (comprising inter alia offices, ablution facilities, reception area, storeroom). The footprint of the buildings has all been included in the construction/substation footprint.

Internal access roads	Internal access roads up to 12 m wide, including structures for storm water control are required to access each turbine and the substation, with a total footprint of about 82.44 ha. Where possible, existing roads will be upgraded. Turns will have a radius of up to 50m for abnormal loads (especially turbine blades} to access the various turbine positions. 200 m wide corridor along proposed access road to enable micro sitting
Turbines	Turbine foundations: Reinforced concrete foundation - 30 m x 30 m (total footprint -4 ha), 5m deep. Crane pads (laydown areas): 56 turbines x 90 m x 50 m (total footprint 25.2 ha
Electrical transformer	Electrical transformers (690 V/33 kV) will be placed adjacent to each turbine (typical footprint of 2m x 2m, but can be up to 10m x 10m at certain locations) to step up the voltage to 33 kV. Underground 33 kV cabling between turbines buried along access roads, where feasible, with overhead 33 kV lines grouping turbines to crossing valleys and ridges outside of the road footprints to get to the onsite 33/132 kV substation.
Wind Monitoring masts	Up to 4 x 140 m high (depending on the final hub height) wind measuring lattice masts strategically placed within the wind farm development footprint to collect data on wind conditions during the operational phase.
Proximity to grid connection	It should be noted that the proposed supporting transmission line that will connect the proposed Kudusberg WEF to the Komsberg substation will be assessed under a separate Basic Assessment that will be undertaken at a later stage. The proximity from the site to the Komsberg substation is approximately 24 km.
Fencing	Permanent fencing will be required around the batching plant, the on-site substation and will be a maximum of 4 m high.

2.3 Listed Activities

As per the EA as well as the Amended EA for the Kudusberg WEF dated 25 March 2019 (**DEFF Ref No.:** 14/12/16/3/3/1/1976) and 04 April 2019 (**DEFF Ref No.:** 14/12/16/3/3/1/1976/AM1[9]) respectively, a number of activities indicated in Listing Notice 1, Listing Notice 2 and Listing Notice 3 (GN R. 983, 984 and 985, as amended) were authorised. These activities were authorised in terms of the National Environmental Management Act (NEMA) (Act No. 107 of 1998) and the EIA Regulations, 2014 (as amended), which were applicable at the time of the original EA. Please refer to respective EAs attached in **Appendix A** for authorised Listed activities.

As previously mentioned, the proposed amendments in themselves are not listed activities according to GN R. 326, 327, 325 and 324 of the EIA Regulations (as amended on 07 April 2017), and do not trigger any new listed activity. In addition, the proposed amendments are within the original authorised development footprint, and do not change the scope of the EA.

[9] EA amendment included the correction to Listing Notice 3: Activity 18 (GN R 985, as amended) on page 4 of the original EA (14/12/16/3/3/1/1976)

2.4 Assessment of Environmental Impacts

As part of the original BA process[10] for the proposed Kudusberg WEF undertaken in 2018/2019, the following specialist studies were undertaken:

- Agricultural Assessment;
- Avifaunal Assessment;
- Bat Assessment;
- Biodiversity (including fauna and flora) Assessment;
- Heritage Assessment (including Archaeology, Palaeontology and Cultural Landscapes);
- Noise Impact Assessment;
- Socio-Economic Impact Assessment;
- Surface Water / Aquatic Impact Assessment;
- Transportation Assessment, and
- Visual Impact Assessment.

The above-mentioned specialist studies were commissioned to assess the impacts of the proposed amendments.

Key

Significance Rating (+ and -)	Colour Code
Low	
Medium	
High	

Table 6 below provides a summary of the impacts identified during the 2018 BA process.

[10] BA process undertaken for original Kudusberg WEF (**DEFF Ref:** 14/12/16/3/3/1/1976/AM1) as proposed WEF falls entirely within REDZ 2 (namely the Komsberg REDZ), which was formally gazetted on 16 February 2018 by Minister of Environmental Affairs (GN 114)

Key

Significance Rating (+ and -)	Colour Code
Low	
Medium	
High	

Table 6: Original Rating of Impacts for the proposed WEF and associated infrastructure

Specialist Study	Impact	Pre-Mitigation Rating	Post Mitigation Rating
Agricultural Potential	**Construction Phase:**		
	Erosion by water and topsoil loss. Changes to the surface that lead to accumulation and channelling of run-off water can cause erosion. Because of the slopes, the aridity and the shallow soils, erosion risk is high	Low (-)	Very Low (-)
	Operational Phase:		
	Erosion by water and topsoil loss. Changes to the surface that lead to accumulation and channelling of run-off water can cause erosion. Because of the slopes, the aridity and the shallow soils, erosion risk is high	Low (-)	Very Low (-)
	Additional land use income will be generated by the farming enterprise through the lease of the land to the energy facility. This will provide the farming enterprise with increased cash flow and rural livelihood, and thereby improve its financial sustainability	Low (+)	N/A
	Decommissioning Phase:		
	Erosion by water and topsoil loss. Changes to the surface that lead to accumulation and channelling of run-off water can cause erosion. Because of the slopes, the aridity and the shallow soils, erosion risk is high	Low (-)	Very Low (-)
	Cumulative Impact:		
	Cumulative impacts are likely to occur as a result of the loss of agricultural land on a regional basis because of other developments on agricultural land in the region	Very Low (-)	Very Low (-)
Avifauna	**Construction Phase:**		
	Destruction of important habitat areas (natural vegetation & water features etc.) due to the construction of wind turbines and associated infrastructures	Low (-)	Very Low (-)
	Disturbance of the bird community due to the increase of people and vehicles in the area	Low (-)	Very Low (-)
	Displacement of bird community due to increased disturbances in the area	Low (-)	Very Low (-)

Specialist Study	Impact	Pre-Mitigation Rating	Post Mitigation Rating
	Operational Phase:		
	Fatalities due to collision with wind turbine blades or associated infrastructures	Medium (-)	Low (-)
	Disturbance of bird community due to noise and movement generated by turbines and people / vehicles operating in the area	Low (-)	Very Low (-)
	Displacement of bird species due to increased disturbances	Low (-)	Very Low (-)
	Population decline due to long-term increasing fatality events	Low (-)	Very Low (-)
	Decommissioning Phase:		
	Disturbance of bird community due to the increase of people and vehicles in the area, when dismantling wind turbines and associated infrastructures	Low (-)	Very Low (-)
	Displacement of bird community due to the increase in disturbances in the area, while dismantling wind turbines and associated infrastructures	Low (-)	Very Low (-)
	Cumulative Impacts:		
	Destruction of important habitat areas (natural vegetation & water features etc.) at multiple renewable energy facilities	Medium (-)	Low (-)
	Disturbance of bird community due to the increase of wind turbine infrastructures, people and vehicles at multiple renewable energy facilities	Medium (-)	Low (-)
	Displacement of bird communities due to the increase in disturbances at multiple renewable energy facilities	Medium (-)	Low (-)
	Fatalities as a result of increased collisions with wind turbine blades at multiple renewable energy facilities	Medium (-)	Low (-)
	Decline in the broader population of avifauna due to long-term fatality events at multiple renewable energy facilities	Medium (-)	Low (-)
Bats	**Construction Phase:**		
	Destruction of important habitat areas (natural vegetation, water features, roosts, etc.) due to the construction of wind turbines and associated infrastructures	Medium (-)	Low (-)
	Disturbance of the bat community due to the increase of people and vehicles in the area, high levels of noise and machinery movements	Low (-)	Very Low (-)
	Displacement of bat community due to increased disturbances in the area	Low (-)	Very Low (-)
	Operational Phase:		
	Fatalities due to collision with turbine blades or barotrauma	Medium (-)	Low (-)

Specialist Study	Impact	Pre-Mitigation Rating	Post Mitigation Rating
	Disturbance of bat community due to high levels of noise and movement generated by turbines operation and increase of people and vehicles associated with maintenance activities	Low (-)	Very Low (-)
	Operational Phase:		
	Displacement of bat community due to increased disturbances in the area	Low (-)	Very Low (-)
	Population decline due to long-term increasing fatality events	Low (-)	Very Low (-)
	Decommissioning Phase:		
	Disturbance of bat community due to the increase of people and vehicles in the area, high levels of noise and machinery movements when dismantling wind turbines and associated infrastructures	Low (-)	Very Low (-)
	Displacement of bat community due to increased disturbances in the area	Low (-)	Very Low (-)
	Cumulative Impacts:		
	Destruction of important habitat areas (natural vegetation, water features, roosts, etc.) due to the construction of wind turbines and associated infrastructures	Medium (-)	Low (-)
	Disturbance of the bat community due to the increase of people and vehicles in the area, high levels of noise and machinery movements	Medium (-)	Low (-)
	Displacement of bat community due to increased disturbances in the area	Medium (-)	Low (-)
	Fatalities due to collision with turbine blades or barotrauma	Medium (-)	Low (-)
	Population decline due to long-term increasing fatality events	Medium (-)	Low (-)
Biodiversity	**Construction Phase:**		
	Clearing of natural vegetation	High – Very High (-)	High (-)
	Loss of Species of Conservation Concern	Low (-)	Low (-)
	Loss of faunal habitat	Medium (-)	Low (-)
	Direct faunal mortalities	Low - Medium (-)	Low (-)
	Loss of animal refugia	Medium (-)	Very Low (-)
	Increased dust deposition	Low (-)	Very Low (-)
	Loss of animal and plant species by illegal collecting	Low (-)	Very Low (-)
	Increased noise and light levels	Medium (-)	Low (-)

Specialist Study	Impact	Pre-Mitigation Rating	Post Mitigation Rating
	Establishment of alien vegetation	Low (-)	Very Low (-)
	Changes in animal behaviour	Medium (-)	Low (-)
	Changes in community composition of plants	Medium (-)	Low (-)
	Increased erosion and water run-off	High (-)	Low (-)
	Operational Phase:		
	Clearing and disturbance of natural vegetation	Low (-)	Very Low (-)
	Direct faunal mortalities	Low (-)	Very Low (-)
	Increased noise levels	Low (-)	Low (-)
	Loss of animal and plant species by illegal collecting	Low (-)	Very Low (-)
	Establishment of alien vegetation	Low (-)	Very Low (-)
	Changes in animal behaviour	Medium (-)	Low (-)
	Increased erosion and water run-off	Medium (-)	Low (-)
	Decommissioning Phase:		
	Clearing and disturbance of natural vegetation	Low (-)	Very Low (-)
	Direct faunal mortalities	Low (-)	Very Low (-)
	Increased dust deposition	Low (-)	Very Low (-)
	Changes in animal behaviour	Medium (-)	Low (-)
	Increased erosion and water run-off	Low (-)	Very Low (-)
	Cumulative Impact:		
	Vegetation loss and habitat destruction	High (-)	Medium (-)
	Loss of Species of Conservation Concern	Medium (-)	Low (-)
	Dissection of mountain crest habitat	Medium (-)	Medium (-)
	Turbine noise	Low (-)	Low (-)
	Compromising integrity of CBA, ESA and NPAES	High (-)	Low (-)
	Increased erosion and water run-off	Medium (-)	Low (-)
Heritage	**Construction Phase:**		

Specialist Study	Impact	Pre-Mitigation Rating	Post Mitigation Rating
	Destruction of palaeontological material, archaeological remains, graves and built environment features.	Low (-)	Low (-)
	Loss of significance through erosion of visual qualities and integrity of cultural landscape.	High (-)	Medium (-)
	Destruction of archaeological remains, graves and built environment	High (-)	Medium (-)
	Operational Phase:		
	Destruction of archaeological remains, graves and built environment features	Very Low (-)	Very Low (-)
	Loss of significance through erosion of visual qualities and integrity of cultural landscape	High (-)	Medium (-)
	Destruction of archaeological remains, graves and built environment	High (-)	Medium (-)
	Decommissioning Phase:		
	Destruction of archaeological remains, graves and built environment features	Low (-)	Very Low (-)
	Loss of significance through erosion of visual qualities and integrity of cultural landscape	Low (-)	Low (-)
	Destruction of archaeological remains, graves and built environment	Low (-)	Low (-)
	Cumulative Impacts:		
	Destruction of palaeontological material within the Abrahamskraal Formation, archaeological remains, graves and built environment features (from direct and indirect impacts)	High (-)	Medium (-)
	Loss of significance through erosion of visual qualities and integrity of cultural landscape	High (-)	Medium (-)
Palaeontology	**Construction Phase:**		
	Disturbance, damage or destruction of fossils	Very Low (-)	Very Low (-)
	Cumulative Impact:		
	Disturbance, damage or destruction of significant fraction of fossil heritage within the lower Abrahamskraal Formation (Karoo Supergroup)	Very Low (-)	Very Low (-)
Noise	**Construction Phase:**		
	Noise impact from the construction of the WEF	Very Low (-)	Very Low (-)
	Operational Phase:		

Specialist Study	Impact	Pre-Mitigation Rating	Post Mitigation Rating
	Noise impact from the operation of the wind turbines	Very Low (-)	Very Low (-)
	Decommissioning Phase:		
	Noise impact from the decommissioning of the wind turbines	Very Low (-)	Very Low (-)
	Cumulative Impact:		
	Noise impact from the operation of the wind turbines	Very Low (-)	Very Low (-)
Socio-Economic	**Construction Phase:**		
	Economy will be stimulated due to capital investment and resultant increased production	High (+)	High (+)
	Unemployment figures will slightly decrease due to jobs created	Low (+)	Low (+)
	Skills levels in municipalities and for benefitting individuals will improve due to employment created	Low (+)	Medium (+)
	Movement of vehicles and workers may change livestock habits and ranges	Low (-)	Very Low (-)
	Employment due to wind farm construction work will result in household income earnings for benefitting households	Low (+)	Low (+)
	The in-migration of migrant labour and job seekers will place pressure on local government to adequately provide housing, services and social facilities	Low (-)	Very Low (-)
	The increased number of people on site creates potential for theft, particularly livestock theft	Medium (-)	Low (-)
	The rates, payroll taxes and Value Added Tax paid to local government will increase government revenue	Low (+)	Low (+)
	Diseases, substance abuse and other social ills could increase leading to increased community dissatisfaction	Medium (-)	Low (-)
	Operational Phase:		
	Expenditure associated with the operation of the wind farm will impact on production in the economy	Medium (+)	Medium (+)
	Operation and maintenance activities will create long term job opportunities	Very Low (+)	Very Low (+)
	Skills levels in municipality and for benefitting individuals will improve due to employment created	Very Low (+)	Very Low (+)
	Upliftment initiative will increase the local communities' access to basic services	Medium (+)	Medium (+)
	Employment in operations and maintenance of the windfarm will result in household income earnings for benefitting households	Very Low (+)	Very Low (+)

Specialist Study	Impact	Pre-Mitigation Rating	Post Mitigation Rating
	The rates, payroll taxes and Value Added Tax paid to local government will increase government revenue	Very Low (+)	Very Low (+)
	Decommissioning Phase:		
	The cost of the removal and disconnection of the wind turbines will stimulate economic activity	Very Low (+)	Very Low (+)
	Unemployment figures will slightly decrease due to jobs created for a short period of time	Very Low (+)	Very Low (+)
	Cumulative Impacts:		
	The influx into the region will possibly be immense due to the numerous projects in the area attracting migrant job seekers. This will increase the demand for services	Medium (-)	Low (-)
	The numerous projects will create a notable number of jobs	High (+)	High (+)
	Capital and operating expenditure of numerous projects will increase production in the economy	High (+)	High (+)
	Local roads upgraded as a result of numerous WEFs in the area	Low (+)	Low (+)
	Numerous upliftment initiatives will increase the local communities' access to basic services	Medium (+)	Medium (+)
Surface Water[11]	**Construction Phase:**		
	Loss of watercourse vegetation, associated habitat and ecosystem services	Low (-)	N/A
	Transportation of construction materials can result in disturbances to soils, and increased risk of sedimentation/erosion	Low (-)	N/A
	Soil and stormwater contamination from oils and hydrocarbons originating from construction vehicles	Low (-)	N/A
	Earthworks could be potential sources of sediment, which may be transported as runoff into the downstream watercourse areas	Low (-)	N/A
	Exposure of soils, leading to increased runoff, and erosion, and thus increased sedimentation of the watercourses;	Low (-)	N/A

[11] New Freshwater Ecological Assessment undertaken in October 2020 as part of the Water Use Authorisation Process for the proposed 86MW Oya WEF and 239MW Kudusberg WEF (**Appendix D5a**), as previous assessment undertaken in 2018 (Ekotrust, 2018 – **Appendix C8b**) did not meet Department of Water and Sanitaiton (DWS) requirements for Water Use Authorisations. The 2020 Freshwater Assessment replaces the original Surface Water Impact Assessment for Kudusberg WEF Project, which was compiled in 2018 (BlueScience, 2018), and the results of the rating of impacts is presented in this table. In addition, the results of the rating of impacts undertaken as part of the 2020 Freshwater Ecological Assessment (du Preez, 2020) are presented in **Table 10**.

Specialist Study	Impact	Pre-Mitigation Rating	Post Mitigation Rating
	Increased sedimentation of the watercourses, leading to smothering of vegetation associated in the watercourses; and	Low (-)	N/A
	Proliferation of alien and/or invasive vegetation as a result of disturbances	Low (-)	N/A
	Earthworks and exposure of soils could result in sedimentation of the watercourses, which may be transported as runoff into the downstream watercourse areas and may smother vegetation associated with the watercourses	Low (-)	N/A
	Earthworks and exposure of soils could result in sedimentation of the watercourses, which may be transported as runoff into the downstream watercourse areas and may smother vegetation associated with the watercourses	Medium (-)	Low (-)
	Disturbances of soils leading to increased alien vegetation proliferation within the terrestrial buffer zone surrounding the watercourses, with the potential to affect the watercourse habitat	Low (-)	N/A
	Altered runoff patterns within the local catchment of the watercourses, potentially leading to increased erosion and sedimentation of the watercourses	Low (-)	N/A
	Potential impacts on the water quality of surface water runoff (when present) which may potentially enter the watercourses and contamination of soils due to concrete casting	Low (-)	N/A
	Potential of backfill material entering the watercourses, increasing the sediment loads therein	Low (-)	N/A
	Earthworks could be potential sources of sediment, which may be transported as runoff into the downstream reach of the watercourse	Low (-)	N/A
	Disturbances of soils leading to increased alien vegetation proliferation within the watercourses, thus impacting on the watercourse habitat	Medium (-)	Low (-)
	Altered runoff patterns within the watercourses, potentially leading to increased erosion and sedimentation of the watercourses	Medium (-)	Low (-)
	Potential of imported materials to entering the watercourses, increasing the sediment loads therein	Medium (-)	Low (-)
	Operational Phase:		
	Disturbance to soils and ongoing erosion as a result of periodic maintenance activities	Low (-)	N/A

Specialist Study	Impact	Pre-Mitigation Rating	Post Mitigation Rating
	Altered water quality (if surface water is present) as a result of increased availability of pollutants	Low (-)	N/A
	Concentrated runoff from the road crossings leading to erosion and subsequent sedimentation of the watercourses (increase in the sediment load) and turbulent flows when surface water is present;	Low (-)	N/A
	Higher flood peaks into the watercourses due to reduced surface roughness in the watercourses	Low (-)	N/A
	Decommissioning Phase:		
	Disturbance of soil and vegetation that established within the operational area	Low (-)	N/A
Transportation	**Construction Phase:**		
	Traffic congestion	High (-)	Medium (-)
	Noise and dust pollution	High (-)	Medium (-)
	Operational Phase:		
	The traffic generated during this phase will be minimal and will have very little, if any impact on the surrounding road network		
	Decommissioning Phase:		
	Noise and dust pollution	Medium (-)	Medium (-)
	Cumulative Impact:		
	Noise and dust pollution with the delivery of equipment, material and staff to site	High (-)	Medium (-)
Visual	**Construction Phase:**		
	Visual intrusion and dust emissions	Medium (-)	Low (-)
	Operational Phase:		
	Visual intrusion, dust emissions and light pollution and glare	Medium (-)	Medium (-)
	Decommissioning Phase:		
	Visual intrusion and dust emissions	Medium (-)	Low (-)
	Cumulative Impact:		
	Visual intrusion and dust emissions	Medium (-)	Medium (-)
	Visual intrusion, dust emissions and light pollution and glare	Medium (-)	Medium (-)

In addition, the following specialists have undertaken detailed walk-throughs and micro-siting of the Oya WEF in accordance with the recommendations contained in the approved EMPr and in accordance with condition 29 of the EA[5]:

- Avifauna;
- Bats;
- Surface Water / Aquatic
- Ecology; and
- Heritage (including Archaeology, Palaeontology and Cultural Landscapes).

The above-mentioned walk-throughs were undertaken to identify any additional sensitive / "no-go" areas based on the final layout and/or any other special features which need to be avoided. Furthermore, the necessary specialists were commissioned to compile the requisite management plans detailed in the EMPr[3]. The above-mentioned specialist walk-through reports are provided in **Appendix D**.

3 PROPOSED AMENDMENTS

3.1 Changes to Authorised Elements of the Project

As previously mentioned, Kudusberg Wind Farm is proposing to submit a Part 2 EA Amendment Application to split the authorised Kudusberg WEF into two (2) separate smaller WEF projects, namely the Kudusberg WEF and Oya WEF, which will result in a number of technical and administrative changes as detailed in **Table 7** below. The split is being proposed to allow the projects to be suitable for numerous opportunities such as either the REIPPPP, RMIPPPP, other government run procurement programmes that may arise or for sale to private entities, if enabled and/or required in the drive for energy security in South Africa.

Following the split, the northern section of the authorised WEF will become the Oya WEF (**Figure 4**), while the southern section of the authorised WEF will remain known as the Kudusberg WEF (authorised under 14/12/16/3/3/1/1976/AM1) (**Figure 3**) (**Table 7**). In addition to the split, the final layout for the Oya WEF is being submitted which has been informed by detailed specialist walk-throughs and on-site micro-siting as per condition 29 of the Kudusberg EA[5]. Furthermore, the approved EMPr authorised as part of the Kudusberg EA is being amended to each WEF. The Oya WEF EMPr (**Appendix I1**) is being amended to incorporate the final layout for the Oya WEF, management plans[3] and the walk-throughs.

The proposed amendments in themselves are not listed activities according to Government Notice (GN) R326, R327, R325 and R324 of the EIA Regulations (as amended on 07 April 2017), and do not trigger any new listed activity. In addition, the proposed amendments are within the original authorised development footprint, and do not change the scope of the EA. Although the proposed amendments will result in changes to the authorised project description, the proposed amendments could also potentially change the impacts previously identified.

Accordingly, the specialists were commissioned to assess the impacts associated with the proposed amendments and re-evaluate the findings of the specialist studies undertaken as part of the original 2018 BA process for the Kudusberg WEF. In addition, Ecological, Avifaunal, Bat, Surface Water and Heritage (including Archaeology, Palaeontology and Cultural Landscapes) specialists have undertaken detailed walk-throughs and micro-siting of the Oya WEF in accordance with the recommendations contained in the approved EMPr and in accordance with condition 29 of the EA[5]. These walk-throughs were undertaken to identify any additional sensitive / "no-go" areas based on the final layout and/or any

other special features which need to be avoided. Furthermore, the necessary specialists were commissioned to compile the requisite management plans detailed in the EMPr[3].

The amendments proposed for each of the two (2) WEFs mentioned above are detailed in **Table 7** below as well as the location of the of the authorised aspects and the proposed amendments in relation to the original EA.

