

BACKGROUND INFORMATION DOCUMENT & INVITATION TO REGISTER AND COMMENT

MIDDLETON WIND ENERGY PROJECT

Background to the project: Terra Power Solutions (Pty) Ltd, a renewable energy company, is proposing the construction of a wind energy facility (wind farm) near Middleton in the Eastern Cape, South Africa. Middleton is approximately 20km south of Cookhouse, along the N10. Coastal & Environmental Services (CES) has been appointed by Terra Power Solutions (Pty) Ltd to undertake the necessary environmental investigations for the wind farm, and to apply for approval from the national Department of Environmental Affairs (DEA), for its construction and operation, as required by South Africa's environmental legislation. Details of the relevant laws, and an overview of the environmental impact assessment process, are provided on the following pages.

Project description: The Middleton wind energy facility will consist of approximately 60 turbines covering an area of approximately 24 000 ha. Each turbine has a nominal power output ranging between 2-3MW (Mega Watts). The total potential output of the wind farm would be ~180MW, and will feed into the national grid.

Dimensions: The ultimate size of the wind turbines will depend on further technical assessments but will typically consist of rotor turbines with rotor diameters up to a maximum of 120 meters. The towers will have a nacelle or transformer hub between 100 and 140 meters above ground with a blade tip height of between 160 and 200 meters above ground.

REGISTRATION



CES requests that all potential stakeholders and interested and affected parties register as participants in the EIA process

Return address for comments:

Ms. Tarryn Martin

P.O. Box 934
Grahamstown, 6140

Tel: (046) 622 2364

Fax: (046) 622 6564

Ms Tarryn Martin

Email: t.martin@cesnet.co.za

or

Email: a.jackson@cesnet.co.za



Figure 1: Location of the proposed Middleton wind energy facility.

Relevant Legislation

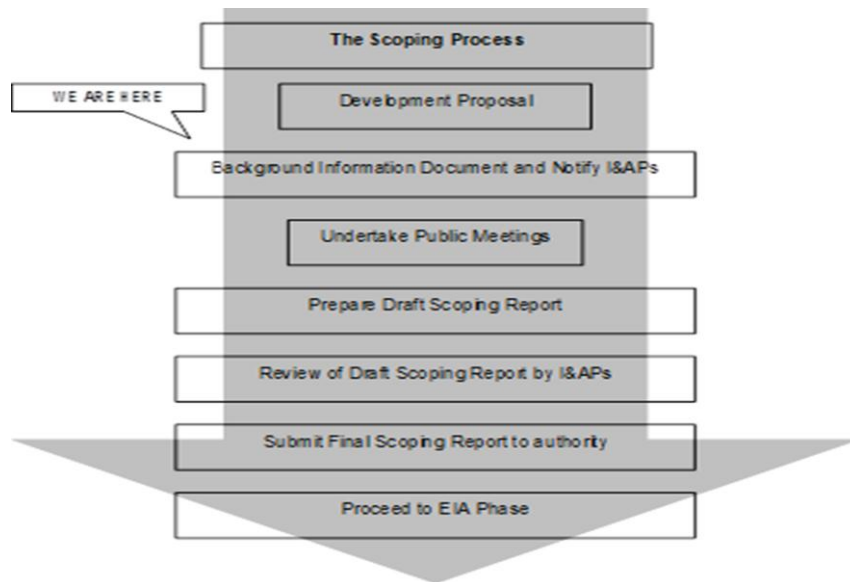
The Environmental Impact Assessment (EIA) regulations, made in terms of Section 24 of Chapter 5 of the National Environmental Management Act (Act No 107 of 1998), and the related Lists of Activities (Government Notices (GN) R.544, R.545 and R.546 of 18th June 2010) specify the activities that require either a Basic Assessment, or a full Scoping and EIA respectively. The activities triggered by the proposed development include, but are not limited to:

