

CSIR Environmental Management Services

PO Box 17001, Congella, Durban, 4013 Tel: +27 31 242 2300 Fax: +27 31 261 2509 Email: RAbed@csir.co.za

17 August 2016

Dear Interested and Affected Party

RE: NOTICE OF ENVIRONMENTAL AUTHORISATION AND APPEAL PROCEDURE FOR THE PROPOSED DEVELOPMENT OF THREE SOLAR PHOTOVOLTAIC FACILITIES (REFERRED TO AS KENHARDT PV 1, PV 2 AND PV 3) AND ASSOCIATED INFRASTRUCTURE, NORTH-EAST OF KENHARDT, NORTHERN CAPE PROVINCE (CSIR REFERENCE: EMS0102/SCATEC/2015; AND DEA REFERENCE: 14/12/16/3/3/2/838 (KENHARDT PV 2) AND DEA REFERENCE: 14/12/16/3/3/2/836 (KENHARDT PV 3)

As a registered Interested and Affected Party (I&AP) on the project database, you have been informed that the Project Applicant intended to develop three 75 Megawatt (MW) Solar Photovoltaic (PV) power generation facilities, located on the remaining extent of Onder Rugzeer Farm 168, approximately 80 km south of Upington and 30 km north-east of Kenhardt within the !Kheis Local Municipality, Northern Cape Province. The proposed 75 MW Solar PV projects are referred to as: Kenhardt PV 1, Kenhardt PV 2 and Kenhardt PV 3 respectively. The Project Applicant is Scatec Solar SA 330 (PTY) Ltd for Kenhardt PV 1, Scatec Solar SA 350 (PTY) Ltd for Kenhardt PV 2 and Scatec Solar SA 370 (PTY) Ltd (hereinafter referred to as Scatec Solar) for Kenhardt PV 3.

As previously noted, Scatec Solar appointed the Council for Scientific and Industrial Research (CSIR) to undertake the Environmental Assessment Process required for the abovementioned proposed projects. The proposed projects were assessed in terms of the National Environmental Management Act (Act 107 of 1998, as amended) (NEMA) and the 2014 NEMA Environmental Impact Assessment (EIA) Regulations promulgated in Government Gazette 38282 and Government Notice (GN) R982, R983, R984 and R985 on 8 December 2014. The finalised EIA Reports for the abovementioned Kenhardt PV 1, PV 2 and PV 3 projects were submitted to the Competent Authority (i.e. the National Department of Environmental Affairs (DEA)) for decision-making in terms of Regulation 24 of the 2014 NEMA EIA Regulations.

As a registered I&AP on the database and in accordance with Regulation 4 (2) of the 2014 NEMA EIA Regulations, you are hereby notified that the National DEA have <u>refused</u> the Environmental Authorisation (EA) for the abovementioned Kenhardt PV 1, PV 2 and PV 3 projects. The EA is signed and dated <u>4 August 2016</u> and was issued to the Project Applicant and CSIR via email on <u>8 August 2016</u>. The reasons for the decision are detailed in Annexure 1 of the EA, and attached as Appendix 1 of this correspondence. The reasons for refusal of the EA are mainly based on the potential adverse threats posed by the projects to the Square Kilometre Array (SKA) South Africa. The EA (including the reasons for decision) can be downloaded from the project website (http://www.csir.co.za/eia/ScatecSolarPV/). A copy of the EA can also be provided to I&APs upon request, by contacting the CSIR Project Manager using the contact details provided above.