Table 7: Details of the authorised WEF and the split of the EA between Oya WEF and Kudusberg WEF

Aspect to be amended	Authorised	Proposed Amendment		EA Reference
		Oya WEF	Kudusberg WEF	
Administrative Aspects				
Amend the holder of the EA's	Kudusberg Wind Farm (Pty) Ltd	Oya Energy (Pty) Ltd	Kudusberg Wind Farm (Pty) Ltd	Pages 1 and 2 of EA dated 25 March 2019 (pages 1, 3 and 4 of full document)
Amend the name of the WEFs	Kudusberg Wind Energy Facility	Oya Wind Energy Facility	Kudusberg Wind Energy Facility	Pages 1, 9 and 10 of EA dated 25 March 2019 (pages 1, 3, 11 and 12 of full document)
Contact Details	kudusberg@g7energies.com	oya@g7energies.com	kudusberg@g7energies.com	Page 2 of EA dated 25 March 2019 (pages 1 and 4 of full document)
Extend the validity of the EA	This activity must commence within a period of five (05) years from the date of issue of this environmental authorisation	This activity must commence within a period of five (05) years from the date of issue of this amended environmental authorisation	This activity must commence within a period of five (05) years from the date of issue of this amended environmental authorisation	Page 11 of EA dated 25 March 2019 (page 13 of full document)
Location of Activity and SG codes	**Western Cape** 1. Portion 1 of 156 Gats Rivier Farm: C01900000000015600001 2. Portion 3 of 156 Gats River Farm: C01900000000015600002 3. Remainder of 156 Gats Rivier Farm: C01900000000015600000 4. Portion 1 of 157 Riet Fontein Farm: C01900000000015700001 5. Portion 1 of 158 Amandelbloom Farm: C01900000000015800001	**Western Cape** 1. Portion 1 of the Farm Gats Rivier No 156: C01900000000015600001 2. Portion 2 of the Farm Gats Rivier No 156: C01900000000015600002 3. Remainder of the Farm Gats Rivier No 156: C01900000000015600000 4. Portion 1 of the Farm Riet Fontein No 157: C01900000000015700001 5. Portion 2 of the Farm Riet Fontein No 157: C01900000000015700002	**Western Cape** 1. 1. Portion 1 of the Farm Gats Rivier No 156: C01900000000015600001 2. Remainder of the Farm Gats Rivier No 156: C01900000000015600000 3. Portion 1 of the Farm Oliviers Berg No 159; C01900000000015900001 4. Remainder of the Farm Oliviers Berg No 159: C01900000000015900000 5. Klipbanks Fontein No 395: C01900000000039500000	Page 7 – 8 of EA dated 25 March 2019 (page 9 - 10 of full document)

	6. Remainder of 158 Amandelboom Farm: C01900000000015800000 7. Portion 1 of 159 Oliviers Berg Farm: C01900000000015900001 8. Remainder of 159 Oliviers Berg Farm: C01900000000015900000 9. Portion 2 of 157 Riet Fontein Farm: C01900000000015700002 10. Remainder of 161 Muishond Rivier Farm: C01900000000016100000 11. Remainder of 395 Klipbanks Fontein Farm: C01900000000019500000 **Northern Cape** 12. Portion 4 of 193 Urias Gat Farm: C07200000000019300004 13. Portion 6 of 193 Urias Gat Farm: C07200000000019300006 14. Remainder of 193 Urias Gat Farm: C07200000000019300000 15. Remainder of 194 Matjes Fontein Farm: C07200000000019400000 16. Remainder of 196 Karree Kloof Farm: C07200000000019600000 **Properties affected by public road:**	6. Portion 1 of the Farm Amandelbloom No 158: C01900000000015800001 7. Remainder of the Farm Amandelboom No 158: C01900000000015800000 8. Portion 1 of the Farm Oliviers Berg No 159: C01900000000015900001 9. Remainder of the Farm Oliviers Berg No 159: C01900000000015900000 **Northern Cape** 10. Portion 4 of the Farm Urias Gat No 193: C07200000000019300004 11. Portion 6 of the Farm Urias Gat No 193: C07200000000019300006 12. Remainder of the Farm Urias Gat No 193: C07200000000019300000 13. Remainder of the Farm Matjies Fontein No 194: C07200000000019400000 14. Portion 5 of the Farm Urias Gat No 193: C07200000000019300005 **Properties affected by access road:** 15. Zeekoegat Farm No 169: C07200000000016900000 16. Portion 1 of the Farm Roodeheuvel No 170: C07200000000017000001	6. Remainder of the Farm Muishond Rivier No 159: C01900000000016100000 **Northern Cape** 7. Remainder of the Farm Karee Kloof No 196: C07200000000019600000 8. Remainder of the Farm Matjes Fontein No 194: C07200000000019400000 **Properties affected by public road:** 9. Zeekoegat Farm No 169: C07200000000016900000 10. Portion 1 of the Farm Roodeheuvel No 170: C07200000000017000001 11. Remainder of the Farm Roodeheuvel No 170: C07200000000017000000 12. Remainder of the Farm Wind Heuvel No 190: C07200000000019000000 13. Portion 1 of the Farm Wind Heuvel No 190: C07200000000019000001 14. Portion 5 of the Farm Urias Gat No 193: C07200000000019300005 15. Remainder of the Farm Vinke Kuil No 171: C07200000000017100000 16. The Farm Alkant No 220: C07200000000022000000 17. Portion 1 of the Farm Lange Huis No 174: C07200000000017400001	

	17. 169 Zeekoegat Farm: C07200000000016900000 18. Portion 1 of 170 Roodeheuvel Farm: C07200000000017000001 19. Remainder of 170 Roodeheuvel Farm: C07200000000017000000 20. Remainder of 190 Wind Heuvel Farm: C07200000000019000000 21. Portion 1 of 190 Wind Heuvel Farm: C07200000000019000001 22. Portion 5 of 193 Urias Gat Farm: C07200000000019300005 23. Remainder of 171 Vinke Kuil Farm: C07200000000017100000 24. Alkant Re/220 Farm: C07200000000022000000 25. Portion 1 of 174 Lange Huis Farm: C07200000000017400001	17. Remainder of the Farm Roodeheuvel No 170: C07200000000017000000 18. Remainder of the Farm Wind Heuvel No 190: C07200000000019000000 19. Portion 1 of the Farm Wind Heuvel No 190: C07200000000019000001 20. Portion 5 of the Farm Urias Gat No 193: C07200000000019300005 21. Remainder of the Farm Vinke Kuil No 171: C07200000000017100000 22. Alkant Farm No 220: C07200000000022000000 23. Portion 1 of the Farm Lange Huis No 174: C07200000000017400001		
Co-ordinates	**Centre:** 32°50' 56.0868"S 20°19' 25.0608"E **North:** 32°40' 29.8812"S 20°24' 57.78"E **East:** 32°43' 53.8212"S 20°29' 32.28"E **South-East:** 32°54' 6.66"S 20°23' 3.7788"E **South-West:** 32°55'32.0412"S	**APPLICATION SITE:** **Coordinates at Corner Points (DD MM SS.sss)** 1. S32° 46' 11.757" E20° 21' 39.554" 2. S32° 45' 55.571" E20° 23' 32.919" 3. S32° 47' 3.530" E20° 23' 8.115" 4. S32° 48' 14.853" E20° 23' 15.057" 5. S32° 48' 7.939" E20° 25' 19.086"	**APPLICATION SITE:** **Coordinates at Corner Points (DD MM SS.sss)** 1. S32° 48' 14.853" E20° 23' 15.057" 2. S32° 48' 7.939" E20° 25' 19.086" 3. S32° 49' 44.075" E20° 24' 59.144" 4. S32° 50' 41.159" E20° 24' 13.445" 5. S32° 50' 46.823" E20° 24' 24.286"	Page 8 – 9 of EA dated 25 March 2019 (page 10 - 11 of full document)

	20°16'24.8988"E **West:** 32°52' 12.7812"S 20°14' 20.6988"E	6. S32° 49' 44.075" E20° 24' 59.144" 7. S32° 50' 41.159" E20° 24' 13.445" 8. S32° 53' 6.441" E20° 21' 52.752" 9. S32° 53' 8.532" E20° 21' 53.539" 10. S32° 54' 36.732" E20° 21' 50.816" 11. S32° 55' 2.170" E20° 18' 58.064" 12. S32° 54' 57.184" E20° 17' 28.053" 13. S32° 55' 48.840" E20° 14' 21.666" 14. S32° 55' 7.517" E20° 13' 55.356" 15. S32° 54' 28.981" E20° 13' 34.753" 16. S32° 52' 11.464" E20° 12' 21.280" 17. S32° 52' 9.896" E20° 14' 16.133" 18. S32° 51' 10.304" E20° 13' 32.215" 19. S32° 51' 0.223" E20° 12' 19.238" 20. S32° 50' 51.343" E20° 12' 14.058" 21. S32° 50' 33.384" E20° 12' 39.312" 22. S32° 50' 21.482" E20° 12' 33.983" 23. S32° 49' 38.848" E20° 13' 6.405" 24. S32° 50' 5.733" E20° 15' 50.817"	6. S32° 54' 9.411" E20° 24' 22.544" 7. S32° 54' 48.192" E20° 23' 53.935" 8. S32° 56' 23.562" E20° 26' 18.389" 9. S32° 57' 26.788" E20° 24' 38.101" 10. S32° 56' 35.721" E20° 22' 48.877" 11. S32° 56' 42.813" E20° 21' 46.490" 12. S32° 57' 27.491" E20° 19' 50.038" 13. S32° 59' 45.215" E20° 19' 58.513" 14. S32° 59' 5.070" E20° 17' 15.888" 15. S32° 59' 11.874" E20° 16' 34.719" 16. S32° 57' 11.539" E20° 15' 29.007" 17. S32° 55' 48.840" E20° 14' 21.666" 18. S32° 55' 23.944" E20° 15' 52.693" 19. S32° 52' 9.370" E20° 14' 54.031" 20. S32° 52' 4.579" E20° 15' 50.647" 21. S32° 51' 44.360" E20° 16' 19.552" 22. S32° 51' 27.665" E20° 17' 16.598" 23. S32° 51' 31.913" E20° 20' 32.550" 24. S32° 50' 41.238" E20° 19' 54.404"	

		25. S32° 47' 57.718" E20° 15' 25.332" 26. S32° 48' 16.924" E20° 17' 59.136" 27. S32° 50' 12.452" E20° 19' 31.355" 28. S32° 47' 54.581" E20° 20' 57.293" 29. S32° 48' 1.255" E20° 21' 9.303" 30. S32° 47' 54.387" E20° 21' 10.181" 31. S32° 47' 24.673" E20° 21' 0.698" 32. S32° 47' 17.149" E20° 21' 13.982" 33. S32° 46' 59.938" E20° 21' 22.475" 34. S32° 46' 56.504" E20° 21' 29.064" **Coordinates at Centre Point (DD MM SS.sss)** 35. S32° 51' 21.895" E20° 18' 41.467" **CONSTRUCTION CAMP:** **Coordinates at Centre Point (DD MM SS.sss)** **CENTRE:** S32° 47' 36.876" E20° 21' 23.588" **Coordinates at Corner Points:** **CC1_01:** S32° 47' 28.108" E20° 21' 19.647" **CC1_02:** S32° 47' 28.329" E20° 21' 28.144"	25. S32° 49' 35.741" E20° 21' 44.517" **Coordinates at Centre Point (DD MM SS.sss)** 26. S32° 54' 10.102" 27. E20° 20' 14.737" **CONSTRUCTION CAMP:** **Coordinates at Centre Point (DD MM SS.sss)** **CENTRE:** S32° 51' 46.797" E20° 21' 16.710" **Coordinates at Corner Points:** **CC1_01:** S32° 51' 41.254" E20° 21' 2.209" **CC1_02:** S32° 51' 40.895" E20° 21' 11.315" **CC1_03:** S32° 51' 46.466" E20° 21' 19.638" **CC1_04:** S32° 51' 45.812" E20° 21' 26.156" **CC1_05:** S32° 51' 47.063" E20° 21' 32.475" **CC1_06:** S32° 51' 50.861" E20° 21' 30.264" **CC1_07:** S32° 51' 51.339" E20° 21' 26.005" **CC1_08:** S32° 51' 53.100" E20° 21' 24.630" **CC1_09:** S32° 51' 43.651" E20° 21' 0.749" **SUBSTATION:** **Coordinates at Corner Points (DD MM SS.sss):**	

		CC1_03: S32° 47' 45.815" E20° 21' 27.943" **CC1_04:** S32° 47' 45.598" E20° 21' 19.332" **CC1_05:** S32° 47' 43.103" E20° 21' 20.053" **CC1_06:** S32° 47' 40.376" E20° 21' 20.085" **CC1_07:** S32° 47' 38.132" E20° 21' 19.168" **CC1_08:** S32° 47' 35.632" E20° 21' 19.015" **CC1_09:** S32° 47' 34.407" E20° 21' 18.760" **SUBSTATION:** **Coordinates at Centre Point (DD MM SS.sss):** **CENTRE:** S32° 54' 24.333" E20° 12' 28.366" **Coordinates at Corner Points (DD MM SS.sss):** **SS1_01:** S32° 54' 19.886" E20° 12' 26.843" **SS1_02:** S32° 54' 23.125" E20° 12' 33.613" **SS1_03:** S32° 54' 28.772" E20° 12' 29.816" **SS1_04:** S32° 54' 25.569" E20° 12' 23.122"	**SS1_01:** S32° 52' 4.061" E20° 21' 48.372" **SS1_02:** S32° 52' 10.456" E20° 21' 53.934" **SS1_03:** S32° 52' 15.215" E20° 21' 45.714" **SS1_04:** S32° 52' 9.014" E20° 21' 40.229" **Coordinates at Centre Point (DD MM SS.sss):** **CENTRE:** S32° 52' 9.655" E20° 21' 47.079"	
Technical Aspects				
Aspect to be amended	**Authorised**	**Proposed Amendment**		**Motivation**
		Oya WEF	**Kudusberg WEF**	
Overall Capacity	325 MW	86 MW	239 MW	Pages 1, 4 (Row 5 of listed activities table), 9 and 10 of EA dated 25 March 2019

				(pages 1, 3, 6, 11 and 12 of full document), Row 4 of technical details table
Number of turbines	56	20	36	Page 10 of EA dated 25 March 2019 (page 12 of full document), Row 11 of technical details table
Hub height	Up to 140 m	92 m above the foundation	No Change i.e. up to 140 m	Page 9 of EA (page 11 of full document), Row 1 of technical details table
Rotor diameter	Up to 180 m	150 m	No Change i.e. up to 180 m	Page 9 of EA (page 11 of full document) dated 25 March 2019, Row 2 of technical details table
Blade length	Up to 90 m	75 m	No Change i.e. up to 90 m	Page 9 of EA (page 11 of full document) dated 25 March 2019, Row 3 of technical details table
Wind Measuring Lattice Masts	Up to 4 x 140 m high depending the final hub height	2 x met masts (same as hub height)	2 x up to 140 m high depending the final hub height	Page 10 of EA (page 12 of full document) dated 25 March 2019, Row 13 of technical details table
Layout	-	Layout submitted for final approval. The layout to be approved are contained in **Appendix J4**. Associated turbine GPS locations will be provided in the Final EA Amendment Report.	Final layout to be submitted prior to the start of construction	Page 14 and 15 of EA (pages 16 and 17 of full document) dated 25 March 2019
EMPr	The EMPr submitted as part of the Application for EA is hereby approved.	Approve Final EMPr	To be submitted based on final approval of layout.	Page 12 and 13 of EA (page 14 and 15 of full document) dated 25 March 2019

3.2 Motivation

Aspect to be amended	Authorised	Proposed Amendment		Motivation
		Oya WEF	Kudusberg WEF	
Administrative Aspects				
Amend the holder of the EA's	Kudusberg Wind Farm (Pty) Ltd	Oya Energy (Pty) Ltd	Kudusberg Wind Farm (Pty) Ltd	The Authorised project is being split into two (2) separate WEFs and as such, the name of the project is changing as well as ownership of the project is changing to be held by 2 separate SPVs. Therefore, the Applicant is requesting to amend the Holders of the EAs and their associated details. This amendment request is administrative in nature and therefore no disadvantages are foreseen should the amendment be granted.
Amend the name of the WEFs	Kudusberg Wind Energy Facility	Oya Wind Energy Facility	Kudusberg Wind Energy Facility	
Contact Details	kudusberg@g7energies.com	oya@g7energies.com	kudusberg@g7energies.com	
Extend the validity of the EA	This activity must commence within a period of five (05) years from the date of issue of this environmental authorisation	This activity must commence within a period of five (05) years from the date of issue of this amended environmental authorisation	This activity must commence within a period of five (05) years from the date of issue of this amended environmental authorisation	The projects are intended to be suitable for numerous opportunities such as either the REIPPPP, RMIPPPP, other government run procurement programmes or for sale to private entities, if required. The announcement of the REIPPPP Bid 5 window has not yet been officiated. As such the exact date in which the projects will be bid, awarded preferred bidder and start construction is unknown. The EAP in conjunction with the specialists assessed this amendment and confirmed that the EA can be extended with no disadvantages associated thereto.

Location of Activity and SG codes	**Western Cape** 1. Portion 1 of 156 Gats Rivier Farm: C019000000000015600001 2. Portion 3 of 156 Gats River Farm: C019000000000015600002 3. Remainder of 156 Gats Rivier Farm: C019000000000015600000 4. Portion 1 of 157 Riet Fontein Farm: C019000000000015700001 5. Portion 1 of 158 Amandelbloom Farm: C019000000000015800001 6. Remainder of 158 Amandelboom Farm: C019000000000015800000 7. Portion 1 of 159 Oliviers Berg Farm: C019000000000015900001 8. Remainder of 159 Oliviers Berg Farm: C019000000000015900000 9. Portion 2 of 157 Riet Fontein Farm:	**Western Cape** 1. Portion 1 of the Farm Gats Rivier No 156: C019000000000015600001 2. Portion 2 of the Farm Gats Rivier No 156: C019000000000015600002 3. Remainder of the Farm Gats Rivier No 156: C019000000000015600000 4. Portion 1 of the Farm Riet Fontein No 157: C019000000000015700001 5. Portion 2 of the Farm Riet Fontein No 157: C019000000000015700002 6. Portion 1 of the Farm Amandelbloom No 158: C019000000000015800001 7. Remainder of the Farm Amandelboom No 158: C019000000000015800000 8. Portion 1 of the Farm Oliviers Berg No 159: C019000000000015900001	**Western Cape** 1. Portion 1 of the Farm Gats Rivier No 156: C019000000000015600001 2. Remainder of the Farm Gats Rivier No 156: C019000000000015600000 3. Portion 1 of the Farm Oliviers Berg No 159; C019000000000015900001 4. Remainder of the Farm Oliviers Berg No 159: C019000000000015900000 5. Klipbanks Fontein No 395: C019000000000039500000 6. Remainder of the Farm Muishond Rivier No 159: C019000000000016100000 **Northern Cape** 7. Remainder of the Farm Karee Kloof No 196: C072000000000019600000 8. Remainder of the Farm Matjes Fontein No 194: C072000000000019400000 **Properties affected by public road:** 9. Zeekoegat Farm No 169: C072000000000016900000 10. Portion 1 of the Farm Roodeheuvel No 170: C072000000000017000001 11. Remainder of the Farm Roodeheuvel No 170: C072000000000017000000	**The motivation for this proposed am**endment is to change the location to include only the properties and infrastructure that are relevant to each proposed WEF after the split and remove surplus properties. There is no disadvantage to this proposed amendment as the number of involved properties remains the same, they are just being split between the two (2) proposed WEFs. All properties were assessed by the respective specialists as part of the original BA process for the authorised Kudusberg WEF and were authorized as such. Once again, the nature of the split can be seen as merely administrative to avoid issues during construction periods. The EAP in conjunction with the specialists assessed this amendment and confirmed that there are no disadvantages associated thereto.

	C019000000000157 00002 10. Remainder of 161 Muishond Rivier Farm: C019000000000161 00000 11. Remainder of 395 Klipbanks Fontein Farm: C019000000000195 00000 **Northern Cape** 12. Portion 4 of 193 Urias Gat Farm: C072000000000193 00004 13. Portion 6 of 193 Urias Gat Farm: C072000000000193 00006 14. Remainder of 193 Urias Gat Farm: C072000000000193 00000 15. Remainder of 194 Matjes Fontein Farm: C072000000000194 00000 16. Remainder of 196 Karree Kloof Farm: C072000000000196 00000 **Properties affected by public road:**	9. Remainder of the Farm Oliviers Berg No 159: C019000000000159 00000 **Northern Cape** 10. Portion 4 of the Farm Urias Gat No 193: C072000000000193 00004 11. Portion 6 of the Farm Urias Gat No 193: C072000000000193 00006 12. Remainder of the Farm Urias Gat No 193: C072000000000193 00000 13. Remainder of the Farm Matjies Fontein No 194: C072000000000194 00000 14. Portion 5 of the Farm Urias Gat No 193: C072000000000193 00005 **Properties affected by access road:** 15. Zeekoegat Farm No 169: 0720000000001690 0000 16. Portion 1 of the Farm Roodeheuvel No	12. Remainder of the Farm Wind Heuvel No 190: C072000000000019000000 13. Portion 1 of the Farm Wind Heuvel No 190: C072000000000019000001 14. Portion 5 of the Farm Urias Gat No 193: C072000000000019300005 15. Remainder of the Farm Vinke Kuil No 171: C072000000000017100000 16. The Farm Alkant No 220: C072000000000022000000 17. Portion 1 of the Farm Lange Huis No 174: C072000000000017400001	

	17. 169 Zeekoegat Farm: C072000000000169 00000 18. Portion 1 of 170 Roodeheuvel Farm: C072000000000170 00001 19. Remainder of 170 Roodeheuvel Farm: C072000000000170 00000 20. Remainder of 190 Wind Heuvel Farm: C072000000000190 00000 21. Portion 1 of 190 Wind Heuvel Farm: C072000000000190 00001 22. Portion 5 of 193 Urias Gat Farm: C072000000000193 00005 23. Remainder of 171 Vinke Kuil Farm: C072000000000171 00000 24. Alkant Re/220 Farm: C072000000000220 00000 25. Portion 1 of 174 Lange Huis Farm: C072000000000174 00001	170: C072000000000170 00001 17. Remainder of the Farm Roodeheuvel No 170: C072000000000170 00000 18. Remainder of the Farm Wind Heuvel No 190: C072000000000190 00000 19. Portion 1 of the Farm Wind Heuvel No 190: C072000000000190 00001 20. Portion 5 of the Farm Urias Gat No 193: C072000000000193 00005 21. Remainder of the Farm Vinke Kuil No 171: C072000000000171 00000 22. Alkant Farm No 220: C072000000000220 00000 23. Portion 1 of the Farm Lange Huis No 174: C072000000000174 00001		
Co-ordinates	**Centre:** 32°50’ 56.0868”S 20°19’ 25.0608”E	**APPLICATION SITE:** **Coordinates at Corner Points (DD MM SS.sss)**	**APPLICATION SITE:** **Coordinates at Corner Points (DD MM SS.sss)**	

	North: 32°40’ 29.8812”S 20°24’ 57.78”E **East:** 32°43’ 53.8212”S 20°29’ 32.28”E **South-East:** 32°54’ 6.66”S 20°23’ 3.7788”E **South-West:** 32°55’ 32.0412”S 20°16’ 24.8988”E **West:** 32°52’ 12.7812”S 20°14’ 20.6988”E	1. S32° 46' 11.757" E20° 21' 39.554" 2. S32° 45' 55.571" E20° 23' 32.919" 3. S32° 47' 3.530" E20° 23' 8.115" 4. S32° 48' 14.853" E20° 23' 15.057" 5. S32° 48' 7.939" E20° 25' 19.086" 6. S32° 49' 44.075" E20° 24' 59.144" 7. S32° 50' 41.159" E20° 24' 13.445" 8. S32° 53' 6.441" E20° 21' 52.752" 9. S32° 53' 8.532" E20° 21' 53.539" 10. S32° 54' 36.732" E20° 21' 50.816" 11. S32° 55' 2.170" E20° 18' 58.064" 12. S32° 54' 57.184" E20° 17' 28.053" 13. S32° 55' 48.840" E20° 14' 21.666" 14. S32° 55' 7.517" E20° 13' 55.356" 15. S32° 54' 28.981" E20° 13' 34.753" 16. S32° 52' 11.464" E20° 12' 21.280" 17. S32° 52' 9.896" E20° 14' 16.133" 18. S32° 51' 10.304" E20° 13' 32.215" 19. S32° 51' 0.223" E20° 12' 19.238"	1. S32° 48' 14.853" E20° 23' 15.057" 2. S32° 48' 7.939" E20° 25' 19.086" 3. S32° 49' 44.075" E20° 24' 59.144" 4. S32° 50' 41.159" E20° 24' 13.445" 5. S32° 50' 46.823" E20° 24' 24.286" 6. S32° 54' 9.411" E20° 24' 22.544" 7. S32° 54' 48.192" E20° 23' 53.935" 8. S32° 56' 23.562" E20° 26' 18.389" 9. S32° 57' 26.788" E20° 24' 38.101" 10. S32° 56' 35.721" E20° 22' 48.877" 11. S32° 56' 42.813" E20° 21' 46.490" 12. S32° 57' 27.491" E20° 19' 50.038" 13. S32° 59' 45.215" E20° 19' 58.513" 14. S32° 59' 5.070" E20° 17' 15.888" 15. S32° 59' 11.874" E20° 16' 34.719" 16. S32° 57' 11.539" E20° 15' 29.007" 17. S32° 55' 48.840" E20° 14' 21.666" 18. S32° 55' 23.944" E20° 15' 52.693" 19. S32° 52' 9.370" E20° 14' 54.031"	

		20. S32° 50' 51.343" E20° 12' 14.058" 21. S32° 50' 33.384" E20° 12' 39.312" 22. S32° 50' 21.482" E20° 12' 33.983" 23. S32° 49' 38.848" E20° 13' 6.405" 24. S32° 50' 5.733" E20° 15' 50.817" 25. S32° 47' 57.718" E20° 15' 25.332" 26. S32° 48' 16.924" E20° 17' 59.136" 27. S32° 50' 12.452" E20° 19' 31.355" 28. S32° 47' 54.581" E20° 20' 57.293" 29. S32° 48' 1.255" E20° 21' 9.303" 30. S32° 47' 54.387" E20° 21' 10.181" 31. S32° 47' 24.673" E20° 21' 0.698" 32. S32° 47' 17.149" E20° 21' 13.982" 33. S32° 46' 59.938" E20° 21' 22.475" 34. S32° 46' 56.504" E20° 21' 29.064" **Coordinates at Centre Point (DD MM SS.sss)** 35. S32° 51' 21.895" E20° 18' 41.467" **CONSTRUCTION CAMP:**	20. S32° 52' 4.579" E20° 15' 50.647" 21. S32° 51' 44.360" E20° 16' 19.552" 22. S32° 51' 27.665" E20° 17' 16.598" 23. S32° 51' 31.913" E20° 20' 32.550" 24. S32° 50' 41.238" E20° 19' 54.404" 25. S32° 49' 35.741" E20° 21' 44.517" **Coordinates at Centre Point (DD MM SS.sss)** 26. S32° 54' 10.102" 27. E20° 20' 14.737" **CONSTRUCTION CAMP:** **Coordinates at Centre Point (DD MM SS.sss)** **CENTRE:** S32° 51' 46.797" E20° 21' 16.710" **Coordinates at Corner Points:** **CC1_01:** S32° 51' 41.254" E20° 21' 2.209" **CC1_02:** S32° 51' 40.895" E20° 21' 11.315" **CC1_03:** S32° 51' 46.466" E20° 21' 19.638" **CC1_04:** S32° 51' 45.812"	

		Coordinates at Centre Point (DD MM SS.sss) **CENTRE:** S32° 47' 36.876" E20° 21' 23.588" **Coordinates at Corner Points:** **CC1_01:** S32° 47' 28.108" E20° 21' 19.647" **CC1_02:** S32° 47' 28.329" E20° 21' 28.144" **CC1_03:** S32° 47' 45.815" E20° 21' 27.943" **CC1_04:** S32° 47' 45.598" E20° 21' 19.332" **CC1_05:** S32° 47' 43.103" E20° 21' 20.053" **CC1_06:** S32° 47' 40.376" E20° 21' 20.085" **CC1_07:** S32° 47' 38.132" E20° 21' 19.168" **CC1_08:** S32° 47' 35.632" E20° 21' 19.015" **CC1_09:** S32° 47' 34.407" E20° 21' 18.760" **SUBSTATION:**	E20° 21' 26.156" **CC1_05:** S32° 51' 47.063" E20° 21' 32.475" **CC1_06:** S32° 51' 50.861" E20° 21' 30.264" **CC1_07:** S32° 51' 51.339" E20° 21' 26.005" **CC1_08:** S32° 51' 53.100" E20° 21' 24.630" **CC1_09:** S32° 51' 43.651" E20° 21' 0.749" **SUBSTATION:** **Coordinates at Corner Points (DD MM SS.sss):** **SS1_01:** S32° 52' 4.061" E20° 21' 48.372" **SS1_02:** S32° 52' 10.456" E20° 21' 53.934" **SS1_03:** S32° 52' 15.215" E20° 21' 45.714" **SS1_04:** S32° 52' 9.014" E20° 21' 40.229" **Coordinates at Centre Point (DD MM SS.sss):** **CENTRE:** S32° 52' 9.655" E20° 21' 47.079"	

