Annex A

Legislative Framework

CONTENTS

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).

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 proposed solar power plant 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, 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.

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. Solar 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 solar 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). SAHRA administers heritage in the province particularly where archaeology and palaeontology are the dominant concerns. The Eastern Cape Provincial Heritage Resources Authority (ECPHRA) deals largely with built environment issues at this stage. Archaeology, including rock art, graves of victims of conflict and other graves not in formal cemeteries are administered by the national heritage authority, SAHRA.

A1.2.2 Provincial

Eastern Cape Department of Economic Development and Environmental Affairs (DEDEA)

DEDEA is the provincial department responsible for economic development and environmental affairs in the Eastern Cape.

DEDEA's mission is 'to provide strategic leadership in developing a people-centred, equitably shared, green economy through effective programmes, strategic partnerships and responsive services.' With regard to the EIA for the Drennan PV Power Facility project, DEDEA are regarded as an important commenting authority and will provide comment on the EIA and input to the national Department's decision-making process.

Eastern Cape Provincial Heritage Resource 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 SAHRA regarding the proposed project. ECPHRA will provide comment on the proposed project.

Other

- Eastern Cape Department of Transport
- Eastern Cape Department of Agriculture and Land Affairs.

A1.2.3 Municipal

Certain Departments, such as the Planning and Roads Departments, from the Chris Hani District Municipality will also be involved as a commenting authority 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);
- Environmental Conservation Act (No 73 of 1989 Amendment Notice No. R1183 of 1997);
- National Water Act (Act No. 36 of 1998);

- National Environmental Management: Biodiversity Act (Act No. 10 of 2004);
- National Forest Act (Act No. 84 of 1998);
- National Heritage Resources Act (Act No. 25 of 1999);
- Electricity Regulation Act (Act No. 4 of 2006) as amended;
- 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 – Eastern Cape:

- Eastern Cape Parks and Tourism Agency Bill 2010; and
- Eastern Cape Nature Conservation Act, 19 of 1974 and variously amended thereafter.

A brief description of the requirements in the above listed Acts and Regulations is provided below.

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 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. A description of these regulations is provided below.

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 Notices GN544, 545 and 546. The regulations require that written authorisation is obtained from the Minister or his delegated authority, in this case the national Department of Environmental Affairs (DEA), in respect of which the investigation, assessment and communication of potential impacts of these activities must follow the procedure as described in Regulations 26 to 35 of the EIA Regulations. Such authorisation, which may be granted subject to conditions, will only be considered once the regulatory requirements have been met. Government Notice R543 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 GN544, GN545 and GN546 would be relevant. GN544 activities require a Basic Assessment process and GN545 activities require a more comprehensive Scoping and EIA process. Given the applicability of activities from all three listings, a Scoping and EIA process is being undertaken.

The EIA Regulations, June 2010 (Government Notice R544 and R545) identify activities which may have a detrimental effect on the environment and the listed activities which may be triggered by the proposed PV power facility include:

GN 544:

Activity 10 (i): *'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…'*

Activity 11 (xi): *'The construction of 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.'*

Activity 13: *'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 m^3 but not exceeding 500 m^3.'.*

Activity 22 (ii): '*The construction of a road outside urban areas where no reserve exists where the road is wider than 8 metres..*

Activity 27 (i) & (ii): *'The decommissioning of existing facilities or infrastructure, for (i) electricity generation with the threshold of more than 10MW and (ii) electricity transmission and distribution with a threshold of more than 132kV.'*

GN 545:

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; except where such physical alteration takes place for: (i) linear development activities; or (ii) agriculture or afforestation where activity 16 in this Schedule will apply'.*

GN 546:

Activity 14: *'The clearing of an area of 5 hectares or more of vegetation where 75% or more of the vegetation cover constitutes indigenous vegetation.'*

Government Notice R543 sets out the procedures and documentation for Scoping and EIA that need to be complied with.

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 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 Solaire Direct 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.

Solairedirect must ensure that any potential 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 Forests Act (No. 84 of 1998):

The National Forests Act provides for the protection of forests as well as specific tree species, quoting directly from the Act: "*no person may cut, disturb, damage or destroy any protected tree or possess, collect, remove, transport, export, purchase, sell, donate or in any other manner acquire or dispose of any protected tree or any forest product derived from a protected tree, except under a licence or exemption granted by the Minister to an applicant and subject to such period and conditions as may be stipulated*".

No protected tree species were observed in the vicinity of the site and as the site is quite small and the landscape open, it is relatively safe to conclude that no protected tree species occur within the study area.

A1.3.6 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), 1999 (Act No. 25 of 1999). The objective of the NHRA is to introduce an integrated system for the management of national heritage resources.