Your attention is drawn to Chapter 2 of the National Appeal Regulations published in GN R993 on 8 December 2014 in terms of Section 44 (1) (a) of NEMA, and as amended in GN R205 on 12 March 2015, which prescribes the appeal procedure to be followed. Should you wish to appeal any aspect of the decision, an appeal must be submitted to the Appeal Administrator by the Appellant, and a copy thereof must be submitted to the Applicant, any registered I&AP and any Organ of State that has interest in the matter, within 20 days from the date that the notification of the decision was sent to the registered I&APs by the Applicant, via one of the following methods:

By Post: Private Bag X447, Pretoria, 0001, or

By Hand: Environment House, 473 Steve Biko Road, Arcadia, Pretoria, 0083

Appeals must be submitted in writing (in the form obtainable from the Appeal Administrator including all required supporting documents) to: Mr. Z Hassam, Director: Appeals and Legal Review, of the National DEA, using the addresses provided above. Mr. Hassam can also be contacted via telephone (012 399 9356) or email (Appealsdirectorate@environment.gov.za). All appeal documentation must include the abovementioned relevant DEA Reference Numbers. For additional information, a guideline on the Administration of Appeals (compiled by the DEA) can be accessed on the DEA website (https://www.environment.gov.za/).

Should you have any queries or require additional information please do not hesitate to contact the undersigned using the contact details provided above.

Sincerely,

Surina Laurie Project Leader

CSIR Environmental Management Services

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Rohaida Abed Project Manager

CSIR Environmental Management Services

Kenhardt PV 1 - DEA Reference: 14/12/16/3/3/2/837

Department of Environmental Affairs Application Reference No. 14/12/16/3/3/2/R

Annexure 1: Reasons for Decision

1. Information considered in making the decision

In reaching its decision, the Department took, inter alia, the following into consideration -

- The information contained in the application form submitted on 02 October 2015 and acknowledged by the Department on 23 October 2016;
- The information contained in the Environmental Impact Assessment Report (EIAr) dated April 2016 and received by this Department on 18 April 2016;
- The comments received during the Scoping and EIA phases of the application and submitted as part of the EIAr dated April 2016;
- Mitigation measures as proposed in the EIAr dated April 2016 and the EMPr submitted as part of the EIAr dated April 2016.
- Specialist studies submitted as part of the EIAr dated April 2016 and received by this Department on 18 April 2016; and
- f) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the National Environmental Management Act, 1998 (Act 107 of 1998).

2. Key factors considered in making the decision

A summary of the issues which, in the Department's view, were of the most significance is set out below-

- a) Compliance of the EIAr dated April 2016 and submitted on 18 April 2016; with Appendix 3 and Appendix 4 of GN R. 982 of 2014;
- The findings of all the specialist studies conducted and submitted as part of the EIAr dated April 2016 along with their recommended mitigation measures;
- The need for the proposed project and provision of electricity to the national grid in terms of the Renewable Energy Independent Power Producers Procurement Programme (REIPPPP) as required by the Department of Energy.
- Description of the environment that may be affected by the activity and the manner in which the physical, biological, social, economic and cultural aspects of the environment may be affected by the proposed activity;
- The location of the proposed development within the Karoo Central Astronomy Area and the significance of identified impacts to the Square Kilometre Array South Africa (SKA-SA).

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- f) Concerns raised and comments provided by the SKA-SA on the findings of the RFI Emissions study dated April 2016 and submitted as part of the EIAr dated April 2016.
- g) The selection of location alternatives in terms of the EIA Regulations, 2014 and in relation to the specialist inputs.
- All legislation and guidelines that have been considered in the preparation of the EIAr dated April 2016.
- Compliance of the EIAr dated April 2016 and submitted on 18 April 2016; with Chapter 5 of GN R. 982 of 2014.
- j) The cumulative impacts the proposed development will have in the area due to other Renewable Energy Facilities being authorised.

Findings

After consideration of the information and factors listed above, the Department made the following findings -

