

# PRE-APPLICATION MEETING

## ENVIRONMENTAL AUTHORISATION AMENDMENT APPLICATION: 75 MW HUMANSRUS PHOTOVOLTAIC (PV) 1 SOLAR POWER FACILITY (REFERRED TO AS LESEDI POWER COMPANY)

Portion 0 of the Farm 469 Hay Rd

DFFE Reference No.: 2022-09-0038

14 October 2022

11:00 - 12:00

Virtual Meeting via Microsoft Teams

# MEETING AGENDA

- 5 minutes: Opening of meeting (EAP)
- 5 minutes: Introduction of meeting attendees (all attendees)
- 15 minutes: Brief overview of proposed EA Amendment application and proposed process to be followed for the application (EAP)
- 10 minutes: Questions (all attendees)
- 15 minutes: Feedback from Competent Authority on the proposed EA Amendment application and proposed process to be followed
- 5 minutes: Conclusion and close-out of meeting (EAP)

# OPENING OF MEETING AND ADMIN

- Welcome and thank you to DFFE
- Meeting “rules” - all participants to please mute unless speaking
- Questions can be posted in chat box or a hand can be raised
- Notes will be taken for the meeting minutes
- Any apologies?

# INTRODUCTION OF MEETING ATTENDEES

## **EARTHnSKY Environmental (EAP)**

- Lizette Kloppers
- Rachelle Botha
- Zusipe Mbodla

## **Lesedi Power Company (Applicant)**

- Thigesh Velen
- Kuben Naicker
- Odwa Nkcitakalo
- Thuso Jones
- Mandy Momberg - Unisam Environmental

## **Department of Forestry, Fisheries and the Environment**

- Julliet Mahlangu
- Dr. Danie Smit
- Nyiko Nkosi
- Zama Langa
- Ditebogo Chantell Mabusela

# OVERVIEW OF PROPOSED APPLICATION

- **Applicant:** Oakleaf Investment Holdings 79 (RF) (Pty) Ltd.
- **Project name:** Environmental Authorisation amendment application for the 75 MW Humansrus Photovoltaic (PV) 1 Solar Power Facility (referred to as Lesedi Power Company)
- **Project location:** Portion 0 of the Farm 469 Hay Rd
- **Part 2** Environmental Authorisation Amendment application (Amendment where a change in scope occurs)

12/8/2021 1:05:21 pm



Danielskuil

Owendale

Metsimatala

Humansrus PV 1 (Lesedi Power Company)

Postmasburg

Lime Acres

Image © 2022 Maxar Technologies

Google Earth

9.11 km

Imagery Date: 10/13/2020 lat -28.296251° lon 23.332351° elev 0 m eye alt 41.41 km

12/3/2021 1:05:21 pm



Redstone CSP (currently under construction)

Jasper solar power plant (not part of this application; different EA)

Lesedi North solar field

Lesedi South solar field

Image © 2022 Maxar Technologies

Google Earth

1711 m

1985

Imagery Date: 3/26/2019 lat -28.308347° lon 23.371970° elev 0 m eye alt 7.47 km

# BACKGROUND TO APPLICATION

- 29 August 2011: an EA was issued by DFFE (then DEA) for the construction of the 160MW Humansrus Solar Power Farm on the Farm Humansrus 469 (DEA Reference: 12/12/20/1903).
- Due to Eskom's restrictions in terms of the Renewable Energy IPP Procurement Programme (REIPPPP), an amendment application was lodged to split the 160MW Humansrus Solar Power Farm into two separate 75MW solar facilities (for Lesedi- and Jasper Power Projects), and therefore two separate EAs.
- This amendment application relates to the EA granted for the 75 MW Humansrus Photovoltaic (PV) 1 Solar Power Facility (Lesedi Power Company), as issued on 23 February 2012 (DEA Reference: 12/12/20/1903/1).
- A subsequent Environmental Authorisation amendment was granted on 11 July 2012 to change the holder of the Environmental Authorisation from Intikon Energy (Pty) Ltd. to Oakleaf Investment Holdings 79 (Pty) Ltd (DEA Reference: 12/12/20/1903/1).
- In 2017, a further EA amendment application was submitted (but never completed because authorization was first required for Section 21 (c), (i) and (f) water uses in terms of the National Water Act, 1998).



