



DRAFT MOTIVATIONAL REPORT

14 November 2022

**PART 2 AMENDMENT: THE PROPOSED SONNEBLOM
PHOTOVOLTAIC ENERGY FACILITY NEAR BLOEMFONTEIN IN THE
FREE STATE PROVINCE**



PROJECT DETAIL

DFFE Reference No. : 14/12/16/3/3/2/673

Project Title : Part 2 Amendment as part of the Sonneblom Photovoltaic Solar Energy Facility near Bloemfontein, Free State Province.

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GLOSSARY OF TERMS AND ACRONYMS

BESS	Battery Energy Storage Systems
BMS	Battery Management System
DFFE	Department of Forestry, Fisheries and the Environment
DM	District Municipality
DoE	Department of Energy
EA	Environmental Authorisation
EAP	Environmental Assessment Practitioner
EIA	Environmental Impact Assessment
EMPr	Environmental Management Programme
Environmental impact	Any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organization's environmental aspects.
ESS	Energy Storage System
GNR	Government Notice Regulation
I&AP	Interested and affected party
IPP	Independent Power Producer
kV	Kilo Volt
Mitigate	Activities designed to compensate for unavoidable environmental damage.
MW	Megawatt
NEMA	National Environmental Management Act No. 107 of 1998
PPP	Public Participation Process
PV	Photovoltaic
REIPPP	Renewable Energy IPP Procurement Process

EXECUTIVE SUMMARY

The holder of the Environmental Authorisation (EA) of the Sonneblom SPP is proposing amendments to the EA which mainly involves changes to the facility layout which was approved as part of the EA. The amendments are related to the relocation and resizing of project specific infrastructure associated with the layout within the assessed and authorised project area.

The holder of the EA intends to commence with construction in February 2023 and therefore requires these changes to the layout to be considered and confirmed prior so that the necessary layout changes as reflected accordingly and can be implemented.

Environamics has been appointed as the independent consultant to undertake the Part 2 amendment process on Sonneblom SPP's behalf. This Motivational report is compiled in accordance with the provisions of Regulation 32 (1) of the EIA Regulations 2014, (as amended).

As part of this Part 2 Amendment Process specialist input was sought from suitably qualified independent specialists to provide an indication of what the implications will be in terms of environmental impact associated with the proposed amendments, as well as provide an indication of whether the mitigation measures included in the EMPr will be sufficient for the impacts associated with the updated layout. The assessment determined that the potential negative impacts resulting from the proposed layout are not significant and that it doesn't increase the significance ratings determined as part of the EIA process. The proposed layout has been refined and optimised from a technical perspective, as well as an environmental perspective.

The advantages and disadvantages of the proposed amendments were explored to provide an indication of the potential benefits and drawbacks. Limited disadvantages are associated with the proposed amendments by the Holder of the EA, with primarily advantages expected to be relevant to the amendment request.

A Public Participation Process (PPP) as required in terms of Chapter 6 of the EIA Regulations, 2014, (as amended) is being conducted in respect of the Part 2 Amendment application. All comments received throughout the amendment process will be included in the Comments and Response Report to be included as part of the Final Motivational Report to be submitted to the DFFE for decision-making.

In light of the above, it is concluded that the EA should be amended in line with the amendments and specifications as proposed and that potential environmental risks identified can be mitigated to acceptable levels provided the recommended mitigation measures are implemented.

1 INTRODUCTION

This report motivates the proposed amendment of the EA as part of the Sonneblom SPP near Bloemfontein, Free State Province (DEA Ref: 14/12/16/3/3/2/673). The Environmental Impact Assessment (EIA) process for the Sonneblom Photovoltaic SPP was lodged in 26 March 2014 and the EA was granted on 19 June 2015. Subsequent amendment processes have been undertaken by the holder of the EA which includes:

1. 14/12/16/3/3/2/673/AM1 dated 04 August 2015 – the amendments included small typing errors included in the EA which needed to be corrected.
2. 14/12/16/3/3/2/673/AM2 dated 30 October 2015 – the amendments included small corrections to one of the listed activities authorised.
3. 14/12/16/3/3/2/673/AM3 dated 07 June 2018 – the amendments included the extension of the validity of the EA. The EA is valid until 19 June 2023.
4. 14/12/16/3/3/2/673/AM4 dated 28 June 2021 – the amendments included the change of the details of the EA holder, amendment of the coordinates of the preferred site, the inclusion of a Battery Storage Energy Facility (BESS) and the associated technical details, an increase in the facility capacity from 84MWdc to 115MWdc, change in the location of inverters, buildings, access road and internal roads within the development footprint and the update of the facility layout and Environmental Management Programme (EMPr). The amended facility layout, dated December 2020, was approved as part of this amendment process.

Sonneblom Solar Power Plant (RF) (Pty) Ltd (hereafter referred to as Sonneblom SPP) was issued with an EA for the development of an 84MW photovoltaic solar facility (later increased to 115MW as part of AM4) and associated infrastructure on Portion 1 of the farm Blydschap No. 504, Registration Division Bloemfontein, Free State situated within the Mangaung Metropolitan Municipality area of jurisdiction. The town of Bloemfontein is located approximately 16 km north west of the proposed development. The total footprint of the project as authorised is 171 hectares (including supporting infrastructure on site). The following activities were authorised with special reference to the proposed development and are listed in the EIA Regulations:

- Activity 10(i) (Regulation 544): *“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(i), (ii), (v), (vi), (x), & (xi) (Regulation 544): *“The construction of: (i) canals; (ii) channels; (v) weirs; (vi) bulk storm water outlet structures; (x) buildings exceeding 50 square metres in size; or (xi) infrastructure or structures covering 50 square metres or more where such construction occurs within a watercourse or within 32 metres of a watercourse, measured from the edge of a watercourse, excluding where such construction will occur behind the development setback line.”*

- Activity 18 (Regulation 544): *“The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, pebbles or rock from a watercourse; or the littoral active zone.”*
- Activity 1 (Regulation 545): *“The construction of facilities or infrastructure for the generation of electricity where the electricity output is 20 megawatts or more.*
- Activity 15 (Regulation 545): *“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.”*
- Activity 4(a)(i)(ee) (Regulation 546): *“The construction of a road wider than 4 metres with a reserve less than 13,5 metres (a) in the Free State Province (i) outside urban areas, in (ee) critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans.”*
- Activity 14(a)(i) (Regulation 546): *“The clearance of an area of 5 hectares or more of vegetation where 75% or more of the vegetative cover constitutes indigenous vegetation-(a) Free State Province (i) All areas outside urban areas.”*

Subsequent to the receipt of the EA and the four completed amendment processes undertaken for the development, the holder of the EA undertook an updated Wetland study (July 2021) for the site due to the passage of time since the original Environmental Impact Assessment (EIA) process was undertaken. This process is considered as part of the due diligence process being undertaken for the development by the EA holder. The independent specialist had found specific wet areas located within the development footprint that had not been present within the site during the studies undertaken previously in 2014. These areas were identified as being unsuitable for development not only from an environmental, but also technical perspective. The changes to the layout therefore relate mainly to the current and confirmed conditions on site and to ensure that avoidance of the newly identified wet areas are implemented.

The following sections will explain the legal mandate and purpose of the report, details of the environmental assessment practitioner, the status of the amendment process and the structure of the report.

