

Annex A

Legislative Framework

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A1 LEGISLATIVE FRAMEWORK

A1.1 INTRODUCTION

This Annex provides a description of the institutional framework applied to the project, and the most relevant national and provincial legislation, policies and guidelines that have been taken into consideration. The content is as follows:

- Relevant South African government departments and regulators;
- South African law relevant to environmental and social standards deemed applicable to the project; and
- international conventions and standards to which South Africa is a signatory and with which the project must comply (relating to issues such as climate change and biodiversity).

The Roggeveld Wind Farm Project is located within the jurisdiction of the Laingsburg Local and Central Karoo District Municipalities (Western Cape) and Karoo Hoogland Local and Namakwa District Municipalities (Northern Cape).

A1.2 GOVERNMENT DEPARTMENTS AND REGULATORS

There are a number of Ministries and Departments that have an interest in and will take responsibility for ensuring that the Roggeveld Wind Farm Project is implemented in an environmentally responsible manner. The concept of co-operative governance is becoming increasingly important in relation to the adjudication of Environmental Impact Assessment (EIAs) in South Africa and whenever an activity falls within the jurisdiction of more than one organ of state, there must be co-ordination and co-operation between those organs of state in the consideration of EIAs and decision-making.

A1.2.1 National

Department of Environmental Affairs (DEA)

The DEA falls under the Ministry of Water and Environmental Affairs and is responsible for all environmental affairs and decision making.

In terms of South Africa's Constitution, responsibility for the environment is shared between provincial and national government. Although decision-making on EIAs is, under most circumstances, a provincial competency, all renewable energy projects are being processed by the DEA, who is the national controlling authority based in Pretoria. This arrangement is set out in Section 4.1 of the 'Guideline in Environmental Impact Assessments for Facilities to be Included in the Electricity Response Plan', 25 November 2008,

GN 162 of 2010. The DEA is, therefore, the competent authority for this proposed project and will be responsible for making a decision whether or not to authorise the project.

Department of Water Affairs (DWA)

The DWA falls within the Ministry of Water and Environmental Affairs and is the custodian of South Africa's water resources. While striving to ensure that all South Africans gain access to clean water and safe sanitation, the department also promotes effective and efficient water resources management to ensure sustainable economic and social development.

Unlike the DEA which has separate government departments in each province, the DWA has regional offices in different areas. Should registration or a Water Use License be required for the proposed project (see discussion in *Section A1.3.3* below) application would be made to the regional offices of the DWA in Cape Town and/or Kimberley.

Department of Energy (formerly the DME)

The Department of Energy is responsible for policy relating to all forms of energy generation, including renewable energy. The Department commissioned an Integrated Energy Plan (IEP) in response to the requirements of the National Energy Policy in order to provide a framework by which specific energy policies, development decisions and energy supply trade-offs could be made on a project-by-project basis. The framework is intended to create a balance between energy demand and resource availability so as to provide low cost electricity for social and economic development, while taking into account health, safety and environmental parameters. Wind Energy is specifically considered in the White Paper for Renewable Energy, 2002.

National Energy Regulator of South Africa (NERSA)

NERSA is a regulatory authority established in terms of the National Energy Regulator Act, 2004 (Act No. 40 of 2004). Its role, among others, is to regulate the electricity industry in terms of the Electricity Regulation Act (Act 4 of 2006). This body will ultimately be the licensing authority for electricity generation from wind farm developments.

South African Heritage Resources Agency (SAHRA)

SAHRA is the national body responsible for policy development for heritage resources management. They are the controlling authority in terms of the National Heritage Resources Act (Act 25 of 1999). Applications in terms of the Act will be made to the provincial Heritage Agencies, in this case Heritage Western Cape and SAHRA's Northern Cape Offices.

Department of Transport – Civil Aviation Authority (CAA)

The CAA was established in terms of the Civil Aviation Authority Act (Act 40 of 1998) and is responsible for the regulation of aviation in South Africa. They monitor aircraft movements and radar which are important considerations for the location and planning of the wind farm. G7 will require approval from the CAA to establish the wind farm.

A1.2.2 *Provincial*

Western Cape Department of Environmental Affairs and Development Planning (DEA&DP)

DEADP is the provincial department responsible for environmental affairs and development planning in the Western Cape. DEA&DP's ambit focuses upon:

- sustainable environmental management and integrated development planning;
- the development of integrated, sustainable human settlements; and
- ensuring equal access and sustainable use of the province's natural resources, including energy.

With regard to the EIA for the G7 Wind Farm Project, DEA&DP are regarded as an important commenting authority and will provide comment on the EIA and input to the national Department's decision-making process.

Northern Cape Department of Environment and Nature Conservation (DENC)

DENC is the provincial department responsible for tourism, environmental affairs and conservation in the Northern Cape.

DENC's mission is to 'conserve and protect the natural environment for the benefit, enjoyment and welfare of present and future generations by integrating sustainable utilisation with socio-economic development'.

With regard to the EIA for the G7 Wind Farm Project, DENC are regarded as an important commenting authority and will provide comment on the EIA and input to the national Department's decision-making process.