# BACKGROUND TO APPLICATION

- A Water Use Registration Record No. 25065811 was issued by the DWS on 26 April 2019 for one road crossing a water course. This Registration Certificate was revised by the DWS on 24 June 2021 to include two additional access roads and the overhead powerline crossing watercourses (File No. 27/2/2/D173/18/1).
- The DWS also issued a letter, dated 13 July 2021 (File No. 27/2/2/C591/55/1), confirming that sewage effluent discharge on site falls within the ambit of a General Authorization under section 21(f) and is a permissible water use under section 22 of the NWA.

# CURRENT ENVIRONMENTAL AUTHORISATION

Department of Environmental Affairs  
Environmental Authorisation Reg. No. 12/12/20/1903/1

-as described in the Environmental Impact Report (EIR) dated January 2012 at:

Location of Activity	Latitude	Longitude
Location of Humansrus PV 1	28°18'58.81"S	23°21'22.71"E

- for the construction of the 75 MW Humansrus Photovoltaic (PV) 1 Solar Power Facility on the farm Humansrus (Farm 469) within the Tsantsabane Local Municipality, in the Siyanda District Municipality, Northern Cape Province, hereafter referred to as "the property".

The key components of the proposed solar power facility include the following:

- a) PV solar panels that will occupy up to 150 ha (1.5 km<sup>2</sup>) of the site area in total;
- b) 280 000 solar panels;
- c) The panels will be 15m<sup>2</sup> in size and will be mounted on metal frames with a maximum height of 3m above ground;
- d) The PV arrays will be 1 km in length and made up of approximately 100 m sections;
- e) Internal electrical collection systems which includes inverters connected to each PV array to convert the direct current (DC) to alternate current (AC);
- f) A new substation which would include a control room, an operations and maintenance facility, parking, external 132kV transformers and electric switch gear and will have a footprint of up to 1,000m<sup>2</sup> in size;
- g) An access to the site via the R385 or DD381 roads;
- h) Access tracks adjacent to each row of the PV array plus tracks between the other components of the development. Site access roads of up to 6 m wide with drainage trenches adjacent to the road;
- a) Additional Infrastructure that will form part of the development will include:
  - A permanent solar irradiation panel (approximately 16m<sup>2</sup> in size) will be erected to collect data on the solar resource of the site.
  - A small office and storage building with security and ablution facilities.
  - Site fencing of 2.5m in height.
  - A lay-down area for temporary storage of materials during the construction activities and a small borrow pit on site.

# CURRENT ENVIRONMENTAL AUTHORISATION

The current EA for the 75 MW Humansrus Photovoltaic (PV) 1 solar power facility (referred to as Lesedi Power Company) includes the following listed activities:

## **GN R. 387:**

- Item 1(a)(i): The construction of facilities or infrastructure, including associated structures or infrastructure, for the **generation of electricity** where electricity output is **20 megawatts or more**.
- Item 1(a)(ii): The construction of facilities or infrastructure, including associated structures or infrastructure, for the **generation of electricity** where the elements of the facility cover a combined **area in excess of 1 hectare**.
- Item 1(l): The **transmission and distribution of above ground electricity** with capacity of **120 kilovolts or more**.
- Item 2: Any development activity, including associated structures and infrastructure, where the **total area of the developed area** is, or is intended to be, **20 hectares or more**.

