



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

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NEAS Reference: DEA/EIA/0000341/2011

DEA Reference: 12/12/20/2209

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Ms Romoya Dorasamy
Exxaro Resources and Watt Energy (Pty) Ltd
PO Box 9229
PRETORIA
0001

Tel no: 012 307 4815
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E-mail: Romaya.Dorasamy@exxaro.com

PER FACSIMILE / MAIL

Dear Ms Dorasamy

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998: GN R.544 AND 545: PROPOSED 100MW TSITSIKAMMA COMMUNITY WIND ENERGY FACILITY IN THE TSITSIKAMMA AREA, EASTERN CAPE PROVINCE

With reference to the abovementioned application, please be advised that the Department has decided to accept the Environmental Impact Report (EIR) dated October 2011 and grant authorisation. The environmental authorisation and reasons for the decision are attached herewith.

In terms of regulation 10(2) of the Environmental Impact Assessment Regulations, 2010 (the Regulations), you are instructed to notify all registered interested and affected parties, in writing and within 12 (twelve) days of the date of the EA, of the Department's decision in respect of your application as well as the provisions regarding the submission of appeals that are contained in the Regulations.

Your attention is drawn to Chapter 7 of the Regulations, which prescribes the appeal procedure to be followed. This procedure is summarised in the attached document. Kindly include a copy of this document with the letter of notification to interested and affected parties.

Should the applicant or any other party wish to appeal any aspect of the decision a notice of intention to appeal must be lodged by all prospective appellants with the Minister, within 20 days of the date of the EA, by means of one of the following methods:

By facsimile: 012 320 7561;
By post: Private Bag X447,

By hand: Pretoria, 0001; or
2nd Floor, Fedsure Building, North Tower,
cnr. Van der Walt and Pretorius Streets,
Pretoria.

If the applicant wishes to lodge an appeal, it must also serve a copy of the notice of intention to appeal on all registered interested and affected parties as well as a notice indicating where, and for what period, the appeal submission will be available for inspection, should you intend to submit an appeal.

Please include the Department (*Attention: Director: Environmental Impact Evaluation*) in the list of interested and affected parties, notified through your notification letter to interested and affected parties, for record purposes.

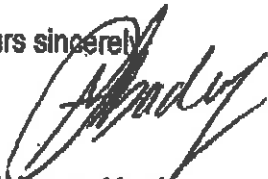
Appeals must be submitted in writing to:
Mr T Zwane, Senior Legal Administration Officer (Appeals) of this Department at the above mentioned addresses or fax number. Mr Zwane can also be contacted at:

Tel: 012-310-3929

Email: tzwane@environment.gov.za

The authorised activities shall not commence within twenty (20) days of the date of signature of the authorisation. Further, please note that the Minister may, on receipt of appeals against the authorisation or conditions thereof suspend the authorisation pending the outcome of the appeals procedure.

Yours sincerely



Mr Ishaam Abader
Deputy Director-General: Environmental Quality and Protection
Department of Environmental Affairs

Date: 01/03/2012

CC:	Mr John von Mayer	Savannah Environmental (Pty) Ltd	Tel: (011) 234 6621	Fax: (086) 684 0547
	Nondwe Mdekazi	DEDEA	Tel: (045) 808 4000	Fax: (045) 838 3981/4
	DJ de Lange	Kouga Local Municipality	Tel: (042) 293 1111	Fax: (042) 293 1114
	Mr T Zwane	Appeals Authority (DEA)	Tel: 012-310-3929	Fax: 012-320-7561

APPEALS PROCEDURE IN TERMS OF CHAPTER 7 OF THE NEMA EIA REGULATIONS, 2010 (THE REGULATIONS) AS PER GN R. 543 OF 2010 TO BE FOLLOWED BY THE APPLICANT AND INTERESTED AND AFFECTED PARTIES UPON RECEIPT OF NOTIFICATION OF AN ENVIRONMENTAL AUTHORISATION (EA)