		Coordinates at Centre Point (DD MM SS.sss): **CENTRE:** S32° 54' 24.333" E20° 12' 28.366" **Coordinates at Corner Points (DD MM SS.sss):** **SS1_01:** S32 °54' 9.886" E20° 12' 26.843" **SS1_02:** S32° 54' 3.125" E20°12'33.613" **SS1_03:** S32°54' 28.772" E20° 12' 29.816" **SS1_04:** S32° 54' 25.569" E20° 12' 23.122"		
Technical Aspects				
Aspect to be amended	**Authorised**	**Proposed Amendment**		**Motivation**
		Oya WEF	**Kudusberg WEF**	
Overall Capacity	325 MW	86 MW	239 MW	Each WEF project is intended to be suitable for numerous opportunities such as either the REIPPPP, RMIPPPP, other government run procurement programmes or for sale to private entities, if required. Simultaneously, these amendments are proposed to increase the efficiency of the facility and consequently, the economic competitiveness thereof. The outcome is therefore the optimal use of the natural wind resource in the area to meet the
Number of turbines	56	20	36	
Hub height	Up to 140 m	92 m above the foundation	No Change i.e. up to 140 m	
Rotor diameter	Up to 180 m	150 m	No Change i.e. up to 180 m	
Blade length	Up to 90 m	75 m	No Change i.e. up to 90 m	

				country's energy demand, without expanding the development area.
Layout	-	Layout submitted for final approval. The layout to be approved are contained in **Appendix J4**. Associated turbine GPS locations will be provided in the Final EA Amendment Report.	Final layout to be submitted prior to the start of construction	The amended layout is more beneficial as wind turbines have been re-positioned outside of very high sensitivity areas. Simultaneously, these amendments are proposed to increase the efficiency of the facility and consequently, the economic competitiveness thereof. The outcome is therefore the optimal use of the natural wind resource in the area to meet the country's energy demand, without expanding the development area. **Kudusberg WEF:** The proposed alignment and layout for this WEF is largely unchanged from the 2018 layout authorized as part of the EA. The total number of turbines proposed for this part of the project area increases from 26 to 36, with all new turbines located along ridge lines previously assessed by the specialist in 2018. The addition of the Construction camp has been added into the layout, although this is located in an area previously assessed as part of the original application and EA. All specialist and the EAP found that there were no additional issues that arose as result of this layout or the proposed amendments. **Oya WEF:** There is little substantive change in terms of turbine placement, and

				the number of turbines proposed for the area remains static. The final layout has been informed by optimising the site for inclusion of the WEF in the RMIPPPP specifically as well as finalising the site development plan. The layout was informed by wind monitoring results, specialist walk-throughs[12] and design considerations of the site, as well as economic efficiency considerations. All specialist assessed the final layout and found the layout to be acceptable from an environmental point of view and found no issues the associated amendments.
Wind Measuring Lattice Masts	Up to 4 x 140 m high depending the final hub height	2 x met masts (same as hub height)	2 x up to 140 m high depending the final hub height	In order to accurately measure the onsite wind resource during the operational phase, the met masts must be installed up to the same height as the hub height. This is required in order to accurately report on the wind energy generated during the operational phase of the facility. Furthermore, met masts are required for both WEF as such they have been split between the two proposed WEF. No disadvantages were identified for this proposed amendment.
EMPr	The EMPr submitted as part of the Application for EA is hereby approved.	Approve Final EMPr	To be submitted based on final approval of layout.	The EMPr was approved as part of the authorised layout and is being updated to

[12] Condition 29 of Kudusberg EA (**DEFF Ref:** 14/12/16/3/3/1/1976/AM1) – Page 15 of EA (page 17 of full document): *the final placement of turbines must follow a micro siting procedure involving a walk-through and identification of any sensitive areas by ecological, avifaunal, bat, surface water and heritage specialists.*

				incorporate the required management plans, as well as the final layout for Oya. The EMPr is also being split between each WEF ensuring that sound management procedures remain in place regardless of the split. The Oya EMPr, will include the final layout informed by the specialist walk-throughs and onsite micro-sighting. No disadvantages were identified for this proposed amendment as it contains and identifies all relevant impacts and associated mitigation measures with the proposed developments.

4 IMPACTS RELATED TO PROPOSED AMENDMENTS

In order to ascertain if further input would be required in relation to the above-mentioned proposed amendments, each of the specialist studies conducted during the BA process of the development was investigated in terms of its applicability to the proposed amendments. In addition, several specialists (namely Avifauna, Bats, Surface Water, Ecology and Heritage) have undertaken detailed walk-throughs and micro-siting of the Oya WEF in accordance with the recommendations contained in the approved EMPr and in accordance with condition 29 of the EA[5]. These walk-throughs were undertaken to identify any additional sensitive / "no-go" areas based on the final layout and/or any other special features which need to be avoided. Furthermore, the necessary specialists were commissioned to compile the requisite management plans detailed in the EMPr[3].

A summary of the Specialist's findings commissioned as part of this amendment process is provided below.

Table 8: Summary of Specialist Findings (amendment letters and walk-throughs)

Environ. Parameter	Summary of findings	Additional Impact management measures
Agriculture **Johann Lanz** **Report dated 2 November 2020** This document is an amendment to, and should be read together with, the original Agricultural Impact Assessment for Kudusberg Wind Energy Facility Project, which was compiled in October 2018 (Lanz, 2018)	**Amendment Letter**	
	There are no additional agricultural impacts related to any of the proposed amendments listed in **Table 6**. All impacts identified in the original Agricultural report (2018) are still valid for the proposed amendments. The amendments and final layout will not change the nature or significance of any of the impacts assessed in the original study. There are no agricultural advantages or disadvantages related to the amendments. The agricultural impacts of the amended projects will therefore be identical to the impact for the authorised development, that was assessed in the original specialist assessment report. Conclusion of assessment is that the proposed amendments will have no agricultural impacts. No additional No-Go areas were identified as a result of this amendment. Therefore, from an agricultural impact point of view, the amendments and final layout should be authorised.	The amendment does not require any changes or additions to the mitigation measures for agricultural impacts that were recommended for the authorised development, and there are therefore no required changes to the EMPr(s).
Avifauna **BioInsight** **Letter dated 2 November 2020** This document is an amendment to, and should be read together with, the original Avifauna Impact Assessment for Kudusberg Wind Energy Facility Project, which was compiled in December 2018 (BioInsight, 2018)	**Amendment Letter**	
	Bioinsight finds that this split is merely administrative and should hold no significant impact on the bird community on site. It is also not envisaged that the conclusions of the final specialist impact assessment report (Bioinsight, 2018) will change, as a result of this split. This being said, however, it is noted that minor disadvantages may occur as a result of the split. As an example, the proposed split may potentially result in additional infrastructures being built (in comparison to what would exist in a single facility). This may potentially include (but not limited to) additional construction camps (estimated that two are to be built), batching plants, offices / control centres etc. In addition to this, it can also be noted that two separate smaller facilities will be assessed separately for real impacts during the operational phase. This could potentially result in a perception that few birds are potentially being impacted. Although challenging and potentially not possible (due to different bidding and construction times), it would be idea if the two facilities	No changes or additions to mitigation measures are proposed at this stage. It will however be important for all relevant management / mitigation measures, as described in Bioinsight (2018) to be strictly adhered to for each wind farm, independently. Wherever possible, it will also be useful for a relevant site walk-through to be conducted at both wind farms (Oya WEF walk-through already completed), prior to construction, in order to assess any relevant sensitivities against proposed infrastructures – for further approval of final site layouts. Given that the authorised project is to be split into two separate smaller ones, Bioinsight emphasises the importance that each individual wind farm must have its own unique monitoring plan with sampling design, going forward (to assess real impacts in the construction and/or post-construction phases).

Environ. Parameter	Summary of findings	Additional Impact management measures
	could be evaluated jointly (once both are in operation) in order to understand the real impact of all turbines in the area, collectively. Careful consideration should be taken with this, and both wind farms should ideally work closely together during the operational phase so that the relevant avifauna specialist(s) can have access to fatality data from both facilities, wherever possible. No specific advantages (as a result of the proposed split) for the bird community were identified at this stage. Bioinsight finds the split acceptable for the bird community on site. Additionally, we find our previous impact assessment (Bioinsight, 2018) for the authorised Kudusberg WEF to still be valid in present day conditions.	
	Walk-though Report	
BioInsight **Walk-through Report dated November 2020** This document is an amendment to, and should be read together with, the original Avifauna Impact Assessment for Kudusberg Wind Energy Facility Project, which was compiled in December 2018 (BioInsight, 2018)	The pre-construction avifauna site walk-through at Oya WEF aimed to anaylse the study area and proposed final layout against any old and potentially new sensitivities that may affect the bird community on site. This analysis was required to determine the acceptability of the final layout being proposed. After careful comparisons between the layout and on-site conditions observed today, it was determined that no new updates to the initial sensitivity analysis would be required, and that no fatal flaws to the project were identified. All habitats in the area remain the same as before, with the majority of the site being very homogenous and mostly dominated by large stretches of typical Karoo Scrub vegetation. No new species nests were found, and existing nests showed no signs of occupancy. No new areas to be avoided were identified, and all previously-identified no-go areas are still applicable under present day conditions. All turbine locations avoid the previously identified no-go areas, and the overlap of certain associated infrastructures are deemed acceptable for the project, given the nature and extent of these activities & features – provided that all previously proposed mitigation/management measures are	As all present day conditions on site have been described as being the same as during the initial monitoring campaign, and as the proposed final layout is deemed acceptable against the pre-defined environmental sensitivities, no new specific management / monitoring plans have been identified to be included in the EMPr going forward, other than those already identified in the initial avifauna specialist assessment report – which are to be strictly adhered to.

Environ. Parameter	Summary of findings	Additional Impact management measures
	strictly adhered to. It is not expected for this project to cause an irreplaceable loss to biodiversity. In light of the above, it is our professional opinion that the proposed final layout for Oya WEF is considered to be acceptable and allowable for implementation, provided that all previously identified management / mitigation measures are strictly adhered to during all phases of the project. It is therefore considered allowable for the project and final layout to undergo approval for EA.	
	Amendment Letter	
<u>Bats</u> **BioInsight** **Letter dated 09 November 2020** This document is an amendment to, and should be read together with, the original Avifauna Impact Assessment for Kudusberg Wind Energy Facility Project, which was compiled in December 2018 (BioInsight, 2018)	Bioinsight finds that this split is merely administrative and should hold no significant impact on the bat community on site. It is also not envisaged that the conclusions of the final specialist impact assessment report (Bioinsight, 2018) will change, as a result of this split. This being said, however, it is noted that minor disadvantages may occur as a result of the split. As an example, the proposed split may potentially result in additional infrastructures being built (in comparison to what would exist in a single facility). This may potentially include (but not limited to) additional construction camps (estimated that two are to be built), batching plants, offices / control centres etc. In addition to this, it can also be noted that two separate smaller facilities will be assessed separately for real impacts during the operational phase. This could potentially result in a perception that few bats are potentially being impacted. Although challenging and potentially not possible (due to different bidding and construction times), it would be ideal if the two facilities could be evaluated jointly (once both are in operation) in order to understand the real impact of all turbines in the area, collectively. Careful consideration should be taken with this, and both wind farms should ideally work closely together during the operational phase so that the relevant bat specialist(s) can have access to fatality data from both facilities, wherever possible. No specific advantages (as a result of the proposed split) for the bat community were identified at this stage.	No changes or additions to mitigation measures are proposed at this stage. It will however be important for all relevant management / mitigation measures (as described in Bioinsight [2018]) to be strictly adhered to for each wind farm, independently. Wherever possible, it will also be useful for a relevant site walk-through to be conducted at both wind farms (Oya WEF walk-through already completed), prior to construction, in order to assess any relevant sensitivities against proposed infrastructures – for further approval of final site layouts. Given that the authorised project is to be split into two separate smaller ones, Bioinsight emphasises the importance that each individual wind farm must have its own unique monitoring plan with sampling design, going forward (to assess real impacts in the construction and/or post-construction phases).

Environ. Parameter	Summary of findings	Additional Impact management measures
	Based on the above, Bioinsight finds the split acceptable for the bat community on site. Additionally, we find our previous impact assessment (Bioinsight, 2018) for the authorised Kudusberg WEF to still be valid in present day conditions.	
	Walk-though Report	
Walk-through Report dated November 2020 This document is an amendment to, and should be read together with, the original Avifauna Impact Assessment for Kudusberg Wind Energy Facility Project, which was compiled in October 2018 (BioInsight, 2018)	After careful comparisons between the layout and on-site conditions observed today, it was determined that no new updates to the initial sensitivity analysis would be required, and that no fatal flaws to the project were identified. All habitats in the area remain the same as before, with the majority of the site being very homogenous and mostly dominated by large stretches of typical Karoo Scrub vegetation. No new significant roosting structures were found, and existing roosts were still intact. No new significant areas to be avoided were identified, and all previously-identified no-go areas are still applicable under present day conditions. All turbine locations avoid the previously identified no-go areas, and the overlap of certain associated infrastructures are deemed acceptable for the project, given the nature and extent of these activities & features – provided that all previously proposed mitigation/management measures are considered. It is not expected for this project to cause an irreplaceable loss to biodiversity. In light of the above, it is our professional opinion that the proposed final layout for Oya WEF is considered to be acceptable and allowable for implementation, provided that all previously identified management/mitigation measures are considered during all phases of the project. It is therefore considered allowable for the project and final layout to undergo approval for Environmental Authorisation.	As all present day conditions on site have been described as being the same as during the initial monitoring campaign, and as the proposed final layout is deemed acceptable against the pre-defined environmental sensitivities, no new specific management / monitoring plans have been identified to be included in the EMPr going forward, other than those already identified in the initial bat specialist assessment report – which are to be considered.
Terrestrial Ecology (Fauna & Flora) **Letter dated 13 November 2020**	**Amendment Letter**	
	Cumulative impacts are unchanged in terms of the proposed amendment, and no additional cumulative impacts will occur.	The EMPr recommendations in the original report and Oya walk down remain valid and no additional mitigation is required. The recommendations should be included in the EMPr and the EA.

Environ. Parameter	Summary of findings	Additional Impact management measures
This document is an amendment to, and should be read together with, the original Terrestrial Ecology Impact Assessment for Kudusberg Wind Energy Facility Project, which was compiled in October 2018 (Ekotrust, 2018)	When the original project plan for the integrated project is compared to that of the project once split into the two components, it can be concluded that the split, from a terrestrial ecological perspective, has no significant change in the risk profile from that of the original integrated project. it is therefore recommended that the amendment be granted, subject to implementation of the recommendations.	
Walk-through Report dated 12 November 2020 This document is an amendment to, and should be read together with, the original Terrestrial Ecology Impact Assessment for Kudusberg Wind Energy Facility Project, which was compiled in October 2018 (Ekotrust, 2018)	**Walk-through Report**	
	On the basis of the walk down, no sensitivities have been identified within the footprint of proposed infrastructure, except for a possible occurrence of a Red List species near to Turbine 1, the identity of which needs to be confirmed before any final recommendations are made. If the identity is confirmed as a Red List species, then a shift of the Turbine 1 location 100 m to the east is recommended. No other changes are required to the proposed layout. Of the remaining Red List plant species that were considered to have a probability of occurring on site (see list in Appendix 1 of Terrestrial Ecology Walk-through Report – **Appendix D3**), none similar to those in the Appendix were observed on site, except for four observations of *Lotononis* that have not yet been identified to species level - there is a small risk that they could be *Lotononis venosa*, listed as Vulnerable, but it is more likely that they are observations of more common species from the genus since none closely match the published description for the listed species (Van Wyk 1990). From an ecological point of view, on the basis that few sensitivities occur within the proposed footprint, it is recommended that the final layout is approved.	If the identity a possible occurrence of a Red List species is confirmed as a Red List species, then a shift of the Turbine 1 location 100 m to the east is recommended. No other changes are required to the proposed layout. A permit is required for the destruction of all protected species (marked in bold in the lists for each turbine position).
<u>Heritage</u>	**Amendment Letter**	
	The proposed development area for the split facilities occupies the same area as that surveyed and assessed in 2018, with only	Due to the fact that the recommended walk-downs are being undertaken (part of separate standalone report, the findings of

Environ. Parameter	Summary of findings	Additional Impact management measures
Letter dated 31 October 2020 prepared by Katie Smuts, Rennie Scurr Adendorff This letter is an amendment to, and should be read in conjunction with the original Heritage Impact Assessment for Kudusberg Wind Energy Facility Project, which was compiled in October 2018 (Smuts, 2018b).	slight deviations in proposed layouts of roads, turbines and associated infrastructure. Due to the fact that the recommended walk-downs are being undertaken (part of separate standalone report), and appropriate mitigatory measures pertaining to heritage resources identified during the assessments have been recommended and provided in the EMPr for implementation accordingly, it is not anticipated that the proposed changes will result in any further, different or greater impacts to heritage resources than those already identified in the 2018 HIA. All buffers previously imposed are respected and, in the case of the northern site clusters on Urias Gat, the new proposal increases the buffer between sites and infrastructure; no turbines are proposed for this area and these buffers pertain to road and construction infrastructure. In light of the above, it is not anticipated that the proposed amended developments will have significant impacts to heritage resources, beyond those to the cultural landscape, given that they are generally of low heritage significance. Cumulative impacts are unchanged in terms of the proposed amendment, and no additional cumulative impacts will be effected. It is therefore recommended that the amendment be granted, subject to implementation of the above recommendations.	which have been detailed below), and appropriate mitigatory measures pertaining to heritage resources identified during the assessments have been recommended and provided in the EMPr for implementation accordingly, it is not anticipated that the proposed changes will result in any further, different or greater impacts to heritage resources than those already identified in the 2018 HIA. The recommendations should be included in the EMPr and the EA.
<u>Archaeological and Palaeontological Walk-down</u> **Walk-through Report dated November 2020** This walk-through report is an amendment to, and should be read in conjunction with the original Heritage Impact	**Walk-through Report** Based on the outcomes of the required walkdown, it is not anticipated that the proposed development of turbines, cables and roads associated with the proposed WEF will negatively impact on significant archaeological or palaeontological heritage and as such, there is no heritage objection to the final alignment proposed for the WEF development. The identified built environment and graves do not fall within the development footprint and will not be directly impacted.	The conditions and recommendations from HWC and SAHRA in response to the initial HIA submission remain applicable. The Chance Fossil Finds Procedure attached as Appendix 1 of the Heritage Walk-through Report (**Appendix D4**) must be implemented during the construction phase of the development. All recommended mitigation measures from the approved Kudusberg WEF HIA (Smuts *et al.,* 2018) will be applied

Environ. Parameter	Summary of findings	Additional Impact management measures
Assessment for Kudusberg Wind Energy Facility Project, which was compiled in October 2018 (Smuts, 2018b).	The findings of this walk-down assessment align with the conclusions of the HIA conducted for the Kudusberg WEF (Smuts *et al.,* 2018) in that ***" The study area is largely devoid of heritage resources at elevation, and entirely devoid of significant heritage resources above 1200m asl. As such, it is not anticipated that turbines located on ridges will negatively impact on heritage resources."."***	including buffer areas and no-go areas ensuring that no impact occurs.
<u>Palaeontology</u> **Letter dated 04 November 2020 prepared by Elize Butler, Banzai Environmental (Pty) Ltd** This letter is an amendment to, and should be read in conjunction with the original PIA report for Kudusberg Wind Energy Facility Project, which was compiled in October 2018 (Almond, 2018)**.**	**Amendment Letter**	
	As the geology of the Authorized and New Kudusberg WEF is the same, there will be no differences on the Impacts affecting these two WEFs. However, the New Proposed Oya WEF is underlain by the Waterford Formation (Ecca Group) additionally to the Abrahamskraal Formation (Lower Beaufort Group, Adelaide Subgroup, Karoo Supergroup). The Impact on palaeontological heritage will thus be higher for the Oya WEF. A Palaeontological and Archaeological walk-down has recently been conducted assessing the heritage of the Oya WEF (Lavin, 2020). No fossiliferous outcrops were identified during the walk-down and thus a low overall Palaeontological significance was allocated to the site. **From a Palaeontological perspective there will be no advantages or disadvantages of the proposed split.** The overall impact rating reflected in the Palaeontological Impact Assessment report for the authorised Kudusberg WEF will not change as: ▪ the geology of the authorised Kudusberg WEF and proposed new Kudusberg WEF is the same; and ▪ A recent palaeontological walk-down of the Oya WEF allocated a low overall Palaeontological significance to the site as no fossils were recovered	No further mitigation measures are needed other than those already contained in the original study.
<u>Noise</u>	**Amendment Letter**	

Environ. Parameter	Summary of findings	Additional Impact management measures
Letter dated 04 November 2020 This letter is an amendment to, and should be read in conjunction with the original noise impact assessment as the noise impact assessment methodologies, impact results and recommendations remain the same (Safetech Report Number 26/8377 of 16 October 2018).	▪ The noise impacts identified as part of the original Kudusberg WEF will remain the same for the proposed Oya and Kudusberg WEF as the number of turbines has not increased. ▪ The turbines have not been placed any closer to any of the noise sensitive areas. ▪ There are no disadvantages to splitting the wind farm into smaller components from a noise impact perspective as the only implication will be administrative in nature i.e. allocating turbines to separate legal entities. The noise impact has not changed based on the above comments and information. The proposed turbine layouts of the Oya and Kudusberg WEFs is acceptable. Due to the potential low impacts associated with the construction and operational phases of the proposed Oya and Kudusberg WEFs, it is recommended that both proposed WEFs receive EAs from a noise perspective.	No further mitigation measures are needed other than those already contained in the original study
<u>Socio-Economic</u> **Report dated 03 November 2020** This document is an amendment to, and should be read together with, the original Socio-economic Impact Assessment for Kudusberg Wind Energy Facility Project, which was compiled in 2018 (Urban-Econ, 2018)	The proposed changes to the authorised 325MW Kudusberg WEF would not change the scope, nature or level of the impacts and therefore no change to the initial assessment conducted **Invalid source specified.** should occur. Furthermore, the split of the authorised 325 MW Kudusberg WEF would result in a phased period of the identified positive impacts which in turn would be advantageous to both local / regional economies. The disadvantage of the split of the authorised 325MW Kudusberg WEF, lies in the prolonged period of identified negative impacts (i.e. criminal activity, social ills, impacts on farms, etc.), however, the identified disadvantage could be reduced through the implementation of the environmental management programme.	Mitigation measures previously identified would not change between the initial and the amended layout.

Environ. Parameter	Summary of findings	Additional Impact management measures
	Thus, from a socio-economic perspective, there is no reason why the proposed amendment should not be authorised and the final proposed layout approved as part of the Amended EA (should this be granted by the DEFF).	
	Amendment Letter	
<u>Surface Water</u> **Letter dated 12 November 2020** This letter is an amendment to, and should be read in conjunction with the original Surface Water Impact Assessment for Kudusberg Wind Energy Facility Project, which was compiled in 2018 (BlueScience, 2018)	All freshwater ecological assessment methodologies applied to the original freshwater ecological study undertaken by FEN Consulting (2020), is still relevant to irrespective of the proposed project split. The Freshwater Ecological assessment undertaken by FEN Consulting in October 2020 reports on the freshwater environment as a whole (including reference to the Kudusberg WEF project components). The outcome of that report is still relevant, and no additional assessments are required. The site walk-down assessment as reported upon by FEN Consulting in November 2020, was a follow up detailed assessment reporting on any potential sensitivities of the proposed Oya WEF. The outcome of the site walk- down assessment reiterated the outcome of the freshwater ecological assessment and did not note any additional sensitivities as covered in the freshwater ecological assessment. Specialist Impact statement Based on the proposed amendment including the Kudusberg and Oya WEF when compared to the original Kudusberg WEF project (as reported upon in FEN Consulting, 2020), the proposed project split is not considered to pose any change in impact / risk significance to the identified and assessed watercourses. As such, no advantages or disadvantages (when considering the authorised specifications, versus the proposed specifications) can be identified from a freshwater ecological perspective. When the original project plan for the integrated project is compared to that of the project once split into the two components, it can be concluded that the split, from a freshwater ecological perspective, has no significant change in the risk profile from that of the original integrated project. It is noted that the proposed project split will entail application for authorisation for each WEF development separately, however	The outcome of the original freshwater ecological study undertaken is still relevant, and thus no additional mitigation measures or assessments are required.

Environ. Parameter	Summary of findings	Additional Impact management measures
	the specialist freshwater ecological assessment of FEN Consulting (2020) is considered sufficient to inform this process, and no additional studies is considered to be required. The cumulative impacts of the combined project development versus splitting of the project into two separate projects is considered unchanged, and no additional cumulative impacts are expected. It is therefore recommended that the amendment be granted, subject to implementation of the above recommendations. These recommendations should be included in the EMPr and the Environmental Authorisation EA.	
<u>Surface Water</u> **Freshwater Ecological Assessment dated October 2020** This report is a new report which has been compiled in 2020 (du Preez, 2020) in order to meet DWS requirements for Water Use Authorisations. It replaces the original Surface Water Impact Assessment for Kudusberg Wind Energy Facility Project, which was compiled in 2018 (BlueScience, 2018)	**New Freshwater Ecological Assessment**	
	No surface infrastructure components are located within any of the delineated watercourses, with the exception of road crossings. However, the proposed Kudusberg WEF construction camp is located approximately 11m an episodic drainage line (EDL), the Kudusberg substation is located approximately 26m from an EDL and Kudusberg WEF Turbine 23 crane pad is located approximately 26 m from an EDL. As such it is recommended these infrastructure components be relocated at least 32m from the delineated extent of the watercourse. The Oya WEF overhead collector power line will also traverse several watercourses, however the pylons will be constructed outside the 32m NEMA ZoR. The DWS Risk Assessment was applied to ascertain the significance of perceived impacts on the key drivers and receptors (hydrology, water quality, geomorphology, habitat and biota) of the assessed watercourses and assuming that the above mentioned surface infrastructure components will be relocated as recommended. No fatal flaws in terms of freshwater ecological aspects were identified. Should the construction of the road crossings in the watercourses be undertaken in the driest period of the year when no surface flow is present and the recommended mitigation measures are applied, the risk significance of the	The mitigation measures proposed as part of the 2020 Freshwater Assessment (du Preez, ,2020) still hold true. These have been presented in **Table 10**. In addition, the mitigation measures have been incorporated into the respective EMPrs (**Appendix I**).