Archaeology, Palaeontology and Meteorites

According to Section 35 (Archaeology, Palaeontology and Meteorites) and Section 38 (Heritage Resources Management) of the South African National Heritage Resources Act (SAHRA), palaeontological heritage impact assessments (PIAs) and archaeological impact assessments (AIAs) are required by law in the case of developments in areas underlain by potentially fossiliferous (fossil-bearing) rocks, especially where substantial bedrock excavations are envisaged, and where human settlement is know to have occurred during prehistory and the historic period. Depending on the sensitivity of the fossil and archaeological heritage, and the scale of the development concerned, the palaeontological, and archaeological impact assessment required may take the form of (a) a stand-alone desktop study, or (b) a field scoping plus desktop study leading to a consolidated report. In some cases these studies may recommend further palaeontological and archaeological mitigation, usually at the construction phase. These recommendations would normally be endorsed by the responsible heritage management authority, to whom the reports are submitted for review.

As part of the EIA, a Heritage Impact Assessment (including both archaeology and palaeontology) will be submitted to Eastern Cape Provincial Heritage Resources Authority (ECPHRA) and SAHRA to elicit comments. Comments received will be included in the Comments and Responses Report in *Annex C*.

Table 1.1 outlines when a permit is required depending on the sensitivity of the heritage resources.

Table 1.1 Permitting requirements for fossil, built environment and Stone Age archaeology

PERMIT APPLICATION SECTION 35 – FOSSILS, BUILT ENVIRONMENT FEATURES, SHIPWRECKS & STONE AGE ARCHAEOLOGY (Ref : NHRA 1999: 58):
(a) destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite; (b) destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite; (c) trade in, sell for private gain, export or attempt to export from the Republic any category of archaeological or palaeontological material or object, or any meteorite.

Burial Grounds and Graves

A Section 36 permit application is made to the South African Heritage Resources Agency (SAHRA) which protects burial grounds and graves that are older than 60 years, and must conserve and generally care for burial grounds and graves protected in terms of this section, and it may make such arrangements for their conservation as it sees fit. SAHRA must also identify and record the graves of victims of conflict and any other graves which it deems to be of cultural significance and may erect memorials associated with these graves and must maintain such memorials. A permit is required under the conditions listed in *Table 1.2*.

Table 1.2 Permitting requirements for burial grounds and graves older than 60 years to ECPHRA and historic burials to the South African Heritage Resources Agency (SAHRA)

PERMIT APPLICATION SECTION 36 – BURIAL GROUNDS & GRAVES (REF: NHRA 1999 : 60)
(a) destroy, damage, alter, exhume or remove from its original position or otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves (b) destroy, damage, alter, exhume, remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority; or (c) bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) any excavation equipment, or any equipment which assists in the detection or recovery of metals (d) SAHRA or a provincial heritage resources authority may not issue a permit for The destruction or damage of any burial ground or grave referred to in subsection (3)(a) unless it is satisfied that the applicant has made satisfactory arrangements for the exhumation and re-interment of the contents of such graves, at the cost of the applicant

Table 1.3 Permitting requirements for heritage resources management

PERMIT APPLICATION SECTION 38 (Ref: NHRA 1999 : 62)

PERMIT APPLICATION SECTION 38 (Ref: NHRA 1999 : 62)
(a) the construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier exceeding 300 m in length; (b) the construction of a bridge or similar structure exceeding 50 m in length; (c) any development or other activity which will change the character of a site exceeding 5 000 m² in extent; or (ii) involving three or more existing erven or subdivisions thereof; or (iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or (iv) the costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority; (d) the re-zoning of a site exceeding 10 000 m² in extent; or (e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority.

A1.3.7 Electricity Regulation Act and Regulations (Act 4 of 2006) as amended

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 the Renewable Energy Independent Power Procurement Programme (IPP Procurement Programme).

The proposed solar plant facility will provide an additional electricity supply through renewable energy sources. Solaire Direct, as the IPP, will be required to comply with guidelines governing the bid programme.

A1.3.8 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 A1.3.7*), 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 (now the Renewable Energy Independent Power Procurement Programme (IPP Procurement Programme)), and the relevant agreements to be concluded.

The guidelines describe the basic structure of the procurement 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 procurement programme. Power generators participating in the procurement scheme are required to sell power generated by renewable technologies to Eskom (the REPA) under a Power Purchase Agreement (PPA). The Department of Energy (DoE) is tasked with the administration of the procurement programme.

In order to establish the proposed Drennan PV power facility Solaire Direct, as an independent power producer, will need to enter into a Power Purchase Agreement (PPA) with NERSA in order to sell the electricity generated.