APPLICANT	INTERESTED AND AFFECTED PARTIES (IAPs)
1. Receive EA from the relevant Competent Authority (the Department of Environmental Affairs (DEA))	1. Receive EA from Applicant/Consultant
2. Within 12 days of date of the EA notify all IAPs of the EA and draw their attention to their right to appeal against the EA in terms of Chapter 7 of the Regulations.	2. N/A
3. If you want to appeal against the EA, submit a notice of intention to appeal within 20 days of the date of the EA, with the Minister of Water and Environmental Affairs (the Minister).	3. If you want to appeal against the EA, submit a notice of intention to appeal within 20 days of the date of the EA, with the Minister of Water and Environmental Affairs (the Minister).
4. After having submitted your notice of intention to appeal to the Minister, provide each registered IAP with a copy of the notice of intention to appeal within 10 days of lodging the notice	4. After having submitted your notice of intention to appeal to the Minister, provide the applicant with a copy of the notice of intention to appeal within 10 days of lodging the notice
5. The Applicant must also serve on each IAP: <ul style="list-style-type: none"> • a notice indicating where and for what period the appeal submission will be available for inspection. 	5. Appellant must also serve on the Applicant within 10 days of lodging the notice, <ul style="list-style-type: none"> • a notice indicating where and for what period the appeal submission will be available for inspection by the applicant.
6. The appeal must be submitted in writing to the Minister within 30 days after the lapsing of the period of 20 days provided for the lodging of the notice of intention to appeal.	6. The appeal must be submitted to the Minister within 30 days after the lapsing of the period of 20 days provided for the lodging of the notice of intention to appeal.
7. Any IAP who received a notice of intention to appeal may submit a responding statement to that appeal to the Minister within 30 days from the date that the appeal submission was lodged with the Minister.	7. An Applicant who received notice of intention to may submit a responding statement to the appeal to the Minister within 30 days from the date that the appeal submission was lodged with the Minister.

NOTES:

1. An appeal against a decision must be lodged with:-
 - a) the Minister of Water and Environmental Affairs if the decision was issued by the Director- General of the Department of Environmental Affairs (or another official) acting in his/ her capacity as the delegated Competent Authority;
 - b) the Minister of Justice and Constitutional Development if the applicant is the Department of Water Affairs and the decision was issued by the Director- General of the Department of Environmental Affairs (or another official) acting in his/ her capacity as the delegated Competent Authority;
2. An appeal lodged with:-
 - a) the Minister of Water and Environmental Affairs must be submitted to the Department of Environmental Affairs;
 - b) the Minister of Justice and Constitutional Development must be submitted to the Department of Environmental Affairs;
3. An appeal must be:-
 - a) submitted in writing;
 - b) accompanied by:
 - a statement setting out the grounds of appeal;
 - supporting documentation which is referred to in the appeal; and
 - a statement that the appellant has complied with regulation 62 (2) or (3) together with copies of the notices referred to in regulation 62.



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

Environmental Authorisation

In terms of regulation 36 of the Environmental Impact Assessment Regulations, 2010

**Proposed Exxaro Resources and Watt Energy (Pty) Ltd 100MW Tsitsikamma Community Wind
Energy Facility in the Tsitsikamma Area, Eastern Cape Province**

Cacadu District Municipality

Authorisation register number:	12/12/20/2209
NEAS reference number:	DEA/EIA/0000341/2011
Last amended:	First issue
Holder of authorisation:	EXXARO RESOURCES AND WATT ENERGY (PTY) LTD
Location of activity:	EASTERN CAPE PROVINCE: Within the Kouga Local Municipality

This authorisation does not negate the holder of the authorisation's responsibility to comply with any other statutory requirements that may be applicable to the undertaking of the activity.

Decision

The Department is satisfied, on the basis of information available to it and subject to compliance with the conditions of this environmental authorisation, that the applicant should be authorised to undertake the activities specified below.

Non-compliance with a condition of this authorisation may result in criminal prosecution or other actions provided for in the National Environmental Management Act, 1998 and the EIA regulations.

Details regarding the basis on which the Department reached this decision are set out in Annexure 1.

Activities authorised

By virtue of the powers conferred on it by the National Environmental Management Act, 1998 (Act 107 of 1998) and the Environmental Impact Assessment Regulations, 2010 the Department hereby authorises –

EXXARO RESOURCES AND WATT ENERGY (PTY) LTD

with the following contact details –

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Tel no: 012 307 4815

Cell: 083 452 6578

Fax no: (012) 307 5285

E-mail: Romoya.Dorasamy@exxaro.com

to undertake the following activities (hereafter referred to as "the activity") indicated in Listing Notices 1. and 2 (GN R. 544 & 545):