Environ. Parameter	Summary of findings	Additional Impact management measures
	proposed WEF development can be reduced and Water Use Authorisation by means of General Authorisation in terms of Section 21(c) and (i) water uses may potentially be obtained in consultation with the DWS. However, the DWS, the custodian of water resources in South Africa, must be consulted with regards to the outcome of this assessment. Based on the findings of the freshwater ecological assessment and the results of the risk assessment, it is the opinion of the ecologist that the proposed WEF development poses a negative low risk to the integrity of the identified watercourses provided that adherence to cogent, well-conceived and ecologically sensitive construction plans are implemented and the mitigation measures provided in this report as well as general good construction practice are adhered to, the proposed WEF development is considered acceptable.	
	Walk-through Report	
Walk-through Report dated November 2020 **This walk-through report should be read in conjunction with the Freshwater Assessment which was compiled in 2018 (du Preez, 2020)**	Based on the findings site walk-down undertaken in October 2020 which focused on identifying any watercourses that may be directly traversed by the proposed infrastructure of the proposed Oya WEF, twenty-five (25) direct watercourse crossings were identified. Eight (8) of these crossings is attributed to access road crossings and the remainder to overhead power line crossings. Provided the recommended mitigation measure be applied, the proposed Oya WEF layout is considered acceptable from a freshwater ecological perspective and should be granted EA. It is noted that the proposed project split will entail application for authorisation for each WEF development separately, however, the specialist freshwater ecological assessment of FEN Consulting (2020) is considered sufficient to inform this process, and no additional studies is considered to be required.	No additional studies are considered to be required. The mitigation measures as provided by FEN Consulting (2020) for the proposed Oya WEF layout (see **Table 10**) are considered sufficient to mitigate any potential impacts that may arise from the proposed WEF development. These mitigation measure must be included in the EMPr as part of the Part 2 EA Amendment Application to DEFF
<u>Transportation</u> **Letter dated 04 November 2020**	**Amendment Letter**	
	The splitting of the Kudusberg WEF into two smaller WEF projects, namely Oya WEF (86MW) and Kudusberg WEF (239MW), will result in the same traffic impacts during the	The proposed Oya WEF and Kudusberg WEF will not require any additional recommendations or mitigation measures and all

Environ. Parameter	Summary of findings	Additional Impact management measures
This letter is and an amendment to, and should be read in conjunction with for the Kudusberg Wind Energy Facility which was compiled in October 2018 (JG Afrika, 2018).	construction and decommissioning phases. The advantage of splitting the Kudusberg WEF, from a transport perspective, is that the individual WEFs will generate less traffic during the construction and decommissioning phases as the overall capacity of 325MW (i.e. number of turbines) of the original Kudusberg WEF will be distributed between the two smaller WEF projects. The impacts assessed in the original Kudusberg WEF report can therefore be viewed as the worst-case scenario as construction of the two smaller WEF projects will likely not commence at the same time or construction will be slightly staggered. The splitting of the Kudusberg WEF, from a transport perspective, will not lead to any disadvantages. The specifications for the proposed Oya WEF and Kudusberg WEF do not exceed the specifications of the authorised Kudusberg WEF i.e. the turbines proposed for the Oya WEF and Kudusberg WEF do not exceed the turbine specifications of the original Kudusberg WEF report (candidate turbine with a maximum hub height of up to 140m and a blade length of approximately 90m and rotor diameter up to 180 m.). The impact ratings during the construction and decommissioning phases will remain at low significance for the two smaller WEF projects. In light of the above, the impacts identified in the original Kudusberg Transport Study dated October 2018 remain relevant to the proposed Oya WEF and Kudusberg WEF. The impacts associated with the project split are acceptable, from a transport perspective, with the implementation of the recommended mitigation measures and it is therefore recommended that the proposed amendments and the final layout be authorised.	the proposed mitigation measures stated in the original Kudusberg report remain valid.
Visual	**Amendment Letter**	

Environ. Parameter	Summary of findings	Additional Impact management measures
Letter dated 04 November 2020 This letter must therefore be read in conjunction with the final VIA report for Kudusberg WEF dated 16 September 2018.	**Visual Character:** The amendments to the Kudusberg WEF as proposed will not result in any additional impacts on the visual character of the broader study area. **Cultural Landscapes:** The amendments to the Kudusberg WEF as proposed will not result in any additional impacts on the cultural landscape in the study broader area. Visual Sensitivity: The amended layouts for the Kudusberg WEF and the Oya WEF have taken cognisance of the areas of visual sensitivity identified in the original VIA. Furthermore, the smaller turbines proposed for the Oya WEF will be less visible from the surrounding area, thus reducing the visual sensitivity of the Oya WEF site. As such, the proposed amendments will not result in any changes in the findings of the visual sensitivity analysis. **Potentially Sensitive Receptors:** The amended turbine layouts will only affect one potentially sensitive receptor, this being VR13. The proximity of the nearest turbine to this receptor increases the impact rating for this receptor from Moderate to High. As this receptor is located on the Kudusberg WEF development site however, it is assumed that the owner of this receptor has a vested interest in the development and as such would not perceive the WEF in a negative light. **Cumulative Impacts:** The amendments to the Kudusberg WEF as proposed will not result in any additional cumulative impacts in the surrounding area. **Overall Visual Impact Rating:**	No additional recommendations or mitigation measures will be required and all of the proposed mitigation measures identified in the original VIA are still valid for the two new WEF projects.

Environ. Parameter	Summary of findings	Additional Impact management measures
	The amendments to the Kudusberg WEF as proposed will not result in any additional cumulative impacts in the surrounding area. **Assessment of Alternatives:** The proposed changes to the authorised road and turbine layouts, the position of the authorised construction camp and the provision of a new construction camp site to serve the smaller Kudusberg WEF are all considered acceptable from a visual perspective. In addition, the proposed Oya WEF layout, including the turbine positions and construction camp site, is considered acceptable from a visual impact perspective and should be authorised as final. **Conclusion:** It is SiVEST's opinion that the proposed amendments to the authorised Kudusberg WEF (14/12/16/3/3/1/1976/AM1) to split the WEF into two (2) separate smaller WEF projects, namely the Kudusberg WEF and Oya WEF, do not give rise to additional visual impacts or exacerbate the impacts previously identified in the VIA for this development. Given the low level of human habitation and the relative absence of sensitive receptors in the area, the proposed changes to the road and turbine layouts, the proposed reduction in turbine dimensions for Oya WEF, the shift in the position of the authorised construction camp and the provision of a new construction camp site to serve the smaller Kudusberg WEF are deemed acceptable from a visual perspective and the EA should be amended. SiVEST is of the opinion that the impacts associated with the construction, operation and decommissioning phases can be mitigated to acceptable levels provided the recommended mitigation measures are implemented.	

Maps showing the proposed layouts for the Kudusberg WEF (southern section of authorised Kudusberg WEF) and Oya WEF (northern section of authorised Kudusberg WEF) in relation to environmental sensitivities are provided in **Figure 6** and **Figure 7** below.

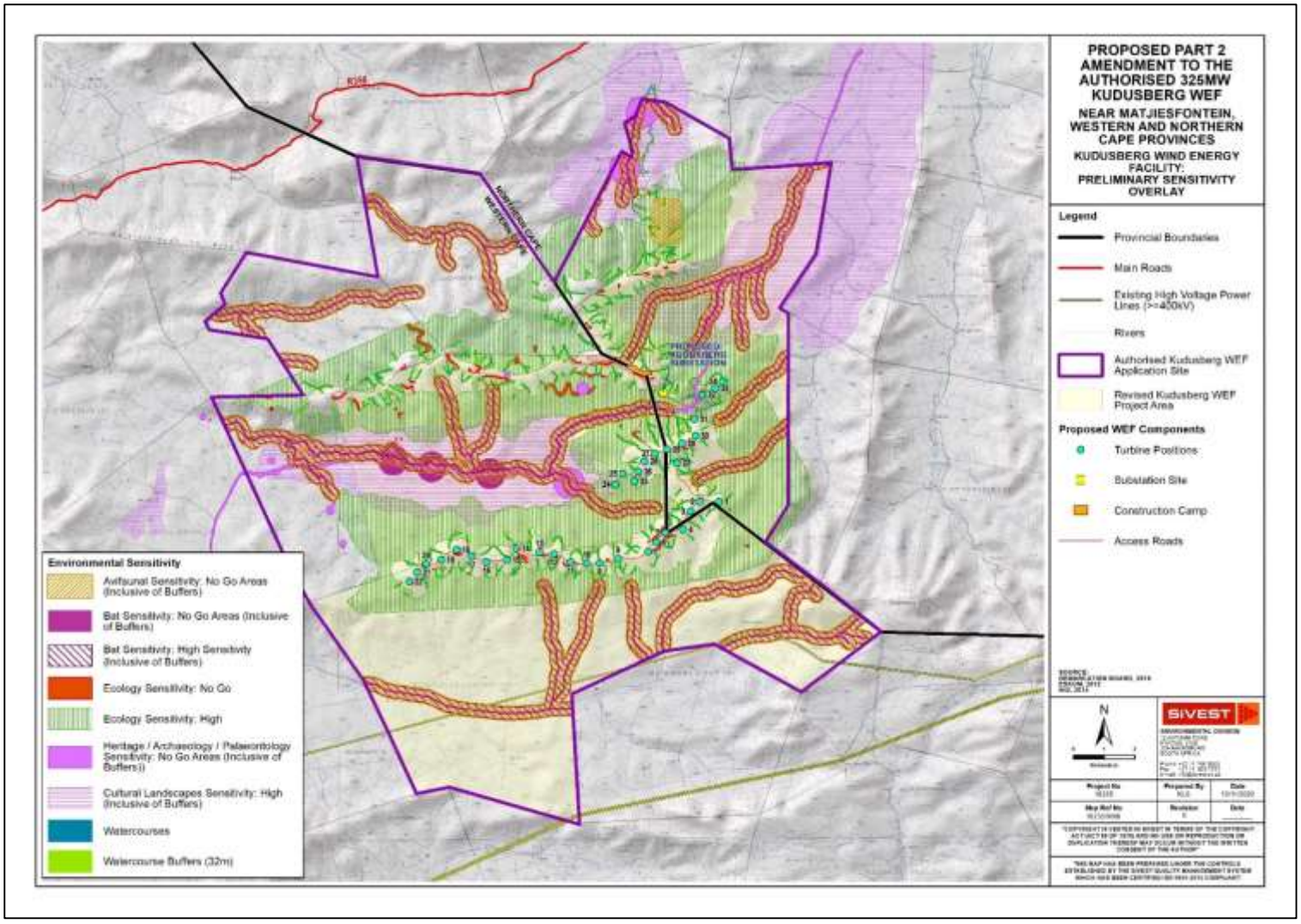

Figure 6: Layout map for proposed Kudusberg WEF (southern section of authorised Kudusberg WEF) in relation to environmental sensitivities[13]

[13] Please note that at the scale of this map some of the turbine locations may appear to be in high sensitivity areas. However, all turbines avoid high sensitivities.

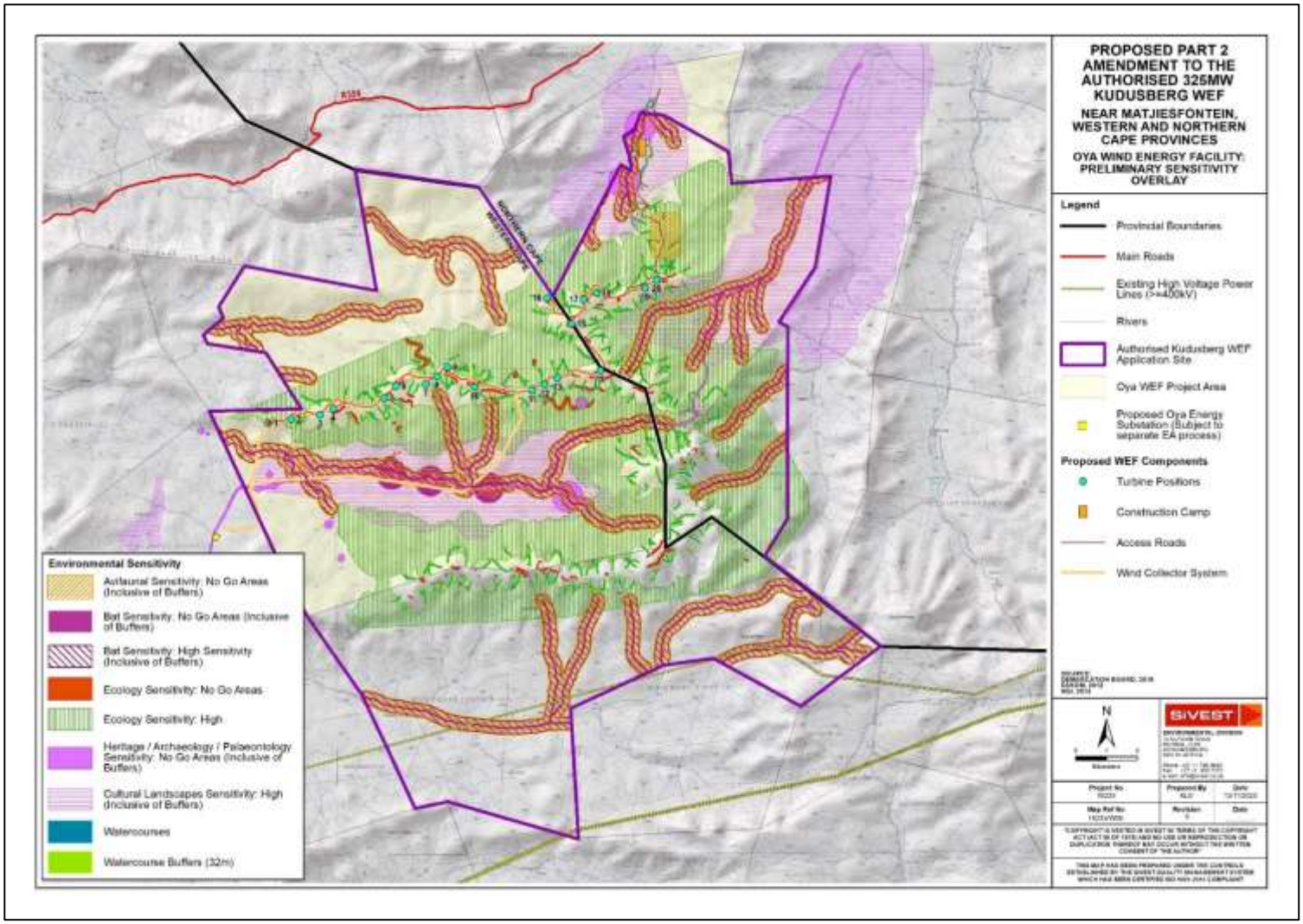

Figure 7: Layout map for proposed Oya WEF (northern section of authorised Kudusberg WEF) in relation to environmental sensitivities[14]

[14] Please note that at the scale of this map some of the turbine locations may appear to be in high sensitivity areas. However, all turbines avoid high sensitivities.

4.1 Summary of Changes in Impact Ratings

Key

Significance Rating (+ and -)	Colour Code
Low	
Medium	
High	

Table 9: Summary of changes in overall impact ratings

Specialist Study	Impact	Original Rating		Revised Rating	
		Pre-Mitigation Rating	Post Mitigation Rating	Pre-Mitigation Rating	Post-Mitigation Rating
Agriculture	Erosion by water and topsoil loss. Changes to the surface that lead to accumulation and channelling of run-off water can cause erosion. Because of the slopes, the aridity and the shallow soils, erosion risk is high	Low (-)	Very Low (-)	No change	No change
	Erosion by water and topsoil loss. Changes to the surface that lead to accumulation and channelling of run-off water can cause erosion. Because of the slopes, the aridity and the shallow soils, erosion risk is high	Low (-)	Very Low (-)	No change	No change
	Additional land use income will be generated by the farming enterprise through the lease of the land to the energy facility. This will provide the farming enterprise with increased cash flow and rural livelihood, and thereby improve its financial sustainability	Low (+)	N/A	No change	No change
	Erosion by water and topsoil loss. Changes to the surface that lead to accumulation and channelling of run-off water can cause erosion.	Low (-)	Very Low (-)	No change	No change

Specialist Study	Impact	Original Rating		Revised Rating	
		Pre-Mitigation Rating	Post Mitigation Rating	Pre-Mitigation Rating	Post-Mitigation Rating
	Because of the slopes, the aridity and the shallow soils, erosion risk is high				
	Cumulative impacts are likely to occur as a result of the loss of agricultural land on a regional basis because of other developments on agricultural land in the region	Very Low (-)	Very Low (-)	No change	No change
Avifauna	Destruction of important habitat areas (natural vegetation & water features etc.) due to the construction of wind turbines and associated infrastructures	Low (-)	Very Low (-)	No change	No change
	Disturbance of the bird community due to the increase of people and vehicles in the area	Low (-)	Very Low (-)	No change	No change
	Displacement of bird community due to increased disturbances in the area.	Low (-)	Very Low (-)	No change	No change
	Fatalities due to collision with wind turbine blades or associated infrastructures	Medium (-)	Low (-)	No change	No change
	Disturbance of bird community due to noise and movement generated by turbines and people / vehicles operating in the area	Low (-)	Very Low (-)	No change	No change
	Displacement of bird species due to increased disturbances	Low (-)	Very Low (-)	No change	No change
	Population decline due to long-term increasing fatality events	Low (-)	Very Low (-)	No change	No change
	Disturbance of bird community due to the increase of people and vehicles in the area, when dismantling wind turbines and associated infrastructures	Low (-)	Very Low (-)	No change	No change

Specialist Study	Impact	Original Rating		Revised Rating	
		Pre-Mitigation Rating	Post Mitigation Rating	Pre-Mitigation Rating	Post-Mitigation Rating
	Displacement of bird community due to the increase in disturbances in the area, while dismantling wind turbines and associated infrastructures	Low (-)	Very Low (-)	No change	No change
	Destruction of important habitat areas (natural vegetation & water features etc.) at multiple renewable energy facilities	Medium (-)	Low (-)	No change	No change
	Disturbance of bird community due to the increase of wind turbine infrastructures, people and vehicles at multiple renewable energy facilities	Medium (-)	Low (-)	No change	No change
	Displacement of bird communities due to the increase in disturbances at multiple renewable energy facilities	Medium (-)	Low (-)	No change	No change
	Fatalities as a result of increased collisions with wind turbine blades at multiple renewable energy facilities	Medium (-)	Low (-)	No change	No change
	Decline in the broader population of avifauna due to long-term fatality events at multiple renewable energy facilities	Medium (-)	Low (-)	No change	No change
Bats	Destruction of important habitat areas (natural vegetation, water features, roosts, etc.) due to the construction of wind turbines and associated infrastructures	Medium (-)	Low (-)	No change	No change
	Disturbance of the bat community due to the increase of people and vehicles in the area, high levels of noise and machinery movements	Low (-)	Very Low (-)	No change	No change

Specialist Study	Impact	Original Rating		Revised Rating	
		Pre-Mitigation Rating	Post Mitigation Rating	Pre-Mitigation Rating	Post-Mitigation Rating
	Displacement of bat community due to increased disturbances in the area	Low (-)	Very Low (-)	No change	No change
	Fatalities due to collision with turbine blades or barotrauma	Medium (-)	Low (-)	No change	No change
	Disturbance of bat community due to high levels of noise and movement generated by turbines operation and increase of people and vehicles associated with maintenance activities	Low (-)	Very Low (-)	No change	No change
	Displacement of bat community due to increased disturbances in the area	Low (-)	Very Low (-)	No change	No change
	Population decline due to long-term increasing fatality events	Low (-)	Very Low (-)	No change	No change
	Disturbance of bat community due to the increase of people and vehicles in the area, high levels of noise and machinery movements when dismantling wind turbines and associated infrastructures	Low (-)	Very Low (-)	No change	No change
	Displacement of bat community due to increased disturbances in the area	Low (-)	Very Low (-)	No change	No change
	Destruction of important habitat areas (natural vegetation, water features, roosts, etc.) due to the construction of wind turbines and associated infrastructures	Medium (-)	Low (-)	No change	No change
	Disturbance of the bat community due to the increase of people and vehicles in the area, high levels of noise and machinery movements	Medium (-)	Low (-)	No change	No change

Specialist Study	Impact	Original Rating		Revised Rating	
		Pre-Mitigation Rating	Post Mitigation Rating	Pre-Mitigation Rating	Post-Mitigation Rating
	Displacement of bat community due to increased disturbances in the area	Medium (-)	Low (-)	No change	No change
	Fatalities due to collision with turbine blades or barotrauma	Medium (-)	Low (-)	No change	No change
	Population decline due to long-term increasing fatality events	Medium (-)	Low (-)	No change	No change
Biodiversity	Clearing of natural vegetation	High – Very High (-)	High (-)	No change	No change
	Loss of Species of Conservation Concern	Low (-)	Low (-)	No change	No change
	Loss of faunal habitat	Medium (-)	Low (-)	No change	No change
	Direct faunal mortalities	Low - Medium (-)	Low (-)	No change	No change
	Loss of animal refugia	Medium (-)	Very Low (-)	No change	No change
	Increased dust deposition	Low (-)	Very Low (-)	No change	No change
	Loss of animal and plant species by illegal collecting	Low (-)	Very Low (-)	No change	No change
	Increased noise and light levels	Medium (-)	Low (-)	No change	No change
	Establishment of alien vegetation	Low (-)	Very Low (-)	No change	No change
	Changes in animal behaviour	Medium (-)	Low (-)	No change	No change
	Changes in community composition of plants	Medium (-)	Low (-)	No change	No change
	Increased erosion and water run-off	High (-)	Low (-)	No change	No change
	Clearing and disturbance of natural vegetation	Low (-)	Very Low (-)	No change	No change
	Direct faunal mortalities	Low (-)	Very Low (-)	No change	No change
	Increased noise levels	Low (-)	Low (-)	No change	No change
	Loss of animal and plant species by illegal collecting	Low (-)	Very Low (-)	No change	No change
	Establishment of alien vegetation	Low (-)	Very Low (-)	No change	No change
	Changes in animal behaviour	Medium (-)	Low (-)	No change	No change
	Increased erosion and water run-off	Medium (-)	Low (-)	No change	No change
	Clearing and disturbance of natural vegetation	Low (-)	Very Low (-)	No change	No change
	Direct faunal mortalities	Low (-)	Very Low (-)	No change	No change
	Increased dust deposition	Low (-)	Very Low (-)	No change	No change

Specialist Study	Impact	Original Rating		Revised Rating	
		Pre-Mitigation Rating	Post Mitigation Rating	Pre-Mitigation Rating	Post-Mitigation Rating
	Changes in animal behaviour	Medium (-)	Low (-)	No change	No change
	Increased erosion and water run-off	Low (-)	Very Low (-)	No change	No change
	Vegetation loss and habitat destruction	High (-)	Medium (-)	No change	No change
	Loss of Species of Conservation Concern	Medium (-)	Low (-)	No change	No change
	Dissection of mountain crest habitat	Medium (-)	Medium (-)	No change	No change
	Turbine noise	Low (-)	Low (-)	No change	No change
	Compromising integrity of CBA, ESA and NPAES	High (-)	Low (-)	No change	No change
	Increased erosion and water run-off	Medium (-)	Low (-)	No change	No change
Noise	Noise impact from the construction of the WEF	Very Low (-)	Very Low (-)	No change	No change
	Noise impact from the operation of the wind turbines	Very Low (-)	Very Low (-)	No change	No change
	Noise impact from the decommissioning of the wind turbines	Very Low (-)	Very Low (-)	No change	No change
	Noise impact from the operation of the wind turbines	Very Low (-)	Very Low (-)	No change	No change
Socio-Economic	Economy will be stimulated due to capital investment and resultant increased production	High (+)	High (+)	No change	No change
	Unemployment figures will slightly decrease due to jobs created	Low (+)	Low (+)	No change	No change
	Skills levels in municipalities and for benefitting individuals will improve due to employment created	Low (+)	Medium (+)	No change	No change
	Movement of vehicles and workers may change livestock habits and ranges	Low (-)	Very Low (-)	No change	No change
	Employment due to wind farm construction work will result in household income earnings for benefitting households	Low (+)	Low (+)	No change	No change

Specialist Study	Impact	Original Rating		Revised Rating	
		Pre-Mitigation Rating	Post Mitigation Rating	Pre-Mitigation Rating	Post-Mitigation Rating
	The in-migration of migrant labour and job seekers will place pressure on local government to adequately provide housing, services and social facilities	Low (-)	Very Low (-)	No change	No change
	The increased number of people on site creates potential for theft, particularly livestock theft	Medium (-)	Low (-)	No change	No change
	The rates, payroll taxes and Value Added Tax paid to local government will increase government revenue	Low (+)	Low (+)	No change	No change
	Diseases, substance abuse and other social ills could increase leading to increased community dissatisfaction	Medium (-)	Low (-)	No change	No change
	Expenditure associated with the operation of the wind farm will impact on production in the economy	Medium (+)	Medium (+)	No change	No change
	Operation and maintenance activities will create long term job opportunities	Very Low (+)	Very Low (+)	No change	No change
	Skills levels in municipality and for benefitting individuals will improve due to employment created	Very Low (+)	Very Low (+)	No change	No change
	Upliftment initiative will increase the local communities' access to basic services	Medium (+)	Medium (+)	No change	No change
	Employment in operations and maintenance of the windfarm will result in household income earnings for benefitting households	Very Low (+)	Very Low (+)	No change	No change
	The rates, payroll taxes and Value Added Tax paid to local government will increase government revenue	Very Low (+)	Very Low (+)	No change	No change

Specialist Study	Impact	Original Rating		Revised Rating	
		Pre-Mitigation Rating	Post Mitigation Rating	Pre-Mitigation Rating	Post-Mitigation Rating
	The cost of the removal and disconnection of the wind turbines will stimulate economic activity	Very Low (+)	Very Low (+)	No change	No change
	Unemployment figures will slightly decrease due to jobs created for a short period of time	Very Low (+)	Very Low (+)	No change	No change
	The influx into the region will possibly be immense due to the numerous projects in the area attracting migrant job seekers. This will increase the demand for services	Medium (-)	Low (-)	No change	No change
	The numerous projects will create a notable number of jobs	High (+)	High (+)	No change	No change
	Capital and operating expenditure of numerous projects will increase production in the economy	High (+)	High (+)	No change	No change
	Local roads upgraded as a result of numerous WEFs in the area	Low (+)	Low (+)	No change	No change
	Numerous upliftment initiatives will increase the local communities' access to basic services	Medium (+)	Medium (+)	No change	No change
Transportation	Traffic congestion	High (-)	Medium (-)	No change	No change
	Noise and dust pollution	High (-)	Medium (-)	No change	No change
	The traffic generated during the operational phase will be minimal and will have very little, if any impact on the surrounding road network				
	Noise and dust pollution	Medium (-)	Medium (-)	No change	No change
	Noise and dust pollution with the delivery of equipment, material and staff to site	High (-)	Medium (-)	No change	No change
Visual	Visual intrusion and dust emissions	Medium (-)	Low (-)	No change	No change
	Visual intrusion, dust emissions and light pollution and glare	Medium (-)	Medium (-)	No change	No change
	Visual intrusion and dust emissions	Medium (-)	Low (-)	No change	No change
	Visual intrusion and dust emissions	Medium (-)	Medium (-)	No change	No change

Specialist Study	Impact	Original Rating		Revised Rating	
		Pre-Mitigation Rating	Post Mitigation Rating	Pre-Mitigation Rating	Post-Mitigation Rating
	Visual intrusion, dust emissions and light pollution and glare	Medium (-)	Medium (-)	N/A	N/A

It should be noted that a new Freshwater Ecological Assessment was undertaken in October 2020 as part of the Water Use Authorisation Process for the proposed 86MW Oya WEF and 239MW Kudusberg WEF (**Appendix D5a**), as the previous assessment undertaken in 2018 (Ekotrust, 2018 – **Appendix C8b**) did not meet the Department of Water and Sanitation (DWS) requirements for Water Use Authorisations. The 2020 Freshwater Assessment replaces the original Surface Water Impact Assessment for the Kudusberg WEF Project, which was compiled in 2018 (BlueScience, 2018). The results of the DWS risk assessment applied to the proposed WEF development activities undertaken as part of the 2020 Freshwater Ecological Assessment (du Preez, 2020) are presented in **Table 10** below.

