From: serahmu@nda.agric.za
Sent: 12 September 2012 04:04 PM

To: Cornelia Steyn

**Subject:** Re: 2012-06-0029 Koeris 78

### Good day

Your application is awaiting to be presented to the committee, please be patient due to the fact that there are application that came before this one therefore it is only fair to other applicant to follow the right channels.

A letter will be sent to you as soon as you application is processed. I hope you will bare with us.

Hope you find this in order

Serah

Sent from my BlackBerry® wireless device

From: "Cornelia Steyn" < Cornelia. Steyn@aurecongroup.com>

**Date:** Tue, 11 Sep 2012 08:18:06 +0000 **To:** SerahMu<<u>SerahMu@nda.agric.za</u>> **Subject:** RE: 2012-06-0029 Koeris 78

Dear Serah

We have not received any formal comment from you, can you please assist me and tell me when we can expect your comment?

Kind regards

Corlie

Cornelia Steyn | BA (Hons) Geography
Environmental Practitioner | Aurecon
T +27 44 805 5421 | M +27 82 575 7415
E Cornelia.Steyn@aurecongroup.com
Suite 201, 2nd Floor Bloemhof Building, 65 York St, George | South Africa
aurecongroup.com



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**DISCLAIMER** 

From: SerahMu [mailto:SerahMu@nda.agric.za]

**Sent:** 30 August 2012 12:34 PM

**To:** Cornelia Steyn

**Subject:** RE: 2012-06-0029 Koeris 78

**Good Day** 

Can you please be specific on the footprint were the wind and solar is going to be erected.

I need you to tell me that out of 46 535 (ha) how many hectares will be used.

Thanks for the table and I cant really say i understand it.

Serah Masala Muobeleni

Department of Agriculture, Forestry and Fisheries

Directorate: Land Use and Soil Management

Tel: 012 319 7480 Cell: 083 779 6631

Fax: 012 319 5938/086 266 5262 Email Address: SerahMu@nda.agric.za



From: Cornelia Steyn [mailto:Cornelia.Steyn@aurecongroup.com]

Sent: 30 August 2012 10:49 AM

To: SerahMu

Subject: RE: 2012-06-0029 Koeris 78

Dear Serah

Sorry I was out of office until today.

The first table is for the wind farm and the second for the solar panels.

Hope this is what you need?

Kind regards Corlie

Project	No. of turbines (approximate)	Turbine size (MW)	Project size (MW)	Size (ha)	Footprint (approximate)
Wind	185 to 500	1.5- 4 MW	750		< 1 % )

Project	Maximum height	Project size (MW)	Size (ha)	Footprint (approximate)
Solar	<u>16</u> -4-m	250	1000	< 2.15 % (1 000 ha)

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#### **DISCLAIMER**

From: SerahMu [mailto:SerahMu@nda.agric.za]

**Sent:** 29 August 2012 01:47 PM

**To:** Cornelia Steyn

**Subject:** 2012-06-0029 Koeris 78

**Good Day** 

Can you please give me the footprint of the area were the proposed wind and solar energy.

The total hectares that is going to be used for the project.

Urgently please

Serah Masala Muobeleni

Department of Agriculture, Forestry and Fisheries

Directorate: Land Use and Soil Management

Tel: 012 319 7480 Cell: 083 779 6631

Fax: 012 319 5938/086 266 5262

Email Address: SerahMu@nda.agric.za



From: SerahMu@nda.agric.za>

**Sent:** 29 August 2012 01:47 PM

To: Cornelia Steyn

**Subject:** 2012-06-0029 Koeris 78

#### **Good Day**

Can you please give me the footprint of the area were the proposed wind and solar energy.

The total hectares that is going to be used for the project.

