

### ESKOM HOLDINGS SOC LIMITED

### KOMATI POWER STATION SOLAR PV FACILITY, BESS AND ASSOCIATED INFRASTRUCTURE, MPUMALANGA PROVINCE

PART 2 AMENDMENT OF EXISTING ENVIRONMENTAL AUTHORISATION: DFFE REF: 14/12/16/3/3/2/2456 -DRAFT AMENDMENT REPORT



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#### 1 INTRODUCTION

#### 1.1 PURPOSE OF THE REPORT

Eskom Holdings SOC Limited (Eskom) are proposing to develop the 100 MW Solar Photovoltaics (PV) Energy Facility (SEF); 150 MW Battery Energy Storage System (BESS); and associated infrastructure at the Komati Power Station located in the Mpumalanga Province, South Africa.

The Komati Solar PV and BESS Facility received environmental authorisation (EA) on 02 February 2024 (DFFE Ref: 14/12/16/3/3/2/2456). The applicant seeks to amend the EA as follows:

- Extension of BESS Area A;
- Removal of the approved Onsite Substations in PV Area A and PV Area B;
- Amendment of the layout of the Solar PV Facility and its associated infrastructure;
- Proposed development of 3 new Onsite Substations (2 in PV Area A and 1 in PV Area B) and associated overhead and underground cabling (capacity 33kV); and
- Removal of the approved 132kV Grid Connection.

WSP Group Africa Pty Ltd (WSP) has been appointed as the Independent Environmental Assessment Practitioner (EAP) to undertake the required Part 2 Amendment Process.

Due to the fact that the amendments result in a change of scope, a Part 2 Amendment Process in terms of Regulation 31 of the Environmental Impact Assessment (EIA) Regulations of 2014 (as amended) is applicable and required to be followed.

In terms of Section 7(1) of the Infrastructure Development Act, 2014 (Act 23 of 2014), large-scale infrastructure projects, known as Strategic Integrated Projects (SIPs), have been identified across all nine provinces. Thirty-six SIPs have been prioritised as part of the National Infrastructure Plan (NIP). SIPs cover catalytic projects that can fast-track development and growth.

The Komati Solar PV and BESS Facility was confirmed as a SIP under SIP 20d from a letter dated 08 August 2023 by the head of Infrastructure South Africa (ISA) and chairperson of the SIP steering committee. This project is a Strategic Infrastructure Project as it forms part of the Just Energy Transition National Program SIP 20d. The letter is included in Appendix S.

The Department of Forestry, Fisheries and the Environment (DFFE) is therefore requested to consider this as a Priority Project and to reduce their decision-making timeframe to 57 days as per the timeframes outlined in the Infrastructure Development Act, as amended (Act 23 of 2014).

#### 2 **PROJECT DESCRIPTION**

#### 2.1 EIA PROCESS HISTORY

In 2023, Eskom appointed WSP to facilitate the Scoping and Environmental Impact Assessment (S&EIA) process for the construction and operation of 100 MW Solar PV Facility; 150 MW BESS; and associated infrastructure at the Komati Power Station. The DFFE issued the Environmental Authorisation (EA) (DFFE Ref: 14/12/16/3/3/2/2456), dated 02 February 2024.

Furthermore, both the layout and Environmental Management Programme (EMPr) were approved. The authorised infrastructure is outlined in **Table 2-1**.

Component	Description / Dimensions	
PV facility	A photovoltaic component comprising of many rows of Photovoltaic (PV) panels and associated support infrastructure to generate up to 100MW through the PV effect.	
	<ul> <li>Solar Energy Facility (100MW):</li> </ul>	
	<ul> <li>Solar modules will be elevated above the ground and will be mounted on either fixed tilt systems or tracking system.</li> </ul>	
	Solar Farm A:	
	<ul> <li>Extent: 115ha;</li> <li>AC Capacity: Up to 70MW</li> <li>DC Capacity: Up to 84MW</li> </ul>	
	<ul> <li>Solar Farm B: - Extent: 21ha</li> </ul>	
	<ul><li>AC Capacity: Up to 30MW</li><li>DC Capacity: Up to 36MW</li></ul>	
Transmission line	132kV double circuit overhead transmission line to connect the onsite PV facility substation via a "loop in loop out" configuration to the Eskom 132kV transmission line.	
	Point of connection of solar panels will be to the Komati High Voltage (HV)	
	<ul> <li>yard.</li> <li>Power routed via a medium voltage overhead line (OHL) or underground cabling.</li> <li>Powerline Corridor:</li> </ul>	
	• 58ha	
	<ul> <li>Servitude of powerlines:</li> </ul>	
	<ul><li>Between 36m and 40m</li><li>Area will be approximately 26ha</li></ul>	
Substations	<ul><li>Each of the solar sites will be equipped with collector substations.</li><li>Infrastructure associated with the substations includes:</li></ul>	
	<ul> <li>Operations and Maintenance (O&amp;M) buildings housing the control and communication equipment.</li> <li>Site substations and collector substations.</li> </ul>	

 Table 2-1:
 Authorised infrastructure in terms of the 02 February 2024 EA

Component	Description / Dimensions	
	<ul> <li>Solar Site Substation A</li> <li>Capacity: 132kV</li> <li>Footprint: 0.5ha</li> <li>Solar Site Substation B</li> <li>Capacity: 132kV</li> <li>Footprint: 0.5ha</li> </ul>	
Battery Energy Storage System (BESS) Facility	<ul> <li>Three BESS facilities</li> <li>Footprints: 3ha</li> <li>BESS capacity: 150 MW with four hours standby time</li> <li>Lithium battery technologies, such as Lithium Iron Phosphate, Lithium Nickel Manganese Cobalt Oxides or Vanadium Redox flow technologies are being considered.</li> </ul>	
Laydown area	<ul> <li>This area will be used to store equipment and materials and house the construction camp.</li> <li>Footprint: 3ha</li> </ul>	
Offices	Temporary offices will also be constructed to manage construction activities from a central point.	
Additional infrastructure	Access roads (main & internal) (8km long and 8m wide), potential water pipeline for potable water (5km) and stormwater infrastructure.	

#### 2.2 PROJECT AREA

The Komati Power Station is situated about 37km from Middelburg, 43km from Bethal and 40km from Witbank in Ward 4, Portion 0 of Farm Komati Power Station 56-IS in the Steve Tshwete Local Municipality located within the Nkangala District Municipality in the Mpumalanga Province. The SEF, BESS facilities and associated infrastructure will be located on Eskom owned land, with the farm portion indicated in **Table 2-2**. The locality of the facilities is illustrated in **Figure 2-1**. The Authorised layout of the project is illustrated in **Figure 2-2**. The cadastral land parcel is indicated in **Table 2-3**.

Table 2-2 – Komati SEF Affected Farm Portions

Farm Name	21 Digit Surveyor General Code of Each Cadastral Land Parcel
Portion 0 of Farm Komati Power Station 56-IS	T0IS0000000005600000



#### Table 2-3 – Coordinate Points of the Cadastral Land Parcel

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Point	Longitude	Latitude
G	26° 5'9.26"S	29°28'9.70"E
Н	26° 5'2.93"S	29°28'18.46"E
I	26° 5'12.68"S	29°28'24.99"E
J	26° 5'15.96"S	29°28'32.44"E
К	26° 5'41.52"S	29°28'46.33"E
L	26° 5'41.41"S	29°28'57.23"E
Μ	26° 5'51.86"S	29°28'51.96"E
N	26° 6'2.02"S	29°28'57.44"E
0	26° 6'19.20"S	29°28'34.65"E
Р	26° 6'44.32"S	29°28'25.28"E
Q	26° 6'40.71"S	29°28'12.64"E
R	26° 6'36.83"S	29°27'7.56"E





#### Figure 2-1 – Location of the Komati Power Station facility

KOMATI POWER STATION SOLAR PV FACILITY, BESS AND ASSOCIATED INFRASTRUCTURE, MPUMALANGA PROVINCE Project No.: 41103965 | Our Ref No.: 14/12/16/3/3/2/2456 ESKOM HOLDINGS SOC LIMITED CONFIDENTIAL | WSP October 2024 Page 6 of 69



Figure 2-2: Komati Solar PV Facility Authorised Layout Map

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#### 2.3 SURROUNDING AREA

The surrounding area of the Komati Solar PV and BESS Facility is predominantly used for agricultural purposes. The surrounding rural landscape is interrupted by the existing road network, which amongst others includes the access road and Eskom overhead powerlines.

**Figure 2-3** below, shows that the project is not located within one of the Renewable Energy Development Zones (REDZ), or one of the EGI Corridors.



Figure 2-3: Project Location in relation to the REDZ and EGI.

#### 2.3.1 SURROUNDING RENEWABLE ENERGY PROJECTS

The map below (**Figure 2-4**) indicates the renewable projects in the surrounding area within 30 km of the Komati Solar PV and BESS Facility as per the Renewable Energy EIA Applications (REEA) dataset for Q2 2024. These projects have either been approved or in the process of being approved. **Table 2-4** indicates the complete list of these projects along with the type of technology, associated permitting process they are subjected to and applicant.

Table 2-4 - Pro	iects within 30km	of the Komati Po	wer Station facility
			wer olalion laonity

СА	Reference Number	Project Name	Technology
DFFE	14/12/16/3/3/2/2068	The Halfgewonnen solar photovoltaic (PV) facilities on portions 7,8,9 and 16 of the farm Halfgewonnen 190 IS, Govan Mbeki LM, Gert	PV

KOMATI POWER STATION SOLAR PV FACILITY, BESS AND ASSOCIATED INFRASTRUCTURE,<br/>MPUMALANGA PROVINCEProject No.: 41103965 | Our Ref No.: 14/12/16/3/3/2/2456CONFIDENTIAL | WSP<br/>October 2024ESKOM HOLDINGS SOC LIMITEDPage 8 of 69

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СА	Reference Number	Project Name	Technology
		Sibannde District Municipality, Mpumalanga Province	
DFFE	12/12/20/1865	Proposed Development of an Energy Recovery Plant at the Samancor Chrome Middelburg Ferrochrome Plant, Middelburg	Petroleum
DFFE	12/12/20/1865/AM1	Proposed Development of an Energy Recovery Plant at the Samancor Chrome Middelburg Ferrochrome Plant, Middelburg	Petroleum
DFFE	12/12/20/2455	Proposed energy recovery plant at Samancor Chrome, Middelburg Ferrochrome, Middelburg, Mpumalanga	Petroleum
DFFE	14/12/16/3/3/2/759	Proposed installation of a Solar photovoltaic power plant at ESKOM Duvha power station	PV
DFFE	14/12/16/3/3/1/452	Proposed Forzando North Coal Mine photovoltaic solar facility in Emalahleni Local Municipality, Mpumalanga Province	PV
DFFE	14/12/16/3/3/1/2657	The Proposed Construction and Operation of the Hendrina North 132kV Powerline to Hendrina Power Station, within the jurisdiction of Steve Tshwete Local Municipality, in Nkangala District Municipality, Mpumalanga Province	Powerline
DFFE	14/12/16/3/3/2/2130	The proposed Hendrina Renewable Energy Complex: North Wind Energy Facility (WEF), Mpumalanga Province	Wind
DFFE	14/12/16/3/3/2/2131	The proposed Hendrina Renewable Energy Complex: South Wind Energy Facility (WEF), Mpumalanga Province	Wind
DFFE	14/12/16/3/3/2/2298	The proposed establishment of a Solar Photovoltaic (PV) Energy Facility, Battery Energy Storage System (BESS) Facilities and associated infrastructure at the Komati Power Station, Mpumalanga Province.	PV

This clearly indicates a shift toward procuring renewable energy supply in South Africa. This is further emphasising the Need and Desirability outlined in **Section 2.4** below.



Figure 2-4: Existing surrounding projects in of relation to the Komati Power Station facility (REEA, Q2 2024)

KOMATI POWER STATION SOLAR PV FACILITY, BESS AND ASSOCIATED INFRASTRUCTURE, MPUMALANGA PROVINCE Project No.: 41103965 | Our Ref No.: 14/12/16/3/3/2/2456 ESKOM HOLDINGS SOC LIMITED CONFIDENTIAL | WSP October 2024 Page 10 of 69

#### 2.4 NEED AND DESIRABILITY OF DU PLESSIS DAM SOLAR PV2

South Africa is faced with significant increases in electricity demand and a shortage in electricity supply. South Africa is the seventh largest coal producer in the world, with approximately 82% of the country's electricity generated from coal. This large dependence on coal and its use has also resulted in a variety of negative environmental impacts, including the contribution to climate change. South Africa is also the highest emitter of GHGs in Africa; attributed to the country's energy-intensive economy that largely relies on coal-based electricity generation.

At the United Nations Framework Convention on Climate Change COP26 in November 2021, the governments of South Africa, with France, Germany, the United Kingdom, the United States of America, and the European Union – together forming the International Partners Group (IPG) – announced a new ambitious, long-term Just Energy Transition Partnership (JETP) to support the South Africa's decarbonisation effort in the context of domestic climate policy, including transitioning its economy towards cleaner energy sources. A distinguishing feature of the JETP is its emphasis on the centrality of a just transition in the structuring of the investment plan and financing package.

The JETP is a pathbreaking initiative and the first of its kind. It is long-term and ambitious in its aspiration to support South Africa's pathway to a low carbon economy and climate resilient society; to accelerate the just transition and the decarbonisation of the electricity system (including rehabilitation and repurposing of mines); and to support the development of new economic opportunities such as green hydrogen and electric vehicles amongst other interventions to support South Africa's shift towards a greener future (Source: https://ukcop26.org/six-month-update-on-progress-in-advancing-the-just-energy-transition-partnership-jetp/).

The EJETP aligns to international and national requirements to address climate change and move toward the use of cleaner technologies for the supply of electricity. JETP's vision focuses on achieving "Net Zero" carbon emissions by 2050, with an increase in sustainable jobs. Some of the additional benefits of moving towards lower carbon technologies, is the positive impact on air quality and water usage, the potential to create exciting new jobs, and a greater preservation of biodiversity in South Africa.

Over the next decade, more than half of the coal-fired power stations will be shut down, including Komati Power Station. While this will result in a lower impact on the environment, the shutdown of power stations will potentially lead to negative social impacts. The EJETP is aimed at, as far as possible, ensuring that the transition to cleaner technologies and the closure of power stations is carried out in a just way. The repurposing and repowering of Komati Power Station to utilise renewable energy is part of the EJETP.

Renewable energy development is regarded as an important contribution to meeting international and national targets of reducing reliance on fossil fuels, such as coal, which contribute towards GHG emissions and resultant climate change. The need and desirability of proposed Komati SEF and BESS project has been considered from an international, national and regional perspective.

#### 2.4.1 INTERNATIONAL PERSPECTIVE

The proposed project will align with internationally recognised and adopted agreements, protocols and conventions. This includes the Kyoto Protocol (1997) which calls for countries

internationally to reduce their GHG emissions through cutting down on their reliance on fossil fuels and investing in renewable energy technologies for electricity generation.

South Africa is also signatory to the United Nations' Development Programmes' (UNDP) Sustainable Development Goals (SDGs), particularly SGD 7 relating to affordable and clean energy. The proposed SEF qualifies as a clean technology that will generate 100MW of affordable energy to contribute to South Africa's energy mix.

The project will also greatly contribute to the countries' efforts to reduce their carbon emissions and play their role as part of the Paris Climate Accord. The Paris Agreement is a legally binding international treaty signed by 196 countries at the COP 21 in Paris, on the 12th of December 2015 to combat climate change. The goal of the Paris Accord is to limit global warming to well below 2 degrees Celsius, compared to industrial levels to avoid catastrophic natural disasters which are driven by the global temperature increase. Therefore, to achieve this long-term temperature goal, countries aim to reach global peaking of GHG emissions as soon as possible to achieve a climate-neutral world by 2050.

The authorisation of the Project will further align with South Africa's National Climate Response White Paper which outlines the countries efforts to manage the impacts of climate change and to contribute to the global efforts to stabilize the GHG concentrations in the atmosphere.

#### 2.4.2 NATIONAL PERSPECTIVE

The proposed project will pave the way for the Just Energy Transition (JET) in South Africa and promote the transition from a fossil fuel-based economy to a low carbon economy. The proposed project is part of the EJETP for the repowering and repurposing of coal fired power stations which will come to the end of life in the next decade. Komati power station being the first power station to shut down in September 2022. This project will also contribute the introduction of cleaner technologies for the supply of electricity.