1.1 LEGAL MANDATE AND PURPOSE OF THE REPORT

Regulation 31 (GNR 326) determine that: *"An Environmental Authorisation (EA) may be amended by following the process prescribed in this Part if the amendment will result in a change to the scope of a valid EA where such change will result in an increased level or change in the nature of impact where such level or change in nature of impact was not—(a) assessed and included in the initial application for environmental authorisation; or (b) taken into consideration in the initial environmental authorisation; and the change does not, on its own, constitute a listed or specified activity."*

This report is the Draft Motivational Report to be submitted to the Department of Forestry, Fisheries and the Environment (DFFE). According to Regulation 32 all identified and registered I&APs and relevant State Departments must be allowed the opportunity to review the

motivational report. The report has been made available to all identified and registered I&APs and all relevant State Departments. They have been requested to provide written comments on the report within 30 days of receiving it. All issues identified during the 30-day review and comment period will be documented and compiled into a Comments and Response Report as part of the Final Motivational Report to be submitted to the DFFE for decision-making. According to Regulation 32(1) of GNR 326 the objective of the report is to, through a consultative process:

- Assess all impacts related to the proposed change;
- Describe the advantages and disadvantages associated with the proposed change;
- Provide measures to ensure avoidance, management and mitigation of impacts associated with such proposed change; and
- Indicate any changes to the EMPr.

1.2 DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP)

Environamics was appointed by the applicant as the independent EAP to conduct the Part 2 Amendment process and prepare all required reports. All correspondence to the EAP can be directed to:

Contact person: Lisa de Lange (Opperman)
EAPASA Reg.: 2020/2150
Postal Address: PO Box 6484, Baillie Park, 2526
Telephone: 084 920 3111 (Cell)
Electronic Mail: lisa@environamics.co.za

And/or

Contact person: Marelle Botha
EAPASA Reg.: 2021/3834
Postal Address: PO Box 6484, Baillie Park, 2526
Telephone: 082 493 5166 (Cell)
Electronic Mail: marelie@environamics.co.za

Regulation 13(1)(a) and (b) determines that an independent and suitably qualified and experienced EAP should conduct the assessment process. In terms of the independent status of the EAP a declaration is attached as part of the Application for EA Amendment. The expertise of the EAP responsible for conducting the EIA is also summarised in the curriculum vitae included as part of Appendix A.

1.3 STATUS OF THE AMENDMENT PROCESS

The EIA process is conducted strictly in accordance with the stipulations set out in Regulations 31-33 of GNR. 326 (as amended). Table 1.1 provides a summary of the amendment process and future steps to be taken. It can be confirmed that to date:

- A pre-application meeting was held with the relevant DEFF on 13 September 2022.
- Site notices of the Amendment Process were placed on the affected property on 02 September 2022.
- An advert was placed in English in a local newspaper (Bloemnuus) on 14 September 2022.
- The Draft Motivational Report has been made available to all identified and registered I&APs and relevant State Departments on 14 November 2022 and they were requested to provide their comments on the report by 14 December 2022.

It is envisaged that the Part 2 Amendment process should be completed within approximately six months of submission of the Draft Motivational Report– see Table 1.1.

Table 1.1: Project schedule

Activity	Prescribed timeframe	Timeframe
Pre-Application Meeting with the DFFE	-	13 September 2022
Submit Application for EA Amendment and Draft Motivational Report	-	14 November 2022
Public participation process – 30-day review and comment period	30 Days	14 November – 14 December 2022
Submit Final Motivational Report	90 Days	January 2023
Decision	107 Days	April/May 2023
Public participation (decision) & submission of appeals	20 Days	April/May 2023

1.4 STRUCTURE OF THE REPORT

This report is structured in accordance with the prescribed contents stipulated in Regulation 32 of Regulation No.326. It consists of nine sections demonstrating compliance to the specifications of the regulations as illustrated in Table 1.2.

Table 1.2: Structure of the report

Requirements for the contents of a Motivational Report as specified in the Regulations		Section in report
Regulation 32 (1) – The applicant must... submit to the competent authority a report reflecting:		
(i)	an assessment of all impacts related to the proposed change	4
(ii)	advantages and disadvantages associated with the proposed change; and	6
(iii)	measures to ensure avoidance, management and mitigation of impacts associated with such proposed change; and	5
(iv)	any changes to the EMPr;	Appendix D
(iv)	Which report –	7
(aa)	had been subjected to a public participation process, which had been agreed to by the competent authority, and which was appropriate to bring the proposed change to the attention of potential and registered interested and affected parties, including organs of state, which have jurisdiction in respect of any aspect of the relevant activity, and the competent authority, and	
(bb)	reflects the incorporation of comments received, including any comments of the competent authority.	

2 PROJECT OVERVIEW

This section aims to provide background information of the location of the activity, property description, activities authorised, photovoltaic technology and approved layout.

2.1 THE LOCATION OF THE ACTIVITY AND PROPERTY DESCRIPTION

The activity entails the development of a photovoltaic solar facility and associated infrastructure on Portion 1 of the farm Blydschap No. 504, Registration Division Bloemfontein, Free State situated within the Mangaung Metropolitan Municipality area of jurisdiction. The proposed development is located in the Free State Province in the central interior of South-Africa. The town of Bloemfontein is located approximately 16km north west of the proposed development (refer to figure 1.1 for the locality map).

The project entails the generation of up to 115MW electrical power through photovoltaic (PV) panels. The total authorised footprint of the project will approximately be 171 hectares (including supporting infrastructure on site) – refer to table 2.1 for general site information.

