Environmental Background Information Document

Proposed 20 MW Solar Photovoltaic Power Plant near Naruchas Sub-station, in the vicinity of Rehoboth, Khomas Region, Namibia

Proponent: JCM Power
Environmental Assessment Practitioner (EAP): Augite Environmental Consulting
EAP Contact Person: Dr. K Kangueehi

1. Purpose of this document

This Environmental Background Information Document (BID) provides preliminary information about the proposed 20 MW Solar Power Plant and the Environmental Impact Assessment (EIA) process to be undertaken in terms of Namibia's environmental legislation.

The BID is issued to:

- Notify Interested and Affected Parties (I&APs) of the proposed project and the application for an Environmental Clearance Certificate (ECC).
- Explain the proposed development, location, and key components.
- Outline the EIA process, stakeholder engagement approach, and how to register and comment.
- Present the key environmental and social issues identified at this early stage, and the studies/assessments anticipated.

2. Project overview

2.1 Project name

Proposed 20 MW Solar Photovoltaic Power Plant near Naruchas Sub-station, Khomas Region.

2.2 Project location

- The allocated area is located **approximately 18 km north of Rehoboth** and **approximately 70 km south of Windhoek** along the **B1** national road.
- The applied area covers approximately **50 hectares (Ha)**.
- The site is accessible via the **B1 tarred road** from Rehoboth or Windhoek, with a smaller portion accessible via an **informal gravel road**.