Table 10: Summary of the results of the DWS risk assessment applied to the proposed WEF development activities

	Phases	Activity	Aspect	Impact	Severity	Consequence	Likelihood	Significance	Risk Rating	Control Measures	Borderline LOW MODERATE Rating Classes
1	**Construction Phase**	Site preparation prior to construction activities of surface infrastructure components located outside the watercourses and at least 32 m from the delineated extent of a watercourse,	Vehicular movement (transportation of construction materials)	• Loss of watercourse vegetation, associated habitat and ecosystem services; • Transportation of construction materials can result in disturbances to soils, and increased risk of sedimentation/erosion; and • Soil and stormwater contamination from oils and hydrocarbons originating from construction vehicles.	1	3	12	36	L	As this activity was assessed based on the recommendation that the proposed Kudusberg WEF construction camp, Kudusberg substation an Kudusberg WEF Turbine 23 crane pad and all pylons associated with the Oya WEF overhead collector system power line would be located at least 32m from the delineated extent of a watercourse (thus outside the 32m NEMA ZoR), this in itself is considered a mitigation measure which complies with the mitigation hierarchy as advocated by the DEFF et al. (2013). The presence of various other Kudusberg WEF crane pads (as listen in Table 9) within the 100m GN509 ZoR but at least 42m from the delineated extent of a watercourse is not considered to pose a direct negative impact to the watercourses. Since no site preparation activities associated with the construction of the surface	NA

	Phases	Activity	Aspect	Impact	Severity	Consequence	Likelihood	Significance	Risk Rating	Control Measures	Borderline LOW MODERATE Rating Classes
2		but still within the 100 m GN509 ZoR, which includes the Oya WEF overhead collector system, Oya WEF construction camp, Kudusberg WEF construction camp, Kudusberg Substation and the identified crane pads within the 100m GN509 ZoR.	Removal of vegetation and associated disturbances to soils.	• Earthworks could be potential sources of sediment, which may be transported as runoff into the downstream watercourse areas; • Exposure of soils, leading to increased runoff, and erosion, and thus increased sedimentation of the watercourses; • Increased sedimentation of the watercourses, leading to smothering of vegetation associated in the watercourses; and • Proliferation of alien and/or invasive vegetation as a result of disturbances.	1	3	12	36	L	infrastructure will be within the 32 m of these watercourses, the risk significance thereof will be "Low". The following mitigation measures should be implemented to retain a "Low" risk significance: • All development footprint areas to remain as small as possible and vegetation clearing to be limited to what is essential; • Retain as much indigenous vegetation as possible; • All vegetation removed as part of the site clearing activities (specifically where large areas need to be cleared) should be transported from the construction site (may not be stockpiled) and disposed of at a registered waste disposal facility; • During construction of the surface infrastructure within close proximity to a watercourse, regular spraying of non-potable water or the use of chemical dust suppressants must be implemented to reduce dust and to ensure no smothering of vegetation within the watercourses occurs from excessive dust settling. It must be noted that specifics as to what type of dust suppressant (grey water vs. chemical dust suppressant) that will be utilised as part of the proposed WEF development was not available at the time of assessment. Should this detail become available, it is recommended that the freshwater ecologist provide a statement on the suitability of the use of the proposed dust suppressant; • The watercourses outside the construction footprint not having authorised road crossings must be considered as no-go areas. No construction vehicles, nor construction personnel or vehicles may traverse through these watercourses (except on approved road crossings);	NA

	Phases	Activity	Aspect	Impact	Severity	Consequence	Likelihood	Significance	Risk Rating	Control Measures	Borderline LOW MODERATE Rating Classes
										• As far as possible, existing roads must be utilised to gain access to sites; • Contractor laydown areas, and material storage facilities to remain outside of the 32 m ZoR; • All vehicle re-fuelling is to take place outside of the 32 m ZoR; and • No vegetation may be removed from the 32 m ZoR surrounding the watercourse where no infrastructure is planned, as this provides a natural buffer zone around the watercourses which disperse surface runoff into the watercourses, and thus prevents sedimentation and erosion thereof.	
3		Site preparation prior to construction activities relating to the upgrading of existing roads and installation of underground cables traversing through watercourses.	Removal of vegetation and associated disturbances to soils.	• Earthworks and exposure of soils could result in sedimentation of the watercourses, which may be transported as runoff into the downstream watercourse areas and may smother vegetation associated with the watercourses; and • Proliferation of alien and/or invasive vegetation as a result of disturbances.	1,75	3,75	14	52,5	L	• It is imperative that all construction works be undertaken during the driest period of the year when there is no flow within the watercourses, and thus no diversion of flow would be necessary; • The reaches of the watercourses where no activities are planned to occur must be considered no-go areas. These no-go areas can be marked at a maximum distance of 5 m upstream and downstream of the proposed road upgrade crossing. This 5 m buffer area would allow for construction personal, vehicles (if applicable) to enter the watercourse crossing where the road is proposed to be upgraded; • For trenching of the cables, the topsoil has to be stored separately and may not be contaminated. Furthermore, the soil layers should be replaced in the same order and the topsoil returned last; • Contractor laydown areas, vehicle re-fuelling areas and material storage facilities are to remain outside of	NA

	Phases	Activity	Aspect	Impact	Severity	Consequence	Likelihood	Significance	Risk Rating	Control Measures	Borderline LOW MODERATE Rating Classes
										the watercourses and at least 32m from the delineated extent; and • The removed vegetation must be stockpiled outside of the delineated boundary of the watercourse. The footprint areas of these stockpiles should be kept to a minimum, and may not exceed a height of 2 m. Should the vegetation not be suitable for reinstatement after the construction phase or be alien/invasive vegetation species, all material must be disposed of at a registered garden refuse site and may not be burned or mulched on site.	
4		Site preparation prior to the construction of new roads and installation of underground cables (along new roads) traversing through watercourses.	Removal of vegetation and associated disturbances to soils.	• Earthworks and exposure of soils could result in sedimentation of the watercourses, which may be transported as runoff into the downstream watercourse areas and may smother vegetation associated with the watercourses; and • Proliferation of alien and/or invasive vegetation as a result of disturbances.	2,5	4,5	15	67,5	M	It is considered imperative that road watercourse construction works be undertaken during the driest periods of the year to limit surface water contamination and the need for any surface water diversion during the construction works (diverting the flow of water through a pipe or an excavated channel was not included as part of this risk assessment). In so doing, the severity scoring (specifically pertaining to the flow regime) will be significantly reduced as would the frequency of an impact. Should this specific mitigation measure be implemented and with implementation of the mitigation measures as per **Activity 3 above**, it is the opinion of the freshwater ecologist that the risk of the proposed road crossing construction in the watercourses be deemed 'low'.	L (-7)

	Phases	Activity	Aspect	Impact	Severity	Consequence	Likelihood	Significance	Risk Rating	Control Measures	Borderline LOW MODERATE Rating Classes
5		Construction of surface infrastructure outside of the watercourses and at least 32 m from the delineated extent of a watercourse (as all proposed infrastructure will be located outside the 32m NEMA ZoR), but still within the 100 m GN509 ZoR, which includes the Oya WEF overhead collector system, Oya WEF construction camp, Kudusberg WEF construction camp, Kudusberg Substation and the	• Removal of vegetation and topsoil and associated stockpiling; • Ground-breaking and earthworks relating to foundations and trenches; • Mixing and casting of concrete for construction purposes; • Backfilling of excavated and disturbed areas; and • Miscellaneous activities by construction personnel.	• Disturbances of soils leading to increased alien vegetation proliferation within the terrestrial buffer zone surrounding the watercourses, with the potential to affect the watercourse habitat; • Altered runoff patterns within the local catchment of the watercourses, potentially leading to increased erosion and sedimentation of the watercourses; • Potential impacts on the water quality of surface water runoff (when present) which may potentially enter the watercourses and contamination of soils due to concrete casting; and • Potential of backfill material entering the watercourses, increasing the sediment loads therein.	1	3	12	36	L	As this activity was assessed based on the recommendation that the proposed Kudusberg WEF construction camp, Kudusberg substation an Kudusberg WEF Turbine 23 crane pad and all pylons associated with the Oya WEF overhead collector system power line would be located at least 32m from the delineated extent of a watercourse (thus outside the 32m NEMA ZoR), this in itself is considered a mitigation measure which complies with the mitigation hierarchy as advocated by the DEFF et al. (2013). The presence of various other Kudusberg WEF crane pads (as listen in Table 9) within the 100m GN509 ZoR but at least 42m from the delineated extent of a watercourse is not considered to pose a direct negative impact to the watercourses. Since no site preparation activities associated with the construction of the surface infrastructure will be within the 32 m of these watercourses, the risk significance thereof will be "Low". If the following mitigation measures are adhered to, the risk significance of the construction of surface infrastructure would be of Low risk significance: With regards to ground-breaking activities at least 32 m from the delineated extent of a watercourse, but within the 100 m GN509 ZoR: • During excavation activities, the topsoil and vegetation should be stockpiled separately from other material outside of the 32 m NEMA ZoR; • Excavated materials should not be contaminated, and it should be ensured that the minimum surface area is taken up by any stockpiled materials. The mixture of the lower and upper layers of the excavated soil should be kept to a minimum, so as for later use as backfill material after construction has commenced; • All exposed soils must be protected from wind using tarpaulins for the duration of the construction phase to	NA

	Phases	Activity	Aspect	Impact	Severity	Consequence	Likelihood	Significance	Risk Rating	Control Measures	Borderline LOW MODERATE Rating Classes
		identified crane pads within the 100m GN509 ZoR.								prevent potential erosion and sedimentation of the watercourses; • Suitable drainage should be insured along the crane pads, in order to ensure that water does not pond on the crane pad or drain in a concentrated manner into the watercourses. This must be considered as part of the stormwater management plan and be overseen by a freshwater ecologist; • Construction of the proposed surface infrastructure may result in disturbance to the natural buffer zone surrounding the watercourses which may result in the reduction of surface roughness. This can be mitigated by ensuring that no concentrated runoff from the surface infrastructure construction areas enter the watercourses by installing silt traps or placing haybales down gradient of the construction footprint (until suitable basal vegetation cover has been restored) to ensure no sediment laden or concentrated runoff generates from the construction footprint; and • It is highly recommended that an alien vegetation management plan be compiled during the planning phase and implemented concurrently with the commencement of construction. With regards to concrete mixing on site: • No mixed concrete may be deposited outside of the designated construction footprint; • Protective equipment should be provided, onto which any mixed concrete can be deposited while it awaits placing; and • Concrete spilt outside of the demarcated area must be promptly removed and taken to a suitably licensed waste disposal site. With regards to backfilling of excavated areas:	

	Phases	Activity	Aspect	Impact	Severity	Consequence	Likelihood	Significance	Risk Rating	Control Measures	Borderline LOW MODERATE Rating Classes
										• Stockpiled material should be used as backfill material; • All excavated areas should be backfilled to the natural ground level with excavated material; and • Soil must be suitably compacted, and all construction material must be removed from the site upon the completion of construction or used in the rehabilitation process. Rehabilitation of the construction footprint areas: • All footprint areas which have been compacted should be ripped and revegetated within indigenous vegetation as soon as the construction activities have been completed. This will prevent soil erosion and the creation of gullies within the operational area; and • The operational area should regularly be inspected for alien and invasive vegetation species which might have established due to the construction activity related disturbances.	

	Phases	Activity	Aspect	Impact	Severity	Consequence	Likelihood	Significance	Risk Rating	Control Measures	Borderline LOW MODERATE Rating Classes
6		Upgrading of existing road crossings and trenching through the watercourses.	• Compaction of soil in the existing road crossing footprint to increase the width of the roads; and • Importation of materials to construct the roads.	• Earthworks could be potential sources of sediment, which may be transported as runoff into the downstream reach of the watercourse; and • Proliferation of alien and/or invasive vegetation as a result of disturbances.	1,75	3,75	14	52,5	L	• During the upgrading of existing internal roads and associate cable installation that may potentially traverse watercourses, a buffer of no more than 5 m on either side of the road crossing footprint through the watercourses may be impacted. This area must be cordoned off, and no vehicles or personnel are permitted outside of the authorised construction area; • Material to be used (gravel – if applicable) as part of the upgrading of the existing roads must be stockpiled outside the 32 m NEMA ZoR of the watercourses to prevent sedimentation thereof and to avoid any other vegetation being impacted by the construction activities. These stockpiles may not exceed a height of 2 m and should be protected from wind using tarpaulins; • Any remaining soils following the completion of backfilling of the trenches are to be spread out thinly in an area within the watercourses to aid in the natural reclamation process; • After upgrading of roads traversing watercourses, the area surrounding the road must be revegetated with suitable indigenous vegetation to prevent the establishment of alien vegetation species and to prevent erosion from occurring; • It is highly recommended that an alien vegetation management plan be compiled during the planning phase and implemented concurrently with the commencement of construction; and • All existing alien and invasive vegetation should be removed. All material must be disposed of at a registered garden refuse site and may not be burned or mulched on site.	NA

	Phases	Activity	Aspect	Impact	Severity	Consequence	Likelihood	Significance	Risk Rating	Control Measures	Borderline LOW MODERATE Rating Classes
7	**CONSTRUCTION PHASE**	Construction of new road crossings and trenches through watercourses	• Removal of vegetation and topsoil and associated stockpiling; • Ground-breaking and earthworks relating to foundations and trenches; • Compaction of soil in the road crossing footprint area; • Importation of materials to construct the roads; • Backfilling of excavated and disturbed areas; and • Miscellaneous activities by construction personnel.	• Disturbances of soils leading to increased alien vegetation proliferation within the watercourses, thus impacting on the watercourse habitat; • Altered runoff patterns within the watercourses, potentially leading to increased erosion and sedimentation of the watercourses; and • Potential of imported materials to entering the watercourses, increasing the sediment loads therein.	2,25	4,25	15	63,75	M	It is considered imperative that watercourse road construction works be undertaken during the dry period to limit surface water contamination and the need for any surface water diversion during the construction works (diverting the flow of water through a pipe or an excavated channel was not included as part of this risk assessment). In so doing, the severity scoring (specifically pertaining to the flow regime) will be significantly reduced as would the frequency of an impact. Should this specific mitigation measure be implemented and with implementation of the below mitigation measures it is the opinion of the freshwater ecologist that the risk of the proposed road crossing construction in the watercourses be deemed 'low': • The design of the new road crossings should ensure that no erosion occurs, specifically along the embankments of the watercourse. As such, vegetation must be established in the construction footprint immediately after the construction of the road/ installation of cables is complete; • New road crossings must intersect the watercourse at a right angle (perpendicular) to minimise disturbance to the watercourse; • No road crossing designs were available at the time of this assessment. However, it is strongly advised that suitably sized culverts be installed within all road crossings and vehicles should not be allowed to cross within the riverbed. This will ensure hydrological connectivity is maintained and no hydrocarbons are not washed into the downstream watercourses from potential vehicle spills. Should road crossing designs become available, it is advised that it be revised by a freshwater ecologist; • During the construction of roads and associate cable installation that may potentially traverse	L (-7)

	Phases	Activity	Aspect	Impact	Severity	Consequence	Likelihood	Significance	Risk Rating	Control Measures	Borderline LOW MODERATE Rating Classes
										watercourses, a buffer of no more than 5 m on either side of the proposed road crossing footprint through the watercourses may be impacted. This area must be cordoned off, and no vehicles or personnel are permitted outside of the authorised construction area; • Soils excavated from the cable trench must be stockpiled immediately upstream of the trench. Once the cable is installed the trench must be infilled with the removed material and suitably compacted to avoid any erosion and preferential flow paths from forming; and • Any remaining soils following the completion of backfilling of the trenches are to be spread out thinly in an area within the watercourses to aid in the natural reclamation process.	
6	**OPERATIONAL PHASE**	Operation and maintenance of the surface infrastructure outside the watercourses and at least 32 m from the delineated extent of a watercourse, but still within the 100 m GN509 ZoR.	• Potential indiscriminate movement of maintenance vehicles within the watercourses or within close proximity to the watercourses; and • Increased risk of sedimentation and/or hydrocarbons entering the watercourses via stormwater	• Disturbance to soils and ongoing erosion as a result of periodic maintenance activities; and • Altered water quality (if surface water is present) as a result of increased availability of pollutants.	1,5	3,5	12	42	L	• No indiscriminate movement of construction equipment through the watercourses may be permitted during standard operational activities or maintenance activities. Use must be made of the existing watercourse crossings only; • Unnecessary disturbances surrounding the perimeter of the surface infrastructure must be avoided; • Vehicles used in the development site must be regularly washed (on a non-permeable surface or off-site) to avoid the dispersal of seeds on any alien or invasive species into the watercourses; • Ensure that routine inspections and monitoring of any instream infrastructure are undertaken to monitor any build-up of debris that will impact on structure integrity or lead to erosion and sedimentation. Furthermore, monitoring to determine the establishment of indigenous vegetation and the presence of any alien or invasive plant species; • Should erosion be noted at the base of the pylon that may potentially impact on a watercourse in the surrounding area, the area must be rehabilitated by	NA

	Phases	Activity	Aspect	Impact	Severity	Consequence	Likelihood	Significance	Risk Rating	Control Measures	Borderline LOW MODERATE Rating Classes
			runoff from the surface infrastructure (such as from crane pads and the construction camp)							infilling the erosion gully and revegetation thereof with suitable indigenous vegetation; • The surface infrastructure areas must be inspected to ensure that no concentrated runoff from these areas form erosion gullies leading to erosion and sedimentation of receiving watercourses. Should these impacts be noted, these gullies/preferential flow paths must be infilled with *in situ* material and appropriately stabilised and/or revegetated; and • Monitoring for the establishment for alien and invasive vegetation species must be undertaken, specifically at the road crossings and surface infrastructures. Should alien and invasive plant species be identified, they must be removed and disposed of as per an alien and invasive species control plan and the area must be revegetated with suitable indigenous vegetation.	
7		Operation and maintenance of roads (new and existing) traversing watercourses.	• Concentrated runoff entering the watercourses; and • Disturbance to the vegetation within and surrounding the watercourses.	• Concentrated runoff from the road crossings leading to erosion and subsequent sedimentation of the watercourses (increase in the sediment load) and turbulent flows when surface water is present; • Higher flood peaks into the watercourses due to reduced surface roughness in the watercourses.	1,75	3,75	12	45	L	• Routine maintenance of the roads must be undertaken to ensure that no concentration of flow and subsequent erosion occurs due to the road crossings/instream infrastructure. Such maintenance activities must specifically be undertaken after high rainfall events; • Stormwater runoff from the road crossings should be monitored (by the Operation and Maintenance (O&M) Manager), to ensure it does not result in erosion of the watercourses. Stormwater should be allowed to diffusely spread across the landscape, by ensuring adequate surface roughness in the watercourse (through vegetation and rocky areas); • Maintenance vehicles must make use of dedicated access roads and no indiscriminate movement in the watercourses may be permitted; • During periodic maintenance activities of the roads/surface infrastructure, monitoring for erosion should be undertaken; and	NA

	Phases	Activity	Aspect	Impact	Severity	Consequence	Likelihood	Significance	Risk Rating	Control Measures	Borderline LOW MODERATE Rating Classes
										• Should erosion be observed, caused by the road crossings/instream infrastructure, the area must be rehabilitated by infilling the erosion gully and revegetation thereof with suitable indigenous vegetation. Use can also be made of rocks collected from the surrounding area to infill any area prone to erosion, as a natural dispersal mechanism.	
8	**DECOMMISSIONING PHASE**	Removal of all surface infrastructure from the project area.	• Movement of construction vehicles and personnel; and • Disturbance to the buffer zone surrounding the watercourses.	• Disturbance of soil and vegetation that established within the operational area.	1,75	3,75	13	48,75	L	• No indiscriminate movement of construction equipment in the watercourses and buffer zones surrounding the watercourses may be permitted. Use must be made of the existing roads during the decommissioning phase; • All surface infrastructure must be decommissioned. All materials must be removed from the watercourses (where applicable) and may temporarily be stockpiled outside the 32 m NEMA ZoR, where after is must be removed from site and disposed of at a registered disposal facility; • High flood peaks from the decommissioning footprint areas can be mitigated by ensuring that no concentrated runoff from the surface infrastructure area and subsequent cleared area enters the watercourses. The velocity of surface water flow from these areas must be reduced by ensuring that the vegetation in the buffer area surrounding the watercourses are intact or by the strategic placement of silt traps of haybales as a means to obstruct flow but still allow flow to percolate at a reduced velocity and encourages a diffuse flow pattern. In this regard it is recommended at an alien and invasive plant species management plan be implemented during the construction and operational phases to specifically prevent the spread of any such species into the sensitive ecological areas;	NA

	Phases	Activity	Aspect	Impact	Severity	Consequence	Likelihood	Significance	Risk Rating	Control Measures	Borderline LOW MODERATE Rating Classes
										• Areas where surface infrastructure have been decommissioned and removed must be suitably compacted/ripped and revegetated to ensure that no erosion occurs which may contribute to the sediment load of the watercourses; • Should erosion gullies be noted, these areas must be rehabilitated by infilling them with suitable soil and ensuring the area is vegetated. The increased surface roughness will discourage concentrated flow paths to develop and ensure diffuse flow patterns; • Should road crossings be decommissioned, road footprint areas within the watercourse must be levelled to the same level and shape as that of the upstream and downstream reaches. This will ensure a continuous bed level and prevent any concentration of surface flow from occurring; • Watercourse embankments must be suitably rehabilitated (shaped end revegetated) to prevent any erosion from occurring; • All bare areas in the project area, specifically where vegetation was initially cleared for surface infrastructure components) must be ripped and be revegetated within suitable indigenous vegetation species; • Follow up revegetation should take place in areas where initial revegetation is not successful; • It is recommended that a Watercourse Rehabilitation and Management Plan must be compiled and implemented. Implementation must be overseen by a suitably qualified Environmental Site Officer (ESO) and the ESO must sign off the rehabilitation before the relevant contractors leave site; and • Post-closure monitoring of the watercourses (for a period of 3 years), with specific mention of the invasion of alien vegetation species) is recommended to be undertaken.	

In light of the above, no new environmental risks or impacts were identified and it was concluded that the impacts identified as part of the BA process for the original Kudusberg WEF in 2018 would remain unchanged. The 2020 Freshwater Assessment which replaces the original Surface Water Impact Assessment (BlueScience, 2018) also identified impacts which can be mitigation to acceptably low levels after the implementation of the recommended mitigation measures. In addition, none of the specialists found that the proposed amendments and subsequent addition of the proposed Oya WEF (northern section of authorised WEF) would change the original cumulative impact ratings or result in fatal flaws from a cumulative impact perspective. This is mainly due to the fact that the overall number of turbines will still remain the same and the two (2) proposed WEFs will be clustered in a REDZ (namely REDZ – Komsberg REDZ), in line with the REDZ intention.

5 NEW / REVISED MITIGATION MEASURES

In addition to assessing the impact of the proposed amendments, specialists were requested to provide measures to ensure avoidance, management and mitigation of any impacts associated with such proposed change and identify any changes required to the EMPr. New and/or revised mitigation measures provided by the specialists are outlined in **Table 11** below.