In terms of policy, the South African Government, through the IRP, has set a target to secure 17 800 MW of renewable energy by 2030. This is an effort to diversify the country's energy mix in response to the growing electricity demand and promote access to clean sources of energy.

The NDP is aimed at reducing and eliminating poverty in South Africa by 2030. The NDP also outlines the need to increase electricity production by 2030, with 20 000 MW of electricity capacity generated from renewable sources in order to move to less carbon-intensive electricity production. The Plan also envisages that South Africa will have an energy sector that provides reliable and efficient energy service at competitive rates, while supporting economic growth through job creation.

The authorisation of the proposed project will further align with South Africa's National Climate Response White Paper which outlines the countries efforts to manage the impacts of climate change and to contribute to the global efforts to stabilise the GHG concentrations in the atmosphere.

The proposed project will also aid in overcoming the power shortages that are currently faced in the country. Over the years, the construction of SEFs has become cheaper, and less time-consuming. Thus, acting as a faster and more efficient method of meeting the ever-growing demand for electricity in the country.

In addition, the Council for Scientific and Industrial Research (CSIR) reported that renewable energy assisted in relieving pressure on the constrained South African power system during load shedding in the first quarter of 2019. This indicates that renewable energy is a key factor in ensuring that the country does not face further load shedding in the future.

#### 2.4.3 REGIONAL AND LOCAL PERSPECTIVE

#### Just Energy Transition

Coal power stations and the coal mining industry play a vital component in the economic and social components of the local Mpumalanga economy. Shifting to a low carbon economy will thus need to offset or exceed the benefits being realised by fossil fuels in the province. Thus, a key factor to ensuring the success of the JET is not only to focus on the transition from fossil fuels to renewable energy resources but to simultaneously ensure that the power stations are repurposed to achieve a just process in Mpumalanga through new infrastructure and the Just Transition of jobs and skills.

#### **Multiple Land Use**

Unlike opencast coal mining within the broader Komati study area, the Project facilitates multiple land use functions within the development area. As solar modules are clustered on surface developments, this allows multiple land use functions. This will boost the economic activities in the area which will in turn increase job opportunities in that area and help improve the local community's welfare without jeopardising the environment.

#### **Desirability of the Project Site**

Four of Eskom's coal-fired power stations have been targeted for decommissioning in the short term: Komati, Camden, Grootvlei, and Hendrina. Eskom is looking to decommission 5 400MW of electricity from coal generation by the year 2022, increasing to 10 500MW by 2030, 22 000MW by 2035 and 35 000MW by 2050. Simultaneously Eskom has been looking at options for repurposing these power stations with the core aims of reusing existing power transmission infrastructure, developing new generation capacity, providing ancillary services, and mitigating socio-economic impact. This project is one of several initiatives in which Eskom proposes.

Due to the need and demand for electricity, there are several renewable energy projects located near the proposed project. These projects are listed in **Section 2.3**. Specialists have undertaken a cumulative impact assessment (**Section 5.3**) against the projects listed in **Section 2.3**. Considering the cumulative impact assessments of the respective studies, no fatal flaws were identified for the proposed Project. Should the avoidance and mitigation measures prescribed be implemented, the significance of the considered impacts for all negative aspects pertaining to the environmental aspects is expected to be acceptable. Considering the need and demand for electricity in South African, and the Project having an acceptable cumulative impact, the development of the project is considered positive.

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#### **3 OVERVIEW OF PART 2 AMENDMENT PROCESS**

#### 3.1 TERMS OF REFERENCE

WSP was appointed to undertake the amendment process in terms of Regulation 31 and 32 of the EIA Regulations (2014), as amended.

The amendment application process followed to date is summarised below:

• The application for the amendment of the EA was submitted to the DFFE on **08 October 2024.** 

Section 32 of the EIA Regulations (2014), as amended requires that the DAR be subject to a public participation process prior to submission to the DFFE. WSP facilitated the following public participation process on behalf of Du Plessis Dam Solar PV2:

- Provision of the Draft Amendment Report for a 30-day comment period as per the requirements of Section 32 (1).
- All interested and affected parties (I&APs) (as per the existing Komati Solar PV and BESS Facility database) were notified by WSP of the availability of the DAR for comment on 08 October 2024. Copies were made available at the Komati Paypoint and Library, Komati Power Station Entrance, Hendrina Public Library, Gerard Sekoto Library; and Eastdene Public Library, as well as on the WSP webpage (https://www.wsp.com/en-ZA/services/public-documents) and on the WSP Datafree Website (https://wsp-engage.com/) for ease of access.
- Two newspaper adverts were placed, one English and IsiZulu version in the Witbank News (04 October 2024) and the other (English and Afrikaans) in the Highvelder (03 October 2024) introducing the project and requesting public input.
- Site notices have been placed along the boundary fence of the project site and at various locations in Komati, Witbank and Hendrina on the **08 October 2024**.

#### 3.2 ENVIRONMENTAL ASSESSMENT PRACTITIONER

WSP was appointed in the role of Independent EAP to undertake the Part 2 Amendment processes. The CV of the EAP is available in **Appendix A**. The EAP declaration of interest and undertaking is included in **Appendix B**. **Table 3-1** details the relevant contact details of the EAP.

EAP	WSP Group Africa (Pty) Ltd			
Contact Person:	Ashlea Strong			
Physical Address:	Building 1, Maxwell Office Park, Magwa Crecent, Midrand			
Postal Address:	PO Box 6001 Halfway House Waterval City 1685			
Telephone:	011 361 1392			
Fax:	011 361 1381			
Email:	Ashlea.Strong@wsp.com			
Qualifications	<ul> <li>Masters in Environmental Management, University of the Free State</li> <li>B Tech, Nature Conservation, Technikon SA</li> <li>National Diploma in Nature Conservation, Technikon SA</li> </ul>			

#### Table 3-1: Details of the EAP

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EAP	WSP Group Africa (Pty) Ltd
EAPASA Registration Number:	EAPASA (2019/1005)

#### Statement of Independence

Neither WSP nor any of the authors of this Report have any material present or contingent interest in the outcome of this Report, nor do they have any business, financial, personal or other interest that could be reasonably regarded as being capable of affecting their independence. WSP has no beneficial interest in the outcome of the assessment.

#### 3.3 LEGAL FRAMEWORK

On the 7<sup>th</sup> April 2017 the Minister of Environmental Affairs promulgated amendments to the EIA Regulations (2014), as amended (GNR 982) in terms of Chapter 5 of the National Environmental Management Act (No. 107 of 1998), as amended (NEMA). Regulations 31 and 32 of the EIA Regulations (2014), as amended, details the process for a Part 2 (Substantive) amendment of an environmental authorisation where a change of scope occurs, but a listed activity is not triggered.

The proposed amendments detailed in Section 4, below do not trigger any new listed activities in terms of the EIA Regulations (2014), as amended. Furthermore, no additional properties will be affected by the amendments that were not originally assessed. However, part of the amendments applied for were not originally assessed as part of the original EIA process and therefore the potential in impacts are assessed as part of this report.

A variety of administrate changes are being applied for as well as some substantive amendments. The details of all amendments are dealt with in Section 4 below.

#### 4 PROPOSED AMENDMENTS TO THE EA

Komati Solar PV and BESS Facility now proposes to follow a Part 2 Amendment Process for the EA (DFFE Ref: 14/12/16/3/3/2/2456).

A Part 2 Amendment Process for the authorised EA (DFFE Ref: 14/12/16/3/3/2/2456) for change in authorised infrastructure within the Komati site boundary. **.Table 4-1** below outlines the amendments proposed to the existing EA. **Figure 4-1** shows the Amended Facility Layout.

### Table 4-1:Proposed amendments to the Komati Power Station Facility EA (DFFE Ref:14/12/16/3/3/2/2456)

Aspect to be Amended	Authorised			Prop	Proposed Amendment		EA Reference		
The purpose of this Part 2 amendment is to expand the BESS Area A, along with the amendment of the Solar PC layout and associated infrastructure, as well as the removal of the 132kV grid connection .									
PV Site A	A1	26°06'05.31" S	29°27' 30.76"E	Chan and s	ging of co-c plit of Area	ordinates A.	<ul> <li>Page 5 of EA</li> <li>Table under Solar PV</li> </ul>		
	A2	26° 06' 17.89"S	29° 27' 05.38"E	Site A1:			Facility Outer Point		
	A3	26° 06' 34.41"S	29° 27' 08.05"E	A1	26° 6' 17.242" S	29° 27' 5.118" E	Site A		
	A4	26° 06' 36 69"S	29° 27'15 15"	A2	26° 6' 4.897" S	29° 27' 29.224" E			
		268 061	E 20° 27'	A3	26° 6' 13.155" S	29° 27' 38.984" E			
	GA	38.86"S	29 27 55.22"E	A4	26° 6' 11 653" S	29° 27' 40 735" F			
	A6	26° 06'21.30"S	29° 27' 56.25"E	A5	26° 6'	29° 27'			
	A7 26° 29° 27' 06'15.50"S 52.78"E			A6	11.570" S	48.910" E			
	A8	26° 06'12 67"S	29° 27'48 93"		15.991" S	54.666" E			
		00 12:07 0	29° 27' 40.35"E	E	A7	26° 6' 19.661" S	29° 27 57.168" E		
	A9	26° 06' 12.40"S		A8	26° 6' 38.095" S	29° 27' 55.166" E			
	A1 26° 06' 0 12.76"S	29° 27' 36.36"E	A9	26° 6' 36.511" S	29° 27' 13.209" E				
	A1 1	26° 06' 16.81"S	29° 28' 10.77"E	A10	26° 6' 34.175" S	29° 27' 9.372" E			
	A1 2	26° 06' 31.14"S	29° 28' 01.99"E	A11	26° 6' 31.172" S	29° 27' 7.203" E			
A1 26 3 35		26° 06' 35.00"S	29° 28' 03.48"E						
	A1 26° 06' 29° 28' 4 39.43"S 09.30"E		29° 28' 09.30''E	Site A	<b>\2:</b>	00% 001			
	A1	A1 26° 06' 29° 28' 5 39.48"S 12.50"E		A1	26° 6 30.755" S	29° 28 1.339" E			
	A1	26° 06'	29° 28'	A2	26° 6' 15.824" S	29° 28' 12.349" E			
	A1	35.92°S 26° 06'	11.90"E 29° 28'	A3	26° 6' 27.919" S	29° 28' 17.771" E			
	7	29.40"S	18.32"E	A4	26° 6' 29.420" S	29° 28' 19.189" E			

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Aspect to be Amended	Authorised	Proposed Amendment	EA Reference
DV Site D	A1 26° 06' 29° 28' 8 18.08"S 13.47"E	A5         26° 6'         29° 28'           30.755" S         18.689" E           A6         26° 6'         29° 28'           36.093" S         12.182" E           A7         26° 6'         29° 28'           39.513" S         13.517" E           A8         26° 6'         29° 28'           39.347" S         4.759" E	
	D1       20:03       20:01       20:07         52.913" S       01.316" E         B2       26° 05'       29° 27'         56.110" S       04.546" E         B3       26° 05'       29° 27'         47.744" S       02.637" E         B4       26° 05'       29° 27'         28.923" S       38.153" E         B5       26° 05'       29° 27'         26.293" S       37.132" E         B6       26° 05'       29° 27'         38.559" S       07.165" E         B7       26° 05'       29° 27'         35.996" S       05.593" E         B8       26° 05'       29° 27'         35.414" S       10.286" E         B9       26° 05'       29° 27'         33.580" S       09.704" E         B10       26° 05'       29° 26'         34.259" S       57.740" E	B1 $26^{\circ}$ 5' $29^{\circ}$ 26'           B2 $26^{\circ}$ 5' $29^{\circ}$ 27' $33.950^{\circ}$ S $57.944^{\circ}$ E           B2 $26^{\circ}$ 5' $29^{\circ}$ 27' $33.367^{\circ}$ S $10.206^{\circ}$ E           B3 $26^{\circ}$ 5' $29^{\circ}$ 27' $35.035^{\circ}$ S $10.290^{\circ}$ E           B4 $26^{\circ}$ 5' $29^{\circ}$ 27' $34.951^{\circ}$ S $4.951^{\circ}$ E           B5 $26^{\circ}$ 5' $29^{\circ}$ 27' $38.872^{\circ}$ S $6.119^{\circ}$ E           B6 $26^{\circ}$ 5' $29^{\circ}$ 27' $26.860^{\circ}$ S $33.729^{\circ}$ E           B7 $26^{\circ}$ 5' $29^{\circ}$ 27' $26.527^{\circ}$ S $29^{\circ}$ 27' $29.112^{\circ}$ S $38.817^{\circ}$ E           B7 $26^{\circ}$ 5' $29^{\circ}$ 27' $29.112^{\circ}$ S $38.67^{\circ}$ E           B9 $26^{\circ}$ 5' $29^{\circ}$ 27' $25.555^{\circ}$ S $4.367^{\circ}$ E           B10 $26^{\circ}$ 5' $29^{\circ}$ 27' $55.555^{\circ}$ S $3.616^{\circ}$ E           B11 $26^{\circ}$ 5'	<ul> <li>Table under Solar PV Facility Outer Point Coordinates- Solar PV Site B</li> </ul>
BESS A	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Changing of co-ordinates to include the expanded area for BESS A           1         26° 5'         29° 28'           27.877" S         0.972" E           2         26° 5'         29° 28'           22.780" S         2.258" E           3         26° 5'         29° 28'           28.612" S         17.503" E           4         26° 5'         29° 28'           29.989" S         17.089" E	<ul> <li>Page 6 of EA         <ul> <li>Table under BESS Outer Point Coordinates from row 1</li> </ul> </li> </ul>

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Aspect to be Amended	Authorised	Proposed Amendment	EA Reference
Powerline Coordinates	7     26° 05' 22.795" S     29° 28' 02.181" E       8     26° 05' 27.799" S     29° 28' 01.020" E       Start     26° 06' 37.005" S     29° 27' 08.299" E       Middle     26° 06' 05.880" S     29° 27' 42.054" E       End     26° 05' 33.446" S     29° 28' 13.965" E	5         26° 5'         29° 28'           27.831" S         11.533" E           6         26° 5'         29° 28'           31.918" S         9.559" E           7         26° 5'         29° 28'           29.714" S         3.773" E           8         26° 5'         29° 28'           28.749" S         4.187" E   The 132kV powerline and associated co-ordinates must be removed.	<ul> <li>Page 7 of EA         <ul> <li>Table under powerline coordinates</li> </ul> </li> </ul>
Substation Outer Point Coordinates: Substation 1	SN1         26° 05' 27.122" S         29° 27' 33.533" E           SN2         26° 05' 26.331" S         29° 27' 37.452" E           SN3         26° 05' 27.794" S         29° 27' 37.798" E           SN4         26° 05' 28.467" S         29° 27' 33.826" E	Update the co-ordinates of Substation 1 to reflect new positionSN1 $26^{\circ} 5'$ $28.582" S29^{\circ} 27'35.191"ESN226^{\circ} 5'26.695" S29^{\circ} 27'35.163"ESN326^{\circ} 5'26.667" S29^{\circ} 27'37.360"ESN426^{\circ} 5'28.639" S29^{\circ} 27'37.389"E$	<ul> <li>Page 7 of EA         <ul> <li>Table under substation outer point coordinates from row 1</li> </ul> </li> </ul>
Substation 2	SN5         26° 06' 06.286" S         29° 27' 29.397" E           SN6         26° 06' 05.502" S         29° 27' 30.884" E           SN7         26° 06' 08.140" S         29° 27' 32.908" E           SN8         26° 06' 09.042" S         29° 27' 31.369"E	Update the co-ordinates of Substation 2 to reflect new position           SN1         26° 6' 15.297" S         29° 27' 36.817" E           SN2         26° 6' 12.106" S         29° 27' 40.873" E           SN3         26° 6' 14.551" S         29° 27' 43.348" E           SN4         26° 6' 17.712" S         29° 27' 39.233" E	<ul> <li>Page 7 of EA         <ul> <li>Table under substation outer point coordinates from row 7</li> </ul> </li> </ul>
Substation 3	Not authorised.	Add co-ordinates for Substation 3 SN1 26° 6' 28.601" S 29° 28' 15.836" E	N/A