Heritage Western Cape (HWC)

As explained above, HWC is the provincial heritage resources authority. In terms of Section 28(8) of the Heritage Resources Act (Act 25 of 1999) and Regulation 3(3)(a) of PN 298 (29 August 2003) (as discussed below) an application will be made to HWC regarding the proposed project. HWC will consider the application and provide comment on the proposed project. They will also issue a decision regarding the project, specifically based on heritage resource considerations.

Cape Nature

Cape Nature is a public institution with statutory responsibility for biodiversity conservation in the Western Cape. It is governed by the Western Cape Nature Conservation Board Act (Act 15 of 1998) and is mandated to promote and ensure nature conservation; render services and provide facilities for research and training; and generate income ⁽¹⁾. Cape Nature's involvement in the proposed project will be a commenting authority relating specifically to ecological and biodiversity impacts on the receiving environment due to the proposed activities. Their role is to ensure that developments do not compromise the biodiversity value areas within the Western Cape. The organisation will specifically consider impacts on threatened ecosystems (these are identified using the National Spatial Biodiversity Assessment or systematic biodiversity plans).

Other

- Western Cape Department of Transport and Public Works – will be responsible for the granting of exemption permits for the conveyance of abnormal loads on public roads.
- Western Cape Department of Agriculture and Rural Development.
- Northern Cape Department of Transport, Safety and Liaison.
- Northern Cape Department of Agriculture, Land Reform and Rural Development

A1.2.3 *Municipal*

Certain Departments, such as the Planning and Roads Departments, from the Laingsburg Local and Central Karoo District Municipalities (Western Cape) and Karoo Hoogland Local and Namakwa District Municipalities (Northern Cape) will also be involved as commenting authorities for the EIA. External to the EIA but also relevant to the project are land-use planning applications which are dealt with by the planning departments at a local government level.

A1.3 *LEGISLATIVE AND POLICY REQUIREMENTS*

The proposed activity is subject to legislative and policy requirements at a national and provincial level. The most important of these are listed below.

National:

- National Environmental Management Act (NEMA) (Act No. 107 of 1998), as amended;
- NEMA EIA Regulations (2006 and 2010);
- National Water Act (Act No. 36 of 1998)
- National Environmental Management: Biodiversity Act (Act No. 10 of 2004);

(1) www.capenature.co.za. Accessed 06/09/2010.

- National Heritage Resources Act (Act No. 25 of 1999);
- Electricity Regulation Act (Act No. 4 of 2006);
- Aviation Act (Act No. 74 of 1962);
- Occupational Health and Safety Act (Act No. 85 of 1993);
- Subdivision of Agricultural Land Act (Act No. 70 of 1970);
- Department of Environmental Affairs and Tourism (DEAT) Integrated Environmental Management Information Series No.2, Scoping, 2002;
- Noise Control Regulations, Environment Conservation Act (Act No. 73 of 1989) and SANS Code 10328, Methods for Environmental Noise Impact Assessments in Terms of NEMA; and
- Conservation of Agricultural Resources Act (Act 43 of 1983).

Provincial – Western Cape:

- Land Use Planning Ordinance 15 of 1985;
- Department of Environmental Affairs & Development Planning (DEA&DP) NEMA EIA Regulations Guideline and Information Document Series, 2009; and
- Strategic Initiative to Introduce Commercial Land Based Wind Energy Development to the Western Cape, 2006.

Provincial – Northern Cape:

- Northern Cape Planning and Development Act (Act 7 of 1998)

A brief description of the requirements in the above listed Acts and Regulations is provided below. At this stage of the EIA process the list of regulatory requirements should not be regarded as definitive or exhaustive. Additional applicable legislation may be identified as the EIA progresses. The Terms of Reference for the majority of the specialist studies (see the Plan of Study for EIA in *Section 6* of the Scoping Report) includes the need for a review of all legislation relevant to the proposed development and these requirements will be included in the EIR.

A1.3.1 *National Environmental Management Act (Act 107 of 1998)*

Section 24 of the National Environmental Management Act (NEMA) as amended gives effect to the South African Constitution, which states that all South African citizens have a right to an environment that is not harmful to their health or well being.

Key principles of NEMA are described in **Chapter 1** of the Act and include the following:

- Development must be socially, environmentally and economically sustainable;
- Environmental management must be integrated;
- Decisions concerning the environment must take into account the needs, interests and values of all I&APs;

- Community well-being and empowerment must be promoted through environmental education and awareness, and the sharing of knowledge and experience;
- Decisions must be taken in an open and transparent manner; and
- Access to information must be provided in accordance with law.

Chapter 5 of NEMA deals with Integrated Environmental Management and focuses on promoting the use of appropriate environmental tools, such as Environmental Impact Assessment. Section 24 requires that activities be investigated that may have a potential impact on the environment, socio-economic conditions, and cultural heritage. The results of such investigations must be reported to the relevant authority. Procedures for the investigation and communication of the potential impact of activities are contained in Section 24 (4) of the Act, which requires that:

- The potential impact, including the cumulative effects of the activity and its alternatives must be investigated;
- The significance of the potential impact must be assessed;
- Mitigation measures which minimise adverse environmental impacts must be investigated;
- The option of not implementing the activity must be considered;
- There must be public participation, independent review and conflict resolution in all phases of the investigation and assessment of impacts; and
- Where an activity falls within the jurisdiction of more than one organ of state, there must be co-ordination and co-operation between those organs of state in the consideration of assessments.