### Urgently please

Serah Masala Muobeleni

Department of Agriculture, Forestry and Fisheries

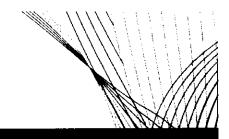
Directorate: Land Use and Soil Management

Tel: 012 319 7480 Cell: 083 779 6631

Fax: 012 319 5938/ 086 266 5262

Email Address: SerahMu@nda.agric.za





### **Sub- Directorate: Sustainable Resource Management**

PO Box 52, Upington, Northern Cape, 8800, Tel: (054) 3378000, 0718607551 Fax: (054) 3378001, E-mail: ntoerien1@gmail.com

Our Reference:

DEA Reference: 14/12/16/3/3/2/346 NEAS REF No. DEAT/EIA0001222/2012 DEA Reference: 14/12/16/3/3/2/342

NEAS REF No. DEAT/EIA0001217/2012

CORLIE STEYN PO Box 494 CAPE TOWN 8000

**Attention: CORLIE STEYN** 

**Enquiries: N.J. Toerien** 

Date: 11/09/2012

TO E Long
INITIAL

NS 2012 -09- 18

FILE No.
ACTION

The proposed project involves the establishment of wind and solar (photovoltaic) energy on farms Kangas (Farm no. 77 Portion 3 and the Remainder), Koeris (Farm no. 78 Portion 1), Areb (Farm no. 75 Portion 0) and Smorgenschaduwe (Farm no. 127 Portion 0).

The Department of Agriculture, Land Reform and Rural Development is guided by Act 43 of 1983. With the development of the abovementioned activities the developer must comply with Act 43 of 1983 and also take care of the following:

### Article 7.(3)b of Regulation 9238: CONSERVATION OF AGRICULTURE RESOURCES, 1983 (Act 43 of 1983)

Utilisation and protection of vlies, marshes, water sponges and water courses

7.(1) "..... no land user shall utilize the vegetation in a viei, marsh or water sponge or within the flood area of a water course or within 10 meters horizontally outside such flood area in a manner that causes or may cause the deterioration of or damage to the natural agriculture resources."

(3)(b) "cultivate any land on his farm unit within the flood area of a water course or within 10 meters horizontally outside the flood area of a water course"

Take also care of the following: who is the current landowner, will it be a subdivision of land or a lease contract between the developer and the landowner?

Rezoning will also be applicable because the land use will change from the current agricultural status.

The Department of Agriculture, Land Reform and Rural Development foreseen no problems in the development as mentioned above as long as the developer adheres to the articles of Act 43 of 1983

Please contact the undersigned if any additional information is required.

Thank you

N.J. Toerien

SRM CONTROL TECHNICIAN

DEPT. OF AGRICULTURE, LANDREFORM AND RURAL DEVELOPMENT



Private Bag X 447· PRETORIA · 0001· Fedsure Building · 315 Pretorius Street · PRETORIA Tel (+ 27 12) 310 3911 · Fax (+ 2712) 322 2682

**DEA Reference**: 14/12/16/3/3/2/346 (WEF), 14/12/16/3/3/2/342 (PV) & 14/12/16/3/3/2/386 (Sub and Gridline) **Enquiries**: Ms Sindiswa Dlomo

Telephone: 012-395-1856 Fax: 012-320-7539 E-mail: Scilomo@envrionment.gov.za

Ms L Corbett Aurecon South Africa (Pty) Ltd P.O. Box 494 CAPE TOWN 8000

Fax: (086) 667 3532

### PER FACSIMILE / MAIL

Dear Ms Corbett

# FINAL SCOPING REPORT FOR THE PROPOSED SPRINGBOK WIND AND SOLAR ENERGY FACILITIES, SUBSTATION AND GRIDLINE IN THE NORTHERN CAPE PROVINCE

The above mentioned refers.

The Department received a letter dated 06 July 2012 from the Northern Cape Department of Environment and Nature Conservation (DENC) expressing their concerns regarding the proximity of the proposed facilities to the Goegap Nature Reserve and the adjacent property of Ratekraal, which is the property of WWF. The said letter is attached for your ease of reference.

The Department requests you to respond to the issues raised in the attached letter and submit all responses to this Department using the following contact details:

Ms Fatima Rawjee
Acting Director: Integrated Environmental Authorisations
Department of Environmental Affairs
Private Bag x 447
PRETORIA
0001

Please also ensure that the DENC have received a copy of both the Draft and Final Scoping report.

You are hereby reminded of Section 24F of the National Environmental Management Act, Act No 107 of 1998, as amended, that no activity may commence prior to an environmental authorisation being granted by the Department.