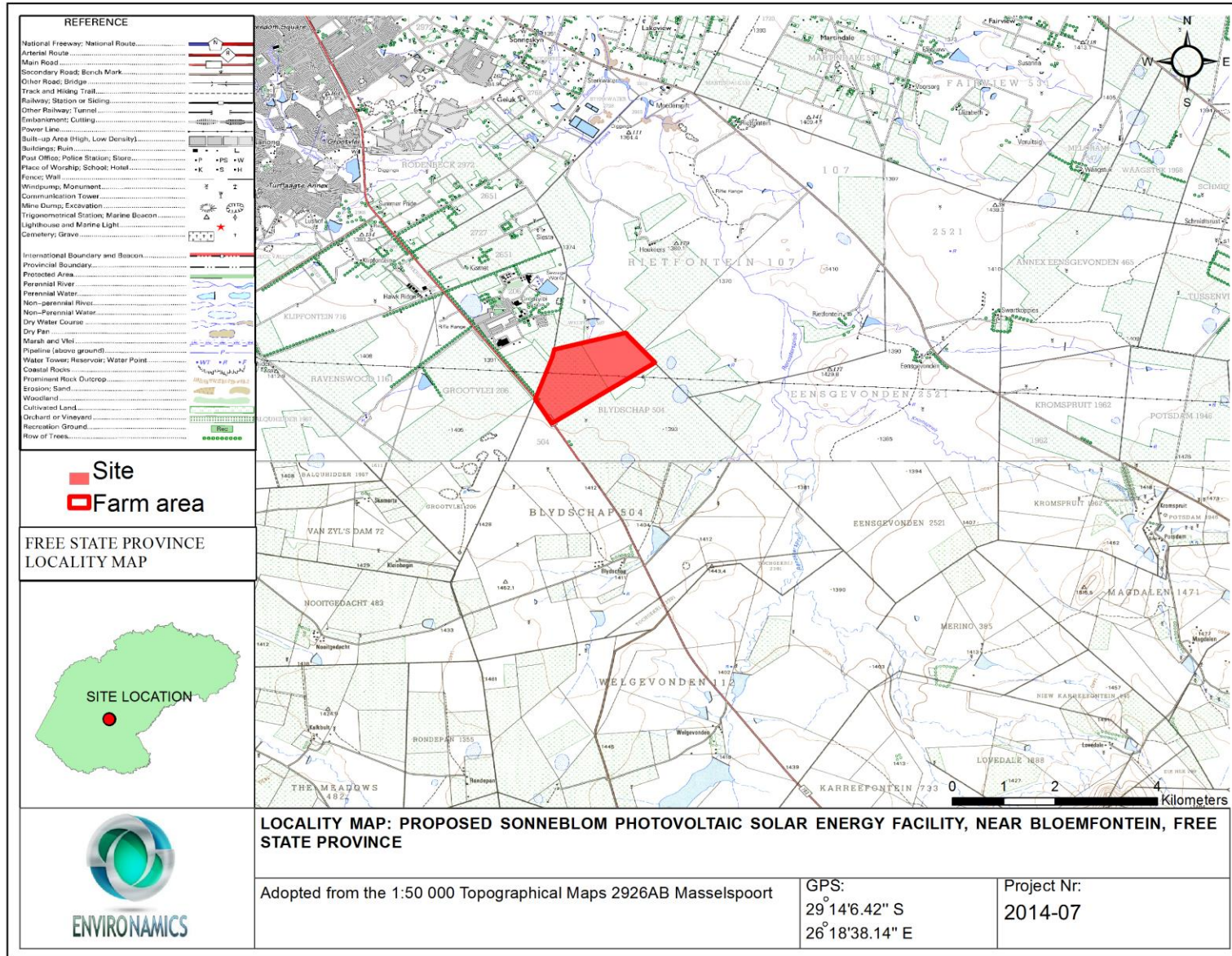


Figure 1.1: Locality Map

Table 2.1: General site information

Description of affected farm portion	Portion 1 of the farm Blydschap 504, Registration Division Bloemfontein, Free State
21 Digit Surveyor General codes	F00300000000050400001
Title Deed(s)	T6089/2001
Type of technology	Photovoltaic solar facility
Structure Height	Panels ~3.5m, buildings ~ 4m and power lines ~32m
BESS Facility (lithium-ion)	2ha in extent
Surface area to be covered	Approximately 171 ha
Structure orientation	The panels will either be fixed to a single-axis horizontal tracking structure where the orientation of the panel varies according to the time of the day, as the sun moves from east to west or tilted at a fixed angle equivalent to the latitude at which the site is located in order to capture the most sun.
Laydown area dimensions	Approximately 171 ha
Generation capacity	Up to 115MW

The property on which the facility is to be constructed will be leased by Sonneblom Solar Power Plant (RF) (Pty) Ltd from the property owner, Mr. Wiese Hendrik Jacobus Rust, for the life span of the project (minimum of 20 years).

2.2 ACTIVITY DESCRIPTION

The development triggered a number of activities in terms of the EIA Regulations, 2014. The following activities were approved as per the EA dated 19 June 2015:

Table 2.2: Listed activities

Relevant notice:	Activity No (s)	Description of each listed activity as per project description:
GNR. 544, 18 June 2010	Activity 10(i)	<ul style="list-style-type: none"> <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.”</i>

		<ul style="list-style-type: none"> Activity 10(i) is triggered since the proposed photovoltaic solar facility will transmit and distribute electricity of more than 33 kilovolts outside an urban area.
GNR. 544, 18 June 2010	Activity 11(i), (ii), (v), (vi), (x) & (xi)	<ul style="list-style-type: none"> <i>“The construction of: (i) canals; (ii) channels; (v) weirs; (vi) bulk storm water outlet structures; (x) buildings exceeding 50 square metres in size; or (xi) infrastructure or structures covering 50 square metres or more where such construction occurs within a watercourse or within 32 metres of a watercourse measured from the edge of a watercourse, excluding where such construction will occur behind the development setback line.”</i> Activity 11(i), (ii), (v), (vi), (x) & (xi) is triggered since a watercourse (non-perennial streams and pans) is located on or in close proximity to the site and the proposed photovoltaic solar facility may result in the construction of canals, channels, weirs, bulk storm water outlet structures, buildings exceeding 50m² in size or infrastructure or structures covering 50m² or more within 32m of a watercourse.
GNR. 544, 18 June 2010	Activity 18	<ul style="list-style-type: none"> <i>“The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, pebbles or rock from a watercourse; or the littoral active zone.”</i> Activity 18 is triggered since a watercourse (nonperennial streams and pans) is located on or in close proximity to the site and the proposed photovoltaic solar facility may result in the infilling or depositing of material of more than 5m³ into, or the dredging, excavation, removal or moving of soil, sand, pebbles or rock from a watercourse; or the littoral active zone.
GNR. 545, 18 June 2010	Activity 1	<ul style="list-style-type: none"> <i>“The construction of facilities or infrastructure for the generation of electricity where the electricity output is 20 megawatts or more.”</i> Activity 1 is triggered since the proposed photovoltaic solar facility will generate up to 115 megawatts electricity.

<p>GNR. 545, 18 June 2010</p>	<p>Activity 15</p>	<ul style="list-style-type: none"> • <i>Physical alteration of undeveloped, vacant or derelict land for residential, retail, commercial, recreational, industrial or institutional use where the total area to be transformed is 20 hectares or more.</i> • Activity 15 is triggered since the proposed photovoltaic solar facility is located outside an urban area and will result in the transformation of approximately 171 hectares of undeveloped, vacant or derelict land.
<p>GNR. 546, 18 June 2010</p>	<p>Activity 4(a)(i)(ee)</p>	<ul style="list-style-type: none"> • <i>“The construction of a road wider than 4 metres with a reserve less than 13,5 metres (a) in the Free State Province (i) outside urban areas, in (ee) critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans.”</i> • A new access point/road will be required from the R702. An internal site road network will also be required to provide access to the solar field and associated infrastructure. All site roads will require a width of approximately 4m. Therefore activity 4(a)(i)(ee) is triggered since the site is located outside an urban area and within a critically biodiversity area.
<p>GNR. 546, 18 June 2010</p>	<p>Activity 14 (a)(i)</p>	<ul style="list-style-type: none"> • <i>“The clearance of an area of 5 hectares or more of vegetation where 75% or more of the vegetative cover constitutes indigenous vegetation- (a) Free State Province (i) All areas outside urban areas.</i> • “In terms of vegetation type the site falls within the Bloemfontein Dry Grassland type, which is identified as a ‘vulnerable’ ecosystem and is therefore included in the list of threatened ecosystems published on 9 December 2011 (Notice 34809 of 2011). The region is characterised by slightly undulating bottomland Landscape covered with tall, dense grassland alternating with patches of karroid scrub occurring especially over calcrete. The ecological fauna and flora habitat survey (refer to G) confirmed that “a moderate diversity of indigenous plant species and animal species appears to be present at the site proposed for

		<p>development.”</p> <p>Therefore, the proposed activity will result in the clearance of 5 hectares or more of indigenous vegetation outside an urban area.</p>
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The proposed amendments will not result in any changes to the authorised activities and will not trigger any new listed activities.

2.3 PHOTOVOLTAIC TECHNOLOGY

The term photovoltaic describes a solid-state electronic cell that produces direct current electrical energy from the radiant energy of the sun through a process known as the Photovoltaic Effect. This refers to light energy placing electrons into a higher state of energy to create electricity. Each PV cell is made of silicon (i.e. semiconductors), which is positively and negatively charged on either side, with electrical conductors attached to both sides to form a circuit. This circuit captures the released electrons in the form of an electric current (direct current). The key components of the proposed project are described below:

- PV Panel Array - To produce up to 115MW, the proposed facility will require numerous linked cells placed behind a protective glass sheet to form a panel. Multiple modules will be required to form the solar PV array which will comprise the PV facility. The PV modules will either be tilted at a fixed angle, or mounted on trackers tracking from east to west during the day in order to capture the most solar energy.
- Wiring to Central Inverters - Sections of the PV array will be wired to inverters. The inverter is a pulse width mode inverter that converts direct current (DC) electricity to alternating current (AC) electricity at grid frequency.
- Connection to the grid - Connecting the array to the electrical grid requires transformation of the voltage from 480V to 33kV to 132kV. The normal components and dimensions of a distribution rated electrical substation will be required. Output voltage from the inverter is 480V and this is fed into step up transformers to 132kV. An onsite substation will be required on the site to step the voltage up to 132kV, after which the power will be evacuated into the national grid. Whilst Sonneblom Solar Power Plant has not yet received a cost estimate letter from Eskom, it is expected that generation from the facility will tie in with the Harvard-Sannaspos Rural 86 Section 132.0 [kV] line traversing the site.
- Supporting Infrastructure – A control facility with basic services such as water and electricity will be constructed on the site and will have an approximate footprint 400m² or less. Other supporting infrastructure includes voltage and current regulators and protection circuitry.