Chapters 1 and 5 of NEMA provide a basis for consideration of potential impacts associated with a proposed development, by the competent authority.

These chapters provide the framework legislation for the more detailed EIA regulations (see *Section A1.3.2* below). These regulations form the basis of ERM's approach to the EIA.

Section 28 of the Act is specific regarding "duty of care" for the environment and remediation of environmental damage. Accordingly, every person who causes, has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring. The Act defines pollution broadly as any change in the environment caused by substances, radioactive or other waves, or emissions of noise, odours, dust or heat.

The environmental authorities may direct an individual or organisation to rectify or remedy a potential or actual pollution problem. If such a directive is not complied with, the authorities may undertake the work and recover the costs from the responsible party.

Section 28 would be relevant to the construction and operational phase of the proposed development. The proponent is obligated, in terms of NEMA, to

implement measures and take actions to prevent any form of pollution to air, water or land.

A1.3.2 *NEMA EIA Regulations*

On 21 April 2006, EIA Regulations (Government Notice No R. 385, R386 and R387) were promulgated in terms of Section 24(5) of NEMA. These regulations came into effect on 3 July 2006. The Minister of Water and Environmental Affairs has in terms of sections 24(2)(a) and (d) of NEMA, listed the activities which may have a detrimental effect on the environment in Government Notice R386 and R387. The regulations require that written authorisation is obtained from the Minister or his delegated authority, in this case the national DEA, in respect of which the investigation, assessment and communication of potential impacts of these activities must follow the procedure as described in Regulations 27 to 36 of the EIA Regulations of Government Notice R385. Such authorisation, which may be granted subject to conditions, will only be considered once the regulatory requirements have been met. Government Notice R.385 sets out the procedures that need to be complied with.

The activities that would be relevant to the proposed project are listed in the Environmental Impact Assessment (EIA) Regulations. Activities from listings R386 and R387 would be relevant. R386 activities require a simpler Basic Assessment and R387 activities require a more comprehensive Scoping and EIA. Given the applicability of activities from both listings, R387 supersedes R386 and a Scoping and EIA process is being undertaken.

The listed activities from both R386 and R387 are described in detail in Chapter 2 of this report but are given again below for completeness.

Government Notice R386:

Activity 1(m) - "The construction of facilities or infrastructure, including associated structures or infrastructure, for - (m) any purpose in the one in ten year flood line of a river or stream, or within 32 metres from the bank of a river or stream where the flood line is unknown, excluding purposes associated with existing residential use, but including – (i) canals; (ii) channels; (iii) bridges; (iv) dams; and (v) weirs."

Activity 7 - "The aboveground storage of dangerous goods, including petrol diesel, liquid petroleum gas or paraffin, in containers with a combined capacity of more than 30 cubic metres but less than 1 000 cubic metres at any one location or site."

Activity 12 - "The transformation or removal of indigenous vegetation of 3 hectares or more or of any size where the transformation or removal would occur within a critically endangered or an endangered ecosystem listed in terms of section 52 of the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004)."

Activity 15 - "Road construction if wider than 4m or with reserve wider than 6m unless within ambit of another listed activity or which are access roads of less than 30m long"

Activity 16(b) - "The transformation of undeveloped, vacant or derelict land to residential, mixed retail, commercial, industrial or institutional use where such development does not constitute infill and where the total area to be transformed is bigger than 1 hectare."

Government Notice R387:

Activity 1: The construction of facilities or infrastructure, including associated structures or infrastructure, for -

(a) the generation of electricity where -

(i) the electricity output is 20 megawatts or more; or

(ii) the elements of the facility cover a combined area in excess of 1 hectare;

(l) the transmission and distribution of above ground electricity with a capacity of 120 kilovolts or more;

Activity 2 - "Any development activity, including associated structures and infrastructure, where the total area of the developed area is, or is intended to be, 20 hectares or more."

The purpose of these activities is to "trigger" the EIA which then applies to the entire project and associated potential impacts. **The purpose of this EIA is for Roggeveld Wind Power (Pty) Ltd to apply and seek environmental authorisation for the above listed activities to be undertaken on the project site.** Should any additional applicable listed activities be identified as the EIA progresses, the DEA will be informed in writing.

On 18 June 2010 revised EIA Regulations (Government Notice No R. 543, 544, 545 and 546) were promulgated in terms of Section 24(5) of NEMA. These regulations came into effect on 1 August 2010, replacing the regulations of 21 April 2006. As for the previous activities listed in R386 and R387 where R386 activities require a Basic Assessment and R387 activities require a more comprehensive Scoping and EIA, activities listed in R544 and R546 require a Basic Assessment and activities listed in R545 require a full EIA.