Yours sincerely

Mr Mark Gordon

Chief Director: Integrated Environmental Authorisations

Department of Environmental Affairs

Date: 10 September 2012

	CC:	Mr Hendrik Reyneke	Mainstream Renewables Power Development (Pty)	Tel: 021 656 4050	Fax: 021 871 5665
			Ltd		
1		Mr C Geldenhuys	DENC	Tel: 053 807 7300	Fax: 053 807 7328
L		Mr Seshego	Nama-khoi Local Municipality	Tel: 027 718 8101	Fax: 021 712 1636

Cape Town 1 Century City Drive Waterford Precinct Century City 7441 T +27 21 526 9400 F +27 21 526 9500 E capetown@aurecongroup.com W aurecongroup.com



PO Box 494 Cape Town 8000 Docex: DX 204

5 September 2012

Email: Louise.Corbett@aurecongroup.com

Department of Environmental Affairs Environmental Impact Evaluation Private Bag X447 Pretoria 0001

Attention: Ms Sindiswa Dlomo

Dear Ms Dlomo

EIA PROCESS FOR THE PROPOSED WIND ENERGY FACILITY ON KANGNAS FARM NEAR SPRINGBOK, NORTHERN CAPE (DEA REF. NO: 14/12/16/3/3/2/346, NEA REF NO: DEA/EIA/0001222/2012)

AND

PROPOSED SOLAR PHOTOVOLTAIC ENERGY FACILITY ON KANGNAS FARM NEAR SPRINGBOK, NORTHERN CAPE (DEA REF. NO: 14/12/16/3/3/2/342, NEA REF NO: DEA/EIA/0001217/2012)

AND

PROPOSED SUBSTATION ON KANGNAS FARM NEAR SPRINGBOK, NORTHERN CAPE (DEA REF. NO: 14/12/16/3/3/2/386, NEA REF NO: DEA/EIA/0001344/2012)

#### RESPONSE TO THE DEPARMENT ENVIRONMENT AND NATURE CONSERVATION COMMENT

Our telephonic discussion on 30 August 2012 and a comment forwarded by the Department of Environmental Affairs (DEA) on the same day have reference.

We would like to acknowledge receipt of the comment from the Department of Environment and Nature Conservation (DENC),dated 6 July 2012, received by DEA on 7 August 2012 and by Aurecon South Africa (Pty) Ltd (Aurecon) on 30 August 2012) on the above-mentioned applications. It should be noted that DENC did not send Aurecon a copy of these comments however, Aurecon will request DENC to do so in accordance with the Environmental Impact Assessment (EIA) Regulations (Government Notice No. 543 of 2010) in future. Please note that we received this comment via DEA on 30 August 2012.

In the comment DENC provides some background to the proposed applications, as provided in the Environmental Impact Assessment (EIA) process, before noting their concerns and recommendations with reference to the EIA applications. It was noted in the Final Scoping Report (FSR) for the applications that any comments received after submission of the FSR would be forwarded to DEA and responded to in the Draft Environmental Impact Assessment Report (DEIR). However DEA has indicated that a response is required in order to proceed with the processing of the FSR, hence a brief response is provided below. Please note that DENC's concerns and recommendations will be addressed in more detail in the DEIR once all specialist studies have been completed, assuming DEA approves the FSR.

No.	DENC Concern & Recommendation	Project Team Response			
1	The map of the proposed development shows the	The site is approximately 18 km away from			
	proximity of the facility to Goegap Nature Reserve	Goegap Nature Reserve and approximately 2.5			

Aurecon South Africa (Pty) Ltd Reg No 1977/003711/07
Board of Directors (09/2011)
BMH Tsita (Chairperson), PC Blersch, MG Diliza,
ZB Ebrahim, AB Geldenhuys, NN Gwagwa, SA Ie Roux,
PC Lombard, AW Möhr, GT Rohde, DM Triegaardt