- **Roads** - A new access point/road will be required from the R702. An internal site road network will also be required to provide access to the solar field and associated infrastructure. All site roads will require a width of approximately 4m.
- **Fencing** - For health, safety and security reasons, the facility will be required to be fenced off from the surrounding farm.

2.4 LAYOUT DESCRIPTION

The approved layout plan of December 2020 follows the limitations of the site and aspects such as environmentally sensitive areas, roads, fencing and servitudes on site were considered. The total surface area proposed for layout options include the PV panel arrays spaced to avoid shadowing, access and maintenance roads and associated infrastructure (BESS, buildings, power inverters, transmission lines and perimeter fences). Limited features of environmental significance exist on site (refer to Appendix G1 for the environmental sensitivity map that is superimposed over the layout plan).

Table 2.3 below provides detailed information regarding the layout and the components that were authorised.

Table 2.3: Technical details for the proposed facility

Component	Description / dimensions
Location of the site	Portion 1 of the farm Blydschap 504, Registration Division Bloemfontein, Free State
Area of PV Array	Approximately 171 hectares
SG Codes	F00300000000050400001
Site access	A new access point/road will be required from the R702
Export capacity	Up to 115MW
Technology	Photovoltaic solar facility with crystalline silicon panels.
Height of PV panels from ground level	Approximately 3.5m
Width of internal roads	Approximately 4 meters

2.5 ASSESSMENT OF ENVIRONMENTAL IMPACTS

As part of the original EIA process undertaken in 2016 for the Sonneblom SPP, the following specialist studies were undertaken to investigate potential significant impacts:

- Brief Geotechnical Study;
- Ecological Fauna and Flora Habitat Survey;
- Visual Impact Assessment;

- Agricultural and Soils Impact Assessment;
- Hydrogeological Assessment Study;
- Palaeontological Impact Assessment;
- Heritage Impact Assessment; and
- Social Impact Assessment.

The findings of the specialist studies and impact assessment undertaken as part of the original environmental authorisation process are summarised in the table below:

Table 2.4: Original Rating of Impacts during construction of the proposed SPP and associated infrastructure

SPECIALIST STUDY	IMPACT	PRE-MITIGATION RATING	POST MITIGATION RATING
Geotechnical Study	Impacts of the geology on the proposed development	Negative Low	Negative Low
Ecological Fauna and Flora Habitat Survey	Loss or fragmentation of indigenous natural fauna and flora	Negative Low	Negative Low
	Loss or fragmentation of habitats	Negative Low	Negative Low
Visual Impact Assessment	Visual intrusion	Negative Medium	Negative Low
Agricultural and Soils Impact Assessment	Loss of topsoil	Negative Low	Negative Low
	Soil erosion	Negative Low	Negative Low
Heritage Impact Assessment	Impacts on heritage objects	Negative Low	Negative Low
Hydrogeological Assessment Study	Hydrogeological impacts	Negative Low	Negative Low
	Impacts on water quality	Negative Low	Negative Low
Palaeontological Impact Assessment	Impacts on palaeontological resources	Negative Medium	Negative Medium
Social Impact Assessment	Temporary employment and other economic benefits (business opportunities and skills development)	Positive Medium	Positive Medium

	Technical advice for local farmers and municipalities	Positive Low	Positive Low
	Increase in construction vehicle traffic	Negative Low	Negative Low
	Impact of construction workers on local communities	Negative Low	Negative Low
	Influx of job seekers	Negative Low	Negative Low
	Risk to safety, livestock and farm infrastructure	Negative Low	Negative Low
	Increased risk of veld fires	Negative Medium	Negative Low
Other	Temporary noise disturbance	Negative Low	Negative Low
	Generation of waste - general waste, construction waste, sewage and grey water	Negative Medium	Negative Low

Table 2.5: Original Rating of Impacts during operation of the proposed SPP and associated infrastructure

SPECIALIST STUDY	IMPACT	PRE-MITIGATION RATING	POST MITIGATION RATING
Visual Impact Assessment	Visual intrusion	Negative Medium	Negative Low
Agricultural and Soils Impact Assessment	Soil erosion	Negative High	Negative Low
	Change in land use	Negative Low	Negative Low
Hydrogeological Assessment Study	Impacts on water quality	Negative Low	Negative Low
	Recharge to groundwater	Negative Low	Negative Low
Social Impact Assessment	Permanent employment	Positive Medium	Positive Medium
	Generation of additional electricity	Positive Medium	Positive Medium
	Generation of alternative land use income	Positive Low	Positive Low
	Change in the sense of place	Negative Low	Negative Low

	Potential impact on tourism	Positive Low	Positive Low
	Establishment of a Community Trust	Positive Medium	Positive Medium
	Development of infrastructure for the generation of clean, renewable energy	Positive Low	Positive Low
Other	Increase in storm water runoff	Negative Medium	Negative Low
	Increased consumption of water	Negative Medium	Negative Medium
	Generation of waste	Negative Low	Negative Low
	Leakage of hazardous materials	Negative Medium	Negative Low

Table 2.6: Original Rating of Impacts during the decommissioning of the proposed SPP and associated infrastructure

SPECIALIST STUDY	IMPACT	PRE-MITIGATION RATING	POST MITIGATION RATING
Other	Rehabilitation of the physical environment	Negative Low	Negative Low
	Generation of waste	Negative Medium	Negative Low
	Loss of employment	Negative Medium	Negative Low

3 PROPOSED AMENDMENTS

Sonneblom Solar Power Plant (Pty) Ltd is applying for the amendment of the EA (DFFE Ref: 14/12/16/3/3/2/673) issued on 19 June 2015. Various amendments are proposed which are discussed and motivated for in the sections which follow.

3.1 CHANGES TO AUTHORISED ELEMENTS AND MOTIVATION THEREFORE

The following amendments are being applied for in terms of the EIA Regulations, 2014 (as amended in 2017):

1. Amendment 1: Increase in Panel Height

The Holder of the EA is requesting that the panel height be increased by 1m from 3.5m (as authorised) to up to 4.5m.

This proposed amendment is required based on recent changes to PV technology which has resulted in panels with an increased height. The increased panels will be located within the authorised development footprint.

2. **Amendment 2: Reduction of the generation capacity**

Subsequent to the receipt of the EA and the four completed amendment processes undertaken for the development, the holder of the EA undertook an updated Wetland study (July 2021) (Appendix E7) for the site due to the passage of time since the original Environmental Impact Assessment (EIA) process was undertaken. This process is considered as part of the due diligence process being undertaken for the development by the EA holder. The independent specialist had found specific wet areas located within the development footprint that had not been present within the site during the studies undertaken previously in 2014. These areas were identified as being unsuitable for development not only from an environmental, but also technical perspective. Based on this specific areas and associated buffers have been avoided by the layout as to ensure that the Holder of the EA is compliant and avoids these areas of sensitivity.

With the amended layout being proposed as part of this amendment process it has resulted in less area available for the placement of PV panels and as such this results in a decrease of the generation capacity of the solar power plant. It is therefore requested that the generation capacity of the Sonneblom SPP be amended from 115MW to up to 60MWdc and 45MWac.

3. **Amendment 3: Change of the location of the switchyard, BESS, connect point, grid connection corridor, O&M buildings and the laydown areas within the authorised development footprint**

As described above, the due diligence process undertaken by the Holder of the EA resulted in the discovery of wet areas within the site that had not been present within the site during the studies undertaken previously in 2014. As these wet areas are not considered suitable for development from a technical and environmental perspective the Holder of the EA proposes the relocation of certain infrastructure as approved as part of the December 2020 facility layout. This includes the relocation of the substation switchyard, BESS, connect point (and therefore relocation of the grid connection corridor), O&M buildings and the laydown areas. Refer to Appendix G2 for a comparative layout map illustrating the approved layout of December 2020 vs proposed amended layout.