- A sufficient public participation process was undertaken and the applicant has satisfied the minimum requirements as prescribed in the EIA Regulations, 2014 for public involvement.
- b) The procedures followed for impact assessment is deemed adequate for the decision-making process.
- c) Based on the summary of the Electromagnetic Interference Technical Report prepared by the CSIR, dated April 2016, the proposed Kenhardt PV1 facility would exceed protection levels toward the closest SKA telescope.
- d) The summary of the Electromagnetic Interference Technical Report prepared by the CSIR, dated April 2016 further indicates that between 20 and 40 dB of attenuation is achievable to mitigate the risk. However, SKA-SA indicated that the lower limit of this range would still be below what would be required to comply with the SKA protection requirements.
- e) Based on comments from the SKA-SA assuming all proposed mitigation measures are implemented and achieved, the expected attenuation for Kenhardt PV1 would pose a low to medium risk of detrimental impact.
- f) It must be noted that the final EIAr did not include the detailed EMI and RFI Report undertaken by MESA, but rather a summary of the Electromagnetic Interference Technical Report prepared by the CSIR.
- g) SKA SA recommended that an appropriate EMC control plan should be developed to identify specific mitigation measures that will be implemented for Kenhardt PV1.
- SKA-SA further indicated that any medium or high risk would mean that, unless specific and detail
 mitigation measures are designed and implemented, it would be a fatal flaw.
- i) The summary of the Electromagnetic Interference Technical Report prepared by the CSIR, dated April 2016 concluded that it cannot guarantee the efficiency of proposed mitigation measures to comply with the required SKA-SA levels.

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- The principles of the mitigation hierarchy has not been fully applied.
- No new alternative locations for the proposed PV facility and its associated infrastructure have been investigated, bearing in mind the concerns raised and recommendations made by the SKA-SA along with the findings of the RFI Emissions study.
- i) It should be noted that the Department authorised a total of approximately 231 photovoltaic solar facilities equivalent to 13378 MWs in the Northern Cape Province. There are also a number of renewable energy projects that have been authorised within the surrounding areas and are in less sensitive environments.
- m) The cumulative impacts of the already authorised projects in the area could potentially raise the impact ratings of these projects.
- Given the potential adverse threats posed by the project to the SKA-SA, the lack of assessment of new location alternatives and the limitations of the RFI study, the proposed development on the current site is not supported.

In view of the above, the competent authority is of the opinion that the proposed listed activities will conflict with the general objectives of integrated environmental management stipulated in Chapter 5 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) and that any potentially detrimental environmental impacts resulting from the listed activities may not be mitigated to acceptable levels and should therefore be prevented altogether.

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Department of Environmental Affairs Application Reference No. 14/12/16/3/3/2/838

Annexure 1: Reasons for Decision

1. Information considered in making the decision

In reaching its decision, the Department took, inter alia, the following into consideration -

- The information contained in the application form submitted on 02 October 2015 and acknowledged by the Department on 23 October 2016;
- The information contained in the Environmental Impact Assessment Report (EIAr) dated April 2016 and received by this Department on 18 April 2016;
- The comments received during the Scoping and EIA phases of the application and submitted as part of the EIAr dated April 2016;
- d) Mitigation measures as proposed in the EIAr dated April 2016 and the EMPr submitted as part of the EIAr dated April 2016.
- Specialist studies submitted as part of the EIAr dated April 2016 and received by this Department on 18 April 2016; and
- f) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the National Environmental Management Act, 1998 (Act 107 of 1998).

2. Key factors considered in making the decision

A summary of the issues which, in the Department's view, were of the most significance is set out below-

- a) Compliance of the EIAr dated April 2016 and submitted on 18 April 2016; with Appendix 3 and Appendix 4 of GN R. 982 of 2014;
- The findings of all the specialist studies conducted and submitted as part of the EIAr dated April 2016 along with their recommended mitigation measures;
- c) The need for the proposed project and provision of electricity to the national grid in terms of the Renewable Energy Independent Power Producers Procurement Programme (REIPPPP) as required by the Department of Energy.
- d) Description of the environment that may be affected by the activity and the manner in which the physical, biological, social, economic and cultural aspects of the environment may be affected by the proposed activity.
- The location of the proposed development within the Karoo Central Astronomy Area and the significance of identified impacts to the Square Kilometre Array South Africa (SKA-SA).

Kenhardt PV 2 - DEA Reference: 14/12/16/3/3/2/838

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- f) Concerns raised and comments provided by the SKA-SA on the findings of the RFI Emissions study dated April 2016 and submitted as part of the EIAr dated April 2016.
- g) The selection of location alternatives in terms of the EIA Regulations, 2014 and in relation to the specialist inputs.
- h) All legislation and guidelines that have been considered in the preparation of the EIAr dated April 2016.
- Compliance of the ElAr dated April 2016 and submitted on 18 April 2016; with Chapter 5 of GN R. 982 of 2014.
- j) The cumulative impacts the proposed development will have in the area due to other Renewable Energy Facilities being authorised.