Table 11: New / Revised mitigation measures identified in respect of the proposed amendments

Specialist Study	Mitigation Measures
Agriculture	The amendment does not require any changes or additions to the mitigation measures for agricultural impacts that were recommended for the authorised development, and there are therefore no required changes to the EMPr(s).
Avifauna	No further mitigation measures are needed other than those already contained in the original study.
Bats	No further mitigation measures are needed other than those already contained in the original study.
Biodiversity	No further mitigation measures are needed other than those already contained in the original study.
Surface Water	The mitigation measures provided in the 2020 Freshwater Assessment (du Preez, 2020) (**Table 10**) still hold true and must be included in the EMPr as part of the Part 2 EA Amendment Application to DEFF and must be implemented as part of the construction and operational phases. It should be noted that these mitigation measures have been incorporated into the EMPrs (**Appendix I**) and will be adhered to.
Heritage	A walk-down was recommended, however, a detailed walk-down of the proposed layout has been undertaken by a suitably experienced archaeologist accordingly, and the findings are presented in a separate standalone walk-down report (**Appendix D4**). In addition, a Heritage Management Plan (HMP) has been compiled and forms part of the EMPr which is to be submitted to the DEFF for approval. It should however be noted that a walk-down for the proposed Kudusberg WEF area still needs to be undertaken prior to construction commencing.
Archaeological and Palaeontological Walk-down Report	The conditions and recommendations from HWC and SAHRA in response to the initial HIA submission remain applicable. The Chance Fossil Finds Procedure attached as Appendix 1 of the Heritage Walk-through Report (**Appendix D4**) must be implemented during the construction phase of the development.

Specialist Study	Mitigation Measures
	It should be noted that a number of conditions and/or recommendations from HWC and SAHRA in response to the initial HIA have been addressed in the Oya WEF EMPr (**Appendix I1**). All required conditions and/or recommendations will be addressed in the Final EMPr which will be submitted to the DEFF for approval with the final report. In addition, a Chance Fossil Finds Procedure has been developed by the specialist and has been incorporated into both the Kudusberg WEF EMPr (**Appendix I2**) and Oya WEF EMPr (**Appendix I1**) and will be implemented accordingly.
Noise	No further mitigation measures are needed other than those already contained in the original study.
Socio-Economic	No further mitigation measures are needed other than those already contained in the original study.
Transportation	The proposed Oya WEF and Kudusberg WEF will not require any additional recommendations or mitigation measures and all the proposed mitigation measures stated in the original Kudusberg report remain valid.
Visual	No additional recommendations or mitigation measures will be required and all of the proposed mitigation measures identified in the original VIA are still valid for the two new WEF projects.

6 ADVANTAGES / DISADVANTAGES OF THE PROPOSED AMENDMENTS

As required in terms of Section 32(1)(a)(ii) of the 2014 EIA Regulations (as amended), the advantages and disadvantages of the proposed amendments are outlined in **Table 12** below.

Table 12: Advantages / Disadvantages of the Proposed Amendments

Aspect to be amended	Authorised	Proposed Amendment		Motivation
		Oya WEF	Kudusberg WEF	
Administrative Aspects				
Amend the holder of the EA's	Kudusberg Wind Farm (Pty) Ltd	Oya Energy (Pty) Ltd	Kudusberg Wind Farm (Pty) Ltd	The Authorised project is being split into two (2) separate WEFs and as such, the name of the project is changing as well as ownership of the project is changing to be held by 2 separate SPVs. Therefore, the Applicant is requesting to amend the Holders of the EAs and their associated details. This amendment request is administrative in nature and therefore no disadvantages are foreseen should the amendment be granted.
Amend the name of the WEFs	Kudusberg Wind Energy Facility	Oya Wind Energy Facility	Kudusberg Wind Energy Facility	
Contact Details	kudusberg@g7energies.com	oya@g7energies.com	kudusberg@g7energies.com	
Extend the validity of the EA	This activity must commence within a period of five (05) years from the date of issue of this environmental authorisation	This activity must commence within a period of five (05) years from the date of issue of this amended environmental authorisation	This activity must commence within a period of five (05) years from the date of issue of this amended environmental authorisation	The projects are intended to be suitable for numerous opportunities such as either the REIPPPP, RMIPPPP, other government run procurement programmes or for sale to private entities, if required. The announcement of the REIPPPP Bid 5 window has not yet been officiated. As such the exact date in which the projects will be bid, awarded preferred bidder and start construction is unknown. The EAP in conjunction with the specialists assessed this amendment and confirmed that the EA can be extended with no disadvantages associated thereto.
Location of Activity and SG codes	**Western Cape** 1. Portion 1 of 156 Gats Rivier Farm: C01900000000015600001 2. Portion 3 of 156 Gats River Farm: C01900000000015600002	**Western Cape** 1. Portion 1 of the Farm Gats Rivier No 156: C01900000000015600001 2. Portion 2 of the Farm Gats Rivier No 156:	**Western Cape** 1. Portion 1 of the Farm Gats Rivier No 156: C01900000000015600001 2. Remainder of the Farm Gats Rivier No 156: C01900000000015600000	The motivation for this proposed amendment is to change the location to include only the properties and infrastructure that are relevant to each proposed WEF after the split and remove surplus properties.

	3. Remainder of 156 Gats Rivier Farm: C01900000000015600000 4. Portion 1 of 157 Riet Fontein Farm: C01900000000015700001 5. Portion 1 of 158 Amandelbloom Farm: C01900000000015800001 6. Remainder of 158 Amandelboom Farm: C01900000000015800000 7. Portion 1 of 159 Oliviers Berg Farm: C01900000000015900001 8. Remainder of 159 Oliviers Berg Farm: C01900000000015900000 9. Portion 2 of 157 Riet Fontein Farm: C01900000000015700002 10. Remainder of 161 Muishond Rivier Farm: C01900000000016100000 11. Remainder of 395 Klipbanks Fontein Farm: C01900000000019500000 **Northern Cape** 12. Portion 4 of 193 Urias Gat Farm: C07200000000019300004 13. Portion 6 of 193 Urias Gat Farm: C07200000000019300006 14. Remainder of 193 Urias Gat Farm: C07200000000019300000	C01900000000015600002 3. Remainder of the Farm Gats Rivier No 156: C01900000000015600000 4. Portion 1 of the Farm Riet Fontein No 157: C01900000000015700001 5. Portion 2 of the Farm Riet Fontein No 157: C01900000000015700002 6. Portion 1 of the Farm Amandelbloom No 158: C01900000000015800001 7. Remainder of the Farm Amandelboom No 158: C01900000000015800000 8. Portion 1 of the Farm Oliviers Berg No 159: C01900000000015900001 9. Remainder of the Farm Oliviers Berg No 159: C01900000000015900000 **Northern Cape** 10. Portion 4 of the Farm Urias Gat No 193:	3. Portion 1 of the Farm Oliviers Berg No 159; C01900000000015900001 4. Remainder of the Farm Oliviers Berg No 159: C01900000000015900000 5. Klipbanks Fontein No 395: C01900000000039500000 6. Remainder of the Farm Muishond Rivier No 159: C01900000000016100000 **Northern Cape** 7. Remainder of the Farm Karee Kloof No 196: C07200000000019600000 8. Remainder of the Farm Matjes Fontein No 194: C07200000000019400000 **Properties affected by public road:** 9. Zeekoegat Farm No 169: C07200000000016900000 10. Portion 1 of the Farm Roodeheuvel No 170: C07200000000017000001 11. Remainder of the Farm Roodeheuvel No 170: C07200000000017000000 12. Remainder of the Farm Wind Heuvel No 190: C07200000000019000000 13. Portion 1 of the Farm Wind Heuvel No 190: C07200000000019000001	There is no disadvantage to this proposed amendment as the number of involved properties remains the same, they are just being split between the two (2) proposed WEFs. All properties were assessed by the respective specialists as part of the original BA process for the authorised Kudusberg WEF and were authorized as such. Once again, the nature of the split can be seen as merely administrative to avoid issues during construction periods. The EAP in conjunction with the specialists assessed this amendment and confirmed that there are no disadvantages associated thereto.

	15. Remainder of 194 Matjes Fontein Farm: C07200000000019400000 16. Remainder of 196 Karree Kloof Farm: C07200000000019600000 **Properties affected by public road:** 17. 169 Zeekoegat Farm: C07200000000016900000 18. Portion 1 of 170 Roodeheuvel Farm: C07200000000017000001 19. Remainder of 170 Roodeheuvel Farm: C07200000000017000000 20. Remainder of 190 Wind Heuvel Farm: C07200000000019000000 21. Portion 1 of 190 Wind Heuvel Farm: C07200000000019000001 22. Portion 5 of 193 Urias Gat Farm: C07200000000019300005 23. Remainder of 171 Vinke Kuil Farm: C07200000000017100000 24. Alkant Re/220 Farm: C07200000000022000000 25. Portion 1 of 174 Lange Huis Farm: C07200000000017400001	C07200000000019300004 11. Portion 6 of the Farm Urias Gat No 193: C07200000000019300006 12. Remainder of the Farm Urias Gat No 193: C07200000000019300000 13. Remainder of the Farm Matjies Fontein No 194: C07200000000019400000 14. Portion 5 of the Farm Urias Gat No 193: C07200000000019300005 **Properties affected by access road:** 15. Zeekoegat Farm No 169: C07200000000016900000 16. Portion 1 of the Farm Roodeheuvel No 170: C07200000000017000001 17. Remainder of the Farm Roodeheuvel No 170: C07200000000017000000 18. Remainder of the Farm Wind Heuvel No	14. Portion 5 of the Farm Urias Gat No 193: C07200000000019300005 15. Remainder of the Farm Vinke Kuil No 171: C07200000000017100000 16. The Farm Alkant No 220: C07200000000022000000 17. Portion 1 of the Farm Lange Huis No 174: C07200000000017400001	

		190: C0720000000001900 0000 19. Portion 1 of the Farm Wind Heuvel No 190: C0720000000001900 0001 20. Portion 5 of the Farm Urias Gat No 193: C0720000000001930 0005 21. Remainder of the Farm Vinke Kuil No 171: C0720000000001710 0000 22. Alkant Farm No 220: C0720000000002200 0000 23. Portion 1 of the Farm Lange Huis No 174: C0720000000001740 0001		
Co-ordinates	**Centre:** 32°50' 56.0868"S 20°19' 25.0608"E **North:** 32°40' 29.8812"S 20°24' 57.78"E **East:** 32°43' 53.8212"S 20°29' 32.28"E **South-East:** 32°54' 6.66"S 20°23' 3.7788"E	**APPLICATION SITE:** **Coordinates at Corner Points (DD MM SS.sss)** 1. S32° 46' 11.757" E20° 21' 39.554" 2. S32° 45' 55.571" E20° 23' 32.919" 3. S32° 47' 3.530" E20° 23' 8.115" 4. S32° 48' 14.853" E20° 23' 15.057" 5. S32° 48' 7.939" E20° 25' 19.086" 6. S32° 49' 44.075" E20° 24' 59.144"	**APPLICATION SITE:** **Coordinates at Corner Points (DD MM SS.sss)** 1. S32° 48' 14.853" E20° 23' 15.057" 2. S32° 48' 7.939" E20° 25' 19.086" 3. S32° 49' 44.075" E20° 24' 59.144" 4. S32° 50' 41.159" E20° 24' 13.445" 5. S32° 50' 46.823" E20° 24' 24.286" 6. S32° 54' 9.411" E20° 24' 22.544"	

	South-West: 32°55’ 32.0412”S 20°16’ 24.8988”E **West:** 32°52’ 12.7812”S 20°14’ 20.6988”E	7. S32° 50' 41.159" E20° 24' 13.445" 8. S32° 53' 6.441" E20° 21' 52.752" 9. S32° 53' 8.532" E20° 21' 53.539" 10. S32° 54' 36.732" E20° 21' 50.816" 11. S32° 55' 2.170" E20° 18' 58.064" 12. S32° 54' 57.184" E20° 17' 28.053" 13. S32° 55' 48.840" E20° 14' 21.666" 14. S32° 55' 7.517" E20° 13' 55.356" 15. S32° 54' 28.981" E20° 13' 34.753" 16. S32° 52' 11.464" E20° 12' 21.280" 17. S32° 52' 9.896" E20° 14' 16.133" 18. S32° 51' 10.304" E20° 13' 32.215" 19. S32° 51' 0.223" E20° 12' 19.238" 20. S32° 50' 51.343" E20° 12' 14.058" 21. S32° 50' 33.384" E20° 12' 39.312" 22. S32° 50' 21.482" E20° 12' 33.983" 23. S32° 49' 38.848" E20° 13' 6.405" 24. S32° 50' 5.733" E20° 15' 50.817" 25. S32° 47' 57.718" E20° 15' 25.332"	7. S32° 54' 48.192" E20° 23' 53.935" 8. S32° 56' 23.562" E20° 26' 18.389" 9. S32° 57' 26.788" E20° 24' 38.101" 10. S32° 56' 35.721" E20° 22' 48.877" 11. S32° 56' 42.813" E20° 21' 46.490" 12. S32° 57' 27.491" E20° 19' 50.038" 13. S32° 59' 45.215" E20° 19' 58.513" 14. S32° 59' 5.070" E20° 17' 15.888" 15. S32° 59' 11.874" E20° 16' 34.719" 16. S32° 57' 11.539" E20° 15' 29.007" 17. S32° 55' 48.840" E20° 14' 21.666" 18. S32° 55' 23.944" E20° 15' 52.693" 19. S32° 52' 9.370" E20° 14' 54.031" 20. S32° 52' 4.579" E20° 15' 50.647" 21. S32° 51' 44.360" E20° 16' 19.552" 22. S32° 51' 27.665" E20° 17' 16.598" 23. S32° 51' 31.913" E20° 20' 32.550" 24. S32° 50' 41.238" E20° 19' 54.404" 25. S32° 49' 35.741" E20° 21' 44.517"	

		26. S32° 48' 16.924" E20° 17' 59.136" 27. S32° 50' 12.452" E20° 19' 31.355" 28. S32° 47' 54.581" E20° 20' 57.293" 29. S32° 48' 1.255" E20° 21' 9.303" 30. S32° 47' 54.387" E20° 21' 10.181" 31. S32° 47' 24.673" E20° 21' 0.698" 32. S32° 47' 17.149" E20° 21' 13.982" 33. S32° 46' 59.938" E20° 21' 22.475" 34. S32° 46' 56.504" E20° 21' 29.064" **Coordinates at Centre Point (DD MM SS.sss)** 35. S32° 51' 21.895" E20° 18' 41.467" **CONSTRUCTION CAMP:** **Coordinates at Centre Point (DD MM SS.sss)** **CENTRE:** S32° 47' 36.876" E20° 21' 23.588" **Coordinates at Corner Points:** **CC1_01:** S32° 47' 28.108" E20° 21' 19.647" **CC1_02:** S32° 47' 28.329" E20° 21' 28.144" **CC1_03:** S32° 47' 45.815" E20° 21' 27.943"	**Coordinates at Centre Point (DD MM SS.sss)** 26. S32° 54' 10.102" 27. E20° 20' 14.737" **CONSTRUCTION CAMP:** **Coordinates at Centre Point (DD MM SS.sss)** **CENTRE:** S32° 51' 46.797" E20° 21' 16.710" **Coordinates at Corner Points:** **CC1_01:** S32° 51' 41.254" E20° 21' 2.209" **CC1_02:** S32° 51' 40.895" E20° 21' 11.315" **CC1_03:** S32° 51' 46.466" E20° 21' 19.638" **CC1_04:** S32° 51' 45.812" E20° 21' 26.156" **CC1_05:** S32° 51' 47.063" E20° 21' 32.475" **CC1_06:** S32° 51' 50.861" E20° 21' 30.264" **CC1_07:** S32° 51' 51.339" E20° 21' 26.005" **CC1_08:** S32° 51' 53.100" E20° 21' 24.630" **CC1_09:** S32° 51' 43.651" E20° 21' 0.749" **SUBSTATION:** **Coordinates at Corner Points (DD MM SS.sss):** **SS1_01:** S32° 52' 4.061" E20° 21' 48.372"	

		CC1_04: S32° 47' 45.598" E20° 21' 19.332" **CC1_05:** S32° 47' 43.103" E20° 21' 20.053" **CC1_06:** S32° 47' 40.376" E20° 21' 20.085" **CC1_07:** S32° 47' 38.132" E20° 21' 19.168" **CC1_08:** S32° 47' 35.632" E20° 21' 19.015" **CC1_09:** S32° 47' 34.407" E20° 21' 18.760" **SUBSTATION:** **Coordinates at Centre Point (DD MM SS.sss):** **CENTRE:** S32° 54' 24.333" E20° 12' 28.366" **Coordinates at Corner Points (DD MM SS.sss):** **SS1_01:** S32° 54' 19.886" E20° 12' 26.843" **SS1_02:** S32° 54' 23.125" E20° 12' 33.613" **SS1_03:** S32° 54' 28.772" E20° 12' 29.816" **SS1_04:** S32° 54' 25.569" E20° 12' 23.122"	**SS1_02:** S32° 52' 10.456" E20° 21' 53.934" **SS1_03:** S32° 52' 15.215" E20° 21' 45.714" **SS1_04:** S32° 52' 9.014" E20° 21' 40.229" **Coordinates at Centre Point (DD MM SS.sss):** **CENTRE:** S32° 52' 9.655" E20° 21' 47.079"	

Technical Aspects				
Aspect to be amended	**Authorised**	**Proposed Amendment**		**Motivation**
		Oya WEF	**Kudusberg WEF**	
Overall Capacity	325 MW	86 MW	239 MW	Each WEF project is intended to be suitable for numerous opportunities such as either the REIPPPP, RMIPPPP, other government run procurement programmes or for sale to private entities, if required.
Number of turbines	56	20	36	
Hub height	Up to 140 m	92 m above the foundation	No Change i.e. up to 140 m	

Rotor diameter	Up to 180 m	150 m	No Change i.e. up to 180 m	Simultaneously, these amendments are proposed to increase the efficiency of the facility and consequently, the economic competitiveness thereof. The outcome is therefore the optimal use of the natural wind resource in the area to meet the country's energy demand, without expanding the development area.
Blade length	Up to 90 m	75 m	No Change i.e. up to 90 m	
Layout	-	Layout submitted for final approval. The layout to be approved are contained in **Appendix J4**. Associated turbine GPS locations will be provided in the Final EA Amendment Report.	Final layout to be submitted prior to the start of construction	The amended layout is more beneficial as wind turbines have been re-positioned outside of very high sensitivity areas. Simultaneously, these amendments are proposed to increase the efficiency of the facility and consequently, the economic competitiveness thereof. The outcome is therefore the optimal use of the natural wind resource in the area to meet the country's energy demand, without expanding the development area. **Kudusberg WEF:** The proposed alignment and layout for this WEF is largely unchanged from the 2018 layout authorized as part of the EA. The total number of turbines proposed for this part of the project area increases from 26 to 36, with all new turbines located along ridge lines previously assessed by the specialist in 2018. The addition of the Construction camp has been added into the layout, although this is located in an area previously assessed as part of the original application and EA. All specialist and the EAP found that there were no additional issues that arose as result of this layout or the proposed amendments.

				Oya WEF: There is little substantive change in terms of turbine placement, and the number of turbines proposed for the area remains static. The final layout has been informed by optimising the site for inclusion of the WEF in the RMIPPPP specifically as well as finalising the site development plan. The layout was informed by wind monitoring results, specialist walk-throughs[15] and design considerations of the site, as well as economic efficiency considerations. All specialist assessed the final layout and found the layout to be acceptable from an environmental point of view and found no issues the associated amendments.
Wind Measuring Lattice Masts	Up to 4 x 140 m high depending the final hub height	2 x met masts (same as hub height)	2 x up to 140 m high depending the final hub height	In order to accurately measure the onsite wind resource during the operational phase, the met masts must be installed up to the same height as the hub height. This is required in order to accurately report on the wind energy generated during the operational phase of the facility. Furthermore, met masts are required for both WEF as such they have been split between the two proposed WEF. No disadvantages were identified for this proposed amendment.
EMPr	The EMPr submitted as part of the Application for EA is hereby approved.	Approve Final EMPr	To be submitted based on final approval of layout.	The EMPr was approved as part of the authorised layout and is being updated to incorporate the required management plans, as well as the final layout for Oya.

[15] Condition 29 of Kudusberg EA (**DEFF Ref:** 14/12/16/3/3/1/1976/AM1) – Page 15 of EA (page 17 of full document): *the final placement of turbines must follow a micro siting procedure involving a walk-through and identification of any sensitive areas by ecological, avifaunal, bat, surface water and heritage specialists.*

				The EMPr is also being split between each WEF ensuring that sound management procedures remain in place regardless of the split. The Oya EMPr, will include the final layout informed by the specialist walk-throughs and onsite micro-sighting. No disadvantages were identified for this proposed amendment as it contains and identifies all relevant impacts and associated mitigation measures with the proposed developments.

Specialist Assessments / Walk-throughs		
	Advantages	**Disadvantages**
Agriculture	There are no agricultural advantages or disadvantages related to the amendments.	
Avifauna	There are no avifaunal related advantages or disadvantages related to the amendments.	
Bats	There are no bat related advantages or disadvantages related to the amendments.	
Biodiversity	There are no ecological advantages or disadvantages related to the amendments.	
Surface Water	Based on the proposed Oya WEF when compared to the original Kudusberg WEF project (as reported upon in FEN Consulting, 2020), the proposed project split is not considered to pose any change in impact / risk significance to the identified and assessed watercourses. As such, no advantages or disadvantages (when considering the authorised specifications, versus the proposed specifications.	
Heritage	There are no heritage related advantages or disadvantages related to the amendments.	
Archaeological and Palaeontological Walk-through	There are no heritage related advantages or disadvantages related to the amendments. Based on the assessment completed, the area proposed for development has an overall low archaeological sensitivity and no new additional significant heritage resources were identified that were not already identified in the original HIA. It is unlikely that the proposed development of the turbines, cables and roads associated with the WEF will negatively impact on significant archaeological or palaeontological heritage. The identified built environment resources and graves do not fall within the development footprint and will not be directly impacted. The sites mapped are all the known sites, both previously recorded and record during the walk-down, located in proximity to the final proposed layout.	
Palaeontology	From a Palaeontological perspective there will be no advantages or disadvantages of the proposed split.	
Socio-Economic	The split of the authorised 325 MW Kudusberg WEF would result in a phased period of the identified positive impacts which in turn would be advantageous to both local/ regional economies.	The disadvantage of the split of the authorised 325 MW Kudusberg WEF, lies in the prolonged period of identified negative impacts (i.e. criminal activity, social ills, impacts on farms, etc.), however, the identified

		disadvantage could be reduced through the implementation of the environmental management programme
Noise	There are no noise related advantages related to the amendments.	There is no disadvantages to splitting the wind farm into smaller components from a noise impact perspective as the only implication will be administrative in nature i.e. allocating turbines to a separate legal entities
Transport	The individual WEFs will generate less traffic during the construction and decommissioning phases as the overall capacity of 325MW (i.e. number of turbines) of the original Kudusberg WEF will be distributed between the two (2) smaller WEF projects.	None
Visual	The smaller turbines proposed for the Oya WEF will be less visible from the surrounding area, thus reducing the visual sensitivity of the Oya WEF site. Another benefit would be clustering the two (2) wind farms in line with the REDZ intention.	The amended turbine layouts will only affect one potentially sensitive receptor, this being VR13. The proximity of the nearest turbine to this receptor increases the impact rating for this receptor from Moderate to High. As this receptor is located on the Kudusberg WEF development site however, it is assumed that the owner of this receptor has a vested interest in the development and as such would not perceive the WEF in a negative light.

A comparison of the authorised Kudusberg WEF layout and the proposed Oya WEF layout following specialist comments and detailed walk-throughs is represented in **Figure 8** below.

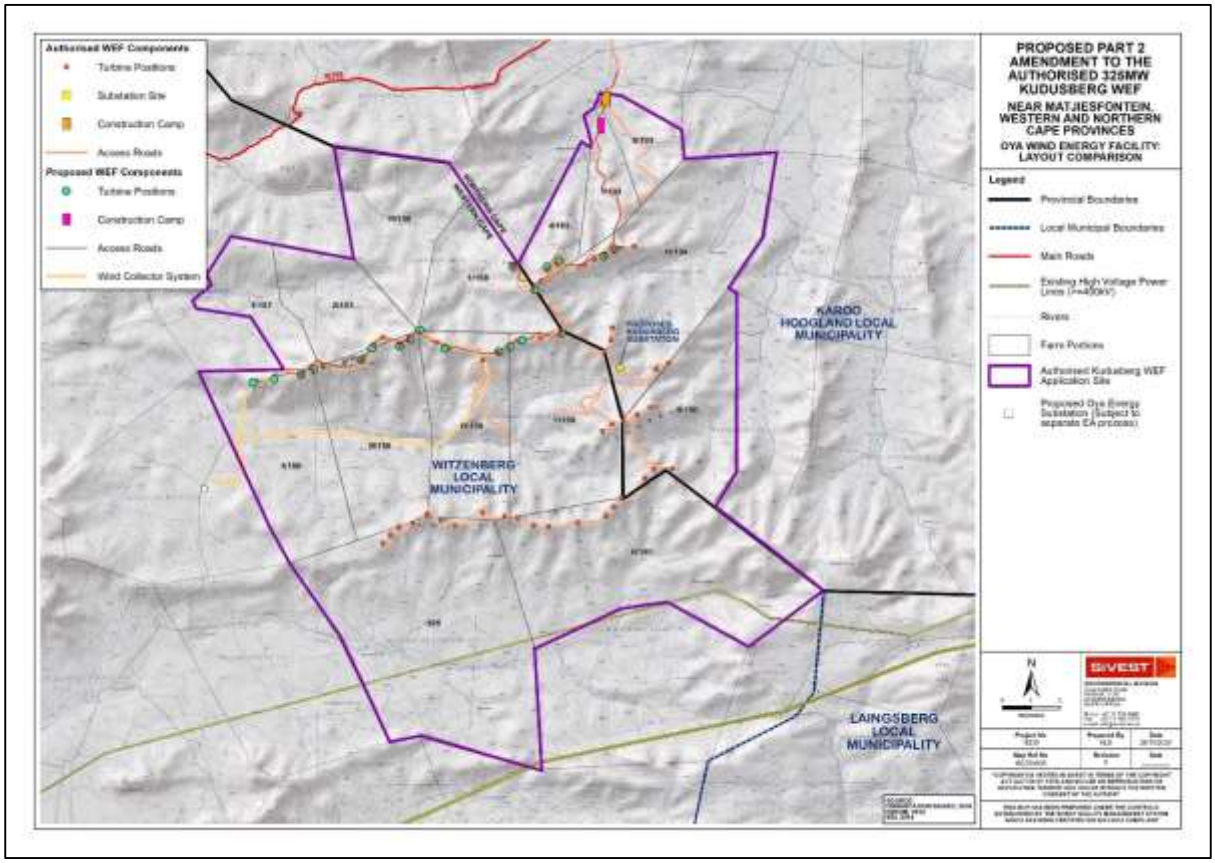

Figure 8: Layout comparison for authorised Kudusberg WEF and proposed Oya WEF

A comparison of the authorised Kudusberg WEF layout and the new proposed Kudusberg WEF layout following specialist comments and detailed walk-throughs is represented in **Figure 9** below.