Aspect to be Amended	Authorised	Proposed Amendment EA Reference
		SN2 26° 6' 29° 28' 30.481" S 15.872" E
		SN3 26° 6' 29° 28' 30.517" S 18.077" E
		SN4 26° 6' 29° 28' 28.529" S 17.969" E
Temporary Construction Laydown Area Outer Point Coordinates	L1         26° 06'         29° 27'           33.159" S         20.052" E           L2         26° 06'         29° 27'           36.370" S         19.472" E           L3         26° 06'         29° 27'           38.154" S         46.767" E           L4         26° 06'         29° 27'           34.831"S         46.796" E	<ul> <li>Update the co-ordinates of the temporary construction laydown Area to reflect new positions</li> <li>Laydown Area A</li> <li> <sup>L</sup> 1 26° 6' 29° 27' 25.931" E </li> <li> <sup>L</sup> 2 26° 6' 29° 27' 4.968" S 29.209" E </li> <li> <sup>L</sup> 3 26° 6' 29° 27' 7.986" S 32.670" E </li> <li> <sup>L</sup> 4 26° 6' 29° 27' 10.301" S 29.287" E </li> <li>          Laydown Area B </li> <li> <sup>L</sup> 1 26° 5' 29° 27' 26.529" S 37.755" E </li> <li> <sup>L</sup> 3 26° 5' 29° 27' 29.055" S 38.584" E </li> <li>          L 2 26° 5' 29° 27' 29.055" S 38.584" E </li> <li>          L 3 26° 5' 29° 27' 28.941" S 36.274" E </li> </ul>
		Lo         26         27         29         27           28.875" S         37.347" E         37.347" E         Page 8 of the EA
Solar Energy Facility (100MW):	<ul> <li>Solar Farm A:         <ul> <li>Extent: 115 Ha</li> <li>Buildable Area: 127 Ha</li> <li>AC Capacity: Up to 70 MW</li> <li>DC Capacity: Up to 84 MW</li> </ul> </li> <li>Solar Farm B:         <ul> <li>Extent: 21 Ha</li> <li>Buildable Area: 50 Ha</li> <li>AC Capacity: Up to 30 MW</li> <li>DC Capacity: Up to 36 MW</li> </ul> </li> </ul>	<ul> <li>Buildable Area: 109 Ha</li> <li>AC Capacity: Up to 46 MW</li> <li>DC Capacity: Up to 55 MW</li> <li>Solar Farm A2:</li> <li>Buildable Area: 18 Ha</li> <li>AC Capacity: Up to 14 MW</li> <li>DC Capacity: Up to 14 MW</li> <li>Solar Farm B:</li> </ul>

Aspect to be Amended	Authorised	Proposed Amendment	EA Reference
	<ul> <li>Solar modules will be elevated above the ground, and will be mounted on either fixed tilt systems or tracking system</li> </ul>	<ul> <li>Buildable Area: 30 Ha</li> <li>AC Capacity: Up to 12 MW</li> <li>DC Capacity: Up to 15 MW</li> <li>Solar modules will be elevated above the ground, and will be mounted on either fixed tilt systems or tracking system</li> </ul>	
Grid Connection (i.e., powerlines)	<ul> <li>Point of connection of Solar Panels will be to the Komati High Voltage (HV) yard.</li> <li>Power routed via a medium voltage overhead line (OHL) or underground cabling.</li> <li>Servitude of powerlines:         <ul> <li>Between 36 and 40m</li> <li>Area will be approximately 26ha</li> </ul> </li> </ul>	<ul> <li>Point of connection of Solar Panels will be to the Komati High Voltage (HV) yard.</li> <li>Power routed via a medium voltage overhead line (OHL) or underground cabling (33kV)</li> </ul>	<ul> <li>Page 8 of EA <ul> <li>Letter B under the key components/infrastructure</li> </ul> </li> <li>Page 9 of EA <ul> <li>Row 5 of the table of technical details of the facility</li> </ul> </li> </ul>
Site Substations	<ul> <li>Each of the solar sites will be equipped with collector substations.</li> <li>Infrastructure associated with the substations includes:         <ul> <li>Operations and Maintenance (O&amp;M) buildings housing the control and communication equipment.</li> <li>Site substations and collector substations.</li> </ul> </li> <li>Solar Site Substation A         <ul> <li>Capacity: 132kV</li> <li>Footprint: 0.5ha</li> </ul> </li> </ul>	<ul> <li>Each of the Solar Sites will be equipped with collector substations.</li> <li>Substation footprint A1 – 1.5 Ha</li> <li>Substation footprint A2 – 0.36 Ha</li> <li>Substation footprint B – 0.36 Ha</li> </ul>	<ul> <li>Page 8 of EA <ul> <li>Letter C under the key components/infrastructure</li> </ul> </li> <li>Page 9 of EA <ul> <li>Row 5 in the table of technical details of the facility</li> </ul> </li> </ul>
Battery Energy Storage System (BESS)	<ul> <li>Three BESS facilities</li> <li>Footprints: Range from 2 ha up to 6 ha.</li> <li>BESS capacity: 150 MW with four hours standby time.</li> </ul>	<ul> <li>Three BESS Facilities</li> <li>Extention of BESS Area A.</li> <li>Footprint: 5.7 ha</li> <li>BESS capacity: 150 MW with four hours standby time.</li> </ul>	<ul> <li>Page 8 &amp; 9 of EA <ul> <li>Letter D under the key components/infrastructure</li> </ul> </li> <li>Page 10 of EA</li> </ul>

Aspect to be Amended	Authorised	Proposed Amendment	EA Reference
	<ul> <li>Lithium Battery Technologies, such as Lithium Iron Phosphate, Lithium Nickel Manganese Cobalt oxides or Vanadium Redox flow technologies are being considered</li> </ul>	<ul> <li>Lithium Battery Technologies, such as Lithium Iron Phosphate, Lithium Nickel Manganese Cobalt oxides or Vanadium Redox flow technologies are being considered</li> </ul>	<ul> <li>Row 6 in the table of technical details of the facility</li> </ul>



#### Figure 4-1: Amended Komati Power Station Layout (2024)

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#### 4.1 MOTIVATION, ADVANTAGES AND DISADVANTAGES

It should be noted that there are no disadvantages for the proposed amendment. The motivation and advantages for the proposed amendments are outlined in **Table 4-2**.

Aspect to be Amended	Authorised	Proposed Amendment	EA Reference	Motivation, Advantages and Disadvantages
PV Site A	A1       26°06'05.31"S       29°27' 30.76"E         A2       26°06' 17.89"S       29°27' 05.38"E         A3       26°06' 34.41"S       29°27' 08.05"E         A4       26°06' 36.69"S       29°27' 15.15"E         A5       26°06' 38.86"S       29°27' 55.22"E         A6       26°06' 12.30"S       29°27' 55.22"E         A6       26°06' 12.60"S       29°27' 52.78"E         A7       26°06' 12.67"S       29°27' 48.93"E         A9       26°06' 12.40"S       29°27' 40.35"E         A10       26°06' 12.76"S       29°27' 36.36"E         A11       26°06' 31.14"S       29°28' 10.77"E         A12       26°06' 35.00"S       29°28' 01.99"E         A13       26°06' 39.43"S       29°28' 09.30"E         A14       26°06' 39.43"S       29°28' 12.50"E         A15       26°06' 39.48"S       29°28' 12.50"E         A16       26°06' 39.48"S       29°28' 13.32"E         A18       26°06' 18.08"S       29°28' 18.32"E	Changing of co-ordinates and split of Area A.Site A1:A1 $26^{\circ} 6' 17.242" S$ $29^{\circ} 27' 5.118" E$ A2 $26^{\circ} 6' 4.897" S$ $29^{\circ} 27' 29.224" E$ A3 $26^{\circ} 6' 13.155" S$ $29^{\circ} 27' 38.984" E$ A4 $26^{\circ} 6' 11.653" S$ $29^{\circ} 27' 40.735" E$ A5 $26^{\circ} 6' 11.653" S$ $29^{\circ} 27' 48.910" E$ A6 $26^{\circ} 6' 15.991" S$ $29^{\circ} 27' 54.666" E$ A7 $26^{\circ} 6' 19.661" S$ $29^{\circ} 27' 57.168" E$ A8 $26^{\circ} 6' 38.095" S$ $29^{\circ} 27' 55.166" E$ A9 $26^{\circ} 6' 36.511" S$ $29^{\circ} 27' 13.209" E$ A10 $26^{\circ} 6' 34.175" S$ $29^{\circ} 27' 9.372" E$ A11 $26^{\circ} 6' 30.755" S$ $29^{\circ} 27' 7.203" E$ Site A2:A1 $26^{\circ} 6' 29.420" S$ A3 $26^{\circ} 6' 27.919" S$ $29^{\circ} 28' 1.339" E$ A4 $26^{\circ} 6' 29.420" S$ $29^{\circ} 28' 19.189" E$	<ul> <li>Page 5 of EA         <ul> <li>Table under Solar PV Facility Outer Point Coordinates- Solar PV Site A</li> </ul> </li> </ul>	The coordinates for PV Site A have been updated to align with the associated infrastructure, and the site has been split into two distinct areas. This strategic change will ensure optimal use of the space and resources, enhancing efficiency and maximizing energy production potential. By refining our approach, we're positioning ourselves to achieve our sustainability goals more effectively. As confirmed by the specialists and EAP, there are no disadvantages associated with the amendment of the EA in terms of PV Site A.

Table 4-2:	Motivation	for the	Proposed	Amendments
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Aspect to be Amended	Authorised			Pr	Proposed Amendment			EA Reference	Motivation, Advantages and Disadvantages
					45 46 47 48	26° 6' 30.755" S 26° 6' 36.093" S 26° 6' 39.513" S 26° 6' 39.347" S	29° 28' 18.689" E 29° 28' 12.182" E 29° 28' 13.517" E 29° 28' 4.759" E		
PV Site B	B1 26° 05'	' 52.913" S	29° 27' 01.316" E	В	31	26° 5' 33.950" S	29° 26' 57.944" E	<ul> <li>Page 6 of EA</li> </ul>	The coordinates for PV Site B have been adjusted to better align
	B2 26° 05'	' 56.110" S	29° 27' 04.546" E	B	32 33	26° 5' 33.367" S 26° 5' 35.035" S	29° 27' 10.206" E 29° 27' 10.290" E	Facility Outer Point	optimizing efficiency and
	B3 26° 05'	' 47.744" S	29° 27' 02.637" F	В	34	26° 5' 34.951" S	29° 27' 4.951" E	Site B	enhancing overall project integration. This change will help maximise the site's potential and support for sustainable energy
	B4 26° 05'	' 28.923" S	29° 27' 38.153"	В	35	26° 5' 38.872" S	29° 27' 6.119" E		
	B5 26° 05'	' 26.293" S	⊑ 29° 27' 37.132"	B	36 37	26° 5' 26.860" S 26° 5' 26.527" S	29° 27' 33.729" E 29° 27' 37.733" E		production goals.
	B6 26° 05'	' 38.559" S	E 29° 27' 07.165"	в	38	26° 5' 29.112" S	29° 27' 38.817" E		and EAP, there are no disadvantages associated with the amendment of the EA in terms of
	B7 26° 05'	25 006" \$	E	B	39 310	26° 5' 47.297" S	29° 27' 3.867" E		
	B7 20 03	33.990 3	E	В	311	26° 5' 55.555" S	29° 27' 3.616" E		PV Site B.
	B8 26° 05'	' 35.414" S	29° 27' 10.286" E	В	312	26° 5' 54.053" S	29° 27' 3.700" E		
	B9 26° 05'	' 33.580" S	29° 27' 09.704" E	В	313	26° 5' 54.136" S	29° 27' 1.281" E		
	B10 26° 05'	' 34.259" S	29° 26' 57.740"		B14 B15	26° 5' 46.045° S 26° 5' 40.707" S	29° 27' 0.363" E 29° 27' 5.869" E		
			Ь	316	26° 5' 36.786" S	29° 26' 58.779" E			
BESS A			. –			1	Page 6 of EA	BESS Area A is a brownfield site	
	1 26° 05' 2 S	28.940" 29	9° 28' 04.556" E	1	1	26° 5' 27.877" S	29° 28' 0.972" E	– Table under BESS Outer	that matches the combined size of BESS Areas B and C, allowing
	2 26° 05' 2	29.278" 29	)°28' 04.601"E	3	3	26° 5' 28.612" S	29° 28' 17.503" E	Point Coordinates from row 1	optimization of the existing space . By leveraging this underutilised
			4	1	26° 5' 29.989" S	29° 28' 17.089" E		area, it enhances project	

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Aspect to be Amended	Authorised			Proposed Amendment			EA Reference	Motivation, Advantages and Disadvantages
	3     26       4     26       5     26       6     26       7     26       8     26	5°       05'       30.136"         5°       05'       25.806"         5°       05'       24.683"         5°       05'       24.115"         5°       05'       22.795"         5°       05'       27.799"	29° 28' 06.897" E 29° 28' 09.032" E 29° 28' 06.080" E 29° 28' 06.315" E 29° 28' 02.181" E 29° 28' 01.020" E		26° 5' 27.831" S 26° 5' 31.918" S 26° 5' 29.714" S 26° 5' 28.749" S	29° 28' 11.533" E 29° 28' 9.559" E 29° 28' 3.773" E 29° 28' 4.187" E		impact, and maximise the potential for energy storage capacity. The proposed amendment to the area is primarily driven by the system size (MW) and future expansion requirements. The original proposed area would not have accommodated these needs or met the project mandate. This strategic decision reinforces the commitment to sustainable development while making the best use of available resources. As confirmed by the specialists and EAP, there are no disadvantages associated with the amendment of the EA in terms of BESS A.
Powerline Coordinates	Start Middle End	26° 06' 37.005" S 26° 06' 05.880" S 26° 05' 33.446" S	29° 27' 08.299" E 29° 27' 42.054" E 29° 28' 13.965" E	To be	removed.		<ul> <li>Page 7 of EA         <ul> <li>Table under powerline coordinates</li> </ul> </li> </ul>	The 132kV overhead powerline (OHPL)was deemed unviable from an engineering perspective, as capacity on these lines may have already been allocated for other projects. Consequently, the 132kV option was ruled out as a feasible connection to the grid As confirmed by the specialists and EAP, there are no disadvantages associated with the amendment of the EA in terms of the removal of the powerline.

Aspect to be Amended	Authorised	Proposed Amendment	EA Reference	Motivation, Advantages and Disadvantages
Substation Outer Point Coordinates: Substation 1	SN1         26° 05' 27.122"         29° 27' 33.533" E           SN2         26° 05' 26.331"         29° 27' 37.452" E           SN3         26° 05' 27.794"         29° 27' 37.798" E           SN4         26° 05' 28.467"         29° 27' 33.826" E	SN1         26° 5' 28.582" S         29° 27' 35.191" E           SN2         26° 5' 26.695" S         29° 27' 35.163" E           SN3         26° 5' 26.667" S         29° 27' 37.360" E           SN4         26° 5' 28.639" S         29° 27' 37.389" E	<ul> <li>Page 7 of EA         <ul> <li>Table under substation outer point coordinates from row 1</li> </ul> </li> </ul>	The substation has been strategically relocated to align with the proposed and authorized infrastructure, enhancing its functionality and efficiency. This thoughtful adjustment ensures that the systems operate at peak performance, supporting our goals for reliable energy delivery and optimising overall project effectiveness. As confirmed by the specialists and EAP, there are no disadvantages associated with the amendment of the EA in terms of substation 1
Substation 2	SN5         26° 06' 06.286" S         29° 27' 29.397"           SN6         26° 06' 05.502" S         29° 27' 30.884"           SN7         26° 06' 08.140" S         29° 27' 32.908"           SN8         26° 06' 09.042" S         29° 27' 31.369"E	SN1         26° 6' 15.297" S         29° 27' 36.817" E           SN2         26° 6' 12.106" S         29° 27' 40.873" E           SN3         26° 6' 14.551" S         29° 27' 43.348" E           SN4         26° 6' 17.712" S         29° 27' 39.233" E	<ul> <li>Page 7 of EA         <ul> <li>Table under substation outer point coordinates from row 7</li> </ul> </li> </ul>	The substation has been strategically relocated to align with the proposed and authorized infrastructure, enhancing its functionality and efficiency. This thoughtful adjustment ensures that the systems operate at peak performance, supporting our goals for reliable energy delivery and optimising overall project effectiveness. As confirmed by the specialists and EAP, there are no disadvantages associated with the amendment of the EA in terms of substation 2.