Listed activities	Activity/project description
GN R. 545 Item 1:	<i>The construction of facilities or infrastructure for the generation of electricity where the electricity output is 20 megawatts or more.</i>
GN R.545: Item 15:	<i>Physical alteration of undeveloped, vacant or derelict land for residential, retail, commercial, recreational, industrial or institutional use where the total area to be transformed is 20 hectares or more;</i> <i>except where such physical alteration takes place for:</i> <i>(i) linear development activities; or</i> <i>(ii) agriculture or afforestation where activity 16 in this Schedule will apply.</i>
GN R.544: Item 10:	<i>The construction of facilities or infrastructure for the transmission and distribution of electricity-</i> <i>(i) outside urban areas or industrial complexes with a capacity of more than 33 but less than 275 kilovolts.</i>
GN R.544: Item 11:	<i>The construction of:</i> <i>(xi) infrastructure or structures covering 50 square metres or more where such construction occurs within a watercourse or within 32 metres of a watercourse, measured from the edge of a watercourse, excluding where such construction will occur behind the development setback line.</i>
GN R.544: Item 13:	<i>The construction of facilities or infrastructure for the storage, or for the storage and handling, of a dangerous good, where such storage occurs in containers with a combined capacity of 80 but not exceeding 500 cubic metres.</i>
GN R.544: Item 23:	<i>The transformation of undeveloped, vacant or derelict land to residential, retail, commercial, recreational, industrial or institutional use:-</i> <i>(ii) outside an urban area and where the total area to be transformed is bigger than 1 hectare but less than 20 hectares.</i>

-for the proposed establishment of the Tsitsikamma Community Wind Energy Facility and its associated infrastructure, as described in the Final Environmental Impact Report (EIR) dated October 2011 on the following farms:

- Portions 19 and 22 of ZalverigeValley 660;
- Portions 3 and 5 of Vergaaderingskraal 675;
- Portion 1 of Ou Driefontein 721;
- Portion 2 of New Driefontein 720;
- Portions 3 - 9 of Wittekleibosch 787;
- Farm 818; Remainder of Farm 678; and
- Portion 3 of Kliprug 676.

The proposed site is situated approximately 30km west of Humansdorp, south of the N2 National Road in the Tsitsikamma area; which falls within the jurisdiction of the Kouga Local Municipality in the Eastern Cape Province, hereafter referred to as "the property".

The associated infrastructure proposed includes:

- Up to 31 wind turbines over an area of approximately 54 km² in extent with a total generating capacity of approximately 100 MW.
- The turbines will have a hub height of up to 100 m, and a rotor diameter of up to 100 m (i.e. each blade up to 50 m in length).
- Foundations (of up to 15 x 15 x 3 m) to support the turbine towers.
- Underground cables between turbines.
- A substation (covering an area of up to 25m x 25m) within the development site.
- An overhead power line (of up to 132kV) linking the wind energy facility to the Eskom electricity distribution network via the existing Diep Rivier Substation to follow the proposed Option A route. Alternatively to follow the proposed Option B route to the Melkhout Substation if connection to Diep Rivier is not feasible.
- Internal access roads (of up to 6m wide) to each wind turbine.
- Main access road / haul road to the site.
- Workshop / administration building (100m²).

Conditions of this Environmental Authorisation

Scope of authorisation

1. The proposed development of the 100MW Tsitsikamma Community Wind Energy Facility on the preferred farm portions as described on page 4 of this authorisation is approved.
2. The preferred Alternative Corridors Option A for the proposed 132kV overhead power line feeding into the electricity distribution network/grid at the Diep Rivier Substation is approved. In the event that the Diep Rivier Substation is not upgraded, Option C to Eskom's existing larger Melkhout Substation must be utilised.
3. Authorisation of the activity is subject to the conditions contained in this authorisation, which form part of the environmental authorisation and are binding on the holder of the authorisation.
4. The holder of the authorisation shall be responsible for ensuring compliance with the conditions contained in this environmental authorisation. This includes any person acting on the holder's behalf, including but not limited to, an agent, servant, contractor, sub-contractor, employee, consultant or person rendering a service to the holder of the authorisation.
5. The activities authorised may only be carried out at the farm portions as described on page 4 of this authorisation.
6. Any changes to, or deviations from, the project description set out in this authorisation must be approved, in writing, by the Department before such changes or deviations may be effected. In assessing whether to grant such approval or not, the Department may request such information as it deems necessary to evaluate the significance and impacts of such changes or deviations and it may be necessary for the holder of the authorisation to apply for further authorisation in terms of the regulations.
7. This activity must commence within a period of three (3) years from the date of issue. If commencement of the activity does not occur within that period, the authorisation lapses and a new application for environmental authorisation must be made in order for the activity to be undertaken.
8. Commencement with one activity listed in terms of this authorisation constitutes commencement of all authorised activities.