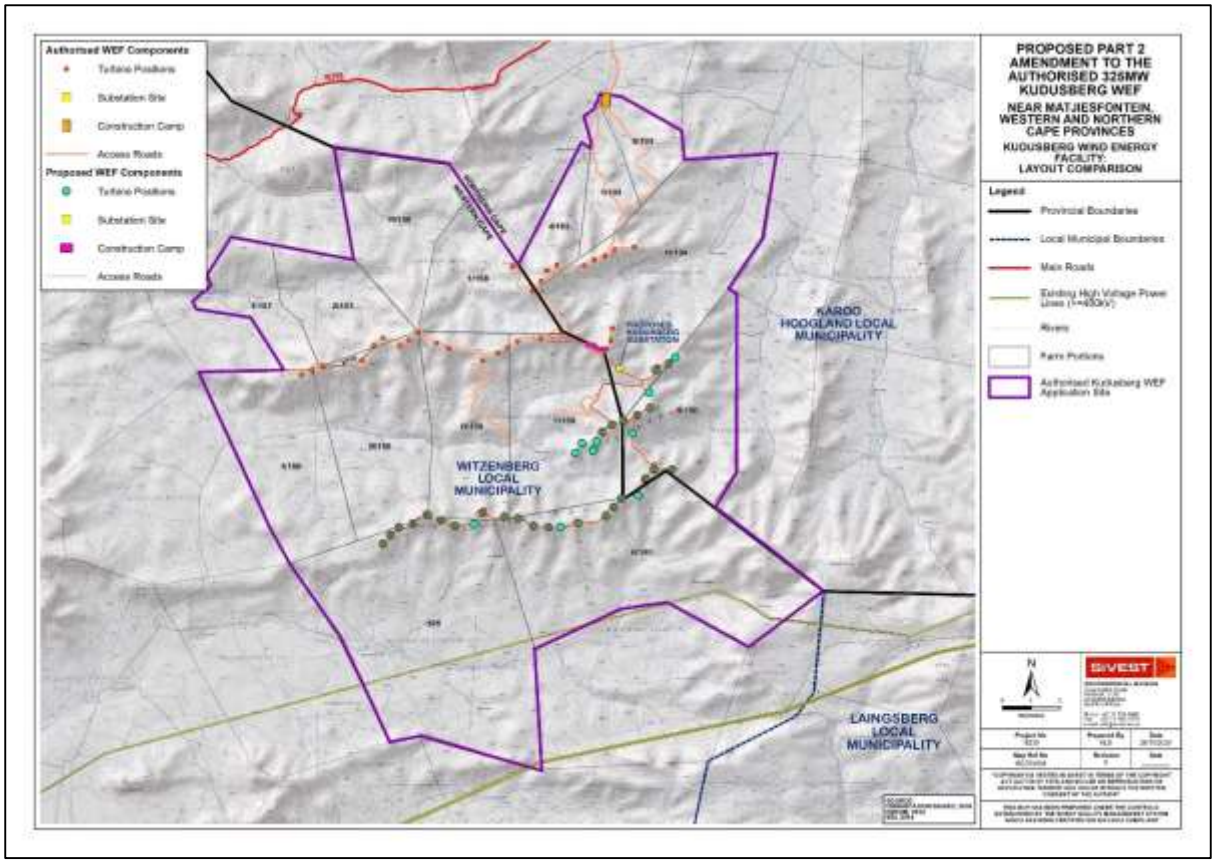

Figure 9: Layout comparison for authorised Kudusberg WEF and new proposed Kudusberg WEF

7 PUBLIC PARTICIPATION

In terms of Chapter 6 of the EIA Regulations, 2014 (as amended), a Part 2 EA Amendment application requires a 30-day Public Participation Process (PPP).

In light of the country wide restriction enforced in terms of Government Gazette 43096 which has resulted in the entire country being placed in a national state of disaster and limits on the movement and gatherings of people in an effort to curb the spread CoVID-19, the public participation process has been amended and adjusted in light of these restrictions. In response, SiVEST has formulated a unique Public Participation process which is as closely related to the requirements of Regulations 39 to 44 of the EIA Regulations, 2014, as amended, (GNR 326) as possible.

It should be noted that General Notice issued by the DEFF on 24 March 2020, as well as Government Notice No. 650 issued by the DEFF on 05 June 2020, were being adhered to during Level 3 of the national lockdown period. However, during a meeting held with the SAWEA on 25 August 2020, the DEFF indicated that the Directive issued by the Department on 05 June 2020 (Government Gazette 43412) related to level 3 lockdown, has been repealed, based on the current lockdown level. Therefore, as it stands, there is no indication that a new directive will be issued, and the “normal” EIA Regulations are currently in force. DEFF however highlighted that Applicants must continue to adhere to the applicable provisions of the Disaster Management Act and associated Regulations (e.g. restrictions on gatherings for public meetings) and hence some elements included in the lockdown directive (05 June 2020 - Government Gazette 43412), mainly as it pertains to PPP, are still relevant and that this directive

can be used as a consultation guide for all new applications. The Applicant will thus continue to adhere to applicable provisions of Disaster Management Act and associated Regulations.

As a result, **alternative means** of undertaking the required stakeholder engagement have been designed and implemented by SiVEST to ensure that all I&APs are afforded reasonable opportunity to engage meaningfully. As such, SiVEST proposed amendments to the public participation process, described in more detail below. This Public Participation Plan was submitted to DEFF on 03 November 2020, and was subsequently approved on 16 November 2020. The Public Participation plan, along with proof of approval, can be found in **Appendix E9**.

Figure 10 below provides an overview of the tools that are available to I&APs and stakeholders to access project information and interact with the public participation team to obtain project information and resolve any queries that may arise, and to meet the requirements for public participation. **Table 13** below shows how the amended PPP has been implemented in accordance to Regulations 39 to 44 of the EIA Regulations, 2014, as amended, (GNR 326), as well as adherence to the applicable provisions of the Disaster Management Act and associated Regulations (e.g. restrictions on gatherings for public meetings) and hence some elements included in the lockdown directive (05 June 2020 - Government Gazette 43412), mainly as it pertains to PPP.

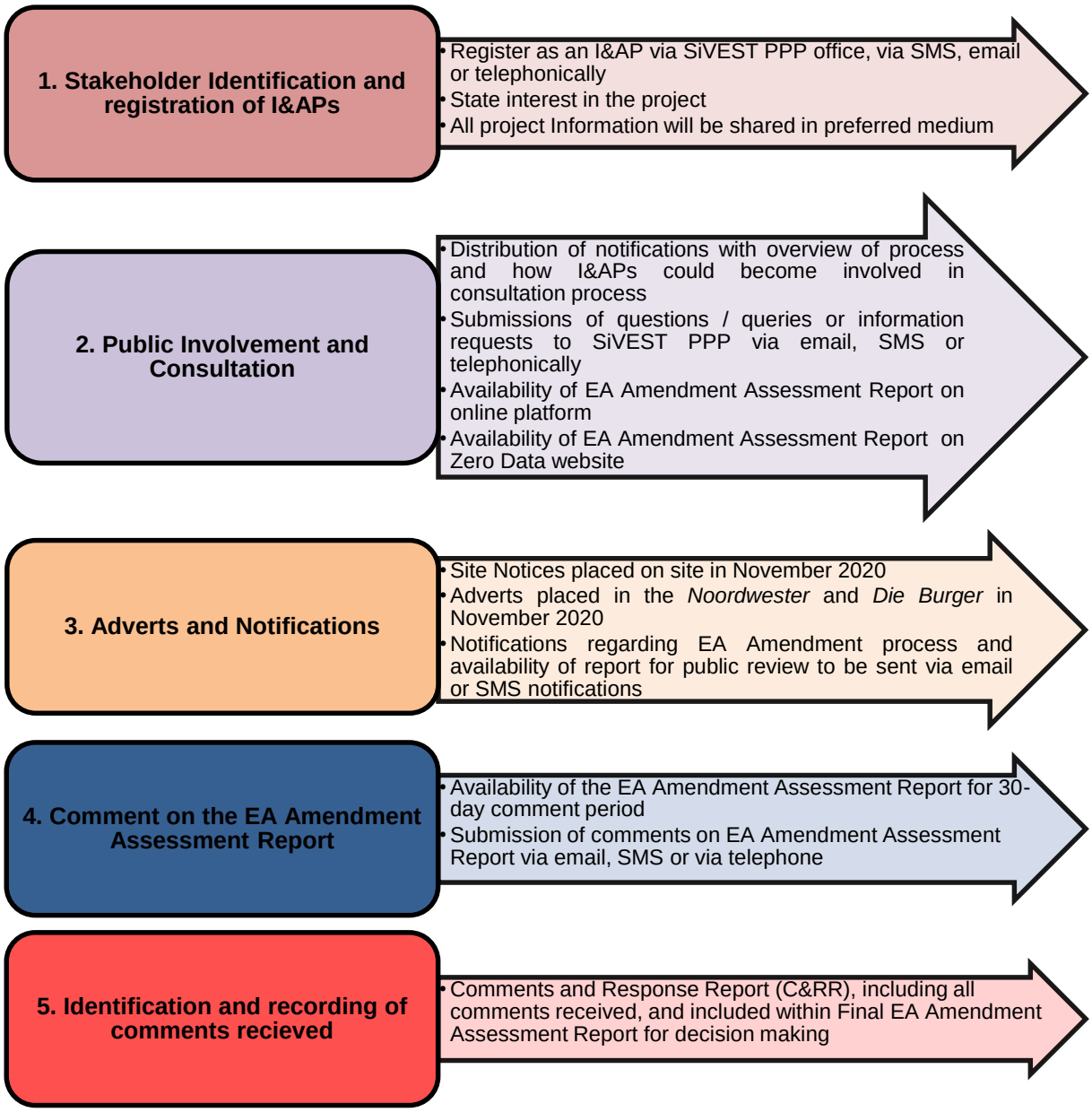

Figure 10: Schematic illustration of PPP tools

Table 13: Public Participation Plan: Discussion of approach and methodology to meet the requirements of the Regulations (Please see **Appendix E9** for full approved plan)

Regulation / circular	Approach & Methodology to meet requirements
Regulation 40(1), Regulation 40(3) & Regulation 43 – provide all potential or registered interested and affected parties, including the competent authority, **access to project related information**, access to the EA Amendment Assessment Report which will be made available for a period of at least 30 days to **submit comments on the draft report** prior to submission of the Final Report for decision-making.	It is the intention to release all relevant project information to all interested and affected parties for a 30-day period **Notification** of EA Amendment process to be distributed using the following means: • Issuing of the notifications and initial landowner consultation (to be circulated to all I&APs in November 2020) (proof to be included in Final EA Amendment Assessment Report). • Placement of site notices in English and Afrikaans (as per regulations) on one (1) of the boundaries of the affected properties, namely Portion 1 of the Farm Gats Rivier No 156 (32°53'31.56"S; 20°13'4.74"E). Placed on 05 November 2020 (proof to be included in EA Amendment Assessment Report). • Notification letter sent via E-mail or sms (if cellphone number / email is available, it is assuming the I&AP have an email or cellphone). • **ALL identified I&APs has access to at least email or cellphone (Appendix 1 and Appendix 2)** • Public notification of the EA Amendment process will be advertised in a local newspaper (namely *the Noordwester*) and provincial newspaper (*Die Burger*) as required according to Regulation 41(2) (c) of the EIA Regulations (2014), as amended. **Availability** of report for review: • Report available on the Kudusberg website for free download. • Dedicated data free portal for online stakeholder engagement platform. • Digital Tablet uploaded with the EA Amendment Assessment Report at the Sutherland Police Station, Witzenberg Local Municipality offices and Laingsburg Local Library**. • An electronic copy can be made available to parties via a secure digital link that will be emailed upon request for the documentation. • CDs / Flash drive to be posted, only if requested[16]. • Digital Tablet uploaded with the Draft EA Amendment Assessment Report at the Sutherland Police Station, Witzenberg Local Municipality offices and Laingsburg Local Library.

[16] The use of postage will only be required should and I&AP request that the documents be sent to them via CD or flash drive. All I&APs and OoS have either email / sms and will be sent an electronic link to the website where the reports can be reviewed or downloaded, as well as a data free portal where the report can be reviewed. Should any I&APs / stakeholders / Oos request documents via post or courier, this will be indicated and proof will be provided in the final report.

<table>
<tr><th>Regulation / circular</th><th>Approach & Methodology to meet requirements</th></tr>
<tr><td></td><td>The tablet will be located at the following locations and will be available for review at the below designated times:
<table>
<tr><th>Locations</th><th>Address</th><th>Open Hours</th><th>Contact**</th></tr>
<tr><td>Laingsburg Local Library</td><td>Van Riebeeck Street Laingsburg 6900</td><td><u>Mondays - Fridays</u>
9am – 1pm
1:30pm – 3pm</td><td>023-5511019</td></tr>
<tr><td>Sutherland Police Station</td><td>21 Piet Retief Street Sutherland</td><td>8am-5pm for viewing</td><td>023-5718040</td></tr>
<tr><td>Witzenberg Local Municipality</td><td>53 Voortrekker Street Ceres</td><td>8am-4pm for viewing</td><td>023-3168554</td></tr>
</table>

** In light of the requirements enforced by the Government Gazette 43096 and the limits on the movement and gatherings of people in an effort to curb the spread CoVID-19, Constable Koopman (PSmTis@saps.gov.za) has confirmed that the report will be sanitised after every viewing. There will also be a bottle of hand sanitiser next to the tablet where the user can sanitise themselves and the report as well to prevent the spread of CoVID-19. A site notice will also be placed next to the report detailing the project details and encouraging the public to practice social distance (i.e. one at a time), ensure the wearing of masks and the use of hand sanitiser while viewing the report.

** Mr. Hennie Taljaard of the Witzenberg Local Municipality confirmed that he will meet any I&APs wishing to view the digital Tablet in order to explain how the digital Tablet works and to provide assistance (if possible).

<u>Availability</u> <u>to comment:</u>
Comments can be submitted in various mediums detailed in the row below, and will be captured and responded to by the SiVEST PPP Office.

***Where I&APs do not have the applicable facilities i.e. access to internet, mobile phones, or computers, provision will be made for the use of an electronic tablet which will contain the full report where all members of the communities can view the report.</td></tr>
<tr><td>Regulation 40(2) - Provide access to all project information that has the potential to influence any decision regarding the application, unless protected by law, and must include consultation with Competent Authority, Organs of State & registered I&APs.</td><td>Report will be submitted to the DEFF using the DEFF online portal.
Report will be submitted to Organs of State and commenting authorities via an agreed electronic platform (via a secure digital link).
<u>Availability</u> <u>of report via means described above.</u>

<u>Submission of comments to EAP</u>:</td></tr>
</table>

Regulation / circular	Approach & Methodology to meet requirements
Regulation 41(6) – Relevant **information available and accessible**	• Comments will be able to be submitted directly to the EAP using the SiVEST sivest_ppp@sivest.co.za email address or cell phone via call, SMS or WhatsApp. • Written comments can also be submitted via email or fax. • This is deemed to be sufficient as all I&APs have either access to email or cellphone. Any comments provided telephonically or via instant message will be transcribed and recorded as formal comments. Provision of project information and consultation via various means including: ▪ Telephonic consultation. ▪ Email correspondence. ▪ SMS and/or WhatsApp. ▪ The Dedicated data free portal platform will ensure that I&APs are afforded sufficient opportunity to participate in the project and raise comments on the project with interest in the EA Amendment Assessment process for the project. This online stakeholder engagement platform will include the following: o Project maps (including locality map, layout map, sensitivity map, landowner map, etc.) o Photos of the project site and surrounds o Presentation providing a summary of the project details and the findings of the EA Amendment process o Posters providing a summary of the findings of the EA Amendment process o A means of submitting written comment or queries. ▪ Virtual meetings, if required, will be conducted using an appropriate platform agreeable to all parties (such as Zoom, Skype or Microsoft Teams). The meetings will be recorded, and the attendees' details captured in an attendance register. Confirmation of their attendance will also be requested by e-mail and the correspondence will be included in the report. ***It should be noted that the use of postage will only be required should and I&AP request that the documents be sent to them via CD or flash drive. All I&APs and OoS have either email / sms and will be sent an electronic link to the website where the reports can be reviewed or downloaded, as well as a data free portal where the reports can be reviewed. Should any I&APs / stakeholders / Oos request documents via post or courier, this will be indicated and proof of postage will be provided in the final report. In addition, the project database in the final report will reflect whether any I&AP / stakeholder / OoS / Authority received the documents via post or courier.***

Regulation / circular	Approach & Methodology to meet requirements
Regulation 41(2)(a) – **Site notice**	• Placement of site notices in English and Afrikaans (as per regulations) were placed on one (1) of the boundaries of the affected properties, namely Portion 1 of the Farm Gats Rivier No 156 (32°53'31.56"S; 20°13'4.74"E). Placed on 05 November 2020 (**Appendix E1**). Size and content is in accordance with Regulation 41(3) & 41(4). • Proof will be incorporated into the EA Amendment Assessment Report
Regulation 41(2)(b) – **Written notification** to affected and neighbouring landowners and occupiers; municipality; ward councilors; Organs of State & other parties required by the CA	Notification letters to all I&APs (Appendix 1 of PP Plan **– Appendix E9**) and OoS (Appendix 2 of PP Plan **– Appendix E9**) will be sent via email and SMS. • Proof of notifications will be incorporated into the Final EA Amendment Assessment Report
Regulation 41(2)(c) – (e) – **Advertisements**	Public notification of the EA Amendment Assessment process will be advertised in a local newspaper (namely the Noordwester) and provincial newspaper (namely *Die Burger*) as required according to Regulation 41 (2) (c) of the EIA Regulations (2014), as amended. • Process notices (A4 size) with site notice details will be placed at the Sutherland Police Station, Witzenberg Local Municipality offices and Laingsburg Local Library.
Regulation 42 – **Project database**	• I&APs have been identified through a process of networking and referral, obtaining information from the SiVEST existing stakeholder database, the existing stakeholder database for the authorised Kudusberg WEF (14/12/16/3/3/1/1976/AM1), proposed Oya Energy Facility (14/12/16/3/3/2/2009) database, neighbouring projects and liaison with potentially affected parties in the greater surrounding area. • Organs of State, key stakeholders and affected and surrounding landowners have been identified and registered on the project database. • Other stakeholders will be required to formally register their interest in the project through either directly contacting the SiVEST Public Participation team via phone, email or fax or use of the SiVEST or Kudusberg website. • In order to access the Kudusberg Data Free Portal platform for a specific project, I&APs will be required to provide their details such that they are automatically registered on the project database. • The register of I&APs will contain the names of: • all persons who requested to be registered on the database through the use of the Kudusberg website, or in writing and disclosed their interest in the project; • all Organs of State which hold jurisdiction in respect of the activity to which the application relates; and all

Regulation / circular	Approach & Methodology to meet requirements
	persons who submitted written comments or attended virtual meetings and viewed virtual presentations on the Kudusberg website during the public participation process. • The information captured on the project database will contain the names, organisation and contact details, as required. **All I&APs have access to either email or a cellphone.**
Regulation 44 – **Comments** to be recorded	• Comments will be able to be submitted directly to the EAP using the SiVEST sivest_ppp@sivest.co.za email address or cell phone via call, SMS or WhatsApp. • Written comments can also be submitted via calls, SMS, WhatsApp, email or fax. • Any comments provided telephonically or via instant message will be transcribed and recorded as formal comments. • I&APs without the applicable electronic facilities to access the Kudusberg website will be provided with the opportunity to submit their comments and communicate with the public participation team via SMS, WhatsApp or by sending a Please-call-me notification. These comments will be transcribed and recorded as formal comments. • All comments received throughout the EA Amendment process will be acknowledged and captured in the C&RR with a relevant response. • The C&RR will be included in the final report submitted to the CA. ***It should be noted that I&APs / stakeholders / OoS will be notified throughout the EA Amendment process to provide comments via the methods mentioned in this PPP. They will also be advised to contact SiVEST directly, if required, in which case other arrangements can be made (if required). SiVEST's public participation email address is monitored on a daily basis to confirm whether any comments or queries have been received. Once a comment is received the project team will save a copy, respond accordingly (using an appropriate method) and the comment / query will also be added to the C&RR (along with an appropriate response), which will be attached to the final report for consideration. SiVEST will also include all proof of correspondence with I&APs, stakeholder and OoS as part of the EA Amendment Assessment Report, while the project database in the report will reflect whether any I&AP / stakeholder / OoS / Authority received the documents via post or courier.***
Regulation 4(2) – Notification of **decision** on application	**Notification of Amendment of EA** using the following means: • Notification letter with details as outlined in the Amended EA issued will be sent via email and SMS (same method used during public consultation described above). • Notification will be available on the project website, as well as the Data Free Portal.

7.1 Notification of Affected Landowners and Provincial Authorities

All affected landowners, as well as the relevant provincial authorities, namely the Northern Cape Department of Environment and Nature Conservation (NC DENC) and Western Cape Department of Environmental Affairs and Development Planning (WC DEA&DP), as well as CapeNature, were notified about the EA Amendment Application via email prior to submission of the application to the DEFF on 13 November 2020. Proof of these notifications is provided in **Appendix E7**.

7.2 Notification of Potential Interested and Affected Parties (I&APs)

The advertising process was followed in compliance with Regulation 41 of the EIA Regulations, 2014 (as amended).

Advertisements (in English and Afrikaans) were placed in the "*Noordwester"* local newspaper as well as *"Die Burger"* provincial newspaper, on 06th and 13th of November 2020 respectively. Proof that the above-mentioned advertisements were placed is provided in **Appendix E2**.

In addition, site notices (in English and Afrikaans) were erected on one (1) of the boundaries of the affected properties on 05 November 2020. A copy of the site notices is provided in **Appendix E1**. Proof of the site notices (including GPS coordinates) which were erected is also included in **Appendix E1**.

I&APs and stakeholders who responded to these advertisements were registered on the project database and sent all relevant information as the amendment process progressed.

7.3 Comment and Review of Draft EA Amendment Assessment Report

The EA Amendment Assessment Report is being circulated for public participation for a period of 30 days[17] (excluding public holidays) from **16 November 2020** until **07 January 2021**. In light of the countrywide restriction enforced in terms of Government Gazette 43096, which has resulted in the entire country being placed in a national state of disaster, which limits the movement and gathering of people in an effort to curb the spread CoVID-19, the public participation process has been amended and adjusted in light of these restrictions. In response, SiVEST has formulated a unique Public Participation process which is as closely related to the requirements of Regulations 39 to 44 of the EIA Regulations, 2014, as amended, (GNR 326) as possible (**Appendix E9**).

As a result, SiVEST have implemented a virtual and electronic public participation process, in which electronic Tablets will be located at public venues (namely the Sutherland Police Station, Witzenberg Local Municipality Office and Laingsburg Local Library) in conjunction with a 'data free' website which will be set up in a way where the Draft Report can be either viewed and/or downloaded free of charge. Furthermore, an electronic copy will also be made available on a website which is a DFP (http://ppp.g7energies.com/K7khasco90m), whereby all registered I&APs can download the document at no data cost to themselves. This will ensure that all project related information associated with the amendment process is readily available and accessible to any person with interest in the project, enabling the public participation process to be undertaken in line with Regulations 41 to 44 of the EIA Regulations, 2014, as amended. Written notice via email and SMS was given to all I&APs, key stakeholders and OoS / Authorities registered on the database that the Draft EA Amendment

[17] DEFF have approved a 30-day Public Participation Process (Refer to **Appendix I1** – Additional information)

Assessment Report was available for comment and review (**Appendix E2**). Electronic copies (CDs / Flash Disk) of the report will also be distributed on written request, otherwise a link to the report will be shared with all OoS and I&APs.

All comments received will be responded to in a C&RR, which will be included prior to submission of the Final EA Amendment Assessment Report and EMPr to the decision-making authority, namely the DEFF. All comments received throughout the EA Amendment process (including comments received during the Report's commenting period) will also be incorporated into the Final EA Amendment Assessment Report, which will then be submitted to the competent authority for decision-making.

It should be noted that A Public Participation Plan (**Appendix E9**) was compiled by the EAP and was subsequently approved by the DEFF (**Appendix 4** and **Appendix E9**).

7.4 Stakeholders and I&APs

I&APs, key stakeholder and/or OoS / Authorities were identified using:

- Email and/or sms notifications[18] to all I&APs key stakeholder and OoS / Authorities on the project database (Proofs included in **Appendix E2**).
- Referrals.

A full database list of registered I&APs, key stakeholder and OoS / Authorities was compiled and is included in **Appendix E4**.

7.5 Announcing the Opportunity to Participate

The opportunity for I&APs, key stakeholder and OoS / Authorities to participate in the EA amendment process was communicated in the following manner:

- All affected landowners, as well as the relevant provincial authorities (NC DENC and WC DEA&DP), as well as, CapeNature, were notified about the EA Amendment Application via email prior to the application being submitted to the DEFF on 13 November 2020 (**Appendix E7**);
- Notification letters, advising of the EA amendment process and comment period will be distributed (via email and sms) the week of 16 - 20 November 2020 (Notification proof will be included in Final EA Amendment Assessment Report); and
- The Draft EA Amendment Assessment was made available to the public for review on a website which is a DFP (http://ppp.g7energies.com/K7khasco90m), whereby all registered I&APs can download the document at no data cost to themselves, for a period of 30 days from **Wednesday 18 November 2020** to **Monday 11 January 2021**, excluding public holidays and the DEFF's December closure period (Proof to be included in Final EA Amendment Assessment Report).