Despite the repeal of the old 2006 Regulations, the revised Regulations provide for transitional situations, in this regard, Section 76(1) states that: '*An application submitted in terms of the previous NEMA regulations and which is pending when these Regulations take effect, must despite the repeal of those regulations be dispensed with in terms of those previous NEMA regulations as if those previous NEMA regulations were not repealed*'. Since the application for the proposed project was submitted to the DEA on 14 July 2010 for Roggeveld, prior to the commencement of the new regulations, and no additional applicable listed activities have been identified in the new regulations, the application and associated EIA procedure will continue in terms of the

requirements of the 2006 EIA Regulations as if they had not been replaced. **However, the way the above listed activities have been incorporated under the revised regulations of 2010 has changed somewhat and to avoid any conflicts or disputes arising, the applicant is concurrently seeking environmental authorisation for the following listed activities that would be triggered by this project:**

Government Notice R544:

Activity 10(i) - "The construction of facilities or infrastructure for the transmission and distribution of electricity outside urban areas or industrial complexes with a capacity of more than 33 but less than 275 kilovolts."

Activity 11 - "The construction of:

(iii) bridges;

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." (this is for all watercourse crossings of the various site access roads of the project)

Activity 22 - "The construction of a road, outside urban areas,

(i) with a reserve wider than 13.5 metres or,

(ii) where no reserve exists where the road is wider than 8 metres."

Activity 26 - " Any process or activity identified in terms of section 53(1) of the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004)."

Government Notice R545:

Activity 1 - "The construction of facilities or infrastructure for the generation of electricity where the electricity output is 20 megawatts or more."

Activity 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."

Activity 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."

Government Notice R546:

These include listed activities specific to the province, which require a Basic Assessment.

Activity 4 - The construction of a road wider than 4 metres with a reserve less than 13,5 metres.

For Northern Cape specifically:

(ii) Outside urban areas, in:

- (aa) "A protected area identified in terms of NEMPAA, excluding conservancies"
- (bb) "National protected Area Expansion Strategy Focus areas"
- (cc) "Sensitive area as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority."
- (dd) "Sites or areas identified in terms of an International Convention"
- (ee) "Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans"
- (ff) "Core areas in biosphere reserves"
- (gg) "Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core area of a biosphere reserve"
- (hh) Areas seawards of the development setback line or within 1 kilometre from the highwater mark of the sea if no such development setback line is identified.

For Western Cape specifically:

(ii) All areas outside urban areas.

Activity 10 - "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 30 but not exceeding 80 cubic metres."

For Northern Cape specifically:

(ii) "Outside urban areas, in:

- (aa) "A protected area identified in terms of NEMPAA, excluding conservancies"
- (bb) "National protected Area Expansion Strategy Focus areas"
- (cc) "Sensitive area as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority."
- (dd) "Sites or areas identified in terms of an International Convention"
- (ee) "Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans"
- (ff) "Core areas in biosphere reserves"
- (gg) "Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core area of a biosphere reserve"
- (hh) Areas seawards of the development setback line or within 1 kilometre from the highwater mark of the sea if no such development setback line is identified.

- (ii) "Areas on the watercourse side of the development setback line or within 100 metres from the edge of a watercourse where no such setback line has been determined;"
- (jj) "Within 500 metres of an estuary"

For Western Cape specifically:

- (ii) "All areas outside urban areas"

Activity 12 - "The clearance of an area of 300 square metres or more of vegetation where 75% or more of the vegetative cover constitutes indigenous vegetation."

- (a) Within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the publication of such list, within an area that has been identified in the National Spatial Biodiversity Assessment 2004;
- (b) Within critical biodiversity areas identified in bioregional plans...

Activity 13 - "The clearance of an area of 1 hectare or more of vegetation where 75% or more of the vegetative cover constitutes indigenous vegetation (...)"

General:

- (a) Critical biodiversity areas and ecological support areas as identified in systematic biodiversity plans adopted by the competent authority.
- (b) National Protected Area Expansion Strategy Focus areas.

For Western and Northern Cape:

- (ii) Outside urban areas, in:
 - (aa) "A protected area identified in terms of NEMPAA, excluding conservancies"
 - (bb) "National protected Area Expansion Strategy Focus areas"
 - (cc) "Sensitive area as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority."
 - (dd) "Sites or areas identified in terms of an International Convention"
 - (ee) "Core areas in biosphere reserves"
 - (ff) "Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core area of a biosphere reserve"
 - (gg) Areas seawards of the development setback line or within 1 kilometre from the highwater mark of the sea if no such development setback line is identified.

Activity 14 - "The clearance of an area of 5 hectares or more of vegetation where 75% or more of the vegetative cover constitutes indigenous vegetation (...)"

For Western and Northern Cape:

(i) All areas outside urban areas.”

Activity 16(iv) - “The construction of (iv) infrastructure covering 10 square metres or more where such construction occurs within 32 metres of a watercourse, measured from the edge of a watercourse, excluding where such construction will occur behind the development setback line.