9. The holder of an environmental authorisation has the responsibility to notify the competent authority of any alienation, transfer and change of ownership rights in the property on which the activity is to take place.

Notification of authorisation

10. The holder of the authorisation must notify every registered interested and affected party, in writing and within 12 (twelve) calendar days of the date of this environmental authorisation, of the decision to authorise the activity.
11. The notification referred to must –
- 11.1 specify the date on which the authorisation was issued;
 - 11.2 inform the interested and affected party of the appeal procedure provided for in Chapter 7 of the Environmental Impact Assessment (EIA) Regulations, 2010;
 - 11.3 advise the interested and affected party that a copy of the authorisation will be furnished on request; and
 - 11.4 give the reasons for the decision.
12. The holder of the authorisation must publish a notice –
- 12.1 informing interested and affected parties of the decision;
 - 12.2 informing interested and affected parties where the decision can be accessed; and
 - 12.3 drawing the attention of interested and affected parties to the fact that an appeal may be lodged against this decision in the newspaper(s) contemplated and used in terms of regulation 54(2)(c) and (d) and which newspaper was used for the placing of advertisements as part of the public participation process.

Management of the activity

13. A copy of the final site layout plan must be submitted to the Department of Agriculture, Forestry and Fisheries (DAFF) for comments and to this Department for written approval prior to commencement of the activity. All available biodiversity information must be used in the finalisation of the layout plan. Existing infrastructure must be used as far as possible e.g. roads.
14. The final location of the wind turbines and associated infrastructure must be informed by surveys undertaken by an ecological, avifaunal and heritage specialist. The site layout plan must indicate the following:
- 14.1 Turbine positions and its associated infrastructure;

- 14.2 Foundation footprint;
 - 14.3 Permanent laydown area footprint;
 - 14.4 Construction period laydown footprint;
 - 14.5 Internal roads indicating width (construction period width and operation period width) and with numbered sections between the other site elements which they serve (to make commenting on sections possible);
 - 14.6 Wetlands, drainage lines, rivers, stream and water crossing of roads and cables indicating the type of bridging structures that will be used;
 - 14.7 The location of Heritage sites;
 - 14.8 Sub-station(s) and/or transformer(s) sites including their entire footprint;
 - 14.9 Cable routes and trench dimensions (where they are not along internal roads);
 - 14.10 Connection routes (including pylon positions) to the distribution/transmission network;
 - 14.11 Cut and fill areas at turbine sites along roads and at sub-station/transformer sites indicating the expected volume of each cut and fill;
 - 14.12 Borrow pits;
 - 14.13 Spoil heaps (temporary for topsoil and subsoil and permanently for excess material);
 - 14.14 All existing infrastructure on the site, especially roads;
 - 14.15 Buildings including accommodation;
 - 14.16 Buffer zones; and
 - 14.17 All "no-go" areas.
15. A map combining the final layout plan must also be superimposed (overlain) on an environmental sensitivity map to be submitted to the department. This map must reflect the proposed location of turbines as stated in the EIR dated October 2011 and this authorisation.
 16. Turbine number 8, 12, 14, 17, 19, 21, 23, 25, 28 and 29 must be relocated to areas of less agricultural sensitivity and away from wetlands/watercourses as identified in the EIR dated October 2011 and the comments from the DAFF.
 17. The Environmental Management Programme (EMPr) submitted as part of the application for environmental authorisation must be amended and submitted with the abovementioned layout plan to the Department for written approval prior to commencement of the activity.
 18. The EMPr amendments must include the following:
 - 18.1 All recommendations and mitigation measures recorded in the EIR dated October 2011.
 - 18.2 Site-specific information and specifications resulting from the final walk-through surveys.
 - 18.3 The requirements and conditions of this authorisation.