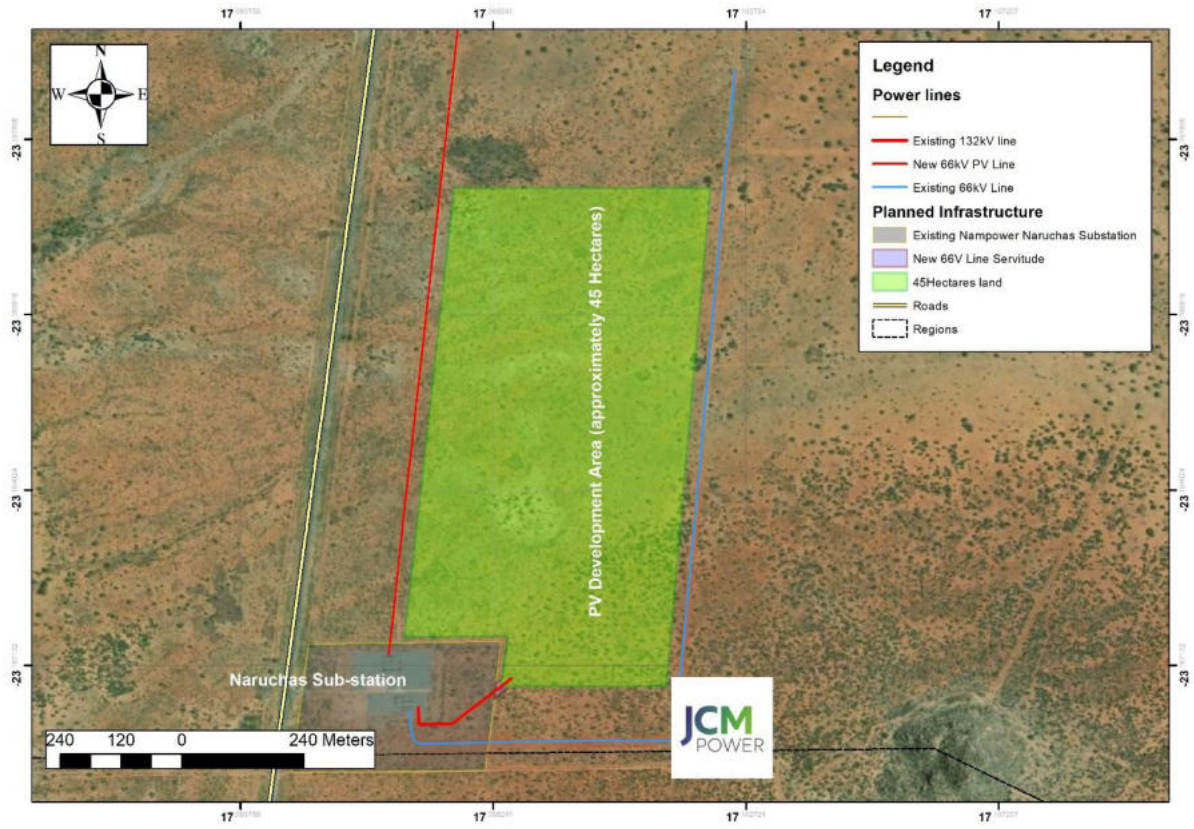

Figure 1: Location map for the 20MW solar power plant site

2.3 Project purpose and need

The proponent intends to develop and operate a solar power plant capable of generating up to **20 MW** of electricity, contributing to:

- Increased renewable energy supply and energy security;
- Reduced greenhouse gas emissions compared to fossil-fuel generation;
- Local economic activity and employment during construction and operations.

3. Project description

3.1 Key components (anticipated)

The project will likely include the following infrastructure and activities (final design subject to engineering):

- Photovoltaic (PV) solar array (ground-mounted panels);
- Mounting structures (fixed-tilt or tracking, depending on design);
- Inverters and transformer station(s);
- Internal access roads and laydown/temporary construction areas;

- Perimeter fencing, security and access control;
- Operations and maintenance (O&M) area (small office/store, workshops if required);
- Stormwater controls and erosion management measures;
- Electrical connection infrastructure (e.g., short on-site/near-site cabling, switchgear, and grid connection at/near the substation—subject to grid studies and approvals).

3.2 Construction activities (typical)

Construction typically includes:

- Site establishment, survey and pegging of the footprint;
- Vegetation clearing limited to the approved footprint;
- Earthworks (minor cut/fill where needed), trenching for cables;
- Delivery, assembly and installation of PV modules and electrical equipment;
- Commissioning and testing.

3.3 Operational phase (typical)

Operations are generally low-impact compared to construction and include:

- Periodic inspections and maintenance;
- Panel cleaning (water demand and method to be confirmed);
- Vegetation control within the fenced area;
- Security operations.

3.4 Decommissioning/rehabilitation (end of life)

At the end of the project life, equipment may be removed and the site rehabilitated. A decommissioning and rehabilitation concept will be addressed in the EIA/EMP, including waste handling (especially PV-related waste) and site restoration.

4. The EIA process to be followed

4.1 Environmental Clearance Certificate (ECC)

The proposed project requires an Environmental Clearance Certificate in terms of:

- **Environmental Management Act, 2007 (Act No. 7 of 2007)**; and
- **Environmental Impact Assessment Regulations (GN 30 of 2012)**.

4.2 Assessment approach

A proportionate EIA process will be undertaken, typically including:

1. **Screening & application** to the Environmental Commissioner for an ECC;
2. **Scoping phase** (identification of key issues, alternatives, and specialist needs);
3. **Impact assessment and EMP** (assessment of significance and practical mitigation/management measures);
4. **Public participation** throughout, including access to draft reports for comment;
5. **Final submission** to the Environmental Commissioner and decision-making.

5. Public participation

5.1 Why public participation matters

Public participation ensures that:

- Stakeholder concerns and local knowledge inform the assessment;
- Potential impacts are identified early and addressed appropriately;
- The project proceeds transparently and in compliance with legislation.

5.2 How to register as an Interested & Affected Party (I&AP)

To register, submit your name, contact details, and interest in the project to the EAP using the details in Section 10.

5.3 Comment period

I&APs are invited to submit comments on or before:
16 February 2026

5.4 Access to information

Registered stakeholders will be notified when draft reports (e.g., Scoping Report and/or EIA/EMP) are available for review and comment, and how to access them.