# CURRENT ENVIRONMENTAL AUTHORISATION

## GN R. 386:

- Item 1(m): The construction of **facilities or infrastructure**, including associated structures or infrastructure, for any purpose **in the one in ten year flood line** of a river or stream, **or within 32m from the back of a river or stream** where the flood line is unknown, excluding purposes associated with existing residential use, but including (i) canals; (ii) channels; (iii) bridges; (iv) dams; and (v) weirs.
- Item 12: The **transformation or removal of indigenous vegetation of 3 hectares or more** or of any size where the transformation or removal would occur within a critically endangered or an endangered ecosystem listed in terms of section 52 of the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004).
- Item 16(b): The **transformation of undeveloped, vacant or derelict land to residential, mixed, retail, commercial, industrial or institutional use** where such development does not constitute infill and where the total area to be transformed is **bigger than 1 hectare**.
- The listed activities included in the existing EA cover the amendments to be applied for. No additional listed activities are triggered.

# OVERVIEW OF PROPOSED APPLICATION

This current EA amendment application is lodged in order to finalise the application that was initiated but not completed in 2017.

The impact assessment in the Environmental Impact Report will assess the impacts of all the relevant amendments applied for.

EA amendment is sought for the following:

- i. Confirmation of change of the contact person for Oakleaf Investment Holdings 79 (Pty) Ltd. (Trading as Lesedi Power Company (Pty) Ltd.)

# OVERVIEW OF PROPOSED APPLICATION

- ii. To amend the size and location of the substation, and indicate that the substation area comprises a control room, external 132kV transformers, electric switch gear, capacitor banks and is fenced for security and safety



12/3/2021 1:05:21 pm

Lesedi South solar field

Substation

Capacitor banks

Image © 2022 Maxar Technologies

301 m

Google Earth

1985

Imagery Date: 3/26/2019 lat -28.312537° lon 23.347281° elev 0 m eye alt 1.30 km

# OVERVIEW OF PROPOSED APPLICATION

- iii. To indicate the location of the operations and maintenance facility, and to show this consists of an office and storage buildings, security, ablution facilities, parking, outdoor storage area and water treatment facility





12/8/2021 1:05:21 pm



Water treatment facility (mobile)

Outdoor storage area

Warehouse: storage of waste solar PV modules

Parking

Operations and maintenance facility

Image © 2022 Maxar Technologies

Google Earth

49 m



1985

Imagery Date: 1/28/2019 lat -28.315177° lon 23.353890° elev 0 m eye alt 212 m

# OVERVIEW OF PROPOSED APPLICATION

- iv. To include aboveground 22kV power lines between the northern solar field and the substation, i.e. across the railway line and D3381 road
- v. Relaxation of the 200m visual buffer (condition 29 of the EA) and the 50m buffer (condition 30 of the EA) for the aboveground 22kV power lines between the northern solar field and the substation that cross the railway line and D3381 road - Updated Visual Impact Assessment already completed



12/3/2021 1:05:21 pm



Lesedi North solar field

22kV power lines between the northern solar field and the substation

Substation

349 m

Image © 2022 Maxar Technologies

Google Earth

1985

Imagery Date: 1/28/2019 lat -28.311164° lon 23.352544° elev 0 m eye alt 1.51 km

# OVERVIEW OF PROPOSED APPLICATION

- vi. To show PV arrays of up to 1km in length across the south solar field and up to 1,5km in length across the north solar field, and made up of approximately 100m sections



12/3/2021 1:05:21 pm

N

Lesedi South solar field

Lesedi North solar field

Image © 2022 Maxar Technologies

Google Earth

659 m

1985

Imagery Date: 3/26/2019 lat -28.314570° lon 23.360466° elev 0 m eye alt 2.85 km

# OVERVIEW OF PROPOSED PROJECT

- To accommodate the temporary storage of up to 300 waste solar PV modules on site, in compliance with the 2013 National Norms and Standards for the storage of waste, as per NEM:WA Regulations (a N&S Registration application will also be lodged with the DFFE for the storage of the waste solar PV modules)