The relocation of the infrastructure is proposed within the development footprint as assessed and authorised and is a shift of the infrastructure from the eastern to the west of the already approved footprint. Therefore, the areas associated with this change in layout has already been assessed and authorised for the placement of infrastructure and the associated disturbance.

4. Amendment 4: Increase in size of associated infrastructure

To optimise the proposed amended layout from a technical perspective the holder of the EA proposes a change in the sizing of certain associated infrastructure. The proposed changes include:

- Increase of the size of the O&M Building area
- Increase of the size of the laydown area and construction site camp
- Increase of the size of the BESS footprint (to cater for a substation component as included below in Amendment 5)
- Stipulation of the size of the on-site facility substation footprint (IPP Substation)
- Increase of the area associated with the inverters for inclusion of the details as part of the EA

5. Amendment 5: Inclusion of a substation component as part of the BESS footprint

The Holder of the EA requires that a substation component be included as part of the BESS footprint to enable the BESS infrastructure to operate as an alone-standing project component. The solar power plant project was initially developed for the REIPPP programme and then later on amended to include battery storage, to cater for tenders such as the Risk Mitigation IPP Programme released in 2020. However, whilst the project is still hoping to participate in future rounds of REIPPPP, other tenders focused specifically on battery storage only, are also expected to be released imminently by the Department of Mineral Resources and Energy. It is expected that the tender will require only battery storage facilities as stand-alone facilities that are able to also connect to the electricity grid, and therefore the way the project is currently authorised (without a substation component), does not suit this purpose.

6. Amendment 6: Splitting of the EA into three separate EAs

The Holder of the EA seeks to split the EA into separate EAs for specific components of the authorised project. A three-way split is being proposed by the Holder of the EA, as follows:

1. Photovoltaic Solar energy Facility, on-site facility (IPP) substation and associated infrastructure
2. Battery Energy Storage System (BESS) and associated infrastructure
3. Overhead power line and switchyard and associated infrastructure

The project was initially developed for the REIPPP programme and then later on amended to include battery storage, to cater for tenders such as the Risk Mitigation IPP Programme released in 2020. However, whilst the project is still hoping to participate in

future rounds of REIPPPP, other tenders focused specifically on battery storage only, are also expected to be released imminently by the Department of Mineral Resources and Energy. It is expected that the tender will require only battery storage facilities as stand-alone facilities that are able to also connect to the electricity grid, and therefore the way the project is currently authorized, does not suit this purpose. The exact details of the tender are not known, but in order to be proactive, the holder requests that the EA be split which will enable the Applicant to bid the separate components as part of new and upcoming tenders focusing on battery storage. The split of the EAs will also enable the Holder of the EA to handover the grid connection infrastructure components to Eskom once operational.

7. Amendment 7: Amendment to extend the validity period of the EA

The activity has not commenced to date and therefore an amendment of the EA is required in order to extend the validity period to ensure that the EA will be valid unit such time that construction will commence.

3.2 DETAILS OF AMENDMENTS BEING APPLIED FOR CONSIDERING THE EA

In light of the above, it is recommended that the EA dated 19 June 2015 be amended as follow:

1. Amendment 1: Increase in Panel Height

Page 5: Table – Technical details for the proposed facility

From:

Height of installed panels from ground level	~3.5m
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To:

Height of installed panels from ground level	Up to 4.5m
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2. Amendment 2: Reduction of the generation capacity

The generation capacity was authorised as 84 MW in the EA dated 19 June 2015, which was later increased to up to 115MW as part of AM4 (dated 28 June 2021).

The Holder of the EA is however now requesting a decrease of the capacity of the facility **from** up to 115MW **to** up to 60MWdc and 45MWac. It is proposed that the EA be amended as follows:

Page 1 (cover letter):

The project description (title) should be amended **from** "THE PROPOSED 84 MW SONNEBLUM PHOTOVOLTAIC SOLAR ENERGY FACILITY NEAR BLOEMFONTEIN, FREE STATE PROVINCE" **to** "THE UP TO 60 MW SONNEBLUM PHOTOVOLTAIC SOLAR ENERGY FACILITY NEAR BLOEMFONTEIN, FREE STATE PROVINCE"

Page 1 (EA):

The project description (title) should be amended **from** "The proposed 84 MW Sonneblom Photovoltaic Solar Energy Facility and associated infrastructure in Bloemfontein, within the Mangaung Metropolitan Municipality in the Free State Province" **to** "The proposed up to 60 MW Sonneblom Photovoltaic Solar Energy Facility and associated infrastructure in Bloemfontein, within the Mangaung Metropolitan Municipality in the Free State Province."

Page 4: The activity description for GNR 545 Activity/Item 1 should amended **from** "Activity 1 is triggered since the proposed photovoltaic solar facility will generate 84MW of electricity" **to** "Activity 1 is triggered since the proposed photovoltaic solar facility will generate up to 60MWdc and 45MWac of electricity."

Page 5: The table summarising the technical details of the proposed facility should be amended as follow: **from** "Export capacity – 84 MW" **to** "Export capacity – up to 60MWdc and 45MWac."

Page 5: The project description following the table summarising the technical details for the proposed development as follow: **from** "-proposed Sonneblom 84MW photovoltaic Solar Energy Facility and associated infrastructure on Portion 1 of the farm Blydschap No. 504, Registration Division Bloemfontein, within the Mangaung Metropolitan Municipality in Free State, hereafter referred to as "the property"" **to** "-proposed Sonneblom 60MW photovoltaic Solar Energy Facility and associated infrastructure on Portion 1 of the farm Blydschap No. 504, Registration Division Bloemfontein, within the Mangaung Metropolitan Municipality in Free State, hereafter referred to as "the property"".

Page 6: Under the condition of the authorisation, condition 1 as follow: **from** "The proposed Sonneblom 84MW Photovoltaic Solar Energy Facility and associated infrastructure on portion 1 of the farm Blydschap No. 504, Registration Division Bloemfontein, within the Mangaung Metropolitan Municipality in Free State Province is approved as per the above geographic coordinates." **to** "The proposed Sonneblom 60MW Photovoltaic Solar Energy Facility and associated infrastructure on portion 1 of the farm Blydschap No. 504, Registration Division Bloemfontein, within the Mangaung Metropolitan Municipality in Free State Province is approved as per the above geographic coordinates."

3. Amendment 3: Change of the location of the switchyard, BESS, connect point, grid connection corridor, O&M buildings and the laydown areas within the authorised development footprint

The Holder of the EA proposes to amend the layout through changing the location of the switchyard, BESS, connect point, grid connection corridor, O&M buildings and the laydown areas within the authorised development footprint. Refer to Appendix C.

Page 7: Condition 12

From:

“12. A copy of the final development layout map submitted as part of the EIAR is approved.”

To:

“The development layout plan title “Sonneblom Solar Power Plant Amended Layout” dated October 2022 is approved.”

4. Amendment 4: Increase in size of associated infrastructure

Page 5: Increase of the size of the O&M Building area

The area was not specified in the EA, but was included in the final EIA Report as 400m² / 0.04ha. It is therefore requested that the increased size of the area be specified in the EA for completeness and correlation with the proposed amended layout:

Technical details for the proposed facility:

O&M Building	Up to 0.7ha
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Page 5: Increase of the size of the laydown area and construction site camp

The area was not specified in the EA, but was included in the final EIA Report as 713.7m² / 0.07137ha. It is therefore requested that the increased size of the area be specified in the EA for completeness and correlation with the proposed amended layout:

Technical details for the proposed facility:

Laydown area and construction site camp	Up to 3ha
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Page 4 & 5: Increase of the size of the BESS footprint (to cater for a substation component as included below in Amendment 5)

The BESS infrastructure was added to the EA as part of AM4. With the increase on the size of the footprint the coordinates authorised in the EA as part of AM4 needs to be updated and the new increased size needs to be reflected in the EA.