For Northern Cape specifically:

(ii) Outside urban areas, in:

- (aa) “A protected area identified in terms of NEMPAA, excluding conservancies”
- (bb) “National protected Area Expansion Strategy Focus areas”
- (cc) “World Heritage Sites”
- (dd) ““Sensitive area as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority.”
- (ee) “Sites or areas identified in terms of an International Convention”
- (ff) “Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans”
- (gg) “Core areas in biosphere reserves”
- (hh) “Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core area of a biosphere reserve”
- (ii) “Areas seawards of the development setback line or within 1 kilometre from the high-water mark of the sea if no such development setback line is determined.”

For Western Cape specifically:

(i) “All watercourses”;

(ii) “Outside urban areas, in”:

- (aa) “A protected area identified in terms of NEMPAA, excluding conservancies”
- “World Heritage Sites”
- (dd) “Sensitive areas as identified in an environmental management framework as contemplated in Chapter 5 of the Act and as adopted by the competent authority”
- (ee) “Sites or areas identified in terms of an International Convention”
- (ff) “Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans”
- (gg) “Core areas in biosphere reserves”
- (hh) “Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core area of a biosphere reserve”

Activity 19 - The widening of a road by more than 4 metres or the lengthening of a road by more than 1 kilometre.

For Northern Cape specifically:

- (ii) Outside urban areas, in:
 - (aa) "A protected area identified in terms of NEMPAA, excluding conservancies"
 - (bb) "National protected Area Expansion Strategy Focus areas"
 - (cc) "Sensitive areas as identified in an environmental management framework as contemplated in Chapter 5 of the Act and as adopted by the competent authority"
 - (dd) "Sites or areas identified in terms of an International Convention"
 - (ee) "Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans"
 - (ff) "Core areas in biosphere reserves"
 - (gg) "Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core area of a biosphere reserve"
 - (hh) "Areas seawards of the development setback line or within 1 kilometre from the high-water mark of the sea if no such development setback line is determined"
 - (ii) "Areas on the watercourse side of the development setback line or within 100 metres from the edge of a watercourse where no such setback line has been determined"

For Western Cape specifically:

- (ii) All areas outside urban areas.

A1.3.3 National Water Act (Act 36 of 1998)

The National Water Act (NWA) is the primary legislative instrument for the control and management of South Africa's water resources. In addition to ensuring equitable access to and use of water, a key function of the NWA is to ensure the protection of a national water resource from pollution. Many provisions in the NWA are similar to those in NEMA, but refer specifically to pollution of a water resource, whereas NEMA refers to any change in an environment (land, water, air). The definition of "water resource" includes surface water bodies, groundwater and aquifers.

Section 19 of the Act deals with the prevention and remediation effects of pollution. It is the responsibility of an owner of land, a person in control of land or a person who occupies or uses that land to take all reasonable measures to prevent pollution of a water resource from occurring, continuing or recurring. If these measures are not taken the authorities may do whatever is necessary to prevent the pollution or remedy its effects and may recover all reasonable costs. This Section includes pollution that may arise from contaminated stormwater.

Section 20 deals with the control of emergency incidents. In this Section, "incident" includes any incident or accident in which a substance -

- pollutes or has the potential to pollute a water resource; or

- has, or is likely to have, a detrimental effect on a water resource.

The onus is therefore on G7 to ensure that storm water runoff is not contaminated, particularly during the construction phase.

The Act requires a person to obtain a Water Licence for 'water use', which in terms of Section 21 includes the following activities which may be relevant to the proposed project:

- taking water from a water resource;
- storing water;
- impeding or diverting the flow of water in a watercourse;
- disposing of waste in a manner which may detrimentally impact on a water resource; and
- altering the bed, banks, course or characteristics of a watercourse.

Generally a water use must be licensed unless it is listed in Schedule I of the Act, is an existing lawful use, is permissible under a general authorisation, or if a responsible authority waives the need for a licence. Section 39 of the Act allows the Minister to issue General Authorisations for certain activities which then do not require a water use licence. General Authorisation GNR 398, 26 March 2004, gives the landowner/occupier/lawful user permission to alter the bed, banks or characteristics of a water course (including for roads) without the requirement for a Water Use License, as long as the following conditions are met:

- The alteration:
 - does not impact on a water resource or on another person's water use, property or land; and
 - is not detrimental to the health and safety of the public in the vicinity of the activity
- The natural migration patterns of aquatic biota and the sustainable ecological functioning of the system are not interfered with;
- The alteration activity does not extend for more than 50 metres continuously or a cumulative distance of 100 metres on that property or land, measured along the watercourse;
- The volume of flow is not reduced except for natural evaporative losses;
- Strict erosion control measures are to be taken during and after construction to ensure no erosion of the bed and banks of the river takes place;
- The water quality is not detrimentally affected; and
- all necessary measures are taken to stabilize the structure and surrounding area. This will include:-
 - rehabilitation of the riparian habitat integrity by ensuring that during rehabilitation only indigenous shrubs and grasses are used in restoring the bio-diversity;
 - rehabilitation of disturbed and degraded riparian areas to restore and upgrade the riparian habitat integrity to sustain a bio-diverse riparian ecosystem;

- removal of alien vegetation and all new alien vegetation recruitment must be controlled; and
- annual habitat assessment must be carried out to monitor the sustainability of the diversion and compliance with the above conditions. Action must be taken to rectify any impacts
- Any structure built fully or partially in or across a watercourse does not exceed-
 - a height of 10 metres, measured from the natural level of the bed of the watercourse on the downstream face of the structure to the crest of the structure;
 - a width of 10 metres, measured at the widest part of the structure; or
 - a length of 50 metres, measured from one edge of the watercourse to the other; or
 - occur within a distance of 500 meters upstream or downstream of another structure that alters the bed, banks or characteristics of the same watercourse, measured along the watercourse.