12/8/2021 1:05:21 pm



Warehouse: storage of waste solar PV modules

Image © 2022 Maxar Technologies

Google Earth

115 m

1985

Imagery Date: 1/28/2019 lat -28.315068° lon 23.354593° elev 0 m eye alt 500 m

# OVERVIEW OF PROPOSED APPLICATION

- viii. To align the authorised development footprint with the farm boundary, to accommodate the overburden storage area, and to indicate that a small borrow pit on site was not needed during the construction phase, as excess overburden was used for filling





7/17/2019 10:37:01 am

N

Lesedi North solar field

Lesedi South solar field

Eskom servitude (edge of authorised development footprint)

Farm boundary

Overburden stockpile

Image © 2022 Maxar Technologies

Google Earth

642 m

1985

Imagery Date: 3/26/2019 lat -28.321205° lon 23.354288° elev 0 m eye alt 2.92 km

# OVERVIEW OF PROPOSED APPLICATION

- ix. To indicate that the solar irradiation measuring panel (approximately 16m<sup>2</sup> in size) was in place during the feasibility stage, to collect data on the solar resource which informed the layout of the facility, but is not permanent, and was removed prior to commencement of operations (no image)
- x. To include three autonomous weather stations (aws), approximately 4m in height, for continuous monitoring of local conditions during the operational phase, and three soiling stations consisting of two PV panels each, measuring approximately 4m<sup>2</sup> in size each, to monitor and determine operational efficiencies