- 18.4 A plant rescue and protection plan which allows for the maximum transplant of conservation important species from areas to be transformed. This plan must be compiled by a vegetation specialist familiar with the site in consultation with the ECO and be implemented prior to commencement of the construction phase.
- 18.5 An open space management plan to be implemented during the construction and operation of the facility.
- 18.6 A re-vegetation and habitat rehabilitation plan to be implemented during the construction and operation of the facility including timeframes for restoration which must indicate rehabilitation within the shortest possible time after completion of construction activities to reduce the amount of habitat converted at any one time and to speed up the recovery to natural habitats.
- 18.7 An alien invasive management plan to be implemented during construction and operation of the facility. The plan must include mitigation measures to reduce the invasion of alien species and ensure that the continuous monitoring and removal of alien species is undertaken.
- 18.8 A storm water management plan to be implemented during the construction and operation of the facility. The plan must ensure compliance with applicable regulations and prevent off-site migration of contaminated storm water or increased soil erosion. The plan must include the construction of appropriate design measures that allow surface and subsurface movement of water along drainage lines so as not to impede natural surface and subsurface flows. Drainage measures must promote the dissipation of storm water run-off.
- 18.9 An effective monitoring system to detect any leakage or spillage of all hazardous substances during their transportation, handling, use and storage. This must include precautionary measures to limit the possibility of oil and other toxic liquids from entering the soil or storm water systems.
- 18.10 An erosion management plan for monitoring and rehabilitating erosion events associated with the facility. Appropriate erosion mitigation must form part of this plan to prevent and reduce the risk of any potential erosion.
- 18.11 A transportation plan for the transport of turbine components, main assembly cranes and other large pieces of equipment.
- 18.12 A traffic management plan for the site access roads to ensure that no hazards would result from the increased truck traffic and that traffic flow would not be adversely impacted. This plan must include measures to minimize impacts on local commuters e.g. limiting construction vehicles travelling on public roadways during the morning and late

afternoon commute time and avoid using roads through densely populated built-up areas so as not to disturb existing retail and commercial operations.

- 18.13 An avifauna and bat monitoring programme to document the effect of the operation of the energy facility on avifauna and bats. This must be compiled by a qualified specialist.
- 18.14 Measures to protect hydrological features such as streams, rivers, pans, wetlands, dams and their catchments, and other environmental sensitive areas from construction impacts including the direct or indirect spillage of pollutants.
- 18.15 An environmental sensitivity map indicating environmental sensitive areas and features identified during the EIA process.
19. The approved EMPr must be implemented and strictly enforced during all phases of the project. It shall be seen as a dynamic document and shall be included in all contract documentation for all phases of the development when approved.
20. Changes to the EMPr, which are environmentally defensible, shall be submitted to this Department for acceptance before such changes could be effected.
21. The Department reserves the right to request amendments to the EMPr should any impacts that were not anticipated or covered in the BAR be discovered.
22. The provisions of the approved EMPr including the mitigation measures identified in the EIR and specialist studies shall be an extension of the conditions of this EA and therefore noncompliance with them would constitute noncompliance with the EA.
23. The holder of this authorisation must appoint qualified vegetation, fauna, heritage and avifauna specialists to ground-truth every infrastructure footprint and their recommendation must inform the final layout of the facility and the EMPr to be submitted to the department for approval.

Environmental Control Officer (ECO) and duties

24. The holder of this authorisation must appoint an independent Environmental Control Officer (ECO) with experience or expertise in the field for the construction phase of the development. The ECO will have the responsibility to ensure that the conditions referred to in this authorisation are implemented and to ensure compliance with the provisions of the EMPr.
25. The ECO must be appointed before commencement of any authorised activity.
26. Once appointed, the name and contact details of the ECO must be submitted to the *Director: Compliance Monitoring* of the Department.
27. The ECO must remain employed until all rehabilitation measures, as required for implementation due to construction damage, are completed and the site is ready for operation.

28. The ECO must:
- 28.1 Keep record of all activities on site, problems identified, transgressions noted and a schedule of tasks undertaken by the ECO.
 - 28.2 Keep and maintain a detailed incident (including spillage of bitumen, fuels, chemicals, or any other material) and complaint register on site indicating how these issues were addressed, what rehabilitation measures were taken and what preventative measures were implemented to avoid re-occurrence of incidents/complaints.
 - 28.3 Keep and maintain a daily site diary.
 - 28.4 Keep copies of all reports submitted to the Department.
 - 28.5 Keep and maintain a schedule of current site activities including the monitoring of such activities.
 - 28.6 Obtain and keep record of all documentation, permits, licences and authorisations such as waste disposal certificates, hazardous waste landfill site licences etc. required by this facility.
 - 28.7 Compile a monthly monitoring report.