Findings

After consideration of the information and factors listed above, the Department made the following findings -

- A sufficient public participation process was undertaken and the applicant has satisfied the minimum requirements as prescribed in the EIA Regulations, 2014 for public involvement.
- b) The procedures followed for impact assessment is deemed adequate for the decision-making process.
- Based on the summary of the Electromagnetic Interference Technical Report prepared by the CSIR, dated April 2016, the proposed Kenhardt PV2 facility would exceed protection levels toward the closest SKA telegrape.
- d) The summary of the Electromagnetic Interference Technical Report prepared by the CSIR, dated April 2016 further indicates that between 20 and 40 dB of attenuation is achievable to mitigate the risk. However, SKA-SA indicated that the lower limit of this range would still be below what would be required to comply with the SKA protection requirements.
- e) Based on comments from the SKA-SA assuming all proposed mitigation measures are implemented and achieved, the expected attenuation for Kenhardt PV2 would pose a high risk of detrimental impact.
- f) It must be noted that the final EIAr did not include the detailed EMI and RFI Report undertaken by MESA, but rather a summary of the Electromagnetic Interference Technical Report prepared by CSIR.
- SKA SA recommended that an appropriate EMC control plan should be developed to identify specific mitigation measures that will be implemented for Kenhardt PV2.
- SKA-SA further indicated that any medium or high risk would mean that, unless specific and detail
 mitigation measures are designed and implemented, it would be a fatal flaw.
- The summary of the Electromagnetic Interference Technical Report prepared by the CSIR, dated April 2016 concluded that it cannot guarantee the efficiency of proposed mitigation measures to comply with the required SKA-SA levels.
- The principles of the mitigation hierarchy has not been fully applied.

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- k) No new alternative locations for the proposed PV facility and its associated infrastructure have been investigated, bearing in mind the concerns raised and recommendations made by the SKA-SA along with the findings of the RFI Emissions study.
- It should be noted that the Department authorised a total of approximately 231 photovoltaic solar facilities equivalent to 13378 MWs in the Northern Cape Province. There are also a number of renewable energy projects that have been authorised within the surrounding areas and are in less sensitive environments.
- m) The cumulative impacts of the already authorised projects in the area could potentially raise the impact ratings of these projects.
- Given the potential adverse threats posed by the project to the SKA-SA, the lack of assessment of new location alternatives and the limitations of the RFI study, the proposed development on the current site is not supported.

In view of the above, the competent authority is of the opinion that the proposed listed activities will conflict with the general objectives of integrated environmental management stipulated in Chapter 5 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) and that any potentially detrimental environmental impacts resulting from the listed activities may not be mitigated to acceptable levels and should therefore be prevented altogether.

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Department of Environmental Affairs Application Reference No. 14/12/16/3/3/2/836

Annexure 1: Reasons for Decision

1. Information considered in making the decision

In reaching its decision, the Department took, inter alia, the following into consideration -

- The information contained in the application form submitted on 02 October 2015 and acknowledged by the Department on 23 October 2016;
- The information contained in the Environmental Impact Assessment Report (EIAr) dated April 2016 and received by this Department on 18 April 2016;
- The comments received during the Scoping and EIA phases of the application and submitted as part of the EIAr dated April 2016;
- Mitigation measures as proposed in the EIAr dated April 2016 and the EMPr submitted as part of the EIAr dated April 2016
- Specialist studies submitted as part of the EIAr dated April 2016 and received by this Department on 18 April 2016; and
- The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the National Environmental Management Act, 1998 (Act 107 of 1998).