Aspect to be Amended	Authorised	Proposed Amendment	EA Reference	Motivation, Advantages and Disadvantages
Substation 3	Not authorised.	SN1         26° 6' 28.601" S         29° 28' 15.836" E           SN2         26° 6' 30.481" S         29° 28' 15.872" E           SN3         26° 6' 30.517" S         29° 28' 18.077" E           SN4         26° 6' 28.529" S         29° 28' 17.969" E	N/A	The addition of a third substation will significantly enhance the proposed infrastructure in PV Area 2. This strategic move is designed to boost energy efficiency and reliability, ensuring that our systems can effectively support increased capacity and future growth. As confirmed by the specialists and EAP, there are no disadvantages associated with the amendment of the EA in terms of
Temporary Construction Laydown Area Outer Point Coordinates	L1         26° 06' 33.159" S         29° 27' 20.052" E           L2         26° 06' 36.370" S         29° 27' 19.472" E           L3         26° 06' 38.154" S         29° 27' 46.767" E           L4         26° 06' 34.831"S         29° 27' 46.796" E	Laydown Area A         L1       26° 6' 7.075" S       29° 27' 25.931" E         L2       26° 6' 4.968" S       29° 27' 29.209" E         L3       26° 6' 7.986" S       29° 27' 32.670" E         L4       26° 6' 10.301" S       29° 27' 29.287" E         Laydown Area B       21       26° 5' 26.524" S       29° 27' 37.483" E         L2       26° 5' 26.529" S       29° 27' 37.755" E       23° 27' 38.584" E         L4       26° 5' 30.073" S       29° 27' 36.411" E       26° 5' 28.941" S         L6       26° 5' 28.875" S       29° 27' 37.347" E	<ul> <li>Page 7         <ul> <li>Table under temporary construction laydown area outer point coordinates</li> </ul> </li> </ul>	substation 3. The temporary construction and laydown area has been relocated to the centre of the project site to enhance convenience and ease during the development and construction phases. As confirmed by the specialists and EAP, there are no disadvantages associated with the amendment of the EA in terms of the temporary construction laydown area.
Aspect to be Amended	Authorised	Proposed Amendment	EA Reference	Motivation, Advantages and Disadvantages
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Solar Energy Facility (100MW):	<ul> <li>Solar Farm A: <ul> <li>Extent: 115 Ha</li> <li>Buildable Area: 127 Ha</li> <li>AC Capacity: Up to 70 MW</li> <li>DC Capacity: Up to 84 MW</li> </ul> </li> <li>Solar Farm B: <ul> <li>Extent: 21 Ha</li> <li>Buildable Area: 50 Ha</li> <li>AC Capacity: Up to 30 MW</li> <li>DC Capacity: Up to 36 MW</li> </ul> </li> <li>Solar modules will be elevated above the ground, and will be mounted on either fixed tilt systems or tracking system</li> </ul>	<ul> <li>Solar Farm A1: <ul> <li>Buildable Area: 109 Ha</li> <li>AC Capacity: Up to 46 MW</li> <li>DC Capacity: Up to 55 MW</li> </ul> </li> <li>Solar Farm A2: <ul> <li>Buildable Area: 18 Ha</li> <li>AC Capacity: Up to 14 MW</li> <li>DC Capacity: Up to 17 MW</li> </ul> </li> <li>Solar Farm B: <ul> <li>Buildable Area: 30 Ha</li> <li>AC Capacity: Up to 12 MW</li> <li>DC Capacity: Up to 15 MW</li> </ul> </li> <li>Solar modules will be elevated above the ground, and will be mounted on either fixed tilt systems or tracking system</li> </ul>	<ul> <li>Page 8 of the EA <ul> <li>Letter A under the key components/infrastructure</li> </ul> </li> <li>Page 9 of the EA <ul> <li>Row 3 of the table of technical details of the facility</li> </ul> </li> </ul>	The coordinates for PV Site A have been updated to align with the associated infrastructure, and the site has been split into two distinct areas. This strategic change will ensure optimal use of the space and resources, enhancing efficiency and maximizing energy production potential. By refining our approach, we're positioning ourselves to achieve our sustainability goals more effectively. As confirmed by the specialists and EAP, there are no disadvantages associated with the amendment of the EA in terms of PV Site A
Grid Connection (i.e., powerlines)	<ul> <li>Point of connection of Solar Panels will be to the Komati High Voltage (HV) yard.</li> <li>Power routed via a medium voltage overhead line (OHL) or underground cabling.</li> <li>Servitude of powerlines:         <ul> <li>Between 36 and 40m</li> <li>Area will be approximately 26ha</li> </ul> </li> </ul>	<ul> <li>Point of connection of Solar Panels will be to the Komati High Voltage (HV) yard.</li> <li>Power routed via a medium voltage overhead line (OHL) or underground cabling (33kV)</li> </ul>	<ul> <li>Page 8 of EA         <ul> <li>Letter B under the key components/infrastructure</li> </ul> </li> <li>Page 9 of EA         <ul> <li>Row 5 of the table of technical details of the facility</li> </ul> </li> </ul>	The 132kV overhead powerline (OHPL)was deemed unviable from an engineering perspective, as capacity on these lines may have already been allocated for other projects. Consequently, the 132kV option was ruled out as a feasible connection to the grid As confirmed by the specialists and EAP, there are no disadvantages associated with the amendment of the EA in terms of the removal of the powerline.

Aspect to be Amended	Authorised	Proposed Amendment	EA Reference	Motivation, Advantages and Disadvantages	
Site Substations	<ul> <li>Each of the solar sites will be equipped with collector substations.</li> <li>Infrastructure associated with the substations includes:         <ul> <li>Operations and Maintenance (O&amp;M) buildings housing the control and communication equipment.</li> <li>Site substations and collector substations.</li> </ul> </li> <li>Solar Site Substation A         <ul> <li>Capacity: 132kV</li> <li>Footprint: 0.5ha</li> </ul> </li> </ul>	<ul> <li>Each of the Solar Sites will be equipped with collector substations.</li> <li>Substation footprint A1 – 1.5 Ha</li> <li>Substation footprint A2 – 0.36 Ha</li> <li>Substation footprint B – 0.36 Ha</li> </ul>	<ul> <li>Page 8 of EA <ul> <li>Letter C under the key components/infrastructure</li> </ul> </li> <li>Page 9 of EA <ul> <li>Row 5 in the table of technical details of the facility</li> </ul> </li> </ul>	The substation has been strategically relocated to align with the proposed and authorized infrastructure, enhancing its functionality and efficiency. This thoughtful adjustment ensures that the systems operate at peak performance, supporting our goals for reliable energy delivery and optimising overall project effectiveness. As confirmed by the specialists and EAP, there are no disadvantages associated with the amendment of the EA in terms of substations.	
Battery Energy Storage System (BESS)	<ul> <li>Three BESS facilities</li> <li>Footprints: Range from 2 ha up to 6 ha.</li> <li>BESS capacity: 150 MW with four hours standby time.</li> <li>Lithium Battery Technologies, such as Lithium Iron Phosphate, Lithium Nickel Manganese Cobalt oxides or Vanadium Redox flow technologies are being considered</li> </ul>	<ul> <li>Three BESS Facilities</li> <li>Extention of BESS Area A.</li> <li>Footprint: 5.7 ha</li> <li>BESS capacity: 150 MW with four hours standby time.</li> <li>Lithium Battery Technologies, such as Lithium Iron Phosphate, Lithium Nickel Manganese Cobalt oxides or Vanadium Redox flow technologies are being considered</li> </ul>	<ul> <li>Page 8 &amp; 9 of EA <ul> <li>Letter D under the key components/infrastructure</li> </ul> </li> <li>Page 10 of EA <ul> <li>Row 6 in the table of technical details of the facility</li> </ul> </li> </ul>	BESS Area A is a brownfield site that matches the combined size of BESS Areas B and C, allowing the optimization of the existing space . By leveraging this underutilised area, it enhance project efficiency, reduce environmental impact, and maximise the potential for energy storage capacity. The proposed amendment to the area is primarily driven by the system size (MW) and future expansion requirements. The original proposed area would not have	

Aspect to be Amended	Authorised	Proposed Amendment	EA Reference	Motivation, Advantages and Disadvantages
				accommodated these needs or met the project mandate. This strategic decision reinforces the commitment to sustainable development while making the best use of available resources. As confirmed by the specialists and EAP, there are no disadvantages associated with the amendment of the EA in terms of BESS A. BESS B and C remain unchanged.

### 4.2 AMENDMENT CO-ORDINATES

The coordinates for the following amendments are outlined below:

- Expansion of BESS Area A (Table 4-3);
- Onsite Substations (x3) (Table 4-4);
- Solar PV Area A1 and A2 (Table 4-5);
- Solar PV Area B (**Table 4-6**); and
- Temporary Construction laydown area (Table 4-7).

#### Table 4-3 – Coordinate Points of BESS Area A including the proposed expansion



S4

S5

S6

Point	Longitude	Latitude
7	29° 28' 3.773" E	26° 5' 29.714" S
8	29° 28' 4.187" E	26° 5' 28.749" S

 Table 4-4 – Coordinate Points of the Amended Onsite substation locations

Point	Longitude	Latitude				
<complex-block></complex-block>						
Substation 1						
S1	29° 27' 35.191" E	26° 5' 28.582" S				
S2	29° 27' 35.163" E	26° 5' 26.695" S				
S3	29° 27' 37.360" E	26° 5' 26.667" S				

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Substation 2

26° 5' 28.639" S

26° 6' 15.297" S

26° 6' 12.106" S

29° 27' 37.389" E

29° 27' 36.817" E

29° 27' 40.873" E

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Point	Longitude	Latitude
S7	29° 27' 43.348" E	26° 6' 14.551" S
S8	29° 27' 39.233" E	26° 6' 17.712" S
	Substation 3	
S9	29° 28' 15.836" E	26° 6' 28.601" S
S10	29° 28' 15.872" E	26° 6' 30.481" S
S11	29° 28' 18.077" E	26° 6' 30.517" S
S12	29° 28' 17.969" E	26° 6' 28.529" S

#### Table 4-5 - Co-ordinate Points of Amended Solar PV Area A1 and Area A2



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Point	Longitude	Latitude	
A3	29° 27' 38.984" E	26° 6' 13.155" S	
A4	29° 27' 40.735" E	26° 6' 11.653" S	
A5	29° 27' 48.910" E	26° 6' 11.570" S	
A6	29° 27' 54.666" E	26° 6' 15.991" S	
A7	29° 27' 57.168" E	26° 6' 19.661" S	
A8	29° 27' 55.166" E	26° 6' 38.095" S	
A9	29° 27' 13.209" E	26° 6' 36.511" S	
A10	29° 27' 9.372" E	26° 6' 34.175" S	
A11	29° 27' 7.203" E	26° 6' 31.172" S	
	Solar PV Area A2		
A12	29° 28' 1.339" E	26° 6' 30.755" S	
A13	29° 28' 12.349" E	26° 6' 15.824" S	
A14	29° 28' 17.771" E	26° 6' 27.919" S	
A15	29° 28' 19.189" E	26° 6' 29.420" S	
A16	29° 28' 18.689" E	26° 6' 30.755" S	
A17	29° 28' 12.182" E	26° 6' 36.093" S	
A18	29° 28' 13.517" E	26° 6' 39.513" S	

B9

B10



#### Table 4-6 - Co-ordinate Points of Amended Solar Area B

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26° 5' 47.297" S

26° 5' 55.555" S

29° 27' 3.867" E

29° 27' 4.367" E

Point	Longitude	Latitude
B11	29° 27' 3.616" E	26° 5' 55.555" S
B12	29° 27' 3.700" E	26° 5' 54.053" S
B13	29° 27' 1.281" E	26° 5' 54.136" S
B14	29° 27' 0.363" E	26° 5' 46.045" S
B15	29° 27' 5.869" E	26° 5' 40.707" S
B16	29° 26' 58.779" E	26° 5' 36.786" S

#### Table 4-7 - Co-ordinate Points of Amended Temporary Construction Laydown Area

Point	Longitude	Latitude		
	- 			
		Image: State Stat		
Laydown Area A				
L1	29° 27' 25.931" E	26° 6' 7.075" S		
L2	29° 27' 29.209" E	26° 6' 4.968" S		

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Point	Longitude	Latitude
L3	29° 27' 32.670" E	26° 6' 7.986" S
L4	29° 27' 29.287" E	26° 6' 10.301" S
	Laydown Area B	
L5	29° 27' 37.483" E	26° 5' 26.524" S
L6	29° 27' 37.755" E	26° 5' 26.529" S
L7	29° 27' 38.584" E	26° 5' 29.055" S
L8	29° 27' 36.411" E	26° 5' 30.073" S
L9	29° 27' 36.274" E	26° 5' 28.941" S
L10	29° 27' 37.347" E	26° 5' 28.875" S

### 5 IMPACT ASSESSMENT

The following section summaries and outlines the impacts identified as part of the 2023 EIA report.

### 5.1 IMPACT ASSESSMENT METHODOLOGY

The assessment of impacts and mitigation evaluates the likely extent and significance of the potential impacts on identified receptors and resources against defined assessment criteria, to develop and describe measures that will be taken to avoid, minimise or compensate for any adverse environmental impacts, to enhance positive impacts, and to report the significance of residual impacts that occur following mitigation.

The key objectives of the risk assessment methodology are to identify any additional potential environmental issues and associated impacts likely to arise from the proposed project, and to propose a significance ranking. Issues / aspects will be reviewed and ranked against a series of significance criteria to identify and record interactions between activities and aspects, and resources and receptors to provide a detailed discussion of impacts. The assessment considers direct<sup>1</sup>, indirect<sup>2</sup>, secondary<sup>3</sup> as well as cumulative<sup>4</sup> impacts.

A standard risk assessment methodology is used for the ranking of the identified environmental impacts pre-and post-mitigation (i.e. residual impact). The significance of environmental aspects is determined and ranked by considering the criteria<sup>5</sup> presented in **Table 5-1**.

Criteria	Score 1	Score 2	Score 3	Score 4	Score 5
Impact Magnitude (M) The degree of alteration of the affected environmental receptor	Very low: No impact on processes	Low: Slight impact on processes	Medium: Processes continue but in a modified way	High: Processes temporarily cease	Very High: Permanent cessation of processes
Impact Extent (E) The geographical extent of the impact on a given environmental receptor	Site: Site only	Local: Inside activity area	Regional: Outside activity area	National: National scope or level	International: Across borders or boundaries
Impact Reversibility (R)	Reversible: Recovery		Recoverable: Recovery		Irreversible: Not possible

Table 5-1 – Impact Assessment Criterion and Scoring System

<sup>&</sup>lt;sup>1</sup> Impacts that arise directly from activities that form an integral part of the Project.

<sup>&</sup>lt;sup>2</sup> Impacts that arise indirectly from activities not explicitly forming part of the Project.

<sup>&</sup>lt;sup>3</sup> Secondary or induced impacts caused by a change in the Project environment.

<sup>&</sup>lt;sup>4</sup> Impacts are those impacts arising from the combination of multiple impacts from existing projects, the Project and/or future projects.

<sup>&</sup>lt;sup>5</sup> The definitions given are for guidance only, and not all the definitions will apply to all the environmental receptors and resources being assessed. Impact significance was assessed with and without mitigation measures in place.