Page 4 – technical details

From:

Battery Energy Storage System (BESS)	
A	29°14'6.51"S; 26°18'56.25"E
B	29°14'9.12"S; 26°18'56.24"E
C	29°14'9.10"S; 26°18'51.05"E
D	29°14'7.66"S; 26°18'51.05"E
E	29°14'7.67"S; 26°18'49.72"E
F	29°14'6.46"S; 26°18'49.76"E

To:

Battery Energy Storage System (BESS)	
A	29°14'6.36"S; 26°18'22.67"E
B	29°14'9.47"S; 26°18'22.59"E
C	29°14'9.50"S; 26°18'38.15"E
D	29°14'6.46"S; 26°18'38.60"E

Page 5 – technical details

Technical details for the proposed facility (table):

From:

BESS facility (lithium-ion)	~2Ha in extent
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To:

BESS facility (lithium-ion)	~4ha in extent
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The list containing the components of the facility on page 5:

From:

- Battery storage of ~2hectares in extent

To:

- Battery storage of ~4 hectares in extent

Page 5: Stipulation of the size of the on-site facility substation footprint (IPP Substation)

The area was not specified in the EA, but was included in the final EIA Report as 10 000 m² / 1ha. It is therefore requested that the size of the area be specified in the EA for completeness and correlation with the proposed amended layout:

Technical details for the proposed facility:

Substation footprint (IPP)	Up to 1ha
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Page 5: Increase of the area associated with the inverters for inclusion of the details as part of the EA

The area was not specified in the EA, but was included in the final EIA Report as 19.9 m² / 0.00199ha. It is therefore requested that the increased size of the area be specified in the EA for completeness and correlation with the proposed amended layout:

Technical details for the proposed facility:

Inverter stations	Up to 750m ² / 0.075ha
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5. Amendment 5: Inclusion of a substation component as part of the BESS footprint

The Holder of the EA requires that a substation component be included as part of the BESS footprint to enable the BESS infrastructure to operate as an alone-standing project component.

Page 5 – technical details

Technical details for the proposed facility (table):

BESS Facility Substation Component	Up to 0.3ha
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The list containing the components of the facility on page 5:

- BESS Facility Substation Component of up to 0.3ha in extent

6. Amendment 6: Splitting of the EA into three separate EAs

The Holder of the EA seeks to split the EA into separate EAs for specific components of the authorised project. A three-way split is being proposed by the Holder of the EA, as follows:

1. Photovoltaic Solar energy Facility, on-site facility (IPP) substation and associated infrastructure
2. Battery Energy Storage System (BESS) and associated infrastructure
3. Overhead power line and switchyard and associated infrastructure

Separate EMPs have been compiled to provide the relevant and appropriate mitigation measures for each of the EAs and the associated impacts. The split EMPs are included in Appendix D as follows:

- Appendix D1: EMP for the solar power plant
- Appendix D2: EMP for the grid connection infrastructure
- Appendix D3: EMP for the BESS
- Appendix D4: Generic EMP for the overhead power line
- Appendix D5: Generic EMP for the substation
- Appendix D6: Generic EMP for the BESS substation component

The layout maps associated with each split EA is also included in the respective EMPs.

A split matrix has also been submitted to the DFFE with the Application for Amendment of the EA to indicate which conditions and what details are relevant to each of the individual split EAs.

7. Amendment 7: Amendment to extend the validity period of the EA

The holder of the EA requests the amendment of condition 6 of the EA to extend the validity of the EA with two additional years. The following point/text is therefore requested to be amended from the EA (AM3 – first validity extension):

From:

“i. The extension of the validity period of your authorisation is extended by an additional five (5) years from the date of the expiry of the EA extension issues on 19 June 2015 (i.e. the EA validity extension was until 19 June 2018). Therefore the validity period is extended to 19 June 2023 and if commencement of the activity does not occur within that period, the

authorisation lapses and a new application for environmental authorisation must be made in order to undertake the activities.”

To:

“6. This activity must commence within a period of ten (10) years from the date of issue of the authorisation (i.e. authorisation lapses on 19 June 2025). If commencement of the activity does not occur within that period, the authorisation lapses and a new application for environmental authorisation must be made in order for the activity to be undertaken.”

The details of the proposed amendments and the motivation therefore have also been included in the Application for Amendment of the EA submitted to the DFFE with this draft Motivation Report for review and comment.

4 IMPACTS/RISKS RELATED TO PROPOSED AMENDMENTS

This section aims to address the following requirements of the regulations:

Regulation 32(1) The applicant must within 90 days of receipt by the competent authority of the application made in terms of regulation 31, submit to the competent authority:

(a) a report, reflecting—

(i) an assessment of all impacts related to the proposed change;

4.1 IMPACTS ASSOCIATED WITH RELATED AMENDMENTS

The proposed amendments discussed in section 3 of this report will only result in changes within the development footprint (layout) that was originally assessed. In light of the above it is argued that the proposed amendments would not require further assessment, since it would not result in an increase in the significance of the potential impacts or any new environmental impacts. It will also not impact areas which was not previously assessed and mitigation measures recommended for. Specialists were consulted to obtain their input on the potential impact of the proposed amendments, whether the significance of potential impacts would remain unchanged and whether the mitigation and management measures contained in the environmental management programme (EMPR) will still suffice.

4.1.1 Specialist input

In order to ascertain if further input would be required in relation to the above-mentioned proposed amendments, each of the specialist studies conducted during the EIA phase of the development was investigated in terms of its applicability. The following determinations were made:

Table 4.1: Specialist input on the proposed amendments

SPECIALIST STUDY	APPLICABILITY
Geotechnical Study	Not applicable - The proposed amendments are located within the assessed development footprint. The amendments will not have an influence on the significance ratings and will not result in any additional geotechnical impacts.
Ecological Fauna and Flora Habitat Survey	Not applicable - The proposed amendments will not result in any additional impacts and will not increase the level or nature of the impact, which was initially assessed and considered when application was made for an EA and subsequent amendments. The significance ratings will remain unchanged, and the proposed mitigation and management measures proposed as part of the EIA process will still suffice.
Visual Impact Assessment	Not applicable - The proposed amendments will not result in any additional impacts and will not increase the level or nature of the impact, which was initially assessed and considered when application was made for an EA and subsequent amendments. The significance ratings will remain unchanged, and the proposed mitigation and management measures proposed as part of the EIA process will still suffice.
Agricultural and Soils Impact Assessment	Not applicable - The proposed amendments will not result in any additional impacts and will not increase the level or nature of the impact, which was initially assessed and considered when application was made for an EA and subsequent amendments. The significance ratings will remain unchanged, and the proposed mitigation and management measures proposed as part of the EIA process will still suffice.
Heritage Impact Assessment	Not applicable - The proposed amendments will not result in any additional impacts and will not increase the level or nature of the impact, which was initially assessed and considered when application was made for an EA and subsequent amendments. The significance ratings will remain unchanged, and the proposed mitigation and management measures proposed as part of the EIA process will still suffice.
Hydrogeological Assessment Study	Not applicable – The proposed amendments are located within the area that was assessed as part of the original EIA application. Specialist input will not be required.
Palaeontological Impact	Not applicable - The proposed amendments will not result in any additional impacts and will not increase the level or nature of the impact,

Assessment	which was initially assessed and considered when application was made for an EA and subsequent amendments. The significance ratings will remain unchanged, and the proposed mitigation and management measures proposed as part of the EIA process will still suffice
Social Impact Assessment	Not applicable - The proposed amendments will not result in any additional impacts and will not increase the level or nature of the impact, which was initially assessed and considered when application was made for an EA and subsequent amendments. The significance ratings will remain unchanged, and the proposed mitigation and management measures proposed as part of the EIA process will still suffice

Despite numerous specialist studies not being affected, specialist statements were obtained from all specialists that confirmed that the proposed amendments will not result in any additional impacts and will not increase the level or nature of the impact, which was initially assessed and considered when application was made for an EA. The significance ratings will remain unchanged and the proposed mitigation and management measures proposed as part of the EIA process will still suffice (refer to Appendix E).