ISO 9001 Certified Member of CESA and ASAQS Silver Founding Member of the Green Building Council of South Africa

	and the adjacent property of Ratelkraal which is the property of the WWF. The possible expansion of the protected area network into Bushmanland (which has almost no protection status) is curtailed by this proposed development.	km away from Ratelkraal. It is noted that there is a large area of Bushmanland Arid Bushveld vegetation to the north of the site, which could be considered for expansion of the protected areas network (see attached figure). Additionally, the proposed projects would not cover the entire site hence it is possible that portions of the site could be considered for conservation. This would need to be explored in the DEIR. During land negotiations in 2011, landowners were specifically asked if they had been approached by WWF/DENC to discuss future expansion of the Goegap nature reserve and all of them indicated that this was not the case.
		It should furthermore be noted that Mainstream Renewable Power South Africa (Pty) Ltd has been in contact with Ms Natasha Wilson of WWF, on more than one occasion, specifically with regards to WWF's expansion plans and the proposed projects. No objection has been received from WWF to date.
		Please provide the shapefiles for the possible protected areas network expansion so that the potential impacts, if any, of the proposed projects can be assessed by the various specialists and included in the DEIR. Please also indicate the legal status of these possible expansion areas.
2	Other similar developments are proposed around the Springbok area with some developments directly adjacent to Goegap Nature Reserve. The renewable energy targets presume an even more concerted effort in the near future to expand the renewable energy network which will impact on biodiversity around and on current protected areas (e.g. birds and bats), other wilderness areas away from protected areas, sensitive habitats, water resources etc.	The cumulative impacts of the proposed projects will be considered in the DEIR. However, it should be noted that not all renewable energy projects proposed will be constructed as there are many requirements to be met.
3	It is highly recommended that the locality of the Renewable Energy facilities be reconsidered and not placed within the Protected Area expansion.	See response to 1 above.  Mainstream undertook a fatal flaw analysis of four sites in the Northern and Western Cape, of which the current site was one. These sites were identified by considering various technical aspects, including surrounding land uses and existing services infrastructure as well as environmental aspects such as botany, avifauna, bats and more. Site visits and desktop studies were undertaken, and input was received from

	specialists in botany avifauna heritage and bats	
It is highly recommended that the Renewable Energy facilities are not placed within visible and/or ecological impact zones around the Protected Areas. This means not within a minimum buffer zone surrounding Protected Areas.	One of the sites considered in the fatal flaw analysis was located immediately adjacent to Goegap Nature Reserve and it was decided not to pursue this site in order to limit potential impacts on the reserve as well as the WWF site. Based on the Fatal Flaw Analysis, Mainstream decided to pursue two of the four sites, namely the Kangnas site and a site closer to Pofadder (currently the subject of a separate EIA process). Based on the selection process undertaken by Mainstream in selecting the site, no other site location alternatives are assessed in the EIA.  See response to 1 above. We are not aware of any legally applicable buffer zones around protected areas and would appreciate if these could be provided.  Various specialist studies will be undertaken for the proposed projects, including a visual,	
	botanical, aquatic ecology, avifaunal and bat studies. These studies will determine the potential visual and ecological impacts of the proposed projects on the surrounds. This information will be included in the DEIR.	
It is recommended that climate change migration corridors be considered and not be impacted on by Renewable Energy facilities.	It is not certain if climate change migration corridors have been designated or if it is suggested that they are compiled. If they have been designated it is requested that these are please made available so that the potential impacts on these corridors can be considered. If this recommendation is a suggestion that corridors be compiled then it is suggested that a body such as DEA complete this task as this would need to be addressed at a strategic, not project specific, level.	
It is recommended that a more strategic planning of placement of Renewable Energy facilities be implemented as the current ad hoc and random method is causing negative impacts on the Northern Cape's biodiversity, eco-tourism and planning processes.	As this comment is addressed to DEA no response is required.	

We trust that the above responses are sufficient to allow DEA to continue with the processing of the FSR and we look forward to your correspondence in this regard.

Yours sincerely

Aureco

LOUISE CORBETT (Pr. Sci. Nat).