6. Alternatives to be considered

A defensible alternatives assessment will be included, typically addressing:

6.1 Location alternatives

- Use of the proposed site near the substation versus other feasible sites (where applicable and if alternatives exist).

6.2 Layout/design alternatives

- PV array layout within the 50 Ha site;
- Fixed-tilt vs tracking (if considered);
- Access road alignment and internal routing to minimize disturbance.

6.3 Technology alternatives

- Inverter/transformer configuration;
- Cable routing (overhead vs underground where relevant and feasible).

6.4 "No-go" alternative

- Not proceeding with the development (baseline scenario), including implications for energy supply and land use.

7. Receiving environment (initial baseline overview)

The detailed baseline will be developed during the EIA using site visits, available data, and specialist input where required. At this stage, the following themes will be addressed:

7.1 Climate and air quality

- Semi-arid conditions typical of the central highland regions;
- Dust generation risk primarily during construction.

7.2 Topography, soils and erosion risk

- Terrain and slope characteristics influence runoff, erosion potential, and earthworks requirements;
- Soil sensitivity and erodibility will be assessed, with erosion controls integrated into the EMP.

7.3 Hydrology and drainage

- Local drainage patterns and stormwater behaviour (including ephemeral runoff) will be evaluated;
- Potential for concentrated flows from altered surfaces and access roads will be considered;
- Stormwater controls to prevent erosion/sedimentation will be specified.

7.4 Geology and hydrogeology

- Underlying geology influences foundation design, excavation conditions, and potential groundwater sensitivity;
- Groundwater considerations will be assessed if water is required for construction and panel cleaning.

7.5 Biodiversity (flora and fauna)

- Vegetation clearance is typically the most direct ecological impact;
- Sensitive habitats or protected species (if present) will be identified, and avoidance/minimisation measures defined.

7.6 Heritage and archaeology

- Chance finds of graves, artefacts, or archaeological material may occur during earthworks;
- A chance-find procedure will be included in the EMP and specialist input obtained if triggered.

7.7 Land use, visual sense of place and socio-economics

- Current land use and compatibility with the solar facility will be assessed;
- Potential visual impacts (fencing, panels, glare considerations, nighttime lighting) will be screened;
- Socio-economic benefits such as jobs and procurement, as well as risks (traffic, safety, nuisance), will be evaluated.

8. Key issues identified for assessment (preliminary)

The following impact themes will be assessed and managed through the EIA/EMP:

Construction phase (typical)

- Vegetation loss and habitat disturbance within the footprint;
- Soil disturbance, erosion, and dust generation;
- Construction traffic, road safety, and nuisance (noise);
- Waste generation, hazardous materials handling, spill risks;
- Worker health & safety and community safety;
- Potential disturbance of heritage resources (chance finds).

Operational phase (typical)

- Long-term land take and fencing effects (faunal movement where relevant);
- Visual impacts and glare risk (screening-level assessment);

- Waste streams (maintenance waste, end-of-life PV equipment planning);
- Ongoing stormwater management and erosion prevention.

Decommissioning phase (typical)

- Waste management (including PV module disposal/recycling pathways);
- Site rehabilitation and re-vegetation measures.

9. Specialist studies (to be confirmed during scoping)

Depending on the screening outcome and site sensitivities, the following may be required:

- Biodiversity screening and/or specialist ecological assessment;
- Heritage/archaeological screening (and assessment if indicated);
- Hydrology/stormwater assessment (screening to detailed, depending on slopes/drainage);
- Visual screening (and glare considerations where relevant);
- Traffic and access assessment (screening level);
- Social considerations and stakeholder issues (integrated into Scoping/EIA).

10. How to register and submit comments

All I&APs are invited to register and submit comments by **16 February 2026**.