Criteria	Score 1	Score 2	Score 3	Score 4	Score 5
The ability of the environmental receptor to rehabilitate or restore after the activity has caused environmental change	without rehabilitation		with rehabilitation		despite action
Impact Duration (D) The length of permanence of the impact on the environmental receptor	Immediate: On impact	Short term: 0-5 years	Medium term: 5-15 years	Long term: Project life	Permanent: Indefinite
<b>Probability of Occurrence (P)</b> The likelihood of an impact occurring in the absence of pertinent environmental management measures or mitigation	Improbable	Low Probability	Probable	Highly Probability	Definite
<b>Significance (S)</b> is determined by combining the above criteria in the following formula:	[S = (E + D + Significance + Signi	$(R + M) \times P]$ = (Extent + Du $\times$ Probabilit	uration + Rever y	sibility + Mag	nitude)
Impact Significance Rating					
Total Score	4 to 15	16 to 30	31 to 60	61 to 80	81 to 100
Environmental Significance Rating (Negative (-))	Very low	Low	Moderate	High	Very High
Environmental Significance Rating (Positive (+))	Very low	Low	Moderate	High	Very High

### 5.1.1 IMPACT MITIGATION

The impact significance without mitigation measures will be assessed with the design controls in place. Impacts without mitigation measures in place are not representative of the proposed development's actual extent of impact and are included to facilitate understanding of how and why mitigation measures were identified. The residual impact is what remains following the application of mitigation and management measures and is thus the final level of impact associated with the development. Residual impacts also serve as the focus of management and monitoring activities during Project implementation to verify that actual impacts are the same as those predicted in this report.

The mitigation measures chosen are based on the mitigation sequence/hierarchy which allows for consideration of five (5) different levels, which include avoid/prevent, minimise, rehabilitate/restore, offset and no-go in that order. The idea is that when project impacts are considered, the first option should be to avoid or prevent the impacts from occurring in the first place if possible, however, this is not always feasible. If this is not attainable, the impacts can be allowed, however they must be minimised as far as possible by considering reducing the footprint of the development for example so that little damage is encountered. If impacts are unavoidable, the next goal is to rehabilitate or

restore the areas impacted back to their original form after project completion. Offsets are then considered if all the other measures described above fail to remedy high/significant residual negative impacts. If no offsets can be achieved on a potential impact, which results in full destruction of any ecosystem for example, the no-go option is considered so that another activity or location is considered in place of the original plan.

The mitigation sequence/hierarchy is shown in **Figure 5-1** below.



### Figure 5-1 - Mitigation Sequence/Hierarchy

The idea is that when project impacts are considered, the first option should be to avoid or prevent the impacts from occurring in the first place if possible, however, this is not always feasible. If this is not attainable, the impacts can be allowed, however they must be minimised as far as possible by considering reducing the footprint of the development for example so that little damage is encountered. If impacts are unavoidable, the next goal is to rehabilitate or restore the areas impacted back to their original form after project completion. Offsets are then considered if all the other measures described above fail to remedy high/significant residual negative impacts. If no offsets can be achieved on a potential impact, which results in full destruction of any ecosystem for example, the no-go option is considered so that another activity or location is considered in place of the original plan.

### 5.2 IMPACT SUMMARY FOR 2023

The following Independent Specialist Studies, amongst others, were undertaken during the original S&EIA process for the establishment of the 100MW Komati Power Station facility located within the Steve Tshwete Local Municipality in the Mpumalanga Province, which was originally authorised by the DFFE, on 02 February 2024:

- Heritage Impact Assessment
- Palaeontological Impact Assessment
- Agricultural Impact Assessment
- Aquatic Impact Assessment
- Avifaunal Impact Assessment
- Biodiversity Impact Assessment
- Paleontological Impact Assessment
- Social Impact Assessment
- Visual Assessment
- Traffic impact assessment

A summary of the identified impacts and corresponding significance ratings for the proposed Komati Solar PV and BESS Facility is indicated in **Table 5-2** below. With the implementation of the mitigation measures prescribed by the specialists, the impacts are rated as Moderate to Very Low.

Aspect	Impact Description	Phase	Character	Without Mitigation		With	Mitigation
Surface water	Stormwater Runoff	С	(-)	20 Low		12	Very Low
	Erosion	С	(-)	36	Moderate	12	Very Low
	Flooding	0	(-)	18	Low	12	Very Low
	Stormwater Runoff	0	(-)	20	Low	12	Very Low
	Erosion	0	(-)	36	Moderate	12	Very Low
	Stormwater Runoff	D	(-)	20	Low	12	Very Low
Groundwater	Hydrocarbon Spills	С	(-)	24	Low	12	Very Low
	Leachate/spills	С	(-)	24	Low	12	Very Low
	Spoil from excavated trenches	С	(-)	24	Low	12	Very Low
	Reduced recharge due to increase in hardstanding footprint	0	(-)	33	Moderate	20	Low
	Localised artificial recharge due to washing of solar panels	0	(-)	30	Low	12	Very Low
	Reduced leachate from contaminated soils	С	(+)	33	Moderate	36	Moderate
	Localised leachate from equipment	0	(-)	39	Moderate	22	Low

#### Table 5-2 – Impact Summary

Aspect	Impact Description	Phase Character Without With Mitigation		Without Mitigation		Mitigation	
	Localised increased leachate from contaminated soils due to following washing of solar panels		(-)	39	Moderate	22	Low
	Hydrocarbon Spills	D	(-)	24	Low	12	Very Low
	Leachate from equipment no longer in use	D	(-)	39	Moderate	30	Low
Soils and	Loss of soil	С	(-)	60	Moderate	22	Low
Potential	Erosion and sedimentation	С	(-)	60	Moderate	30	Low
	Loss of Agricultural Land	С	(-)	60	Moderate	30	Low
	Soil contamination	С	(-)	70	High	22	Low
	Loss of soil	0	(-)	45	Moderate	9	Very Low
	Erosion and sedimentation	0	(-)	50	Moderate	18	Low
	Loss of Agricultural Land	0	(-)	50	Moderate	30	Low
	Soil contamination	0	(-)	60	Moderate	30	Low
	Loss of soil	D	(-)	27	Low	9	Very Low
	Erosion and sedimentation	D	(-)	55	Moderate	20	Low
	Loss of Agricultural Land	D	(-)	9	Very Low	9	Very Low
	Soil contamination	D	(-)	22	Low	18	Low
Terrestrial Animal Species	Loss and disturbance of natural habitat - Mixed <i>Themeda triandra</i> Grassland	С	(-)	85	Very High	36	Moderate
	Loss and disturbance of natural habitat - Moist Mixed Grassland	С	(-)	70	High	27	Low

Aspect	Impact Description	Phase	Character	Without Mitigation		With	Mitigation
	Establishment and spread of alien invasive species	С	(-)	44	Moderate	12	Very Low
	Direct mortality, injuring and disturbance of fauna	С	(-)	48	Moderate	14	Very Low
	Loss of fauna species of conservation concern	С	(-)	51	Moderate	24	Low
	Establishment and spread of alien invasive species	Ο	(-)	44	Moderate	12	Very Low
	Establishment and spread of alien invasive species	D	(-)	44	Moderate	12	Very Low
Terrestrial Plant Species	Loss and disturbance of natural habitat - Mixed <i>Themeda triandra</i> Grassland	С	(-)	85	Very High	48	Moderate
	Loss and disturbance of natural habitat - Moist Mixed Grassland	С	(-)	70	High	30	Moderate
	Establishment and spread of alien invasive species	С	(-)	44	Moderate	12	Very Low
	Loss of flora SCC	С	(-)	68		24	Low
	Establishment and spread of alien invasive species	0	(-)	44	Moderate	12	Very Low
	Establishment and spread of alien invasive species	D	(-)	44	Moderate	12	Very Low
Aquatic	Loss of wetland habitat	С	(-)	75	High		N/A
Biodiversity	Changes in wetland health/functioning	С	(-)	44	Moderate	24	Low
	Contamination of riparian systems	С	(-)	40	Moderate	10	Very Low
	Wetland soil erosion	С	(-)	44	Moderate	24	Low
	Spread of AIS	С	(-)	48	Moderate	12	Very Low

KOMATI POWER STATION SOLAR PV FACILITY, BESS AND ASSOCIATED INFRASTRUCTURE, MPUMALANGA PROVINCE Project No.: 41103965 | Our Ref No.: 14/12/16/3/3/2/2456 ESKOM HOLDINGS SOC LIMITED

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Aspect	Impact Description	Phase	Character	With Mitig	out jation	With	Mitigation
	Spread of AIS	0	(-)	48	Moderate	10	Very Low
	Wetland soil erosion	0	(-)	55	Moderate	21	Low
	Water quality deterioration and contamination of wetland soils	0	(-)	48	Moderate	10	Very Low
Avifauna	Habitat loss, displacement, and disturbance of avifauna	С	(-)	36	Moderate	27	Low
	Habitat loss, displacement, and disturbance of avifauna	0	(-)	27	Low	27	Low
Traffic	Impact of construction vehicles on roads and access roads	С	(-)	28	Low	28	Low
	Transportation activities during operations	0	(-)	28	Low	28	Low
	Impact of construction vehicles on roads and access roads	D	(-)	28	Low	28	Low
Visual	Impact of visual effect on sensitive visual receptors in close proximity (within 1km)	С	(-)	64		36	Moderate
	Impact of visual impact on observers (residents and visitors) in close proximity (within 1km)	Ο	(-)	72	High	42	Moderate
	Impact of visual effect of the proposed PV facility within 1- 3km radius	0	(-)	45	Moderate	26	Low
	Impact of visual effect of the proposed PV facility within 3- 6km radius	0	(-)	24	Low	20	Low
	Impact of visual effect of the proposed PV facility within the greater area (beyond 6km radius)	0	(-)	18	Low	9	Very Low
	Impact of operational, safety and security	0	(-)	39	Moderate	22	Low

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Aspect	Impact Description	Phase	Character	Without Mitigation		With	Mitigation
'	lighting of the facility at night during the operational phase						
	Impact of solar glint and glare as a visual distraction and possible air/road travel hazard	0	(-)	54	Moderate	42	Moderate
	Impact of solar glint and glare on static ground- based receptors (residents of homesteads) in close proximity (within 1km)	Ο	(-)	64	High	42	Moderate
	Impact of ancillary infrastructure during the operational phase	0	(-)	24	Low	24	Low
	Impact of sense of place during the operational phase ( Indirect Impact)	0	(-)	26	Low	26	Low
	Visual impact of construction activities on sensitive visual receptors in close proximity (within 1km)	D	(-)	52	Moderate	33	Moderate
Heritage	Impact to known cultural heritage sites	С	(-)	12	Very Low	12	Very Low
Palaeontology	Destruction of fossil heritage	С	(-)	85	Very High	33	Moderate
Social	Economic Impact	С	(+)	14	Very Low	45	Moderate
	Employment	С	(+)	20	Low	56	Moderate
	Noise	С	(-)	16	Low	12	Very Low
	Dust	С	(-)	36	Moderate	20	Low
	Visual	С	(-)	64	High	48	Moderate
	Population influx	С	(-)	33	33 Moderate		Very Low
	Low Carbon Generation	0	(+)	20	Low	56	Moderate
	Employment Opportunities	0	(+)	30	Low	68	High

Aspect	Impact Description	Phase Character Without Mitigation		Without Mitigation		With	Mitigation
	Visual	0	(-)	64	High	33	Moderate
	Solar glint and glare	0	(-)	64	High	30	Low
	Loss of employment	D	(-)	45	Moderate	27	Low
	Reduced community investment	D	(-)	39	Moderate	27	Low
	Associated infrastructure	D	(-)	48	Moderate	16	Low

### 5.2.1 ENVIRONMENTAL IMPACT STATEMENT FOR 2023

The overall objective of the EIA was to provide sufficient information to enable informed decisionmaking by the authorities. This was undertaken through consideration of the proposed project components, identification of the aspects and sources of potential impacts and subsequent provision of mitigation measures.

It was the opinion of WSP that the information contained in the 2023 Final EIA Report was sufficient for the DFFE to make an informed decision for the environmental authorisation being applied for in respect of this project.

Mitigation measures were developed where applicable for the above aspects and are presented within the EMPr. It was imperative that all impact mitigation recommendations contained in the EMPr, of which the environmental impact assessment took cognisance, are legally enforced.

Considering the findings of the respective studies, no fatal flaws were identified for the proposed Project. Should the avoidance and mitigation measures prescribed be implemented, the significance of the considered impacts for all negative aspects pertaining to the environmental aspects is expected to be low. It was thus the opinion of the EAP that the Project could proceed, and that all the prescribed mitigation measures and recommendations are considered by the issuing authority.

The DFFE granted the environmental authorisation for the Project in February 2024.

### 5.3 CUMULATIVE IMPACTS FOR 2023

A summary of the identified cumulative impacts for the proposed Komati Solar PV and BESS Facility is indicated in **Table 5-3** below. All high-level impacts have the potential to be reduced if mitigation measures are implemented.

Aspect	Impact Description	Impact Significance
Surface water	Hydrological perspective	Low
Soil and Agricultural	Loss of soil	High
Potential	Erosion and sedimentation	High
	Loss of Agricultural Land	High
	Soil contamination	High

Table	5-3 –	Cumulative	Impact	Summar	v
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Terrestrial Animal Species	Loss and disturbance of natural habitat	High
Terrestrial Plant Species	Loss and disturbance of natural habitat	High
Traffic	Cumulative traffic impact	No impact
Visual	Potential cumulative visual impact of solar farms on the visual quality of the landscape	Low
Heritage	Cumulative heritage impacts	No impact
Palaeontology	Cumulative palaeontological heritage	High
Social	Social cumulative impact	Low

### 5.3.1 CUMULATIVE IMPACT STATEMENT

Considering the cumulative impact assessments of the respective studies, no fatal flaws were identified for the proposed Project. Should the avoidance and mitigation measures prescribed be implemented, the significance of the considered impacts for all negative aspects pertaining to the environmental aspects is expected to be acceptable.

Based on the above findings, it is thus the opinion of the EAP that the cumulative impact of the project will have an acceptable impact with the implementation of mitigation measures, and the project should be allowed to go ahead.

### 5.4 2024 SPECIALIST STUDIES

The specialists outlined in **Table 5-4** were appointed to undertake the necessary specialist reporting to determine and assess the potential impacts associated with the proposed amendments. Each of the specialists have reviewed the previous studies (2023) and the proposed amendments to the project and have provided a specialist statement as to whether the proposed amendment will change the impacts identified in the previous studies as well as to whether any additional mitigation measures will be required. The Specialist Declarations for the specialists are included in **Appendix C**. A summary of the findings of the 2024 statements is provided below in **Section 5.5** below.