Associate: Environment & Advisory Services

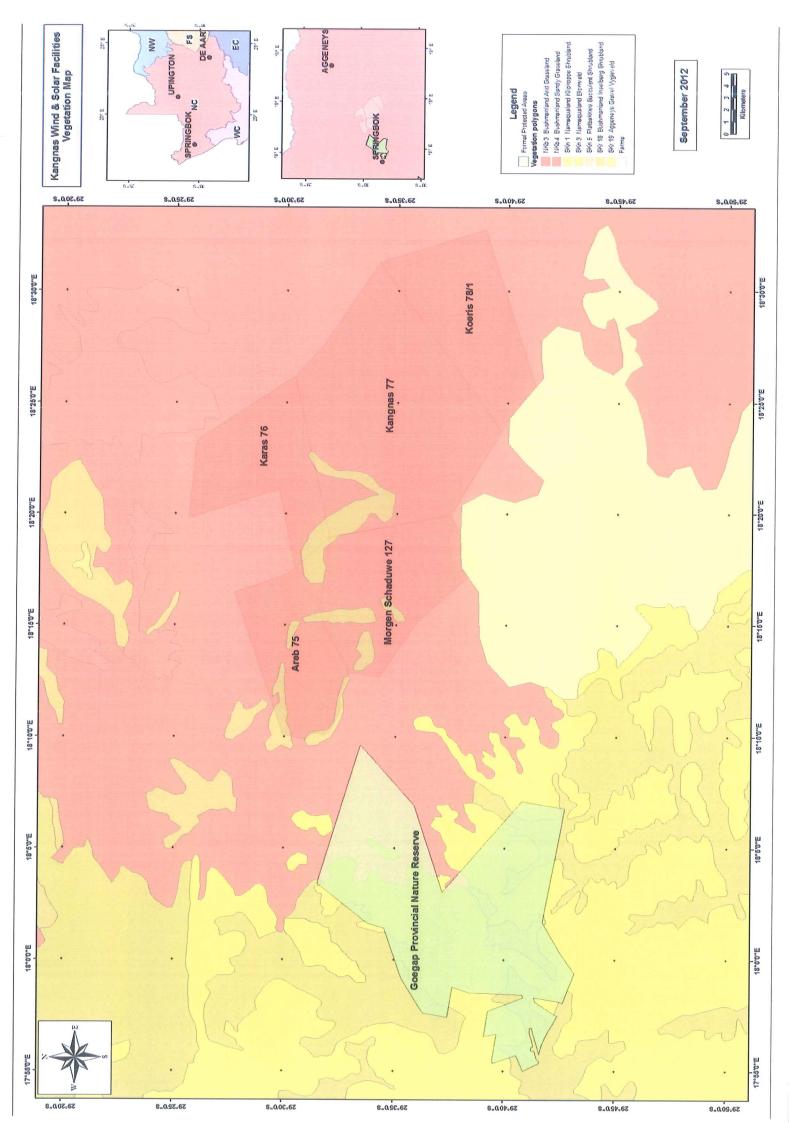
CC :

Mr D van Heerden, Department of Environment and Nature Conservation, Northern Cape (<u>dvvanheerden@ncpg.gov.za</u>, tel: 053 807

7437 / 7300, fax : 053 807 7328)

Aurecon Cape Town Office Electronic File Reference: C:\Users\Louise.corbett\AppData\Local\Microsoft\Windows\Temporary Internet

Files\Content.Outlook\FPQSJUIW\Letter to DEA 300812\_LC.doc





Private Bag X6102, Kimberley, 8300, Metlife Towers, T-Floor, Tel: 053 807 7300, Fax: 053 807 7328

Enquiries: Mr C Geldenhuys Ref:

Date: 6 July 2012

Ms Nosipho Ngcaba

Director-General

Department of Environmental Affairs

Private Bag X447

Pretoria

0001

0 7 AUG 2012

Att: Ms Dee Fischer: Chief Director: Environmental Impact Management

RE: PROPOSED SPRINGBOK WIND AND SOLAR ENERGY FACILITY FOCUS GROUP MEETING.

### 1. BACKGROUND

As per standard EIA related public participation meetings interested and affected parties are allowed the opportunity to provide comment on proposed developments. In the presentation at the proposed Springbok wind and solar energy facility Focus Group Meeting 3/7/2012 it was explained that the intention was to erect a 750 MW wind energy facility and a 250 MW solar energy facility on the farms Kangnas, Koeris, Smorgenschaduwe and Areb approximately 40 km west of Springbok (Figure 1). This would also include four substations, one primary station, power cables and road infrastructure.

The five properties together are 46 535 hectares in total. The development proposal is for 185-500 wind turbines depending on technology type. Each turbine's foundation is expected to be 400m<sup>2</sup> with a crane hoist foundation of 800m<sup>2</sup> adjacent to each turbine (total footprint = 22-60 hectares). A 6-10m wide road will be constructed (or current roads upgraded) to each turbine (total footprint unknown). The PV facility is expected to cover 1 000 hectares. A wider disturbance footprint can be expected during the construction phase.