Environmental audit report

29. The holder of the authorisation must submit an environmental audit report to the Department within 30 days of completion of the construction phase (i.e. within 30 days of site handover) and within 30 days of completion of rehabilitation activities.
30. The environmental audit report must:
- 30.1 Be compiled by an independent environmental auditor;
 - 30.2 Indicate the date of the audit, the name of the auditor and the outcome of the audit;
 - 30.3 Evaluate compliance with the requirements of the approved EMPr and this environmental authorisation;
 - 30.4 Include measures to be implemented to attend to any non-compliances or degradation noted;
 - 30.5 Include copies of any approvals granted by other authorities relevant to the development for the reporting period;
 - 30.6 Highlight any outstanding environmental issues that must be addressed, along with recommendations for ensuring these issues are appropriately addressed;
 - 30.7 Include a copy of this authorisation and the approved EMPr;

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- 30.8 Include all documentation such as waste disposal certificates, hazardous waste landfill site licences etc. pertaining to this authorisation; and
- 30.9 Include evidence of adherence to the conditions of this authorisation and the EMPr where relevant such as training records and attendance records.

Commencement of the activity

31. The authorised activity shall not commence within twenty (20) days of the date of signature of the authorisation.
32. An appeal under section 43 of the National Environmental Management Act (NEMA), Act 107 of 1998 (as amended), does not suspend an environmental authorisation or exemption, or any provisions or conditions attached thereto, or any directive, unless the Minister, MEC or delegated organ of state directs otherwise.
33. Should you be notified by the Minister of a suspension of the authorisation pending appeal procedures, you may not commence with the activity until such time that the Minister allows you to commence with such an activity in writing.

Notification to authorities

34. Fourteen (14) days written notice must be given to the Department that the activity will commence. Commencement for the purposes of this condition includes site preparation. The notice must include a date on which it is anticipated that the activity will commence. This notification period may coincide with the notice of intent to appeal period, within which construction may not commence.

Operation of the activity

35. Fourteen (14) days written notice must be given to the Department that the activity operational phase will commence.



Site closure and decommissioning

36. Should the activity ever cease or become redundant, the applicant shall undertake the required actions as prescribed by legislation at the time and comply with all relevant legal requirements administered by any relevant and competent authority at that time.

Specific conditions

Avifauna and Bats

37. The bird and bat monitoring programme must be implemented to document the effect of the operation of the energy facility on avifauna and bats. This shall commence prior to construction, and continue during operation of the energy facility.
38. The results of the pre-construction bird monitoring programme must inform the final layout and the construction schedule of the energy facility.
39. Reports regarding bird monitoring must be submitted to the relevant provincial environmental department, BirdLife South Africa, the Endangered Wildlife Trust (EWT) and this Department on a quarterly basis. The report will assist all stakeholders in identifying potential and additional mitigation measures and to establish protocols for a bird monitoring programme for wind energy development in the country.
40. Anti-collision devices such as bird flappers must be installed where power lines cross avifaunal corridors (e.g. grasslands, rivers, wetlands, and dams). The input of an avifaunal specialist must be obtained for the fitting of the anti-collision devices onto specific sections of the line once the exact positions of the towers have been surveyed and pegged. Additional areas of high sensitivity along the preferred alignment must also be identified by the avifaunal specialist for the fitment of anti-collision devices. These devices must be according to Eskom's Transmission Guidelines.
41. Lighting on the turbines must be kept to a minimum and must be coloured (red or green) and intermittent, rather than permanent and white, to reduce confusion effects for nocturnal migrants.
42. The facility infrastructure must be designed to discourage the use of infrastructure components as perching or roosting substrates by birds and bats.

Vegetation, wetlands and Water Resources

43. The holder of this authorisation must obtain a Water Use Licence from the Department of Water Affairs (DWA) prior to the commencement of the project should the holder impact on any wetland or water resource. A copy of the license must be submitted to the *Director: Environmental Impact Evaluation* at the Department.
44. The holder of this authorisation must obtain the appropriate permits from the Department of Agriculture, Forestry and Fisheries (DAFF) for the removal of plants listed in the National Forest Act and from the Eastern Cape Department of Economic Development and Environmental Affairs (DEDEA) for the destruction of species protected in terms of the specific provincial legislation.
45. A wetland delineation study must be conducted to further refine areas of sensitivity. If turbines are found to be located in areas of high sensitivity, their positions must be revised and must be included in the final layout.
46. The workshop area, any interim construction facilities and temporary laydown areas must be located away from any sensitive area identified in the EIR dated October 2011.
47. A preconstruction survey for *Protea coronata* must be undertaken at the location of turbine number 1, 2 and 3 to determine whether this species occurs within the footprint of these turbines or not. If any individuals occur there, viable seeds must be collected at the appropriate time of the year and sown within suitable nearby habitats.