Assessment	Name of Specialist	Company	Qualifications	Sections in the report
Air Quality	Kirsten Collet	WSP	<ul><li>Master of Science, Atmospheric Sciences</li><li>SACNASP</li></ul>	<ul><li>Section 5.5.12</li><li>Appendix N</li></ul>
Noise	Kirsten Collet	WSP	<ul><li>Master of Science, Atmospheric Sciences</li><li>SACNASP</li></ul>	<ul><li>Section 5.5.12</li><li>Appendix N</li></ul>
Surface Water	Sinesipho Vuba / Nivi Jaggath	WSP	<ul> <li>BSc Eng. Civil</li> <li>South African Institute of Civil Engineers</li> <li>Engineering Council of South Africa</li> </ul>	<ul><li>Section 5.5.4</li><li>Appendix G</li></ul>
Groundwater	Sarah Skinner	WSP	<ul> <li>MSc, Water Utilisation</li> </ul>	<ul><li>Section 5.5.5</li><li>Section 6.5</li></ul>

Table 5-4:	Specialists appointed to	determine and	assess the poten	tial impacts.
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Assessment	Name of Specialist	Company	Qualifications	Sections in the report
			<ul> <li>SACNASP (Geology)</li> </ul>	<ul> <li>Appendix H</li> </ul>
Soils and Agricultural Potential	Johan Lanz	Independent consultant	<ul> <li>Master of Science</li> <li>SACNASP (Earth Science)</li> </ul>	<ul><li>Section 5.5.1</li><li>Section 6.1</li><li>Appendix D</li></ul>
Terrestrial Animal Species	Rudolph Greffrath	WSP	<ul><li>B-tech Degree in Nature Conservation,</li><li>SACNASP</li></ul>	<ul><li>Section 5.5.2</li><li>Section 6.2</li><li>Appendix E</li></ul>
Terrestrial Plant Species	Rudolph Greffrath	WSP	<ul><li>B-tech Degree in Nature Conservation,</li><li>SACNASP</li></ul>	<ul><li>Section 5.5.2</li><li>Section 6.2</li><li>Appendix E</li></ul>
Aquatic Biodiversity	Rudolph Greffrath	WSP	<ul><li>B-tech Degree in Nature Conservation,</li><li>SACNASP</li></ul>	<ul><li>Section 5.5.4</li><li>Section 6.4</li><li>Appendix GO</li></ul>
Avifauna	Low de Vries	Volant Environmental	<ul> <li>PhD: Zoology</li> <li>SACNASP (Zoological Science)</li> </ul>	<ul><li>Section 5.5.3</li><li>Section 6.3</li><li>Appendix F</li></ul>
Traffic	Pieter Pretorius	Innovative Transport Solutions (Pty) Ltd	<ul> <li>Ph.D. (Engineering)</li> <li>Registered Professional Engineer</li> <li>Member of the South African Institution of Civil Engineering</li> </ul>	<ul> <li>Section 5.5.8</li> <li>Section 6.8</li> <li>Appendix J</li> </ul>
Visual	Lourens du Plessis	LOGIS	<ul> <li>BA (University of Pretoria) Geography and Anthropology</li> <li>SAGC</li> </ul>	<ul><li>Section 5.5.7</li><li>Section 6.7</li><li>Appendix I</li></ul>
Heritage	Anton Pelser	A Pelser Archaeological Consulting	<ul> <li>MA Archaeology</li> </ul>	<ul><li>Section 5.5.9</li><li>Section 6.9</li><li>Appendix K</li></ul>
Palaeontology	Heidi Fourie	Independent Consultant	Ph.D Palaeontology	<ul><li>Section 5.5.10</li><li>Section 6.10</li><li>Appendix L</li></ul>
Social	Steve Horak	WSP	<ul> <li>MA Environment &amp; Society</li> </ul>	<ul><li>Section 5.5.11</li><li>Appendix M</li></ul>

### 5.5 2024 SPECIALIST FINDINGS

### 5.5.1 AGRICULTURE, SOIL AND LAND USE CAPACITY

SoilZA did not conduct the original agricultural assessment but was appointed to assess whether the proposed amendments would have any influence on agricultural impacts, as originally assessed. All of the proposed amendments will occur within the previously assessed footprint of the development, apart from the expansion of the BESS, which is all within non-agricultural land within the power station precinct. The amendments themselves therefore have zero agricultural impact and consequently have absolutely no influence on the agricultural impacts of the development, as previously assessed.

According to the specialist (**Appendix D**), the assessment of the impacts of the proposed amendments confirms that:

- The amendments do not change the nature or significance of the impact as previously assessed;
- There are no required changes or additions to the mitigation measures as a result of the proposed amendments;
- There are no required changes to the EMPr as a result of the proposed amendments; and
- The proposed amendments are acceptable in terms of agricultural impact.

It should be noted that, in addition to the Environmental Authorisation, the project will require approval in terms of applicable municipal land use legislation. This approval may not be supported by Department of Agriculture because part of the solar facility (PV site A1) occupies existing croplands.

### 5.5.2 BIODIVERSITY

The biodiversity assessment (**Appendix E**) concluded that since the amendments are proposed within the existing site footprint, terrestrial plant species impacts (to those assessed in the 2023 studies) are not envisaged as a result of the amendments. Similarly, from a terrestrial animal perspective, no additional impacts are envisaged. It is recommended that the mitigation measures, as presented in the 2023 study, must be rigorously implemented..

### 5.5.3 AVIFAUNA

Compared to the previous impact assessment undertaken by Volant Environmental in 2023, it is unlikely that the amendments to the Komati SEF would change (*i.e.* increase or decrease) the current rated impacts to birds. According to the Komati Solar Energy Facility Amendment Letter by Volant Environmental (September 2024)(**Appendix F**) the current Komati SEF development would contribute to approximately 157 ha of habitat loss in an already transformed area, with LOW avifaunal significance, and thus supports the sensitivity rating of the Screening Tool. The vegetation present on the development site yielded few species of concern, and at low abundance. No nesting sites or roost sites of red-listed species were located on site. No significant seasonal variation in species assemblages and movements across the development site are likely to occur, less so for probable species of concern, thus the overall impact of the development on avifauna is considered to be LOW.

The letter states that the impacts expected by the amended development of the Komati SEF will comprise of habitat destruction and the displacement, and disturbance of local bird assemblages, as well as the direct mortalities of avifauna which are likely to arise from electrocution from power line

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infrastructure, and expected collisions with solar panels, overhead power lines and any associated infrastructure. The displacement, habitat destruction and disturbance of avifauna, however, is likely to be restricted to the development site itself. Small passerines are most likely to be affected by the construction of the development site, however, none of which were recorded on site, are red-list species. Impacts on larger non-passerines might occur, but none of which were recorded on site and likely occur uncommonly in the area.

To further reduce risk on avifauna, mitigation measures during both the construction and postconstruction phases can be executed. These mitigation measures include restricting habitat loss and limiting disturbance to the footprint of the development area itself, whilst bird flappers can be successfully used to reduce collisions with overhead powerlines and associated infrastructure, especially in areas of high-risk areas which will become apparent during the monitoring phase. With these mitigation measures in place, impact on avifauna by the development of this site will be further reduced, maintaining a low risk, and thus no fatal flaws are assigned to the development of this site with respect to avifauna.

Therefore, the proposed development footprint of the amended Komati SEF is considered suitable for development. No avifaunal impacts associated with the Komati SEF that cannot be mitigated to an adequate level were detected.

### 5.5.4 AQUATIC

The biodiversity assessment (**Appendix O**) concluded that since the amendments are proposed within the existing site footprint, Aquatic and Wetland impacts (to those assessed in the 2023 studies) are not envisaged. Mitigation measures, as presented in the 2023 study, must be rigorously implemented. As per the 2023 impact statement, which still holds true, the currently proposed project infrastructure largely avoids the loss of significant areas of natural habitat due to active avoidance of these areas as part of the ongoing planning process, vegetation clearing would result in loss of additional 24.5 ha of moderately/largely modified seep habitats (Seep 1), contributing to cumulative impacts in terms of direct loss of seep wetlands at the landscape level..

### 5.5.5 SURFACE WATER

The Surface Water Specialist Statement by WSP (September 2024) confirmed that there are no new findings (**Appendix G**), and that the area has largely remained unchanged since the surface water assessment undertaken in 2023.

No new mitigation measures are required as a result of the proposed amendments.

### 5.5.6 GROUNDWATER

The Groundwater Statement by WSP (**Appendix H**) states that the groundwater aspects relevant to the groundwater are associated with quality impacts associated with site equipment, fuel storage areas and the existing footprint and quantity impacts associated with reduced recharge to the increased hard standing footprint and localised *ad hoc* artificial recharge from water used for washing in areas identified as potentially contaminated (WSP contaminated land study, 2023).

The main receptors are community boreholes located in the surrounding farms and rivers both in terms of the aquatic ecology and as potential pathway of contaminated water downstream.

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The amendments made to the project will not change any of these groundwater aspects. Therefore, the impacts previously identified are still relevant with no additional impacts triggered due to the amendments.

Furthermore, there are no required changes or additions to the mitigation measures as a result of the proposed amendments; and therefore no required changes to the EMPr as a result of the proposed amendments.

### 5.5.7 VISUAL

The Visual Assessment Letter by Logis (September 2024)(**Appendix I**) confirms that the proposed amendment is not expected to significantly alter the influence of the project infrastructure on areas of higher viewer incidence (observers traveling along the roads within the region) or potential sensitive visual receptors (residents of homesteads and settlements in closer proximity to the facility).

The proposed amendment is consequently not expected to influence the anticipated visual impact, as stated in the original VIA report (i.e. the visual impact is expected to occur regardless of the amendment). This statement relates specifically to the assessment of the visual impact within a 1km radius of the SEF infrastructure (potentially moderate significance), but also generally apply to potentially low to very low visual impacts at distances of up to 6km from the structures.

From a visual perspective, the proposed amendment will therefore require no (zero) changes to the significance rating within the original visual impact assessment report that was used to inform the approved EIA. In addition to this, no new mitigation measures are required.

There are no new assessment guidelines which are now relevant to the authorised development which were not undertaken as part of the initial Visual Resource Management Africa Visual Impact Assessment report (2013). Additional to this, and as stated above, there have been no changes to the environment of the proposed development site or the larger surrounding environment.

It is suggested that the amendment proposing the expansion of the SEF, BESS and associated infrastructure be supported, subject to the conditions and recommendations as stipulated in the original EA, and according to the Environmental Management Programme (EMPr) and suggested mitigation measures, as provided in the original VIA report.

### 5.5.8 TRAFFIC AND TRANSPORT

The Traffic Impact Statement Letter by Innovative Transport Solutions (September 2024) (**Appendix J**) concluded that these proposed amendments would have no impact on the critical items of the May 2023 Traffic Impact Assessment report.

The environmental impact of the transportation activities during the construction, operations and decommissioning phases of the proposed Eskom Komati PV and BESS project, with a significance rating of N2, is expected to be low.

It is recommended that a Transport Management Plan should be compiled for the construction and decommissioning phase of the project. The aim of the Traffic Management Plan would be to improve road safety during these phases for the community as well as to limit the construction and decommissioning phase traffic within the local peak hours.

### 5.5.9 HERITAGE

The specialist letter (**Appendix K**) concluded that, based on the results of the previous 2023 Phase 1 Heritage Impact Assessment conducted in the area, the likelihood of any significant cultural heritage (archaeological and/or historical) sites, features or material being present in the additional areas forming part of the proposed expansion (amendment) work for the Solar PV/BESS and Associated Infrastructure is low. No further field-based assessments are therefore recommended. The proposed amendments will not have any affect on the previous impacts and no additional mitigation measures are required. The recommended Chance Finds Procedure should however be drafted and implemented as required in the 2023 HIA Report.

### 5.5.10 PALAEONTOLOGICAL

Based on Palaeontological Impact Assessment: Phase 1 Field Study by Anton Pelser Archaeological Consulting (May 2023) (**Appendix L**) the proposed development has received no objections (see Recommendation B in the specialist report). However, due to the **very high** palaeontological sensitivity of the site, a Phase 1 Palaeontological Impact Assessment: Field Study is necessary to assess potential impacts on fossiliferous outcrops. A Phase 2 Palaeontological Mitigation will only be required if the Phase 1 Assessment identifies a fossiliferous formation from the Karoo Supergroup or if fossils are discovered during construction. The relevant protocol is attached in Appendix 2 of the specialist report.

This project has the potential to greatly benefit the community by generating both short- and longterm employment opportunities, enhancing life expectancy, promoting community growth, and fostering overall social development.

It is crucial to conserve palaeontological materials. Should any palaeontological material be exposed during activities such as clearing, digging, excavating, drilling, or blasting, the South African Heritage Resources Agency (SAHRA) must be notified immediately. All construction activities must halt, a 30-meter no-go barrier must be established, and a palaeontologist should be called in to determine appropriate mitigation measures.

All the land involved in the development was assessed and none of the property is unsuitable for development.

#### 5.5.11 SOCIO- ECONOMIC

The Social Specialist Statement Letter by WSP (September 2024) considered and reviewed the 2013 social impact assessment, significance ratings, and mitigation measures to consider the changes in activities resulting from the EA's proposed Project changes (**Appendix M**). The proposed amendments to the projects will not change any of the identified social aspects. Therefore, the impacts previously identified are still relevant with no additional impacts triggered due to the amendments.

#### 5.5.12 NOISE AND AIR

The Air Quality and Acoustics Specialist Statement by WSP (September 2024) the above changes are proposed within the existing site footprint, air quality and environmental acoustic impacts on additional receptors (to those assessed in the 2022 studies) are not envisaged (**Appendix N**).

From an air quality perspective, emissions during the construction phase (although having impacts rated as "low" in the original assessment) will be of greatest concern with the BESS Area A footprint increasing slightly and the construction of three new sub-stations. Mitigation measures, as

presented in the 2022 study, must be rigorously implemented, specifically at the substation sites which are in closest proximity to the Komati residential receptors (substation 1 and 2). For the operational phase, air quality impacts are not envisaged.

From an environmental noise perspective, noise from construction activities will be of greatest concern, although being rated with "low" impacts in the original assessment. Mitigation measures, as presented in that assessment, must be rigorously implemented, specifically at the substation sites which are in closest proximity to the Komati residential receptors (substation 1 and 2). For the operational phase, noise impacts will be minimal, with the sub-stations being the largest source of noise. Since two of the proposed sub-stations will be located in close proximity to the Komati residential area, it is therefore recommended that substations with the lowest possible sound power levels be installed on site or attenuation barriers be installed alongside each sub-station should noise complaints arise from such sources.

The overall air quality and noise impacts of the proposed Komati Solar PV and BESS Project are still deemed as "low" and it is further recommended that the Project be authorised without any notable impacts on the ambient air quality or noise climate of the surrounding area.

### 6 ENVIRONMENTAL MANAGEMENT PROGRAMME

The EMPr was originally complied by WSP as part of the 2023 EIA and approved. The following section outlines whether additional or amended mitigation measures have been recommended by specialists in 2024. The original 2023 EMPr has been amended to include the proposed amendments. The Amended EMPr is included in **Appendix P**.

### 6.1 AGRICULTURE, SOIL AND LAND USE CAPACITY ADDITIONAL OR AMENDED MITIGATION MEASURES

No additional or amended mitigation measures have been recommended by the specialist. The existing mitigation measures included within the approved EMPr remain valid. No changes have therefore been made to the EMPrs as a result of the Agricultural Assessment 2024 findings.

### 6.2 BIODIVERSITY ADDITIONAL OR AMENDED MITIGATION MEASURES

No additional or amended mitigation measures have been recommended by the specialist. The existing mitigation measures included within the approved EMPr remain valid. No changes have therefore been made to the EMPrs as a result of the Biodiversity Assessment 2024 findings.

### 6.3 AVIFAUNA ADDITIONAL OR AMENDED MITIGATION MEASURES

No additional or amended mitigation measures have been recommended by the specialist. The existing mitigation measures included within the approved EMPr remain valid. No changes have therefore been made to the EMPrs as a result of the Avifauna Assessment 2024 findings.

### 6.4 AQUATIC ADDITIONAL OR AMENDED MITIGATION MEASURES

No additional or amended mitigation measures have been recommended by the specialist. The existing mitigation measures included within the approved EMPr remain valid. No changes have therefore been made to the EMPrs as a result of the Aquatic Assessment 20244 findings.

### 6.5 SURFACE WATER ADDITIONAL OR AMENDED MITIGATION MEASURES

No additional or amended mitigation measures have been recommended by the specialist. The existing mitigation measures included within the approved EMPr remain valid. No changes have therefore been made to the EMPrs as a result of the Surface Water Impact Assessment 2024.

### 6.6 GROUNDWATER ADDITIONAL OR AMENDED MITIGATION MEASURES

No additional or amended mitigation measures have been recommended by the specialist. The existing mitigation measures included within the approved EMPr remain valid. No changes have therefore been made to the EMPrs as a result of the Groundwater Impact Assessment 2024 findings.

### 6.7 VISUAL ADDITIONAL OR AMENDED MITIGATION MEASURES

No additional or amended mitigation measures have been recommended by the specialist. The existing mitigation measures included within the approved EMPr remain valid. No changes have therefore been made to the EMPrs as a result of the Visual Assessment 2023 findings.

### 6.8 TRAFFIC AND TRANSPORT ADDITIONAL OR AMENDED MITIGATION MEASURES

No additional or amended mitigation measures have been recommended by the specialist. The existing mitigation measures included within the approved EMPr remain valid. No changes have therefore been made to the EMPrs as a result of the Traffic Assessment 2023 findings.

### 6.9 HERITAGE ADDITIONAL OR AMENDED MITIGATION MEASURES

No additional or amended mitigation measures have been recommended by the specialist. The existing mitigation measures included within the approved EMPr remain valid. No changes have therefore been made to the EMPrs as a result of the Socio-Economic Assessment 2024 findings. The recommended Chance finds Procedure should however be drafted and implemented as required in the 2023 HIA Report.

### 6.10 PALAEONTOLOGICAL ADDITIONAL OR AMENDED MITIGATION MEASURES

No additional or amended mitigation measures have been recommended by the specialist. The existing mitigation measures included within the approved EMPr remain valid. No changes have therefore been made to the EMPrs as a result of the Palaeontological Assessment 2024 findings.