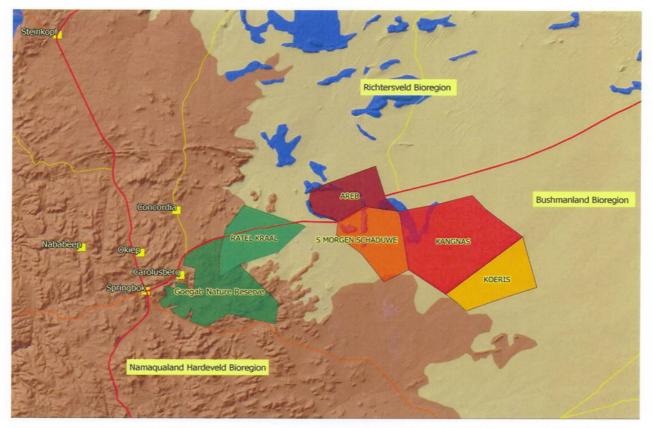


Figure 1 Farms targeted for the proposed renewable energy facility are Areb (RE75), Kangnas (77/3 & RE77), Koeris (78/1) and Smorgenschaduwe(127RE) and are located approximately 40km east of Springbok. The farms in this diagram lie in a possible expansion path of the protected area network from Goegap Nature Reserve eastwards. The farm Ratelkraalis the property of the World Wildlife Fund for Nature (WWF) and is currently managed by DENC.

The developer indicated that government's Integrated Resource Plan of 2010 made allowance for the generation 20 409 MW of renewable energy of which 8 400 MW would be Solar (PV) and 9 200 MW Wind, but that this target is constantly reviewed. The energy use in South Africa is currently 38 000 MW. This indicates the extent of the Renewable Energy push in South Africa. Interestingly for Renewable Energy tenders developers are required to conduct 12 months of wind data to support a proposed development in an area, but for solar there is no such requirement.

- On a question of the construction time frame the developer indicated that a 150-200 MW project takes 18-22
  months to complete. The developer indicated that projects tendered for during the first phase of
  government's Renewable Energy initiative have to be operational by 2014 and those tendered during the
  most recent fifth phase have to be operational by 2016.
- It was estimated that 30-40 people would be permanently active/employed at the facilities during the operational phase and 300-500 people would be on site during the construction phase.
- The development will occupy approximately 50% 75% of the land area of the farms but it is expected by the developer that 1% - 3% of grazing would be lost.
- Comments must be received before 23 July 2012.

• It is unclear what the nature of the contractual agreements with land owners are, i.e., if continued use of the

land would be possible for livestock farming.

2. CONCERNS & RECOMMENDATIONS

The map of the proposed development shows the proximity of the facility to Goegap Nature Reserve and the

adjacent property of Ratelkraal which is the property of the WWF. The possible expansion of the protected

area network into Bushmanland, which has almost no protection status, is curtailed by this proposed

development.

Other similar developments are proposed around the Springbok area with some developments directly adjacent

to Goegap Nature Reserve. The Renewable Energy targets presume an even more concerted effort in the near

future to expand the Renewable Energy network which will impact biodiversity around and on current protected

areas (e.g. birds and bats), other wilderness area away from protected area, sensitive habitats, water resources

etc.

It is highly recommended that the locality of these Renewable Energy facilities be reconsidered and not placed

within the Protected Area expansion targeted areas.

It is highly recommended that Renewable Energy facilities are not placed within visible and / or ecological impact

zones around Protected Areas. This means not within a minimum buffer zone surrounding Protected Areas.

It is recommended that climate change migration corridors be considered and not be impacted on by Renewable

Energy facilities.

3. RECOMMENDATION

It is recommended that a more strategic planning of placement of Renewable Energy facilities be implemented

as the current ad hoc and random method is causing negative impacts on the Northern Cape's biodiversity, eco-

-20120724

tourism and planning processes.