4.1.2 Summary of changes in Impact Ratings

As mentioned above specialist inputs were obtained from to confirm whether the proposed amendments will result in any additional impact or an increase in the significance of any impacts that were previously assessed. Based on their findings Table 4.2-4.4 demonstrate that the proposed amendments will not result in any additional impacts and that the significance ratings of all potential impacts will remain the same.

Table 4.2: Original Rating of Impacts during construction of the proposed SPP and associated infrastructure

SPECIALIST STUDY	IMPACT	ORIGINAL SIGNIFICANCE	NEW SIGNIFICANCE
Geotechnical Study	Impacts of the geology on the proposed development	Negative Low	Negative Low
Ecological Fauna and Flora Habitat Survey	Loss or fragmentation of indigenous natural fauna and flora	Negative Low	Negative Low
	Loss or fragmentation of habitats	Negative Low	Negative Low
Visual Impact	Visual intrusion	Negative Low	Negative Low

Assessment			
Agricultural and Soils Impact Assessment	Loss of topsoil	Negative Low	Negative Low
	Soil erosion	Negative Low	Negative Low
Heritage Impact Assessment	Impacts on heritage objects	Negative Low	Negative Low
Hydrogeological Assessment Study	Hydrogeological impacts	Negative Low	Negative Low
	Impacts on water quality	Negative Low	Negative Low
Paleontological Impact Assessment	Impacts on palaeontological resources	Negative Medium	Negative Low
Social Impact Assessment	Temporary employment and other economic benefits (business opportunities and skills development)	Positive Medium	Positive Medium
	Technical advice for local farmers and municipalities	Positive Low	Positive Low
	Increase in construction vehicle traffic	Negative Low	Negative Low
	Impact of construction workers on local communities	Negative Low	Negative Low
	Influx of job seekers	Negative Low	Negative Low
	Risk to safety, livestock and farm infrastructure	Negative Low	Negative Low
	Increased risk of veld fires	Negative Low	Negative Low
Other	Temporary noise disturbance	Negative Low	Negative Low
	Generation of waste - general waste, construction waste, sewage and grey water	Negative Low	Negative Low

Table 4.3: Original Rating of Impacts during operation of the proposed SPP and associated infrastructure

SPECIALIST STUDY	IMPACT	ORIGINAL SIGNIFICANCE	NEW SIGNIFICANCE
Visual Impact Assessment	Visual intrusion	Negative Low	Negative Low
Agricultural and Soils Impact Assessment	Soil erosion	Negative Low	Negative Low
	Change in land use	Negative Low	Negative Low
Hydrogeological Assessment Study	Impacts on water quality	Negative Low	Negative Low
	Recharge to groundwater	Negative Low	Negative Low
Social Impact Assessment	Permanent employment	Positive Medium	Positive Medium
	Generation of additional electricity	Positive Medium	Positive Medium
	Establishment of a Community Trust	Positive Medium	Positive Medium
	Change in the sense of place	Negative Low	Negative Low
	Potential impact on tourism	Positive Low	Positive Low
	Development of infrastructure for the generation of clean, renewable energy	Positive Low	Positive Low
Other	Impacts associated with the surrounding land uses	Negative Low	Negative Low
	Increase in storm water runoff	Negative Low	Negative Low
	Increased consumption of water	Negative Medium	Negative Medium
	Generation of waste	Negative Low	Negative Low
	Leakage of hazardous materials	Negative Low	Negative Low

Table 4.4: Original Rating of Impacts during the decommissioning of the proposed SPP and associated infrastructure

SPECIALIST STUDY	IMPACT	ORIGINAL SIGNIFICANCE	NEW SIGNIFICANCE
Other	Rehabilitation of the physical environment	Negative Low	Negative Low
	Generation of waste	Negative Low	Negative Low
	Loss of employment	Negative Low	Negative Low

5 NEW / REVISED MITIGATION MEASURES

This section aims to address the following requirements of the regulations:

Regulation 32(1) The applicant must within 90 days of receipt by the competent authority of the application made in terms of regulation 31, submit to the competent authority:

(a) a report, reflecting—

(iii) measures to ensure avoidance, management and mitigation of impacts associated with such proposed change;

In addition to assessing the risks and impact of the proposed amendments to the Sonneblom SPP, the EAP aimed to provide measures to ensure avoidance, management and mitigation of any impacts associated with the proposed amendments and identify any changes required to the

Based on the confirmation of no change to impact provided by the specialists no new mitigation measures are considered to be relevant to the project. Therefore, the mitigation measures included in the EMPr(s) are considered as sufficient and appropriate for the mitigation and management of impacts to acceptable levels considering the proposed amendments.

It must be noted that the Holder of the EA undertook a Termite Assessment from a technical perspective which is to ensure that the infrastructure of the facility does not suffer any damages, furthermore a Phase 1 Groundwater Availability Assessment and Conceptual Stormwater Management Plan has also been undertaken. The measures provided for in these studies have been included in the EMPr for the solar facility, BESS and the grid connection infrastructure (Appendix D1-D3).

Lastly, the holder of the EA undertook an updated Wetland study (July 2021) for the site due to the passage of time since the original Environmental Impact Assessment (EIA) process was

undertaken (see Appendix E7). This process is considered as part of the due diligence process being undertaken for the development by the EA holder. The independent specialist had found specific wet areas located within the development footprint that had not been present within the site during the studies undertaken previously in 2014. These areas were identified as being unsuitable for development not only from an environmental, but also technical perspective. The wetland study (Appendix E7) provided some limited mitigation /management measures that have also been included in the EMPr for the solar facility, BESS and the grid connection infrastructure (Appendix D1-D3).

6 ADVANTAGES AND DISADVANTAGES ASSOCIATED WITH THE PROPOSED AMENDMENTS

This section aims to address the following requirements of the regulations:

<p>Regulation 32(1) The applicant must within 90 days of receipt by the competent authority of the application made in terms of regulation 31, submit to the competent authority:</p> <p>(a) a report, reflecting—</p> <p>(ii) advantages and disadvantages associated with the proposed change;</p>

Table 6.1 below weighs up the advantages and disadvantages that are expected with the proposed amendments.

Table 6.1: Advantages and disadvantages associated with the proposed amendments

Proposed Amendment	Advantages	Disadvantages
<p><u>Amendment 1</u></p> <p>Increase in Panel Height</p>	<ul style="list-style-type: none"> Installation of current PV panel technology 	<ul style="list-style-type: none"> Limited increase in height, however no change in impact expected
<p><u>Amendment 2</u></p> <p>Reduction of the generation capacity</p>	<ul style="list-style-type: none"> Avoidance of the wet areas present within the development footprint 	<ul style="list-style-type: none"> None relevant
<p><u>Amendment 3</u></p> <p>Change of the location of the switchyard, BESS, connect point, grid connection corridor, O&M buildings and the laydown areas within the authorised development</p>	<ul style="list-style-type: none"> Avoidance of the wet areas present within the development footprint Optimisation of the layout from a technical perspective 	<ul style="list-style-type: none"> None relevant, change is proposed to be undertaken within the assessed and authorised development footprint

footprint		
<u>Amendment 4</u> Increase in size of associated infrastructure	<ul style="list-style-type: none"> • Optimisation of the layout within the authorised development footprint from a technical perspective 	<ul style="list-style-type: none"> • None relevant, change is proposed to be undertaken within the assessed and authorised development footprint which has been approved for disturbance as per listed activities authorised in the EA
<u>Amendment 5</u> Inclusion of a substation component as part of the BESS footprint	<ul style="list-style-type: none"> • Enables the BESS component to operate as a stand-alone facility for potential future energy requirements 	<ul style="list-style-type: none"> • None relevant, change is proposed to be undertaken within the assessed and authorised development footprint which has been approved for disturbance as per listed activities authorised in the EA
<u>Amendment 6</u> Splitting of the EA into three separate EAs	<ul style="list-style-type: none"> • Pro-active approach to potential future bidding round requirements • Stand-alone EA for grid connection ready once handover to Eskom is required 	<ul style="list-style-type: none"> • None relevant
<u>Amendment 7</u> Amendment to extend the validity period of the EA	<ul style="list-style-type: none"> • EA is valid for the commencement of construction 	<ul style="list-style-type: none"> • None relevant

From the above table it is clear that limited disadvantages are associated with the proposed amendments by the Holder of the EA, with primarily advantages expected to be relevant to the amendment request.