Environmental Assessment Practitioner (EAP): Augite Environmental Consulting
Contact Person: Dr. K Kangueehi
Email: kkangueehi0@gmail.com
Cell: 081 706 9027

When commenting, please include:

- Full name and surname
- Organisation (if applicable)
- Contact details (email and phone)
- Interest in the project (e.g., landowner, nearby resident, authority, NGO, business)
- Specific issues/concerns, suggestions, and any information you want considered

11. Next steps and indicative schedule

- Submit ECC application to the Environmental Commissioner (as per regulatory process).
- Conduct scoping (site verification, issue identification, alternatives, stakeholder engagement).
- Prepare draft Scoping Report and/or EIA/EMP for public review.
- Address comments and submit final documentation for decision-making.

12. Document control

Document: Environmental Background Information Document (BID)
Project: 20 MW Solar PV Plant near Naruchas Sub-station, Khomas Region
Proponent: JCM Power
EAP: Augite Environmental Consulting
Issue date: February 2026
Status: For Public Participation / Stakeholder Registration

I&AP Registration Form (One Page)

INTERESTED & AFFECTED PARTY (I&AP) REGISTRATION FORM

Project: Proposed 20 MW Solar Photovoltaic Power Plant near Naruchas Sub-station, vicinity of Rehoboth, Khomas Region, Namibia
Proponent: JCM Power
Environmental Assessment Practitioner (EAP): Augite Environmental Consulting
Contact Person: Dr. K Kangueehi
Email: kkangueehi0@gmail.com

Cell: 081 706 9027

A. Personal / Organisational Details

1. **Full Name & Surname / Organisation Name:**
   _____
2. **Representative Name (if organisation):**
   _____
3. **Postal Address:**
   _____
4. **Physical Address:**
   _____
5. **Telephone (Office):** _____ **Cell:**
   _____
6. **Email Address:**
   _____
7. **Preferred Communication Method (tick):** ☐ Email ☐ WhatsApp ☐ Phone call ☐ SMS ☐ Letter
8. **Preferred Language (tick):** ☐ English ☐ Afrikaans ☐ Oshiwambo ☐ Otjiherero ☐ Other: _____

B. Your Interest in the Project (tick all that apply)

☐ Landowner / Leaseholder
☐ Neighbouring land user / Resident
☐ Local business / Service provider
☐ Community representative / Traditional authority
☐ Government / Public authority
☐ NGO / CBO / Environmental group
☐ Interested member of the public
☐ Other (specify):
_____

C. Issues You Want Considered (briefly)

(You may attach additional pages if required)

D. Registration Declaration

I, the undersigned, request to be registered as an Interested & Affected Party for the above-mentioned project and to receive notifications and documentation for review and comment.

Signature: _____ **Date:** ____ / ____ / 2026

Return this form to the EAP: kkangueehi0@gmail.com (or via WhatsApp/phone request)

(ii) Comment Sheet

PUBLIC PARTICIPATION COMMENT SHEET
Project: Proposed 20 MW Solar Photovoltaic Power Plant near Naruchas Sub-station, vicinity of Rehoboth, Khomas Region, Namibia
Proponent: JCM Power
EAP: Augite Environmental Consulting | **Email:** kkangueehi0@gmail.com | **Cell:** 081 706 9027

A. Commenter Details

1. **Full Name & Surname / Organisation:**
   _____
2. **Contact Number:** _____
3. **Email Address:**
   _____
4. **Postal/Physical Address (optional):**
   _____
5. **Are you registered as an I&AP?** ☐ Yes ☐ No (If no, please complete the I&AP Registration Form)

B. Comments / Issues / Questions

Please state your comments clearly and, where possible, indicate the aspect of the project your comment relates to (e.g., biodiversity, water, traffic, heritage, visual, land use, socio-economic, safety, etc.).

Comment 1:
Issue/theme: _____
Details:

Comment 2:
Issue/theme: _____
Details:

Comment 3:
Issue/theme: _____
Details:

C. Suggestions / Recommendations (optional)

D. Supporting Information (optional)

Please list any documents/photos/maps you attach or reference:

Signature (optional): _____ **Date:** ____ / ____ / 2026