Visual Resources

48. A lighting engineer must be consulted to assist in the planning and placement of light fixtures in order to reduce visual impacts associated with glare and light trespass.
49. Commercial messages and graffiti on turbines must be avoided.

Air Emissions

50. Dust abatement techniques must be used during surface clearing, excavation, or blasting activities, on unpaved and unvegetated surfaces to minimize airborne dust.
51. Construction materials and stockpiled soils must be covered if they are no source of fugitive dust.

Roads and Ground transportation

52. Existing road infrastructure must be used as far as possible for providing access to the proposed turbine positions. Where no road infrastructure exists, new roads should be placed within existing disturbed areas or environmental conditions must be taken into account to ensure the minimum amount of damage is caused to natural habitats.

Noise

53. Should the layout change significantly, the new layout must be remodelled/reviewed in terms of the potential noise impact by an independent acoustics specialist.
54. The applicant must appoint an approved noise inspection authority to conduct noise monitoring at the potential sensitive receptors on a quarterly basis. Annual feedback regarding noise monitoring must be presented to all stakeholders.
55. The applicant must ensure that all equipment and machinery are well maintained and equipped with silencers.
56. The applicant must provide a prior warning to the community when a noisy activity is to take place.

Historical/ Paleontological Resources

57. A Phase 1 field assessment study by a professional palaeontologist must be done to identify any paleontological hotspots and make specific recommendations for any mitigation required.
58. Should any concentrations of archaeological material be uncovered during construction; work must be immediately stopped and be reported to the nearest archaeologist and/or the South African Heritage Resources Agency (SAHRA).

Hazardous Materials and Waste Management

59. Hazardous and flammable substances must be stored and used in compliance to the applicable regulations and safety instructions. Furthermore no chemicals must be stored nor any vehicle maintenance must occur within 350 m of the temporal zone of wetlands, whether a drainage line with or without an extensive floodplain or hillside wetlands.

60. An integrated waste management approach must be implemented that is based on waste minimisation and must incorporate reduction, recycling, re-use and disposal where appropriate. Any solid waste shall be disposed of at a landfill licensed in terms of section 20 (b) of the National Environment Management Waste Act, 2008 (Act No. 59 of 2008). Copies of all waste disposal certificates must be kept on site.

Human Health and Safety

61. A health and safety programme must be developed to protect both workers and the general public during construction, operation and decommissioning of the wind energy facility. The programme must establish a safety zone for wind turbine generator from residences and occupied buildings, roads, right-of-ways, and other public access areas that is sufficient to prevent accidents resulting from the operation of wind turbine generators.
62. Potential interference with public safety communication systems (e.g. radio traffic related to emergency activities) must be avoided.
63. The applicant must ensure that the operation of the wind facility has minimal electromagnetic interference (EMI) (i.e. impacts to microwave, radio and television transmissions) and should comply with the relevant communication regulations.
64. The applicant must obtain a written permit or approval from the South Africa Civil Aviation Authority that the wind facility will not interfere with the performance of any aerodrome radio Communication, Navigation and Surveillance (CNS) equipment especially the radar prior to commencement of the activity. The approval/permit must be submitted to the *Director: Environmental Impact Evaluation*.
65. Liaison with land owners/farm managers is to be done prior to construction in order to provide sufficient time for them to plan agricultural activities. If possible, construction should be scheduled to take place within the post-harvest, pre planting season, when fields are lying fallow.

Excavation and Blasting Activities

66. Foundations and trenches must be backfilled with originally excavated materials as much as possible. Excess excavation materials must be disposed of only in approved areas or, if suitable, stockpiled for use in reclamation activities.
67. Borrow materials must be obtained only from authorized and permitted sites.
68. Anti-erosion measures such as silt fences must be installed in disturbed areas.