7 PUBLIC PARTICIPATION

The following sections provide detailed information on the public participation process to be conducted as part of the amendment process and to address the following requirements of the regulations:

Regulation 32(1) The applicant must within 90 days of receipt by the competent authority of the application made in terms of regulation 31, submit to the competent authority:

(a) a report, reflecting...

(iv) Which report – (aaa) had been subjected to a public participation process, which had been agreed to by the competent authority, and which was appropriate to bring the proposed change to the attention of potential and registered interested and affected parties, including organs of state, which have jurisdiction in respect of any aspect of the relevant activity, and the competent authority, and (bbb) reflects the incorporation of comments received, including any comments of the competent authority.

7.1 INTRODUCTION

In terms of Chapter 6 of the EIA Regulations, 2014, (as amended), a Part 2 Amendment Application requires a 30- day Public Participation Process (PPP). The following three categories of variables were taken into account when deciding the required level of public participation:

- The scale of anticipated impacts
- The sensitivity of the affected environment and the degree of controversy of the project
- The characteristics of the potentially affected parties

The EIA process conducted in 2014 examined the sensitivity of the affected environment and assessed potential environmental impacts. It was concluded that the proposed development will have a net positive impact for the area and will subsequently ensure the optimal utilisation of resources. All negative environmental impacts can further be effectively mitigated through the proposed mitigation measures included in the EMPr. The scale of the anticipated impacts associated with the proposed amendments is also not expected to be severe. The proposed project (and its subsequent amendment) is not controversial and the potentially affected parties generally seem to welcome the proposed development.

Since the scale of anticipated impacts is low, the low environmental sensitivity of the site and the fact that no conflict is foreseen between potentially affected parties, no additional public participation mechanisms were considered. The following steps will be taken as part of the public participation process for the amendment process:

- Newspaper advertisement:

Since the proposed development is unlikely to result in any impacts that extend beyond the municipal area where it is located, it was deemed sufficient to advertise in a local newspaper. An advertisement will be placed in English in the local newspaper (Bloemnuus) on 14 September 2022 to notify the public of the EIA process and requesting Interested and Affected Parties (I&APs) to register with, and submit their comments to Environamics Environmental Consultants. I&APs

- Site notice:

Site notice was placed on site on 02 September 2022 in English to inform surrounding communities and immediately adjacent landowners of the Part 2 Amendment Process. I&APs were given the opportunity to raise comments by 03 October 2021.

- Availability of the report:

The draft Motivational Report has been made available to registered I&APs for a 30-day review and comment period. Hard copies may be made available for review to any interested and affected party who may not have access to the Internet or email communication, where this is requested. The availability of the report was made known through notification via email and SMS (whichever is relevant).

- Direct notification of potential and registered I&APs:

Identified and registered I&APs, including key stakeholders representing various sectors, will be directly informed of the proposed amendment via registered post, telephone calls, WhatsApps and emails (whichever is relevant). A link to access the draft motivational report will be made available as part of the notification. I&APs will be requested to submit written comments on the draft report within 30-days of the notification of availability of the report. For a complete list of I&APs with their contact details see Appendix B1 to this report.

- Direct notification of surrounding landowners and occupiers:

Written notices of the availability of the draft report have also been provided via email to all surrounding landowners and occupiers.

- Submission of Draft Motivational Report:

A Draft Motivational Report will be submitted electronically to the Department in December 2020 for comments. The EAP declaration was included as part of the application for amendment.

- Circulation of the Draft Motivational Report:

As mentioned above, copies of the draft motivational report have been provided to all I&APs via Dropbox and/or email. I&APs have been requested to provide their comments

on the report within 30-days of the notification. The 30-day review and comment period is from 14 November 2022 to 14 December 2022. All issues identified during the 30-day review and comment period will be documented and compiled into a Comments and Response Report to be included as part of the Final Motivational Report.

- Circulation of decision and submission of appeals:

Notice will be given to all identified and registered I&APs of the decision taken by the DFFE. The attention of all registered I&APs will also be drawn to the fact that an appeal may be lodged against the decision in terms of the National Appeals Regulations. In accordance with the provisions of Regulation 4(1) of Government Notice No. 993, an appellant must submit the appeal to the appeal administrator, and a copy of the appeal to the applicant, any registered I&APs and any organ of state with interest in the matter within 20 days from the date that the notification of the decision was sent to the applicant by the competent authority.

It must be noted that proof of all public participation tasks is included as Appendix B of this draft Motivational Report.

7.2 STAKEHOLDERS AND I&APS

A comprehensive list of registered I&APs and key stakeholder was compiled and is included in Appendix B. The proofs of distribution of the draft report (i.e. email notification) will be included in the Final Motivational Report. Comments received from key stakeholders during the 30-day comment and review period will be incorporated into the Final Motivational Report, which will then be submitted to the competent authority (namely the DFFE) for decision-making.

8 CONCLUSION AND RECOMMENDATIONS

This draft Motivation Report provides an assessment of the potential risks and impacts, advantages and disadvantages associated with the proposed amendments, measures to ensure avoidance, management and mitigation of risks and impacts associated with such proposed change and an outline of the public consultation process to be undertaken. In light of the fact that the proposed amendments would still be within the development footprint already assessed and authorised for the SPP, it was determined that the proposed amendments would not result in any additional environmental impacts or a change in the significance of the potential impacts.

The advantages and disadvantages were explored providing an indication of the potential benefits and drawbacks of the proposed amendments. From the assessment, the advantages outweigh the disadvantages mainly due to opportunity that the amendments represent to avoid the wetland areas that were not present during the EIA process, as well as the opportunity to optimise the facility layout from a technical perspective.

A public participation process is being undertaken to obtain any comments from I&APs and key stakeholders on the proposed amendments. The 30-day review and comment period is from 14 November 2022 to 14 December 2022. Any comments raised and responses to these comments and concerns will be integrated into the Final Motivational Report, including the Comments and Responses Report.

8.1 ENVIRONMENTAL IMPACT STATEMENT

The final recommendation by the EAP considered firstly if the legal requirements for the Amendment process had been met and secondly the validity and reliability of the substance of the information contained in the draft Motivation Report. In terms of the legal requirements it is concluded that:

- The Motivational Report complied with the requirements set out in Regulation 32.
- All key consultees have been consulted as required by the 2014 EIA Regulations.
- The recommended mitigation measures of the EIA process will be sufficient to mitigate the impacts associated with the proposed amendments to an acceptable level.

In terms of the contents and substance of the EIA report the EAP is confident that:

- All key environmental issues were identified and adequately assessed to provide the environmental authority with sufficient information to allow them to make an informed decision on the proposed amendments.

The final recommendation of the EAP is that:

The EAP is of the opinion that the significance of the environmental impacts of the proposed amendments are expected to remain the same as those already identified in the original EIA Report.

It is the opinion of the independent EAP that the proposed amendments will have a net positive impact for the area and will subsequently ensure the optimal utilisation of resources and the authorised development footprint. Based on the contents of the report it is proposed that the environmental authorisation be amended, subject to the implementation of the mitigation measures provided for during the EIA process.

We trust that the department find the report in order and eagerly await your comment in this regard.