[18] It should be noted that the use of postage will only be required should and I&AP request that the documents be sent to them via CD or flash drive. All I&APs and OoS have either email / sms and will be sent an electronic link to the website where the reports can be reviewed or downloaded, as well as a data free portal where the reports can be reviewed. Should any I&APs / stakeholders / Oos request documents via post or courier, this will be indicated and proof of postage will be provided in the BA Report. In addition, the project database in the report will reflect whether any I&AP / stakeholder / OoS / Authority received the documents via post or courier.

7.6 Proof of Notification

Proof of notification of the I&APs will be included in **Appendix E2 of the Final EA Amendment Assessment Report**. More specifically, the types of proofs include the following:

- Proof of notification of affected landowners and relevant provincial authorities (namely NC DENC and WC DEA&DP), as well as CapeNature, about the EA Amendment Application (**Appendix E7**);
- Site notice text (**Appendix E1**);
- Photographs and Global Positioning System (GPS) Coordinates of site notices (**Appendix E1**);
- Proof of advertisements (namely tear-sheets) in the "Noordwester" local newspaper and *"Die Burger"* provincial newspaper (**Appendix E3**); and
- Correspondence to and from registered I&APs and key stakeholders, where received (**Appendix E5**).

7.7 Comments and Response Report (C&RR)

Issues, comments and concerns raised throughout the EA Amendment process (including comments received during the commenting period for the Draft EA Amendment Assessment Report) will be captured in the Comments and Response Report (C&RR) (**Appendix E6**), as and when they are received. The C&RR provides a summary of the issues raised, as well as the responses provided to I&APs, key stakeholders and OoS / Authorities. This information will be used to feed into the evaluation of environmental and social impacts and will also be taken into consideration when finalising the EA Amendment Assessment Report. All comments received through the amendment process will be included in the C&RR, which will be submitted as part of the final report.

7.8 Distribution to Organs of State (OoS) / Authorities

Table 14 below includes all the key stakeholders / OoS / authorities who will be emailed electronic copies of the Draft EA Amendment Assessment Report (including all appendices) at the start of the 30-day comment and review period. The report will be accompanied by a cover letter, a copy of which is included in **Appendix E8**. The remaining proofs of distribution (i.e. email notification) will be included in the Final EA Amendment Assessment Report.

It should be noted that all key stakeholders / OoS / authorities will be contacted near the end of the 30-day comment and review period and will be reminded to submit comments before this period closes. Comments received from key stakeholders / OoS / authorities during the 30-day comment and review period will be incorporated into the Final EA Amendment Assessment Report, which will then be submitted to the competent authority (namely the DEFF) for decision-making.

Table 14: Distribution of Draft EA Amendment Assessment Report to OoS

BASIC ASSESSMENT (BA) FOR THE KUDUSBERG WIND ENERGY FACILITY (WEF), BETWEEN MATJIESFONTEIN AND SUTHERLAND IN THE WESTERN AND NORTHERN CAPE PROVINCES							
DISTRIBUTION OF THE EA AMENDMENT ASSESSMENT REPORT TO ORGANS OF STATE FOR COMMENT							
TITLE	**SURNAME**	**NAME**	**POSITION**	**EMAIL ADDRESS**	**FORMAT DOCUMENT IS SHARED**	**METHOD OF COMMUNICATION**	
						EMAIL	**SMS**
CAPE WINELANDS DISTRICT MUNICIPALITY							
Mr	Mgajo	M	Municipal Manager	mm@capewinelands.gov.za	Email will be sent to explain the project between 16 November 2020 to 20 November 2020. A link to the website will be shared. The report will also be sent via We Transfer	√	
Mr	Du Plessis	Kobus	LED and Land Use Planning	kobusdp@capewinelands.gov.za		√	
WITZENBERG LOCAL MUNICIPALITY							
Mr	Nasson	David	Municipal Manager	david@witzenberg.gov.za	Email will be sent to explain the project between 16 November 2020 to 20 November 2020. A link to the website will be shared. The report will also be sent via We Transfer	√	
Mr	Taljaard	Hennie	Senior Town Planner	htaljaard@witzenberg.gov.za		√	
NAMAKWA DISTRICT MUNICIPALITY							
Mr	Fortuin	Chris	Municipal Manager	chrisf@namakwa-dm.gov.za	Email will be sent to explain the project between 16 November 2020 to 20 November 2020. A link to the website will be shared. The report will also be sent via We Transfer	√	
KAROO HOOGLAND LOCAL MUNICIPALITY							

Mr	Fortuin	Jannie	Municipal Manager	munman@karoohoogland.gov.za	Email will be sent to explain the project between 16 November 2020 to 20 November 2020. A link to the website will be shared. The report will also be sent via We Transfer	√	
Mr	Gibbsons	Allistar	Community Service Manager	a.gibbons@karoohoogland.gov.za		√	
ATNS							
Ms	Smit	Ferdi	System Specialist Radar | Technical Services CT International Airport	ferdis@atns.co.za	Email will be sent to explain the project between 16 November 2020 to 20 November 2020. A link to the website will be shared. The report will also be sent via We Transfer	√	
Mr	Mondzinger	Graham	Obstacle Evaluator	GrahamM@atns.co.za		√	
Mr	De Lange	Phillip	Manager: Manager of Western and Northern Cape	phillipd@atns.co.za		√	
DEPARTMENT OF AGRICULTURE							
Mr	van der Walt	Cor		CorvdW@elsenburg.com	Email will be sent to explain the project between 16 November 2020 to 20 November 2020. A link to the website will be shared. The report will also be sent via We Transfer	√	
Mr	Layman	Brandon		landuse.elsenburg@elsenburg.com BrandonL@elsenburg.com		√	
Mr	Opperman	Carl		carl@awk.co.za info@awk.co.za		√	
BIRDLIFE SOUTH AFRICA							
Mr	Booth	Jonathan	Policy Manager	advocacy@birdlife.org.za	Email will be sent to explain the project between 16 November 2020 to 20 November 2020. A link to the website will be shared. The report will	√	
Ms	Ralston	Samantha		energy@birdlife.org.za		√	

					also be sent via We Transfer		
BREEDE GOURITZ CATCHMENT MANAGEMENT AGENCY							
Ms	Mthimkhulu	Makhosi		MMthimkhulu@bgcma.co.za	Email will be sent to explain the project between 16 November 2020 to 20 November 2020. A link to the website will be shared. The report will also be sent via We Transfer	√	
Ms	Sam	Andiswa		ASam@bgcma.co.za		√	
CAPE NATURE							
Ms	Simons	Megan	Land Use Advice	msimons@capenature.co.za	Email will be sent to explain the project between 16 November 2020 to 20 November 2020. A link to the website will be shared. The report will also be sent via We Transfer	√	
Mr	Fordham	Colin	Scientist: Land Use Advice	cfordham@capenature.co.za		√	
ENDANGERED WILDLIFE TRUST							
Mr	Little	Ian	Senior Manager	ianl@ewt.org.za	Email will be sent to explain the project between 16 November 2020 to 20 November 2020. A link to the website will be shared. The report will also be sent via We Transfer	√	
Mr	Leeuwner	Lourens	Renewable Energy Project Manager	lourensl@ewt.org.za		√	
ESKOM							
Mr	Crous	Andre	Eskom Telecommunications	andre.crous@eskom.co.za	Email will be sent to explain the project between 16 November	√	
Mr	Nala	Bheki	Manager Telecommunications	nalamb@eskom.co.za		√	

Mr	Geeringh	John	Chief Planner	GeerinJH@eskom.co.za	2020 to 20 November 2020. A link to the website will be shared. The report will also be sent via We Transfer	√	
Ms	Hector	Ambrose		HectorA@eskom.co.za		√	
DEPARTMENT OF ENVIRONMENT, FORESTRY AND FISHERIES - BIODIVERSITY							
Mr	Lekota	Seoka		slekota@environment.gov.za	Email will be sent to explain the project between 16 November 2020 to 20 November 2020. A link to the website will be shared. The report will also be sent via We Transfer	√	
Mr	Rabothata	Mmatlala		slekotamrabothata@environment.gov.za		√	
DEPARTMENT OF WATER AND SANITATION							
Mr	Roberts	John		RobertsJ@dwa.gov.za	Email will be sent to explain the project between 16 November 2020 to 20 November 2020. A link to the website will be shared. The report will also be sent via We Transfer	√	
Ms	Schwartz	Chantel	Director: Institutional Establishment	MahunonyaneM@dws.gov.za		√	
Mr	Khan	Rashid		KhanR@dws.gov.za		√	
DEPARTMENT OF MINERAL RESOURCES (DMR)							
Ms	Kunene	Duduzile	Regional Manager	Duduzile.Kunene@dmr.gov.za	Email will be sent to explain the project between 16 November 2020 to 20 November 2020. A link to the website will be shared. The report will also be sent via We Transfer	√	
DEAPARTMENT OF AGRICULTURE, FORESTRY AND FISHERIES							
Provincial Department - Western Cape Department							

Mr	van Rhyn	Petro	Head of Communication	petrovr@elsenburg.com	Email will be sent to explain the project between 16 November 2020 to 20 November 2020. A link to the website will be shared. The report will also be sent via We Transfer	√	
National Department							
Ms	Buthelezi	Thoko	AgriLand Liaison Office	ThokoB@daff.gov.za	Email will be sent to explain the project between 16 November 2020 to 20 November 2020. A link to the website will be shared. The report will also be sent via We Transfer	√	
Ms	Gabriel	Mary Jean		maryjeang@daff.gov.za		√	
DEPARTMENT OF CULTURAL AFFAIRS & SPORT							
Ms	Heli	Vuyokazi	Heritage Resource Management	Vuyokazi.Heli@westerncape.gov.za HWC.HWC@westerncape.gov.za	Email will be sent to explain the project between 16 November 2020 to 20 November 2020. A link to the website will be shared. The report will also be sent via We Transfer	√	
DEPARTMENT OF AGRICULTURE, LAND REFORM & RURAL DEVELOPMENT							
Mr	Legodi	Lucky		lucky.legodi@drdlr.gov.za	Email will be sent to explain the project between 16 November 2020 to 20 November 2020. A link to the website will be shared. The report will	√	

					also be sent via We Transfer		
DEPARTMENT OF ENVIRONMENTAL AFFAIRS & DEVELOPMENT PLANNING							
Mr	Toefy	Zaahir	Director: Development Facilitation	Zaahir.toefy@westerncape.gov.za	Email will be sent to explain the project between 16 November 2020 to 20 November 2020. A link to the website will be shared. The report will also be sent via We Transfer	√	
Mrs	La Meyer	Adri	Directorate: Development Facilitation	Adri.Lameyer@westerncape.gov.za		√	
DEPARTMENT OF TRANSPORT AND PUBLIC WORKS							
Provincial Department - Western Cape Department							
Mr	Carstens	Schalk	Chief Engineer	Schalk.Carstens@westerncape.gov.za	Email will be sent to explain the project between 16 November 2020 to 20 November 2020. A link to the website will be shared. The report will also be sent via We Transfer	√	
Ms	Swanepoel	Grace		Grace.Swanepoel@westerncape.gov.za		√	
National Department							
Mr	Welman	Ben		bigben@mweb.co.za		√	
Mr	Manyathi	T		Transport.Publicworks@westerncape.gov.za		√	
HERITAGE WESTERN CAPE							
Ms	Peters	Ameerah	PA to CEO	ceoheritage@westerncape.gov.za	Email will be sent to explain the project between 16 November 2020 to 20 November 2020. A link to the website will be shared. The report will also be sent via We Transfer	√	
Ms	Scheermeyer	Colette	Heritage Officer	Colette.Scheermeyer@westerncape.gov.za.		√	
SANRAL - WESTERN REGION							

Ms	Abrahams	Nicole	Environmental Coordinator	abrahamsn@nra.co.za	Email will be sent to explain the project between 16 November 2020 to 20 November 2020. A link to the website will be shared. The report will also be sent via We Transfer	√	
SQUARE KILOMETRE ARRAY							
Dr	Tiplady	Adriaan	Manager: Site Categorisation	atiplady@ska.ac.za	Email will be sent to explain the project between 16 November 2020 to 20 November 2020. A link to the website will be shared. The report will also be sent via We Transfer	√	
SA CIVIL AVIATION AUTHORITY (SA CAA)							
Ms	Stoh	Lizell	Obstacle Specialist	strohl@caa.co.za	Email will be sent to explain the project between 16 November 2020 to 20 November 2020. A link to the website will be shared. The report will also be sent via We Transfer	√	
SOUTH AFRICAN ASTRONOMICAL OBSERVATORY							
Prof	Ted	Williams	Director	williams@saao.ac.za	Email will be sent to explain the project between 16 November 2020 to 20 November 2020. A link to the website will be shared. The report will	√	
Dr	Sefako	Ramotholo	Telescope Operations (TOPS)	rrs@saao.ac.za		√	

					also be sent via We Transfer		
SOUTHERN AFRICAN LARGE TELESCOPE							
Mr	Chris	Coetzee	Technical Operations Manager Southerland Site	chris@salt.ac.za	Email will be sent to explain the project between 16 November 2020 to 20 November 2020. A link to the website will be shared. The report will also be sent via We Transfer	√	
Ms	Hlazo	Mavela		salt@salt.ac.za		√	
SOUTH AFRICAN WEATHER SERVICE							
Ms	Nelly	Boshielo	South African Weather Service	Nelly.Boshielo@weathersa.co.za	Email will be sent to explain the project between 16 November 2020 to 20 November 2020. A link to the website will be shared. The report will also be sent via We Transfer	√	
SENTECH							
Mr	Koegelenberg	Johan	Broadcast Coverage Planner: RF Networks	koegelenbergj@sentech.co.za	Email will be sent to explain the project between 16 November 2020 to 20 November 2020. A link to the website will be shared. The report will also be sent via We Transfer	√	
Mr	Motlhake	Serame	Network Planning Manager	motlhakes@sentech.co.za		√	
Mr	Creese	Frank	Senior TCC Manager: Operations and Maintenance (Western Region)	creesef@sentech.co.za		√	
Ms	Pretorius	Alisha		pretoriusa@sentech.co.za		√	
SOUTH AFRICAN LOCAL GOVERNMENT ASSOCIATION							

Ms	Harigobin	Chantal		sharigobin@salga.org.za	Email will be sent to explain the project between 16 November 2020 to 20 November 2020. A link to the website will be shared. The report will also be sent via We Transfer	√	
TELKOM							
Mr	Shaw	Leonard		leonardS@openserve.co.za	Email will be sent to explain the project between 16 November 2020 to 20 November 2020. A link to the website will be shared. The report will also be sent via We Transfer	√	
Mr	Thurling	Keverne		Thurling@telkom.co.za		√	
Mrs	Hartman	Loretta	Wayleave Officer	LorettaH@openserve.co.za		√	
TRANSNET FREIGHT RAIL							
Mr	Coetzee	Herman	Radio Communication Department	herman.coetzee2@transnet.net	Email will be sent to explain the project between 16 November 2020 to 20 November 2020. A link to the website will be shared. The report will also be sent via We Transfer	√	
Mr	Govender	Devon		devon.govender@transnet.net		√	
WESSA							
Mr	Griffiths	Morgan	Environmental Governance Programme Manager	morgan.griffiths@wessa.co.za	Email will be sent to explain the project between 16 November 2020 to 20 November 2020. A link to the website will be shared. The report will	√	

					also be sent via We Transfer		

8 CONCLUSION AND RECOMMENDATIONS

The aforementioned and associated specialist comment letters and site walk-through reports provide an assessment of the potential impacts, advantages and disadvantages associated with the proposed amendments. In light of the fact that the proposed turbines would still be within the development footprint already assessed for the authorised Kudusberg WEF and the total number of turbines will remain unchanged, it was determined that the proposed amendments would not result in any additional environmental risks or impacts and it was concluded that the impacts identified and mitigation measures and/or recommendations proposed as part of the BA process for the original Kudusberg WEF in 2018 would remain unchanged. The 2020 Freshwater Assessment (du Preez, 2020) which replaces the original Surface Water Impact Assessment (BlueScience, 2018) also concluded that impacts can be mitigated to acceptably low levels after the implementation of the recommended mitigation measures. As such, no further assessment would be required.

In addition, based on the feedback received from the specialists, it is evident that the advantages outweigh the disadvantages, mainly due to the fact that the amended layout is more beneficial as wind turbines have been removed and re-positioned outside of very high sensitivity areas and are located in optimal positions. Majority of the specialists also found that the layout did not differ too significantly from the original findings as the overall number of turbines has remained unchanged. It should also be noted that none of the specialists found that the proposed amendments and subsequent addition of the proposed Oya WEF (northern section of authorised WEF) would change the original cumulative impact ratings or result in fatal flaws from a cumulative impact perspective. This is mainly due to the fact that the overall number of turbines will still remain the same and the two (2) proposed WEFs will be clustered in a REDZ (namely REDZ – Komsberg REDZ), in line with the REDZ intention.

Several specialists (namely Avifauna, Bat, Surface Water, Terrestrial Ecology and Heritage[19]) also undertook detailed walk-throughs and micro-siting of the Oya WEF to identify any additional sensitive / "no-go" areas based on the final layout and/or any other special features which need to be avoided. Furthermore, the necessary specialists were commissioned to compile the requisite management plans detailed in the EMPr[3]. Based on the specialist walk-throughs which were undertaken, no fatal flaws or additional environmental sensitivities were identified and all specialists found the proposed layout for the Oya WEF to be acceptable. Additionally, all specialists recommended that the layout should be approved. Very few new (previously unknown) heritage resources were identified during the Heritage walk-through, however, it was confirmed by the specialist that they do not fall within the development footprint and will not be directly impacted.

It should be noted that the Ecologist recommended (not critical) shifting Turbine 1 a minimum of 90m eastwards and locating the crane pad to the east of the new position if a possible Vulnerable plant species (tentatively identified as *Octopoma quadrisepalum*) is identified within 40m of Turbine 1. Alternatively, he recommended submitted an application for a permit to relocate the plant or destroy it. No additional layout changes were however recommended from a Terrestrial Ecology perspective.

From a Surface Water perspective, it was found that the proposed Oya WEF overhead collector power line will traverse several watercourses, however, the pylons will be constructed outside the 32m NEMA zone of regulation. It was however determined that should the above infrastructure components be moved to be located at least 32m from a watercourse and the watercourse road crossings only be constructed during the driest period of the year, the impacts significance for the construction and operation for these components can be considered low with mitigation. In addition, no fatal flaws in terms of freshwater ecological aspects were identified. In terms of the walk-down, recommended

[19] Includes Archaeology, Palaeontology and Cultural Landscapes

amendments to the Oya WEF layout were made, in order to limit the infrastructure components within the watercourses and the 32m NEMA and 100m GN 509 zones of regulation. These amendments are however **not considered critical** for the protection of watercourses (as the risk assessment determined a Low Risk significance for linear infrastructure within the watercourses), but are suggested as best practice and to further reduce impacts on the receiving natural environment as a whole. The proposed Oya WEF layout respects the required buffers and is however considered acceptable from a freshwater ecological perspective, provided the recommended mitigation measure be applied, and should be granted EA.

It should however be noted that none of the specialists identified any fatal flaws and all specialists (including the Ecologist and Surface Water Specialist) subsequently recommended that the layout should be approved. Various management plans[3] have also been compiled by some of the specialists for incorporation into the EMPr and subsequent implementation. In light of the information above, the proposed amendments are acceptable from an overall environmental perspective.

It is therefore the EAP's reasoned opinion, based on the specialist assessments and detailed specialist walk-throughs which were undertaken, that:

1. **The EA should be split into two (2) EA's and amended in line with the proposed specifications listed in Table 1,**
2. **The impacts identified can be mitigated to acceptable levels, provided the recommended mitigation measures are implemented.**
3. **the layout being proposed as part of the Oya WEF and the Final EMPr (Appendix I1) be approved by the DEFF as part of the Amended EA (should this be granted)**.
4. Furthermore, **it is requested that the Kudusberg EMPr should <u>not</u> be approved and should be submitted along with the final layout before construction and should be included as such as part of the Amended EA (should this be granted).**

A public participation process is being undertaken to obtain any comments received by I&APs on the proposed amendments for the 325MW Kudusberg WEF. The public review and comment period will be undertaken from **Wednesday 18 November 2020** to **Monday 11 January 2021**, over a 30-day[17] period (excluding public holidays and the DEFF's December closure period). Any comments raised and responses to these comments and concerns will be integrated into the Final Amendment Assessment Report (as we well as forming part of the C&RR), which will be submitted to the DEFF for decision-making.

Based on the findings of the specialists, the EAP recommends that DEFF amends the EA as follows:

8.1 Details of Amendments Being Applied For

It is the EAPs opinion in conjunction with the respective specialists that the Kudusberg EA (**DEFF Ref No.:** <u>14/12/16/3/3/1/1976/AM1</u>) be amended into two (2) separate EAs for the Oya WEF and the Kudusberg WEF respectively and that the amendment be authorised as outlined in **Table 1 in section 1** of this report.

8.2 Environmental Impact Statement

SiVEST Environmental Division, as the EAP, is therefore of the opinion that:

- The magnitude and rating of all environmental impacts of the proposed amendments are expected to remain the same as those already identified in the original BA Report.
- The proposed amendments are not expected to result in increased negative impacts for any of the environmental aspects and no additional impacts were identified.
- The impacts identified can be mitigated to acceptable levels, provided the recommended mitigation measures are implemented.
- none of the specialists found that the proposed amendments and subsequent addition of the proposed Oya WEF (northern section of authorised WEF) would change the original cumulative impact ratings or result in fatal flaws from a cumulative impact perspective.
- All identified sensitive / "no-go" areas have been avoided for both propsoed WEF developments (i.e. Kudusberg WEF and Oya WEF) and the recommended buffer zones for both WEF developments have been implemented accordingly (where required).
- **It is requested that the layout being proposed as part of the Oya WEF and the Final EMPr be approved by the DEFF as part of the Amended EA**.
- **The Kudusberg EMPr and layout must NOT be approved**.
- The EA should be split into two (2) EAs and amended in line with the amendments as proposed.

It is trusted that this Draft EA Amendment Assessment Report provides the reviewing authority with sufficient information to make an informed decision regarding the requested amendments.

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Heritage (including Archaeology, Palaeontology and Cultural Landscapes) – Amendment Letter

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Heritage Impact Assessments				
Nid	**Report Type**	**Author/s**	**Date**	**Title**
8180	AIA Phase 1	Jayson Orton	01/02/2006	ARCHAEOLOGICAL IMPACT ASSESSMENT FOR THE CONSTRUCTION OF A DAM ON THE VERLORENVLEI FARM (VERLORENVALLEY 344) NEAR TOUWSRIVIER
8181	AIA Phase 1	Jayson Orton	29/09/2009	HERITAGE STATEMENT FOR THE PROPOSED VERLORENVLEI DIVERSION CANAL, CERES MAGISTERIAL DISTRICT, WESTERN CAPE
6644	AIA Phase 1	Jonathan Kaplan	29/09/2009	ARCHAEOLOGICAL IMPACT ASSESSMENT PROPOSED DEVELOPMENT ERF 660 DE DOORNS, WESTERN CAPE PROVINCE
186697	Desktop AIA	Foreman Bandama, Shadrack Chirikure	01/08/2014	An Archaeological Scoping and Assessment report for the proposed Gamma (Victoria West, Northern Cape) - Kappa (Ceres – Western Cape) 765Kv (2) Eskom power transmission line
329647	HIA Phase 1	Dave Halkett	15/06/2012	HERITAGE IMPACT ASSESSMENT OF THE IMPACTS RESULTING FROM THE RAISING OF THE EXISTING KEEROM DAM, SITUATED BETWEEN MONTAGU AND TOUWS RIVER, WESTERN CAPE
359488	Heritage Screener	Mariagrazia Galimberti, Kyla Bluff, Nicholas Wiltshire	09/03/2016	Brandvalley Wind Energy Facility
53187	HIA Phase 1	Timothy Hart, Lita Webley	01/03/2011	HERITAGE IMPACT ASSESSMENT PROPOSED WIND ENERGY FACILITY
337370	PIA Phase 1	Duncan Miller	01/03/2011	Palaeontological Impact Assessment Proposed Roggeveld Wind Energy Facility
356316	Heritage Screener	Mariagrazia Galimberti, Kyla Bluff, Nicholas Wiltshire	02/02/2016	Heritage Screener CTS15_015b EOH Brandvalley Wind Energy Facility
356318	Heritage Screener	Mariagrazia Galimberti, Kyla Bluff, Nicholas Wiltshire	01/02/2016	Heritage Screener CTS15_015a EOH Rietkloof Wind Energy Facility
364162	PIA Phase 1	John E Almond	01/04/2016	PALAEONTOLOGICAL HERITAGE ASSESSMENT: COMBINED DESKTOP & FIELD-BASED STUDY - PROPOSED BRANDVALLEY WIND ENERGY FACILITY LAINGSBURG, WESTERN & NORTHERN CAPE PROVINCES
364163	AIA Phase 1	Celeste Booth	01/04/2016	A PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT (AIA) FOR THE PROPOSED BRANDVALLEY WIND ENERGY FACILITY (WEF) SITUATED IN THE KAROO HOOGLAND LOCAL

				MUNICIPALITY (NAMAKWA DISTRICT MUNICIPALITY), THE WITZENBURG LOCAL MUNICIPALITY (CAPE WINELANDS DISTRICT MUNICIPALITY) AND LAINGSBURG LOCAL MUNICIPALITY (CENTRAL KAROO DISTRICT MUNICIPALITY).
4843	AIA Phase 1	Hilary Deacon	28/03/2008	Archaeological Impact Assessment: Proposed Breede Valley De Doorns Housing Project
514990	HIA Phase 1	Katie Smuts, Emmylou Bailey, Madelon Tusenius, John Almond	29/10/2018	HERITAGE IMPACT ASSESSMENT Basic Assessment for the Proposed Development of the 325MW Kudusberg Wind Energy Facility and associated infrastructure, between Matjiesfontein and Sutherland in the Western and Northern Cape Provinces: BA REPORT
375379	AIA Phase 1	Hugo Pinto, Katie Smuts	24/10/2011	Preliminary Archaeological Survey of Karoopoort Farm

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