Number of the relevant listing notice	Activity No(s)	Description
GNR R544	(1)	The construction of facilities or infrastructure for the generation of electricity where: (i) the electricity output is more than 10 megawatts but less than 20 megawatts; or (ii) the output is 10 megawatts or less but the total extent of the facility covers an area in excess of 1 hectare.
GNR R544	(10)	The construction of facilities or infrastructure for the transmission and distribution of electricity - (i) outside urban areas or industrial complexes with a capacity of more than 33 but less than 275 kilovolts;
GNR 544	(18)	The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock or more than 5 cubic metres from: (i) a watercourse;
GNR R545	(1)	The construction of facilities or infrastructure for the generation of electricity where the electricity output is 20 megawatts or more.
GNR R545	(8)	The construction of facilities or infrastructure for the transmission and distribution of electricity with a capacity of 275 kilovolts or more, outside an urban area or industrial complex.
GNR R545	(15)	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; except where such physical alteration takes place for:
GNR 546	(4)	The construction of a road wider than 4 metres with a reserve less than 13,5 metres (d) In Western Cape: (i) All areas outside urban areas
GNR 546	(14)	The clearance of an area of 5 hectares or more of vegetation where 75% or more of the vegetative cover constitutes indigenous vegetation,
GNR 546	(19)	The widening of a road by more than 4 metres, or the lengthening of a road by more than 1 kilometre. (d) Western Cape (ii) All areas outside urban areas;

As the proposed development triggers activities in GNR 545 a full Scoping and EIA process will have to be conducted by the applicant.

The Scoping phase

The Scoping Phase is important for informing the public and relevant authorities about the nature and size of the proposed project. A critical component of the Scoping Phase is the Public Participation Process, in which Interested and Affected Parties (I&APs) are given an opportunity to raise any issues or concerns they may have about the project. The process is outlined in the figure below. The Draft Scoping Report will be made available for review by the public and all registered I&APs will be notified to the availability thereof. This report will set the scope and specialist terms of reference for the EIA Phase.



The Environmental Impact Assessment phase

This phase is more complex and more detailed than the Scoping phase, because it focuses on undertaking a number of specialist studies that have been identified as being necessary during the Scoping phase. These studies provide expert input into the EIA process based on scientific information. I&APs will be consulted again during this phase, and will be given an opportunity to comment on the Draft Environmental Impact Report (EIR) that will contain the specialist reports. During this phase an Environmental Management Plan must also be prepared for the project.

Environmental Authorisation phase

The final EIR is submitted to the national Department of Environment Affairs (DEA) who, after considering the report, will make a decision either authorising the project to continue under certain conditions, or requiring additional work to be undertaken.

Potential issues for investigation

The following specialist studies will be conducted within the proposed wind farm site, to ascertain any potential impacts, positive and negative, that may occur as a result of pre-construction, construction and operational phases.

- **Visual and aesthetic impacts**

A wind farm will normally have a high visibility due mainly to the height of the turbines.

- **Noise impacts**

The Noise Impact Investigation will be conducted in accordance with the South African National Standard (SANS) 10328 "Methods for environmental noise impact assessments"

- **Ecological, Wetland, and Agricultural impacts**

The location of any species of special concern will be identified, and the location noted in order to inform the mitigation and management measures. Wetlands will be delineated and where necessary, the relevant water use licences will be obtained. An agricultural assessment will investigate the impacts on agriculture of a wind farm development.

- **Avifaunal and Bat impacts**

Potential impacts to birds and bats

- **Heritage, archaeological and/or palaeontological impacts**

Potential impacts on heritage, cultural resources and/or fossils etc.

Table 1: Property Number and Portions of landowners

Property Number	Portion
215	Remaining Extent (RE)
164	RE
165	RE
166	RE
166	1
166	4
409	2
381	5
381	2
160	1
161	RE
230	RE
230	2
230	3
220	1
431	RE
216	RE
166	1
409	RE
163	1
163	1
431	RE
220	RE
220	RE
221	RE
220	RE
220	RE
221	RE
381	RE
381	12
381	RE
381	8
212	2
381	8

I hereby wish to register as an Interested and Affected Party (IAP) for the Middleton Wind Farm EIA process

Name:

Organization:

Postal address:

Email:

Phone #: _____ Fax #: _____

My initial comments, issues or concerns are:

Other individuals, stakeholders, organisations or entities that should be registered are:

Name:

Organization:

Postal address:

Email:

Phone #: _____ Fax #: _____

Please return details to: **Ms Tarryn Martin:** P.O. Box 934, Grahamstown, 6140

Telephone: (046) 622 2364 Fax: (046) 622 6564 Email: t.martin@cesnet.co.za or a.jackson@cesnet.co.za