### 6.11 SOCIO- ECONOMIC ADDITIONAL OR AMENDED MITIGATION MEASURES

No additional or amended mitigation measures have been recommended by the specialist. The existing mitigation measures included within the approved EMPr remain valid. No changes have therefore been made to the EMPrs as a result of the Socio-Economic Assessment 2024 findings.

### 6.11.1 AIR QUALITY AND ACOUSTICS ADDITIONAL OR AMENDED MITIGATION MEASURES

No additional or amended mitigation measures have been recommended by the specialist. The existing mitigation measures included within the approved EMPr remain valid. No changes have therefore been made to the EMPrs as a result of the final assessment 2024 findings .

### 7 PUBLIC PARTICIPATION

### 7.1 PURPOSE OF PUBLIC PARTICIPATION PROCESS

Public participation is understood to be a series of inclusive and culturally appropriate interactions aimed at providing I&APs with opportunities to express their views, so that these can be considered and incorporated into the decision-making process, if required. Effective public participation requires the prior disclosure of relevant and adequate project information to enable I&APs to understand the risks, impacts, and opportunities of the project.

The following was undertaken as part of the Public Participation Process for the amendment:

Basic reasons why the public should get involved in the Amendment Process:

- The environment is held in public trust, therefore use of environmental resources is everyone's concern in line with the Constitution.
- Public participation is proper, fair conduct in public decision-making activities. Focus on vulnerable and disadvantaged person and offer equitable participation due to historical issues.
- A way to ensure that projects meet the citizens' needs and are suitable to the affected public.
- Finally, the final decision is informed when local knowledge and values are included and when expert knowledge is publicly examined.

### 7.1.1 OBJECTIVES

The objectives of the public participation process can be summarised as follows:

- Identify relevant individuals, organisations and communities who may be interested in or affected by the authorised project;
- Clearly outline the scope of the project, including the scale and nature of the existing and proposed activities;
- Identify viable project alternatives that will assist the relevant authorities in making an informed decision;
- Identify shortcomings and gaps in existing information;
- Identify key concerns, raised by I&APs;
- Highlight the potential for environmental impacts, whether positive or negative; and
- To inform and provide the public with information and an understanding of the project, issues and solutions.

### 7.1.2 WHAT IS AN INTERESTED AND AFFECTED PARTY?

An I&AP is defined as any person, group of persons or organisations interested in or affected by an activity, and any organ of state that may have jurisdiction over any aspect of the activity.

#### 7.1.2.1 Rights, Roles and Responsibilities of the I&AP

In terms of Chapter 6, specifically Section 43(1) of the NEMA EIA Regulations 2014, as amended registered I&APs have the right to bring to the attention of the CA any issues that they believe may be of significance to the consideration of the application. The rights of I&AP are qualified by certain obligations, namely:

I&APs must ensure that their comments are submitted within the timeframes that have been approved by the Department of Environmental Affairs (DEA), or within any extension of a timeframe agreed by the applicant, Environmental Assessment Practitioner (EAP) or CA; and

 Disclose to the EAP any direct business, financial, personal or other interest that they might have in the approval or refusal of the application.

In order to participate effectively, I&APs should:

- Become involved in the process as early as possible;
- Register as a I≈
- Advise the EAP of other I&APs who should be consulted;
- Follow the process once it has been concluded;
- Read the material provided and actively seek to understand the issues involved;
- Give timeous responses to correspondence;
- Be respectful and courteous towards other I&APs;
- Refrain from making subjective, unfounded or ill-informed statements; and
- Recognise that the process is confined to issues that are directly relevant to the application.

### 7.2 PUBLIC PARTICIPATION PLAN

**Table 7-1** below outlines the Public Participation Plan for the Part 2 Amendment Process for the

 Komati Solar PV and BESS Facility.

#### Table 7-1:Public Participation Plan

Summary of PPP requirement (GNR 326 of EIA Regulations)	Plan/Activities
<ul> <li>41(2) The person conducting a PPP must give notice to all potential I&amp;APs by-</li> <li>(a) fixing a notice board at a place conspicuous to and accessible by the public at the boundary, on the fence or along the corridor of— <ul> <li>(i) the site where the activity to which the application or proposed application relates is or is to be undertaken; and</li> <li>(ii) any alternative site;</li> </ul> </li> </ul>	<ul> <li>Placement of four (4) site notices (in English, Afrikaans and IsiZulu) at appropriate locations onsite and in the surrounding area.</li> <li>This includes the boundary/access road to the facility, as well as additional public places within the project area, such as grocery stores, municipalities, and/or local public libraries.</li> </ul>
<ul> <li>(b) giving written notice, in any of the manners provided for in section 47D of the Act, to—</li> <li>(i) the occupiers of the site and, if the proponent or applicant is not the owner or person in control of the site on which the activity is to be undertaken, the owner or person in control of the site where the activity is or is to be undertaken and to any alternative site where the activity is to be undertaken;</li> <li>(ii) owners, persons in control of, and occupiers of land adjacent to the site where the activity is or is to be undertaken and to any alternative site where the activity is to be undertaken;</li> <li>(iii) owners, persons in control of the ward in which the site and alternative site where the activity is to be undertaken;</li> <li>(iii) the municipal councillor of the ward in which the site and alternative site is situated and any organisation of ratepayers that represent the community in the area;</li> <li>(iv) the municipality which has jurisdiction in the area;</li> <li>(v) any organ of state having jurisdiction in respect of any aspect of the activity; and</li> <li>(vi) any other party as required by the competent authority;</li> </ul>	<ul> <li>Written notification (in English, Afrikaans and IsiZulu) will be sent to owners and occupiers on or adjacent to the facility, municipality ward councillors, local and district municipalities, and relevant state departments.</li> <li>General communication (written notification) with stakeholders (public and government departments/authorities) throughout the amendment process.</li> <li>Stakeholders will be added to the database on request as the project progress.</li> </ul>
<ul> <li>(c) placing an advertisement in—</li> <li>(i) one local newspaper; or</li> <li>(ii) any official Gazette that is published specifically for the purpose of providing public notice of applications or other submissions made in terms of these Regulations;</li> </ul>	Two newspaper adverts will be placed, one IsiZulu and English version in the Witbank News and the other (English and Afrikaans) in the Highvelder to formally announce the commencement of the Part 2 Amendment Application and associated EMPr amendment process, requesting stakeholders to register their interest in the project, and informing them of the release of the Draft Part 2 Amendment Report and amended EMPr for public review and comment.
(d) placing an advertisement in at least one provincial newspaper or national newspaper, if the activity has or may have an impact that	

Summary of PPP requirement (GNR 326 of EIA Regulations)	Plan/Activities
extends beyond the boundaries of the metropolitan or district municipality in which it is or will be undertaken	
<ul> <li>(e) using reasonable alternative methods, as agreed to by the competent authority, in those instances where a person is desirous of but unable to participate in the process due to—</li> <li>(i) illiteracy;</li> <li>(ii) disability; or</li> <li>(iii) any other disadvantage.</li> </ul>	<ul> <li>The existing database for the Komati Solar PV and BESS Facility project will be verified and updated for the purposes of the Part 2 Amendment and EMPr amendment process. As part of the verification process, existing I&amp;APs will be contacted telephonically and asked to confirm their preferred method of communication. The POPI act will also be put into consideration to confirm all the relevant POPI requirements for the database.</li> <li>The relevant ward councillors are to be contacted to ensure that communicating relevant Project information to community members.</li> <li>No public meetings or focus group discussions have been provided for.</li> </ul>
(42) A proponent or applicant must ensure the opening and maintenance of a register of interested and affected parties and submit such a register to the competent authority,	<ul> <li>Stakeholders with a potential interest in the Project will be identified at the outset of the Project. As noted above, the existing databases will be verified and updated for the purposes of the Part 2 Amendment and EMPr amendment process. The database will be updated to include landowners and other stakeholders relevant to the Projects.</li> <li>All stakeholders identified will be registered on the project stakeholder database, and the database will be maintained throughout the amendment process.</li> </ul>
(43) & (44) Registered Interested and affected parties (I&APs) must be given 30 days to comment on the draft Report	The Draft Amendment Report and amended EMPr will be made available to all stakeholders for a 30-day comment period. Strict adherence to all best practice measures is ensured throughout PPP. As a result, the Draft AR and amended EMPr will be made available to stakeholders as follows:
	<ul> <li>Hard Copy: Komati Paypoint and Library;</li> <li>Hard Copy: Komati Power Station Entrance;</li> <li>Hard Copy: Hendrina Public Library;</li> <li>Hard Copy: Eastdene Public Library;</li> <li>Hard Copy: Gerard Sekoto Library;</li> <li>Electronic Copy: WSP Website (<u>https://www.wsp.com/en-ZA/services/public-documents</u>); and</li> <li>Electronic Copy: WSP Datafree Website (<u>https://wsp-engage.com/</u>).</li> </ul>
	A Comment and Response Report (CRR) will be generated for inclusion in the Final Amendment Report and amended EMPr for consideration by the competent authority.

### 7.3 PUBLIC PARTICIPATION TO DATE

### 7.3.1 PRE-APPLICATION CONSULTATION

A pre-application meeting was held on **04 June 2024** with the DFFE in order to discuss the proposed amendment Project. The minutes of this meeting are included in **Appendix R**.

### 7.3.2 IDENTIFICATION OF KEY STAKEHOLDERS

Section 41 of the EIA Regulations (2014, as amended) states that written notices must be given to identified stakeholders as outlined in **Table 7-2**.

Relevant authorities (Organs of State) have been automatically registered as I&APs. In accordance with the EIA Regulations, 2014 (as amended), all other persons must request in writing to be placed on the register, submit written comments, or attend meetings to be registered as stakeholders, and included in future communication regarding the Project.

NEMA Requirement	Discussion	
the owner or person in control of that land if the applicant is not the owner or person in control of the land	The project activity is located on 1 portion of privately- owned land. The landowner has been included on the I&AP database.	
the occupiers of the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken	All landowners have been contacted to confirm whether there are any occupiers on the land portions. Occupiers have been included on the database.	
owners and occupiers of land adjacent to the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken	Adjacent landowner and occupier details were collected, and the landowners were notified via a project notification letter via email and/or SMS notification.	
the municipal councillor of the ward in which the site or alternative site is situated and any organisation of ratepayers that represent the community in the area	Ward Councillor has been included on the I&AP database, including: Ward 4	
the municipality which has jurisdiction in the area	The Steve Tshwete Local Municipality which is located in the Nkangala District Municipality both of which have been included on the I&AP database.	
any organ of state having jurisdiction in respect of any aspect of the activity	The DFFE has been identified as the competent authority. The Mpumalanga Department of Agriculture, Rural Development, Land and Environmental Affairs (MDARDLEA) are included on the I&AP database as a commenting authority.	
any other party as required by the competent authority.	All tiers of government, namely, national, provincial, local government and parastatals have been included on the I&AP database. Inclusive of:	
	<ul> <li>Department of Mineral Resources and Energy;</li> <li>Mpumalanga Departments of Water and Sanitation;</li> <li>MDARDLEA;</li> <li>Department of Rural Development and Land Reform;</li> <li>DFFE Directorate: Biodiversity Conservation;</li> <li>DFFE Directorate: Protected Areas;</li> </ul>	

#### Table 7-2: Interested and Affected Parties Table

KOMATI POWER STATION SOLAR PV FACILITY, BESS AND ASSOCIATED INFRASTRUCTURE,<br/>MPUMALANGA PROVINCECONFIDENTIAL | WSPProject No.: 41103965 | Our Ref No.: 14/12/16/3/3/2/2456October 2024ESKOM HOLDINGS SOC LIMITEDPage 60 of 69

NEMA Requirement	Discussion	
	<ul> <li>Mpumalanga Department of Water and Sanitation: Oliphant's Proto-CMA;</li> <li>Mpumalanga Department of Social Development;</li> <li>Mpumalanga Department of Public Works, Roads and Transport;</li> <li>Mpumalanga Department of Co-Operative Governance and Traditional Affairs;</li> <li>Mpumalanga Heritage Resources Authority;</li> <li>South African Heritage Resources Agency (SAHRA);</li> <li>Department of Defence Force Mpumalanga;</li> <li>Nkangala District Municipality;</li> <li>Steve Tshwete Local Municipality;</li> <li>BirdLife South Africa;</li> <li>Endangered Wildlife Trust;</li> <li>South African National Biodiversity Institute;</li> <li>Mpumalanga Tourism and Parks Agency.</li> </ul>	

### 7.3.3 NOTIFICATION PROCEDURES

#### 7.3.3.1 Direct Notification

Notification of the proposed Amendment Application will be issued to potential Stakeholders, via direct correspondence (i.e. site notices and e-mail) on **08 October 2024**. The notification letter to be circulated is included in **Appendix Q.4** of this report. Proof of notification will be included in Final Assessment Report (FAR)

#### 7.3.3.2 Advertisement

Notification of the proposed Project will be issued to the general public via an advertisement on in the Witbank News and Highvelder newspapers respectively. The purpose of the advertisement was to notify the general public of the proposed application and provide an opportunity to register on the Project database and provide input into the process. A copy of the advertisement is included as **Appendix Q.2.** The advertisement publication details are provided in **Table 7-3**. Proof of placement of the advertisements will be included in the FAR.

Table 7-3:	Dates on which the advert was p	ublished

Newspaper	Publication Date	Language
Witbank News	04 October 2024	English and IsiZulu
Highvelder	03 October 2024	English and Afrikaans

#### 7.3.3.3 Site notices

In accordance with GNR 326 Section 41(2)(a-b) site notices were developed (**Appendix Q.3**) to be placed at strategic points in close proximity to the proposed Project site, as well as in public places within Steve Tshwete Local Municipality and Nkangala District Municipality. Site notices were put up at the following points:

- Komati Power Station Entrance;
- Boundary/access road to the Solar PV Site A and B;
- Blinkplan Police Station;

- OK Foods Super Market;
- Komati Paypoint and Library;
- Nkangala District Municipality Office;
- Gerard Sekoto Library;
- Eastdene Public Library; and
- Hendrina Public Library.

### 7.3.3.4 Availability of the Draft Amendment Report

The DAR will be placed on public review for a period of 30 days from **08 October 2024** to **08 November 2024**, at the venues as follows:

- Hard Copy: Komati Paypoint and Library;
- Hard Copy: Komati Power Station Entrance;
- Hard Copy: Hendrina Public Library.
- Hard Copy: Eastdene Public Library;
- Hard Copy: Gerard Sekoto Library;
- Electronic Copy: WSP Website (<u>https://www.wsp.com/en-ZA/services/public-documents</u>); and
- Electronic Copy: WSP Datafree Website (https://wsp-engage.com/).

### 7.3.3.5 Availability of the Final Amendment Report

The Final amendment report will be submitted to the DFFE for decision making. Furthermore, all registered I&APs will be notified that the Final report will be placed on the WSP website and the WSP datafree website for their information.

### 7.3.4 STAKEHOLDER REGISTRATION

All stakeholders that either called in or sent written correspondence, such as emails, fax, or post, to the EAP have been added to the database and their comments and/or queries have been responded to.

### 7.4 COMMENTS RECEIVED

Comments received from registered stakeholders during the public review period will be captured and responded to within a comment and response table. No comments have been received with respect to the Amendment Process to date.

### 8 ENVIRONMENTAL IMPACT STATEMENT

Eskom Holdings SOC Limited (Eskom) are proposing to develop the 100 MW Solar Photovoltaics (PV) Energy Facility (SEF); 150 MW Battery Energy Storage System (BESS); and associated infrastructure at the Komati Power Station located in the Mpumalanga Province, South Africa.

The Komati Solar PV and BESS Facility received environmental authorisation (EA) on 02 February 2024 (DFFE Ref: 14/12/16/3/3/2/2456). The applicant seeks to amend the EA as follows:

- Extension of BESS Area A;
- Removal of the approved Onsite Substations in PV Area A and PV Area B;
- Amendment of the layout of the Solar PV Facility and its associated infrastructure;
- Proposed development of 3 new Onsite Substations (2 in PV Area A and 1 in PV Area B) and associated overhead and underground cabling (capacity 33kV); and
- Removal of the approved 132kV Grid Connection.

WSP were appointed to undertake the amendment process in terms of Regulation 31 and 32 of the EIA Regulations (2014), as amended. In addition, various specialists were appointed to assess the proposed amendments to the EA.