Overhead Power Line

69. A walk-through survey of the final survey power line corridor must be undertaken by a botanical specialist, an ornithologist and a heritage specialist to identify areas where mitigation may be required.
70. All sections of the proposed power line passing over, or in close proximity of grasslands, rivers, wetlands, and dams must be marked with suitable bird flight diverters in order to deter large birds from colliding with any powerline. Additional areas of high sensitivity along the preferred alignment must be identified by an avifaunal specialist for the fitment of anti-collision devices according to Eskom Transmission Guidelines.
71. A Search and Rescue (S&R) operation of all the Red Data as well as rare endangered plants must be undertaken on the exact spots selected on which the pylons will be erected by a suitable qualified botanist. All plants present must be surveyed and collected for documentation at South National Biodiversity Institute (SANBI) and particular species, especially those which are rare and threatened species are moved to nurseries for re-establishment after construction and/or relocated to protected areas.

General

72. A copy of this authorisation and the approved EMPr must be kept at the property where the activity will be undertaken. The environmental authorisation as well as any amendment to the environmental authorisation and approved EMPr must be provided to any authorised official of the Department who requests to see it and must be made available for inspection by any employee or agent of the holder of the environmental authorisation who works or undertakes work at the property.
73. The holder of the authorisation must notify both the *Director: Environmental Impact Evaluation* and the *Director: Compliance Monitoring* at the Department, in writing and within 48 (forty eight) hours, if any condition of this authorisation cannot be or is not adhered to. Any notification in terms of this condition must be accompanied by reasons for the non-compliance.
74. National government, provincial government, local authorities or committees appointed in terms of the conditions of this authorisation or any other public authority shall not be held responsible for any damages or losses suffered by the holder or his successor in title in any instance where construction or operation subsequent to construction be temporarily or permanently stopped for

reasons of non-compliance by the holder with the conditions of authorisation as set out in this document or any other subsequent document emanating from these conditions of authorisation.

Date of environmental authorisation: 01 MARCH 2012



Mr Ishaam Abader

**Deputy Director-General: Environmental Quality and Protection
Department of Environmental Affairs**

Annexure 1: Reasons for Decision

1. Information considered in making the decision

In reaching its decision, the Department took, *inter alia*, the following into consideration -

- a) The information contained in the EIR dated October 2011;
- b) The comments received from interested and affected parties as included in the EIR dated October 2011;
- c) Mitigation measures as proposed in the EIR dated October 2011 and the EMPr;
- d) The information contained in the specialist studies contained in the EIR; and
- e) The objectives and requirements of relevant environmental legislation, policies and guidelines, including section 2 of the National Environmental Management Act, 1998 (Act No. 107 of 1998).

2. Key factors considered in making the decision

All information presented to the Department was taken into account in the Department's consideration of the application. A summary of the issues which, in the Department's view, were of the most significance is set out below.

- a) The findings of the specialist studies conducted, issued identified and recommended mitigation measures which were deemed to be acceptable.
- b) The need for the proposed project is to contribute towards the renewable energy generation target set by the Government, socio-economic and environmental sustainable growth, and kick start and stimulate the renewable energy industry in South Africa.
- c) The EIR dated October 2011 identified all relevant environmental legislation and guidelines that have been considered in the preparation of the EIR dated October 2011.
- d) The methodology used in assessing the potential impacts identified in the EIR dated October 2011 and the specialist studies have been adequately indicated.
- e) A sufficient public participation process was undertaken and the applicant has satisfied the minimum requirements as prescribed in the EIA Regulations, 2010 for public involvement.

4. Conclusions

After consideration of the information and factors listed above, the Department made the following conclusions -

- a) The findings of the specialist studies undertaken within the EIA phase that considered both the benefits and potential negative impacts associated with the proposed development concluded that there are no environmental fatal flaws that should prevent the proposed wind energy facility and associated infrastructure from proceeding on the identified site, provided that the recommended mitigation and management measures are implemented, and given due consideration during the process of finalising the wind energy facility layout.
- b) The identification and assessment of impacts are detailed in the EIR dated October 2011 and sufficient assessment of the key identified issues and impacts have been completed.
- c) The procedure followed for impact assessment is adequate for the decision-making process.
- d) The proposed mitigation of impacts identified and assessed adequately curtails the identified impacts.
- e) All environmental legal and procedural requirements have been met.
- f) EMPr measures for the construction and operation of the development were proposed and included in the EIR and will be implemented to manage the identified environmental impacts during the construction process.

In view of the above, the Department is satisfied that, subject to compliance with the conditions contained in the environmental authorisation, the proposed activity will not conflict with the general objectives of integrated environmental management laid down in Chapter 5 of the National Environmental Management Act, 1998 and that any potentially detrimental environmental impacts resulting from the proposed activity can be mitigated to acceptable levels. The application is accordingly granted.