12/3/2021 1:05:21 pm

N

AWS 2 + soiling station

Lesedi North solar field

AWS 3 + soiling station

Lesedi South solar field

AWS 1 + soiling station

Image © 2022 Maxar Technologies

Google Earth

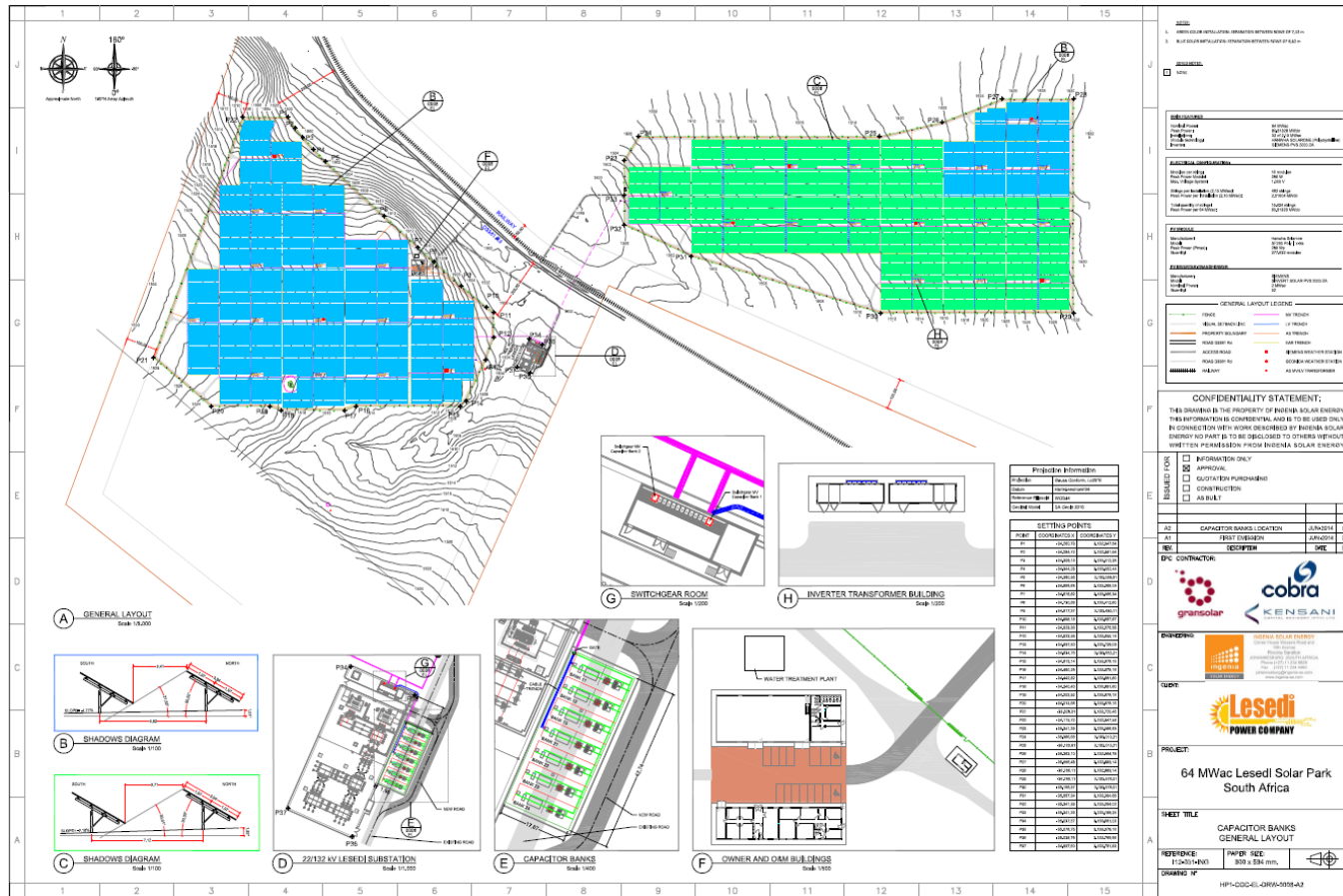
593 m

1985

Imagery Date: 3/26/2019 lat -28.314282° lon 23.361296° elev 0 m eye alt 2.60 km

# OVERVIEW OF PROPOSED APPLICATION

- xi. Approval of the as-built drawings and layout plans for the entire operations



## PROPOSED PROCESS TO BE FOLLOWED FOR THE EA AMENDMENT APPLICATION

- Pre-application meeting with DFFE
- Payment of application fee (R2 000-00)
- Submission of EA Amendment Application Form to DFFE & acknowledgement of receipt by DFFE
- Circulation of Environmental Impact Report to potential and registered I&APs, organs of state and DFFE for review and commenting (at least 30 days). Public Participation process to include:
  - Site notice boards
  - Newspaper advertisement in one local newspaper
  - Circulation of Report or electronic link to the Report via email, SMS and WhatsApp
  - Placement of Report at the local library for public viewing
  - Incorporation of the EA Amendment application's information in Lesedi's existing community engagement process to be undertaken. The engagement includes nearby communities/community representatives, ward councillors, local municipalities etc.
  - No public meeting (engagement through Lesedi's existing community engagement process)
  - Comments and Responses Report and I&AP Register
- Submission of the Environmental Impact Report to DFFE within 90 days from submission of the EA Amendment Application. Report compiled in terms of Regulation 32(1)(a) of the EIA Regulations. No additional specialist studies identified. Revised VIA already completed.
- Notification to I&APs on Department's Decision: Circulation of notification letters via email, SMS and WhatsApp and the placement of a newspaper advertisement in one local newspaper.

# QUESTIONS?

Chat box or hand raised

# FEEDBACK FROM DFFE ON THE PROPOSED APPLICATION AND PROPOSED PROCESS TO BE FOLLOWED FOR THE EA

- Confirmation that there is no specific report template for the EA Amendment application's Environmental Impact Report
- Approval of proposed approach for the EA Amendment application, in particular the proposed public participation process
- Site visit scheduling
- Screening Tool Report and Site Sensitivity Verification Report required as no new listed activities triggered and existing development?

# CONCLUSION AND CLOSE-OUT OF MEETING

Thank you for your time