A1.3.9 Occupational Health and Safety Act (Act 85 of 1993)

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 Conservation of Agricultural Resources Act (Act 43 of 1983)

The Conservation of Agricultural Resources Act provides for the regulation of control over the utilisation of the natural agricultural resources in order to promote the conservation of soil, water and vegetation and provides for combating weeds and invader plant species. The Conservation of Agricultural Resources Act defines different categories of alien plants and those listed under Category 1 are prohibited and must be controlled while those listed under Category 2 must be grown within a demarcated area under permit. Category 3 plants includes ornamental plants that may no longer be planted but existing plants may remain provided that all reasonable steps are taken to prevent the spreading thereof, except within the floodline of water courses and wetlands.

Although several listed invasive species were observed at the site, the abundance and density of alien plants at the site was low. Alien species were largely associated with disturbed areas such as around watering points, and were not commonly observed in the veld.

Alien species observed at the site include *Opuntia imbricata*, *Malva parviflora*, *Conyza bonariensis*, *Datura stramonium* and *Tagetes minuta*. Several of these species are listed under category 1 and should be controlled as part of the EMP for the development.

A1.3.11 Subdivision of Agricultural Land Act (Act No. 70 of 1970)

Solaire Direct 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.

A1.3.12 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 assessing impacts is particularly relevant to the EIR. This document outlines the approaches to and the objectives of assessing impacts.

A1.3.13 Eastern Cape Nature Conservation Act, 19 of 1974 and variously amended thereafter

The above act as well as the Transkei Decree (No 9 Of 1992) and the Ciskei Nature Conservation Act of 1987 are all applicable to the Eastern Cape. These acts make provision for the management of protected areas, as well as for regulations relating to the hunting of wild animals, catching of fish and the harvesting of plant species. Lists of protected plant and animal species are provided. Protected species include all frogs, tortoises and reptiles.

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 Chris Hani District Municipality Integrated Development Plans (IDPs).

A1.3.15 International Guidelines

- IFC Performance Standards;
- Equator Principles; and
- Clean Development Mechanism (CDM).

The IFC applies Performance Standards (PS) to manage social and environmental risks and impacts and to enhance development opportunities in its private sector financing. The PS may also be applied by other financial institutions electing to apply them to projects in emerging markets. Together, the following eight PS establish standards that the client is to meet throughout the life of an investment by IFC or other relevant financial institution:

- PS 1: Social and Environmental Assessment and Management System;
- PS 2: Labor and Working Conditions;
- PS 3: Pollution Prevention and Abatement;
- PS 4: Community Health, Safety and Security;
- PS 5: Land Acquisition and Involuntary Resettlement (n/a);
- PS 6: Biodiversity Conservation and Sustainable Natural Resource Management;
- PS 7: Indigenous Peoples (n/a);
- PS 8: Cultural Heritage.

PS 1 establishes the importance of: (i) integrated assessment to identify the social and environmental impacts, risks, and opportunities of projects; (ii)

effective community engagement through disclosure of project-related information and consultation with local communities on matters that directly affect them; and (iii) the client's management of social and environmental performance throughout the life of the project. PS 2 through 8 establish requirements to avoid, reduce, mitigate or compensate for impacts on people and the environment, and to improve conditions where appropriate. While all relevant social and environmental risks and potential impacts should be considered as part of the assessment, PS 2 through 8 describe potential social and environmental impacts that require particular attention in emerging markets. Where social or environmental impacts are anticipated, the client is required to manage them through its Social and Environmental Management System consistent with PS 1.

The Equator Principles (EPs) similarly are a credit risk management framework for determining, assessing and managing environmental and social risk in project finance transactions. Project finance is often used to fund the development and construction of major infrastructure and industrial projects. The EPs are adopted voluntarily by financial institutions and are applied where total project capital costs exceed US$10 million. The EPs are primarily intended to provide a minimum standard for due diligence to support responsible risk decision-making.

The EPs, based on the IFC's Performance Standards on social and environmental sustainability and on the World Bank Group Environmental Health and Safety Guidelines (EHS Guidelines), are intended to serve as a common baseline and framework for the implementation by each adopting institution of its own internal social and environmental policies, procedures and standards related to its project financing activities.

The relevant sections of the World Bank General Environment, Health and Safety Guidelines, as well as the industry specific Guideline on Solar Energy would also be applicable.

This EIA has been undertaken in accordance with the requirements of the EP and IFC Performance Standards. The EIA of course is only one step in the process of complying with the EP and IFC Performance standards and also would require the developer to keep to commitments made during the EIA process and to build on this by also meeting its commitments towards pre-construction and post construction monitoring, the conditions of approval that the DEA may impose, the EMP and an ongoing commitment towards environmental best practice. It is therefore recommended that the developer also commit to establishing and Environmental Management System against which the developer's ongoing performance can be monitored.

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 solar 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 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*" (3).

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.

(1) UNFCCC website, 2010.
(2) *Ibid*.
(3) *Ibid*.