G7 must ensure that the water crossings meet the above requirements or alternatively a Water Use License may be required. Based on current information and understanding of the projects, the river crossings would meet these conditions. Section 2.8 (1) of the General Authorisation states that a person who uses water in terms of this authorisation must submit a registration form for the registration of the water use if the alteration involves mining related activities or occurs within a distance of 1 000 meters from any other alteration, measured along the watercourse.

A1.3.4 National Environmental Management: Biodiversity Act (Act 10 of 2004)

Amongst other objectives, the Biodiversity Act seeks to provide for the management and conservation of biological diversity and its components, the sustainable use of indigenous biological resources, and the fair and equitable sharing of benefits arising from bio-prospecting of indigenous biological resources. It further seeks to provide for co-operative governance in biodiversity management and conservation.

Chapter 1 provides that the Act give effect to conventions affecting biodiversity to which South Africa is a party. These would include the United Nations Convention on Biological Diversity (CBD), the Convention on Trade in Endangered Species (CITES), the Ramsar Convention and the Bonn Convention.

Significantly, the Act provides for the protection of ecosystems and species that are threatened or in need of protection and seeks to prevent the introduction and spread of alien or invasive species. As such, it controls and regulates:

- certain threatening activities occurring in identified ecosystems;

- certain activities which may negatively impact on the survival of identified threatened or protected species; and
- certain restricted activities involving alien or listed invasive species.

In accordance with the Biodiversity Act, an important function of the EIA and associated specialist studies is to ensure that sensitive vegetation is not detrimentally affected by the installation and construction activities associated with the establishment of the renewable energy facility and its associated infrastructure.

A1.3.5 National Heritage Resources Act (Act 25 of 1999)

The protection and management of South Africa's heritage resources is controlled by the National Heritage Resources Act (NHRA). The objective of the NHRA is to introduce an integrated system for the management of national heritage resources.

The protection of archaeological and palaeontological resources is the responsibility of a provincial heritage resources authority and all archaeological objects, palaeontological material and meteorites are the property of the State. Section 35 states that *"Any person who discovers archaeological or palaeontological objects or material or a meteorite in the course of development must immediately report the find to the responsible heritage resources authority, or to the nearest local authority offices or museum, which must immediately notify such heritage resources authority"*.

Section 38 (8) of the National Heritage Resources Act which states that any person who intends to undertake a development categorised as-

- (a) *the construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;*
- (c) *any development or other activity which will change the character of a site -*
 - (i) *exceeding 5 000 m² in extent;*

must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.

Given that the proposed wind farm development may exceed 5 000m² in extent and will change the character of the site the proposed development will require authorisation from Heritage Western Cape (HWC) and SAHRA Northern Cape. Heritage issues will be assessed as part of the EIA process with the assistance of specialist heritage practitioners.

A1.3.6 Electricity Regulation Act and Regulations (Act 4 of 2006)

The aims of the Electricity Regulation Act is to achieve efficient, effective and sustainable electricity supply, development and operation to ensure the needs of electricity users in South Africa are met and their interests safeguarded. This will be achieved through the facilitation of investment in the supply industry, access to electricity, promotion of use of diverse energy sources,

promotion of competitiveness and a fair balance between the players in the industry and end users.

The Electricity Regulations on New Generation Capacity Government Notice R721 (August 2009), provides for the establishment and regulation of power purchase agreements with independent power producers (IPPs), guidelines governing procurement and renewable feed-in tariff (REFIT) programme.

The proposed renewable energy facility will provide an additional electricity supply through renewable energy sources. G7, as the IPP, will be required to comply with guidelines governing the bid programme and REFIT.

A1.3.7 *Electricity Regulation on New Generation Capacity (Government Gazette No 32378 of 5 August 2009)*

The Electricity Regulations on New Generation Capacity (Government Gazette No 32378) were promulgated on 5 August 2009 by the Department of Energy in terms of the Electricity Regulation Act 2006 (see *Section A1.3.6*), and are applicable to:- (a) all types of generation technology including renewable generation and co-generation technology (i.e. landfill gas, small hydro (less than 10 MW), wind and concentrated solar power (with storage)) but excluding nuclear power generation technology; (b) base load, mid-merit and peak generation; and (c) take effect from the date of promulgation, unless otherwise indicated. The objectives of these regulations are:

- The regulation of entry by a buyer and an Independent Power Producer (IPP) into a power purchase agreement;
- The facilitation of fair treatment and the non-discrimination between IPP generators and the buyer;
- The facilitation of the full recovery by the buyer of all costs incurred by it under or in connection with the power purchase agreement and an appropriate return based on the risks assumed by the buyer there under and, for this purpose to ensure the transparency and cost reflectivity in the determination of electricity tariffs;
- The establishment of rules and guidelines that are applicable in the undertaking of an IPP bid programme and the procurement of an IPP for purposes of new generation capacity;
- The provision of a framework for the reimbursement by the regulator, of costs incurred by the buyer and the system operator in the power purchase agreement; and
- The regulation of the framework of approving the IPP bid programme, the procurement process, the Renewable Feed in Tariff (REFIT) programme, and the relevant agreements to be concluded.

The guidelines describe the basic structure of the REFIT programme, including the roles of various parties in the programme, namely the National Energy Regulator of South Africa (NERSA), Eskom and renewable energy generators. They specify that Eskom's "Single Buyer Office" is to be appointed as the Renewable Energy Purchasing Agency (REPA), the exclusive

buyer of power under the REFIT programme. Power generators participating in the REFIT scheme are required to sell power generated by renewable technologies to Eskom (the REPA) under a Power Purchase Agreement (PPA), and are also entitled to receive regulated tariffs, based on the particular technology used for generation. NERSA is tasked with the administration of the REFIT programme, including setting the tariffs and verification of the fact that generation is genuinely from renewable energy sources.

The regulations deal generally with procurement under an IPP bid programme, this is defined to mean a bidding process for the procurement of new generation capacity and/or ancillary services from IPPs. They specify the use of a bidding process involving requests for prequalification, requests for proposals and negotiations with the preferred bidder. A special process for the procurement of renewable energy and cogeneration under the REFIT programme is described in Regulation 7. This Regulation states that NERSA is to, “develop rules related to the criteria for the selection of renewable energy IPPs... that qualify for a licence” and sets out a list of aspects that the NERSA prescribed criteria should take into account. These include:

- Compliance with the integrated resource plan and the preferred technologies;
- Acceptance by the IPP of a standardised power purchase agreement;
- Preference for a plant location that contributes to grid stabilisation and mitigates against transmission losses;
- Preference for plant technology and location that contributes to local economic development;
- Compliance with legislation in respect of the advancement of historically disadvantaged individuals;
- Preference for projects with viable network integration requirements;
- Preference for projects with advanced environmental approvals;
- Preference for projects demonstrating the ability to raise finance;
- Preference for small distributed generators over centralised generators;
- and
- Preference for generators that can be commissioned in the shortest time.

In order to establish the proposed Roggeveld Wind Farm, G7, as an independent power producer, will need to enter into a Power Purchase Agreement (PPA) with NERSA in order to sell the electricity generated.

A1.3.8 Aviation Act (Act 74 of 1962)

The Civil Aviation Regulations (CAR Part 139.01.33, 1997) issued in terms of the Aviation Act, as amended, regulates obstacles outside aerodromes or heliports which may impact on navigational airspace and affect aviation safety. The regulations deal with wind turbine generators separately as these are considered a ‘special type of aviation obstruction’ because of the continual movement of blades which extend above the height of the tower. The regulations specify offset distances from aerodromes, windfarm configurations, marking and lighting.

G7 must ensure that the design including markings and lighting of the wind farm meets the requirements of the Commissioner for Civil Aviation.

A1.3.9 ***Occupational Health and Safety Act***

The purpose of the OHSA (Act 85 of 1993) is to provide for the health and safety of persons at work or in connection with the use of equipment and machinery. It also provides for the protection of people other than employees from hazards arising from or in connection with activities of persons at work. In this regard an employer is required to bring about and maintain, as far as reasonably practicable, a work environment that is safe and without risk to the health and well-being of workers. The Act is administered by the Department of Labour who have established provincial offices. Occupational health and safety inspectors from these provincial offices undertake inspections and investigations at workplaces to ensure compliance with OHSA.

The Act covers *inter alia*:

- General duties of employers to their employees;
- Electing of Health and Safety Representatives and establishment of Health and Safety Committees; and
- Reporting and investigation of incidents.

Health and safety aspects of the project, as well as employment and labour relations within the construction, operation and decommissioning phases of the project, will need to be undertaken in accordance with OHSA.

A1.3.10 ***Subdivision of Agricultural Land Act***

G7 will apply for an exemption (or departure) from applying for the subdivision of agricultural land in terms of the Subdivision of Agricultural Land Act (Act No. 70 of 1970) since agricultural activities will continue during operation of the facility.

A1.3.11 ***Conservation of Agricultural Resources Act (Act 43 of 1983)***

Regulation 15 of GNR 1048 of 1984 published under the Conservation of Agricultural Resources Act (CARA) classifies categories of weeds and invader plants and restrictions placed on where these weeds may occur. Regulation 15E details requirements and methods to implement control measures for alien and invasive plant species. While no permit requirements will arise from this regulation, G7 will be required to ensure that no alien plants or weeds are introduced to the site due to the proposed activities.