Regards

D VAN HEERDEN

HEAD OF DEPARTMENT

From:

Sent:

Christopher,

То:	Cornelia Steyn
Subject:	RE: Proposed wind and solar energy facilities near Springbok
Hi Corlie	
rii Coriie	
	ents but the Upington server for e-mail is off for the past 2 days. I ask one of the ne comments but due to the technical problem they are not able to access their
I will be in the office on 21 Sept 2	2012 and will try my best to provide you with comments.
Thank You.	
Shaun Cloete	
Sent: 19 September 2012 02:45 I To: Cloete Shaun; Cebekhulu Md	rnelia.Steyn@aurecongroup.com] PM luduzi Christopher (UPN); Julies Anasta solar energy facilities near Springbok
Dear Shaun	
Please let us know if we can assis	st with anything to help you to provide comment to us.
Kind regards Corlie	
Cornelia Steyn I BA (Hons) Geogr Environmental Practitioner I Aur T +27 44 805 5421 I M +27 82 5 E <u>Cornelia.Steyn@aurecongroup</u> Suite 201, 2nd Floor Bloemhof Br	recon 575 7415
Original Message	
From: Cloete Shaun [mailto:Cloe Sent: 18 September 2012 12:23 I	
To: Cebekhulu Mduduzi Christop	
Cc: Cornelia Steyn	calar anarm facilities many Coringhali
Subject: Fw: Proposed wind and	solar energy facilities near Springbok

Cloete Shaun < Cloete S@dwa.gov.za>

19 September 2012 02:54 PM

Can u please follow up with Anasta for the document mentioned below

(Proposed wind and solar energy facilities near Springbok) can u please get the document and provide the standard comments for Solar / Wind Applications.
Anasta can u please locate the document or is it still with you?
Thank You. Shaun Cloete
Original Message From: Cornelia Steyn [mailto:Cornelia.Steyn@aurecongroup.com] Sent: 14 September 2012 09:39 AM To: Cloete Shaun Subject: Proposed wind and solar energy facilities near Springbok
Dear Shaun
I refer to our telephonic conversation this morning.
Please find the final scoping report attached.
A hard copy was also posted to you on 2nd August and we also emailed it to you.
Can you please acknowledge this email and provide a date when you would be able to provide us with your official comment?
Thank you for your assistance in this regard.
Kind regards
Corlie
Cornelia Stevn I BA (Hons) Geography

Environmental Practitioner I Aurecon

T +27 44 805 5421 I M +27 82 575 7415

E Cornelia.Steyn@aurecongroup.com <mailto:Cornelia.Steyn@aurecongroup.com> Suite 201, 2nd Floor Bloemhof Building, 65 York St, George I South Africa aurecongroup.com < <a href="http://www.aurecongroup.com">http://www.aurecongroup.com</a>>

### Description:

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From: Conrad Geldenhuys <c.geldenhuys@hotmail.com>

**Sent:** 27 July 2012 02:18 PM

**To:** Cornelia Steyn

**Subject:** RE: Wind en sonpaneel aanleg: Springbok: Kontak besonderhede

**Attachments:** image001.png

#### Beste Corlie,

my besonderhede is hieronder. Let assseblief daarop dat prosedures binne ons departement vereis dat kommentaar van my as plantkundige oor EIA aansoeke net gelewer kan word as dit via ons Omgewing afdeling (wat EIA aansoeke ontvang en hanteer) aangevra word.

### Groete Conrad

Conrad Geldenhuys

Production Scientist Grade A: Botanist Research and Development Support Section

Northern Cape Department of Environment and Nature Conservation

Goegap Nature Reserve

1 Airport road Private Bag X1 Springbok South Africa 8240

EMAIL: c.geldenhuys@hotmail.com

Tel: (+27) 027 718 9906 Fax: (+27) 027 718 9907 Cell: (+27) 079 524 0970

From: Cornelia.Steyn@aurecongroup.com

To: c.geldenhuys@hotmail.com

Subject: Wind en sonpaneel aanleg: Springbok: Kontak besonderhede

Date: Thu, 26 Jul 2012 13:31:27 +0000

Beste Conrad

Kan jy asb jou posadres, faks nommer en selfoon nommer (indien moonltik) vir ons aanstuur.