2. Key factors considered in making the decision

A summary of the issues which, in the Department's view, were of the most significance is set out below-

- a) Compliance of the EIAr dated April 2016 and submitted on 18 April 2016; with Appendix 3 and Appendix 4 of GN R. 982 of 2014;
- The findings of all the specialist studies conducted and submitted as part of the EIAr dated April 2016 along with their recommended mitigation measures;
- c) The need for the proposed project and provision of electricity to the national grid in terms of the Renewable Energy Independent Power Producers Procurement Programme (REIPPPP) as required by the Department of Energy.
- d) Description of the environment that may be affected by the activity and the manner in which the physical, biological, social, economic and cultural aspects of the environment may be affected by the proposed activity:
- The location of the proposed development within the Karoo Central Astronomy Area and the significance of identified impacts to the Square Kilometre Array South Africa (SKA-SA).

Kenhardt PV 3 - DEA Reference: 14/12/16/3/3/2/836

Department of Environmental Affairs Application Reference No. 14/12/16/3/3/2/836

- f) Concerns raised and comments provided by the SKA-SA on the findings of the RFI Emissions study dated April 2016 and submitted as part of the ElAr dated April 2016.
- g) The selection of location alternatives in terms of the EIA Regulations, 2014 and in relation to the specialist inputs.
- h) All legislation and guidelines that have been considered in the preparation of the EIAr dated April 2016.
- Compliance of the EIAr dated April 2016 and submitted on 18 April 2016; with Chapter 5 of GN R. 982 of 2014.
- j) The cumulative impacts the proposed development will have in the area due to other Renewable Energy Facilities being authorised.

Findings

After consideration of the information and factors listed above, the Department made the following findings -

- A sufficient public participation process was undertaken and the applicant has satisfied the minimum requirements as prescribed in the EIA Regulations, 2014 for public involvement.
- b) The procedures followed for impact assessment is deemed adequate for the decision-making process.
- c) Based on the summary of the Electromagnetic Interference Technical Report prepared by the CSIR, dated April 2016, the proposed Kenhardt PV3 facility would exceed protection levels toward the closest SKA telescope.
- d) The summary of the Electromagnetic Interference Technical Report prepared by the CSIR, dated April 2016 further indicates that between 20 and 40 dB of attenuation is achievable to mitigate the risk. However, SKA-SA indicated that the lower limit of this range would still be below what would be required to comply with the SKA protection requirements.
- e) Based on comments from the SKA-SA assuming all proposed mitigation measures are implemented and achieved, the expected attenuation for Kenhardt PV3 would pose a low to medium risk of detrimental impact.
- f) It must be noted that the final EIAr did not include the detailed EMI and RFI Report undertaken by MESA, but rather a summary of the Electromagnetic Interference Technical Report prepared by the CSIR.
- SKA SA recommended that an appropriate EMC control plan should be developed to identify specific mitigation measures that will be implemented for Kenhardt PV3.
- SKA-SA further indicated that any medium or high risk would mean that, unless specific and detail
 mitigation measures are designed and implemented, it would be a fatal flaw.
- i) The summary of the Electromagnetic Interference Technical Report prepared by the CSIR, dated April 2016 concluded that it cannot guarantee the efficiency of proposed mitigation measures to comply with the required SKA-SA levels.

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- j) The principles of the mitigation hierarchy has not been fully applied.
- No new alternative locations for the proposed PV facility and its associated infrastructure have been investigated, bearing in mind the concerns raised and recommendations made by the SKA-SA along with the findings of the RFI Emissions study.
- It should be noted that the Department authorised a total of approximately 231 photovoltaic solar facilities equivalent to 13378 MWs in the Northern Cape Province. There are also a number of renewable energy projects that have been authorised within the surrounding areas and are in less sensitive environments.
- The cumulative impacts of the already authorised projects in the area could potentially raise the impact ratings of these projects.
- Given the potential adverse threats posed by the project to the SKA-SA, the lack of assessment of new location alternatives and the limitations of the RFI study, the proposed development on the current site is not supported.

In view of the above, the competent authority is of the opinion that the proposed listed activities will conflict with the general objectives of integrated environmental management stipulated in Chapter 5 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) and that any potentially detrimental environmental impacts resulting from the listed activities may not be mitigated to acceptable levels and should therefore be prevented altogether.

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