This DAR will be submitted in support of the application for amendment of the EA issued to Eskom, for the operation of the 100MW facility at the Komati Power Station located in the Mpumalanga Province. Due to the fact that the proposed amendments constitute a change of scope, a Part 2 Amendment Process in terms of Regulation 31 of the EIA Regulations (2014), as amended is required.

The motivation, advantages and disadvantages for the proposed amendments are outlined in **Table 4-2**. It can be noted that no disadvantages have been identified.

All of the specialists concluded that the proposed amendments are acceptable with no additional mitigation required.

The updated EMPr is included in **Appendix P**).

It can be confirmed that public participation will be undertaken in terms of Chapter 6 of the NEMA EIA Regulations 2014, as amended.

This report was provided to potentially interested and affected parties for a 30-day review period from **08 October 2024** to **08 November 2024**. All comments received will be used to update the FAR which will be submitted to the competent authority, the DFFE. The DFFE is tasked with making a decision on the amendment application. The amendments have been outlined in\_**Table 8-1**.
# 

#### Proposed amendments to the Komati Solar PV Facility EA (DFFE Ref: Table 8-1: 14/12/16/3/3/2/2456)

Aspect to be Amended	Authorised		Prop	osed Amen	dment	EA Reference	
The purpose of this Part 2 amendment is to expand the BESS Area A, along with the amendment of the Solar PC layout and associated infrastructure, as well as the removal of the 132kV grid connection .							
PV Site A	A1	26°06'05.31"S	29°27' 30.76"E	Char and	nging of co-c split of Area	ordinates A.	Page 5 of EA
	A2	26° 06' 17.89"S	29° 27' 05.38"E	Site A1:			- Table under Solar PV Facility Outer Point
	A3	26° 06' 34.41"S	29° 27' 08.05"E	A1	26° 6' 17.242" S	29° 27' 5.118" E	Site A
	A4	26° 06' 36.69"S	29° 27'15.15"E	A2	26° 6' 4.897" S	29° 27' 29.224" E	
	A5	26° 06' 38.86"S	29° 27' 55.22"E	A3	26° 6' 13.155" S	29° 27' 38.984" E	
	A6	26° 06'21.30"S	29° 27' 56.25"E	A4	26° 6' 11.653" S	29° 27' 40.735" E	
	A7	26° 06'15.50"S	29° 27' 52.78"E	A5	26° 6' 11.570" S	29° 27' 48.910" E	
	A8	26° 06'12.67"S	29° 27'48.93"E	A6	26° 6' 15.991" S	29° 27' 54.666" E	
	A9	26° 06' 12.40"S	29° 27' 40.35"E	A7	26° 6' 19.661" S	29° 27' 57.168" E	
	A10	26° 06' 12.76"S	29° 27' 36.36"E	A8	26° 6' 38.095" S	29° 27' 55.166" E	
	A11	26° 06' 16.81"S	29° 28' 10.77"E	A9	26° 6' 36.511" S	29° 27' 13.209" E	
	A12	26° 06' 31.14"S	29° 28' 01.99"E	A10	26° 6' 34.175" S	29° 27' 9.372" E	
	A13	26° 06' 35.00"S	29° 28' 03.48"E	A11	26° 6' 31.172" S	29° 27' 7.203" E	
	A14	26° 06' 39.43"S	29° 28' 09.30"E	Cite	A.D.		
	A15	26° 06' 39.48"S	29° 28' 12.50"E	A1	AZ:	29° 28'	
	A16	26° 06' 35.92"S	29° 28' 11.90"E	A2	30.755" S	1.339" E 29° 28'	
	A17	26° 06' 29.40"S	29° 28' 18.32"E	A3	15.824" S	12.349" E	
	A18	26° 06' 18.08"S	29° 28' 13.47"E	A4	27.919" S 26° 6'	29° 28'	
				A5	29.420" S	19.189" E	
				A6	26° 6'	29° 28'	
				A7	26° 6'	29° 28'	
				A8	39.513" S 26° 6' 39.347" S	13.517" Е 29° 28' 4.759" Е	
PV Site B	B1	26° 05' 52.913" S	29° 27' 01.316" E	B1	26° 5' 33.950" S	29° 26' 57.944" E	<ul> <li>Page 6 of EA</li> </ul>

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## vsp

Aspect to be Amended	Authorised				Proposed Amendment			EA Reference
	B2	26° 05' 56.110" S	29° 27' 04.546" E		B2	26° 5' 33.367" S	29° 27' 10.206" E	- Table under Solar PV
	B3	26° 05' 47.744" S	29° 27' 02.637" E		B3	26° 5' 35.035" S	29° 27' 10.290" E	Facility Outer Point Coordinates- Solar PV Site P
	B4	26° 05' 28.923" S	29° 27' 38.153" E		В4	26° 5' 34.951" S	29° 27' 4.951" E	Sile D
	B5	26° 05' 26.293" S	29° 27' 37.132" E		B5	26° 5' 38.872" S	29° 27' 6.119" E	
	B6	26° 05' 38.559" S	29° 27' 07.165" E		B6	26° 5' 26.860" S	29° 27' 33.729" E	
	B7	26° 05' 35.996" S	29° 27' 05.593" E		B7	26° 5' 26.527" S	29° 27' 37.733" E	
	B8	26° 05' 35.414" S	29° 27' 10.286" E		B8	26° 5' 29.112" S	29° 27' 38.817" E	
	B9	26° 05' 33.580" S	29° 27' 09.704" E		В9	26° 5' 47.297" S	29° 27' 3.867" E	
	B10	26° 05' 34.259" S	29° 26' 57.740" E		B10	26° 5' 55.555" S	29° 27' 4.367" E	
					B11	26° 5' 55.555" S	29° 27' 3.616" E	
					B12	26° 5' 54.053" S	29° 27' 3.700" E	
					B13	26° 5' 54.136" S	29° 27' 1.281" E	
					B14	26° 5' 46.045" S	29° 27' 0.363" E	
					B15	26° 5' 40.707" S	29° 27' 5.869" E	
					B16	26° 5' 36.786" S	29° 26' 58.779" E	
BESS A	SS A			Changing of co-ordinates to		rdinates to	<ul> <li>Page 6 of EA</li> </ul>	
	1 2	26° 05' 28.940" S	29° 28' 04.556" E		for BESS A		ided area	<ul> <li>Table under BESS Outer</li> <li>Point Coordinates from</li> </ul>
	2 2	26° 05' 29.278" S	'.9°28' )4.601"E	1		26° 5' 27 877" S	29° 28' 0 972" F	row 1
	3 2	26° 05' 30.136" S	29° 28' 06.897" E		2	26° 5' 22 780" S	29° 28' 2 258" E	
	4 2	26° 05' 25.806" S	29° 28' 09.032" E		3	26° 5' 28 612" S	29° 28' 17 503" F	
	5 2	26° 05' 24.683" S	29° 28' 06.080" E		4	26° 5' 29 989" S	29° 28' 17 089" F	
	6	26° 05' 24.115" S	29° 28' 06.315" E		5	26° 5' 27 831" S	29° 28' 11 533" F	
	7 2	26° 05' 22.795" S	29° 28' 02.181" E		6	26° 5' 31 918" S	29° 28' 9 559" F	
	8	26° 05' 27.799" S	29° 28' 01.020" E		7	26° 5' 29.714" S	29° 28' 3.773" F	
					8	26° 5' 28.749" S	29° 28' 4.187" E	

#### wsp

Aspect to be Amended	Authorised	Proposed Amendment	EA Reference
Powerline Coordinates	Start         26° 06' 37.005" S         29° 27' 08.299" E           Middle         26° 06' 05.880" S         29° 27' 42.054" E           End         26° 05' 33.446" S         29° 28' 13.965" E	The 132kV powerline and associated co-ordinates must be removed.	<ul> <li>Page 7 of EA         <ul> <li>Table under powerline coordinates</li> </ul> </li> </ul>
Substation Outer Point Coordinates: Substation 1	SN1         26° 05' 27.122" S         29° 27' 33.533" E           SN2         26° 05' 26.331" S         29° 27' 37.452" E           SN3         26° 05' 27.794" S         29° 27' 37.798" E           SN4         26° 05' 28.467" S         29° 27' 33.826" E	Update the co-ordinates of Substation 1 to reflect new positionSN1 $26^{\circ} 5'$ $28.582" S29^{\circ} 27'35.191"ESN226^{\circ} 5'26.695" S29^{\circ} 27'35.163"ESN326^{\circ} 5'26.667" S29^{\circ} 27'37.360"ESN426^{\circ} 5'28.639" S29^{\circ} 27'37.389"F$	<ul> <li>Page 7 of EA         <ul> <li>Table under substation outer point coordinates from row 1</li> </ul> </li> </ul>
Substation 2	SN5         26° 06' 06.286" S         29° 27' 29.397" E           SN6         26° 06' 05.502" S         29° 27' 30.884" E           SN7         26° 06' 08.140" S         29° 27' 32.908" E           SN8         26° 06' 09.042" S         29° 27' 31.369"E	Update the co-ordinates of Substation 2 to reflect new position           SN1         26° 6' 15.297" S         29° 27' 36.817" E           SN2         26° 6' 12.106" S         29° 27' 40.873" E           SN3         26° 6' 14.551" S         29° 27' 43.348" E           SN4         26° 6' 17.712" S         29° 27' 39.233" E	<ul> <li>Page 7 of EA         <ul> <li>Table under substation outer point coordinates from row 7</li> </ul> </li> </ul>
Substation 3	Not authorised.	Add co-ordinates for Substation 3           SN1         26° 6' 28.601" S         29° 28' 15.836" E           SN2         26° 6' 30.481" S         29° 28' 15.872" E           SN3         26° 6' 30.517" S         29° 28' 18.077" E           SN4         26° 6' 28.529" S         29° 28' 17.969" E	N/A

## wsp

Aspect to be Amended	Authorised	Proposed Amendment EA	\ Reference
Temporary Construction Laydown Area Outer Point Coordinates	L1         26° 06'         29° 27'           33.159" S         20.052" E           L2         26° 06'         29° 27'           36.370" S         19.472" E           L3         26° 06'         29° 27'           38.154" S         46.767" E           L4         26° 06'         29° 27'           34.831"S         46.796" E	Update the co-ordinates of the temporary construction laydown Area to reflect new positions Laydown Area A $\begin{array}{c c c c c c c c c c c c c c c c c c c $	Page 7 <ul> <li>Table under temporary construction laydown area outer point coordinates</li> </ul>
		Laydown Area B	
Solar Energy Facility (100MW):	<ul> <li>Solar Farm A: <ul> <li>Extent: 115 Ha</li> <li>Buildable Area: 127 Ha</li> <li>AC Capacity: Up to 70 MW</li> <li>DC Capacity: Up to 84 MW</li> </ul> </li> <li>Solar Farm B: <ul> <li>Extent: 21 Ha</li> <li>Buildable Area: 50 Ha</li> <li>AC Capacity: Up to 30 MW</li> <li>DC Capacity: Up to 36 MW</li> </ul> </li> <li>Solar modules will be elevated above the ground, and will be mounted on either fixed tilt systems or tracking system</li> </ul>	<ul> <li>Laydown Area B</li> <li>Solar Farm A1: <ul> <li>Buildable Area:</li> <li>109 Ha</li> <li>AC Capacity: Up</li> <li>to 46 MW</li> <li>DC Capacity: Up</li> <li>to 55 MW</li> </ul> </li> <li>Solar Farm A2: <ul> <li>Buildable Area: 18</li> <li>Ha</li> <li>AC Capacity: Up</li> <li>to 14 MW</li> <li>DC Capacity: Up</li> <li>to 17 MW</li> </ul> </li> <li>Solar Farm B: <ul> <li>Buildable Area: 30</li> <li>Ha</li> <li>AC Capacity: Up</li> <li>to 12 MW</li> <li>DC Capacity: Up</li> <li>to 15 MW</li> </ul> </li> </ul>	<ul> <li>Page 8 of the EA <ul> <li>Letter A under the key components/infrastructure</li> </ul> </li> <li>Page 9 of the EA <ul> <li>Row 3 of the table of technical details of the facility</li> </ul> </li> </ul>

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## wsp

Aspect to be Amended	Authorised	Proposed Amendment	EA Reference
		tilt systems or tracking system	
Grid Connection (i.e., powerlines)	<ul> <li>Point of connection of Solar Panels will be to the Komati High Voltage (HV) yard.</li> <li>Power routed via a medium voltage overhead line (OHL) or underground cabling.</li> <li>Servitude of powerlines:         <ul> <li>Between 36 and 40m</li> <li>Area will be approximately 26ha</li> </ul> </li> </ul>	<ul> <li>Point of connection of Solar Panels will be to the Komati High Voltage (HV) yard.</li> <li>Power routed via a medium voltage overhead line (OHL) or underground cabling (33kV)</li> </ul>	<ul> <li>Page 8 of EA <ul> <li>Letter B under the key components/infrastructure</li> </ul> </li> <li>Page 9 of EA <ul> <li>Row 5 of the table of technical details of the facility</li> </ul> </li> </ul>
Site Substations	<ul> <li>Each of the solar sites will be equipped with collector substations.</li> <li>Infrastructure associated with the substations includes:         <ul> <li>Operations and Maintenance (O&amp;M) buildings housing the control and communication equipment.</li> <li>Site substations and collector substations.</li> </ul> </li> <li>Solar Site Substation A         <ul> <li>Capacity: 132kV</li> <li>Footprint: 0.5ha</li> </ul> </li> </ul>	<ul> <li>Each of the Solar Sites will be equipped with collector substations.</li> <li>Substation footprint A1 – 1.5 Ha</li> <li>Substation footprint A2 – 0.36 Ha</li> <li>Substation footprint B – 0.36 Ha</li> </ul>	<ul> <li>Page 8 of EA <ul> <li>Letter C under the key components/infrastructure</li> </ul> </li> <li>Page 9 of EA <ul> <li>Row 5 in the table of technical details of the facility</li> </ul> </li> </ul>
Battery Energy Storage System (BESS)	<ul> <li>Three BESS facilities</li> <li>Footprints: Range from 2 ha up to 6 ha.</li> <li>BESS capacity: 150 MW with four hours standby time.</li> <li>Lithium Battery Technologies, such as Lithium Iron Phosphate, Lithium Nickel Manganese Cobalt oxides or Vanadium Redox flow technologies are being considered</li> </ul>	<ul> <li>Three BESS Facilities</li> <li>Extention of BESS Area A.</li> <li>Footprint: 5.7 ha</li> <li>BESS capacity: 150 MW with four hours standby time.</li> <li>Lithium Battery Technologies, such as Lithium Iron Phosphate, Lithium Nickel Manganese Cobalt oxides or Vanadium Redox flow technologies are being considered</li> </ul>	<ul> <li>Page 8 &amp; 9 of EA <ul> <li>Letter D under the key components/infrastructure</li> </ul> </li> <li>Page 10 of EA <ul> <li>Row 6 in the table of technical details of the facility</li> </ul> </li> </ul>

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In terms of Section 7(1) of the Infrastructure Development Act, 2014 (Act 23 of 2014), large-scale infrastructure projects, known as Strategic Integrated Projects (SIPs), have been identified across all nine provinces. Thirty-six SIPs have been prioritised as part of the National Infrastructure Plan (NIP). SIPs cover catalytic projects that can fast-track development and growth.

The Komati Solar PV and BESS Facility was confirmed as a SIP under SIP 20d from a letter dated 08 August 2023 by the head of Infrastructure South Africa (ISA) and chairperson of the SIP steering committee. This project is a Strategic Infrastructure Project as it forms part of the Just Energy Transition National Program SIP 20d. The letter is included in Appendix <u>S.</u>

The Department of Forestry, Fisheries and the Environment (DFFE) is therefore requested to consider this as a Priority Project and to reduce their decision-making timeframe to 57 days as per the timeframes outlined in the Infrastructure Development Act, as amended (Act 23 of 2014).

#### 8.1 EA AUTHORISATION PERIOD

In terms of condition 7 of the existing EA (DFFE Ref: 14/12/16/3/3/2/2456), the activity must commence within a period of ten (10) years from the date of issue of the EA. Furthermore, condition 8 of the existing EA stated that construction must be completed within five (5) years of the commencement of the activity on site.

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