A1.3.12 ***Integrated Environmental Management Information Series***

The Department of Environmental Affairs and Tourism (DEAT) Information Series of 2002 consists of 20 documents. The documents were drafted as sources of information on the concepts and approaches to Integrated

Environmental Management (IEM). IEM is a key instrument of NEMA and provides the overarching framework for the integration of environmental assessment and management principles into environmental decision-making. The aim of the information series is to provide general information on techniques, tools and processes for environmental assessment and management. ERM have referred to these various documents for information on the most suitable approach to the environmental assessment process for the proposed development.

The Information series on Scoping is particularly relevant to the DSR. This document outlines the approaches to and the objectives of Scoping.

A1.3.13 *DEA&DP EIA Guideline and Information Document Series*

The EIA process guidelines have been updated and the latest versions, available in the DEA&DP's NEMA Environmental Impact Assessment Guideline and Information Document Series, consist of:

- Guideline on Transitional Arrangements (May 2009);
- Guideline on Public Participation (May 2009);
- Guideline on Alternatives (May 2009);
- Guideline on Need and Desirability (May 2009);
- Guideline on Exemption Applications (May 2009);
- Guideline on Appeals (May 2009); and
- Guideline on the Interpretation of the Listed activities (November 2006).

The above-mentioned guidelines are still in draft form and will only be finalised and formally published once the amendments to the NEMA EIA Regulations have been promulgated.

DEA&DP has developed policy guidelines around specialist involvement in EIA processes. The guidelines aim to improve the quality of specialist input and facilitate informed decision-making. They clarify the roles and responsibilities of all role players with regard to specialist input in the EIA process. The following guidelines were considered:

- Guideline for Determining the Scope of Specialist Involvement in EIA Processes;
- Guideline for the Review of Specialist Input into the EIA Process;
- Guideline for Involving Biodiversity Specialists in EIA Processes;
- Guideline for Involving Heritage Specialists in EIA Processes;
- Guideline for Involving Visual and Aesthetic Specialists in EIA Processes;
- and
- Guideline for Environmental Management Plans.

DEA&DP has developed a Strategic Initiative to Introduce Commercial Land Based Wind Energy Development to the Western Cape. This document consists of a number of reports that are intended to assist developers,

Environmental Assessment Practitioners (EAPs) and Decision Makers. The following reports were considered:

- Report 1: Executive Summary and Synthesis Report;
- Report 5: Proposed Regional Methodology; and
- Report 6: Proposed Project Level Methodology.

Although the competent authority for the proposed activity is DEA, ERM have nevertheless referred to these various documents for information on the most suitable approach to the EIA process for the proposed development, as the DEA&DP are a commenting authority.

A1.3.14 *Municipal Bylaws*

Certain activities related to the proposed development may, in addition to national legislation, be subject to control by municipal by-laws for aspects such as planning, dust, noise and roads, as well as the Lainsburg Local and Central Karoo District Municipalities (Western Cape) and Karoo Hoogland Local and Namakwa District Municipalities (Northern Cape) Integrated Development Plans (IDPs). Relevant by-laws will be identified as part of the various specialist studies during the EIA Phase.

A1.4 *INTERNATIONAL CONVENTIONS*

A1.4.1 *United Nations Framework Convention on Climate Change (UNFCCC)*

The UNFCCC is a framework convention which was adopted at the 1992 Rio Earth Summit. South Africa signed the UNFCCC in 1993 and ratified it in August 1997. The stated purpose of the UNFCCC is to, “*achieve....stabilisation of greenhouse gas concentrations in the atmosphere at concentrations at a level that would prevent dangerous anthropogenic interference with the climate system*”, and to prevent human-induced climate change by reducing the production of greenhouse gases which are defined as, “*those gaseous constituents of the atmosphere both natural and anthropogenic, that absorb and re-emit infrared radiation*” ⁽¹⁾.

The proposed wind farm project will contribute to a reduction in South Africa’s greenhouse gases as it will provide an alternative to fossil-fuel based power generation.

A1.4.2 *Kyoto Protocol*

The Kyoto Protocol is a protocol to the UNFCCC which was initially adopted in 1997 in Kyoto, Japan, and which entered into force on 16 February 2005 ⁽²⁾. The Kyoto Protocol is the chief instrument for tackling climate change. The main feature of the Protocol is that, “*it sets binding targets for 37 industrialized*

(1) UNFCCC website, 2010.

(2) *Ibid.*

countries and the European community for reducing greenhouse gas (GHG) emissions. These amount to an average of five per cent against 1990 levels, over the five-year period 2008-2011. The major distinction between the Protocol and the Convention is that, “while the Convention encouraged industrialised countries to stabilize GHG emissions, the Protocol commits them to do so” (1).

The Clean Development Mechanism (CDM) established under the Kyoto Protocol. The CDM allows developing countries such as South Africa to implement GHG emission reduction projects and generate carbon credits. Roggeveld Wind Farm will be applying for registration under the CDM. See further discussion in this regard in *Section 3.6* of the Scoping Report.

(1) *Ibid.*