Groete Corlie

Cornelia Steyn | BA (Hons) Geography Environmental Practitioner | Aurecon T +27 44 805 5421 | M +27 82 575 7415

E Cornelia.Steyn@aurecongroup.com

Suite 201, 2nd Floor Bloemhof Building, 65 York St, George I South Africa

aurecongroup.com



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**DISCLAIMER** 

From: Cornelia Steyn

Sent: 11 September 2012 02:33 PM
To: sdlomo@environment.gov.za

Cc: Louise Corbett (Louise.Corbett@aurecongroup.com); Hendrik Reyneke

(Hendrik.Reyneke@mainstreamrp.com)

**Subject:** Proposed wind and solar PV energy facilities near Springbok (Kangnas).

**Attachments:** 2258815.pdf; DEA letter re DENC comment 050912.pdf

Dear Sindiswa,

In reference to the attached letter dated 10 September 2012 and our telephonic discussion earlier today, we would like to confirm that we have already responded officially in an email on 5 September 2012, and we have posted a hard copy on that day. We attach this letter again for your convenience.

Thank you for your kind assistance in this matter.

Kind regards Corlie

Cornelia Steyn | BA (Hons) Geography
Environmental Practitioner | Aurecon
T +27 44 805 5421 | M +27 82 575 7415
E Cornelia.Steyn@aurecongroup.com
Suite 201, 2nd Floor Bloemhof Building, 65 York St, George | South Africa
aurecongroup.com



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**DISCLAIMER** 

From: Cornelia Steyn

**Sent:** 30 August 2012 12:59 PM

To: 'SerahMu'

**Subject:** RE: 2012-06-0029 Koeris 78

**Attachments:** loc\_windFocus.jpg; loc\_pvFocus.jpg

#### Dear Serah

Currently there are two focus areas: one for the wind one for solar (please refer to the two attachments).

The total area for both are 46 535 (ha), but the footprint area for the wind facility will be <1% which means 465,53 ha if you take it at 1,

and for the solar facility approximately 1000ha of the 46 545ha will be the footprint area for the development.

So in total 1465,53 ha will be used as the footprint development area for both the solar and the wind facilities.

Please email me again if this is still unclear.

### Kind regards

Corlie

Cornelia Steyn | BA (Hons) Geography
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#### **DISCLAIMER**

From: SerahMu [mailto:SerahMu@nda.agric.za]

**Sent:** 30 August 2012 12:34 PM

**To:** Cornelia Steyn

**Subject:** RE: 2012-06-0029 Koeris 78

#### **Good Day**

Can you please be specific on the footprint were the wind and solar is going to be erected.

I need you to tell me that out of 46 535 (ha) how many hectares will be used.

Thanks for the table and I cant really say i understand it.

Serah Masala Muobeleni

Department of Agriculture, Forestry and Fisheries

Directorate: Land Use and Soil Management

Tel: 012 319 7480 Cell: 083 779 6631

Fax: 012 319 5938/086 266 5262 Email Address: SerahMu@nda.agric.za



From: Cornelia Steyn [mailto:Cornelia.Steyn@aurecongroup.com]

**Sent:** 30 August 2012 10:49 AM

To: SerahMu

**Subject:** RE: 2012-06-0029 Koeris 78

Dear Serah

Sorry I was out of office until today.

The first table is for the wind farm and the second for the solar panels.

Hope this is what you need?

Kind regards Corlie

Project	No. of turbines (approximate)	Turbine size (MW)	Project size (MW)	Size (ha)	Footprint (approximate)
Wind	185 to 500	1.5- 4 MW	750		< 1 % )

Project Maximum height		Project size (MW)	Size (ha)	Footprint (approximate)
Solar	<u>16</u> -4-m	250	1000	< 2.15 % (1 000 ha)

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#### **DISCLAIMER**

From: SerahMu [mailto:SerahMu@nda.agric.za]

**Sent:** 29 August 2012 01:47 PM

**To:** Cornelia Steyn

**Subject:** 2012-06-0029 Koeris 78

**Good Day** 

Can you please give me the footprint of the area were the proposed wind and solar energy.

The total hectares that is going to be used for the project.

Urgently please

Serah Masala Muobeleni

Department of Agriculture, Forestry and Fisheries

Directorate: Land Use and Soil Management

Tel: 012 319 7480

Cell: 083 779 6631

Fax: 012 319 5938/086 266 5262 Email Address: SerahMu@nda.agric.za



#### Kangnas Wind and Solar Project Our Ref: 9/2/066/0001

Enquiries: Kathryn Smuts Tel: 021 462 4502

Email: ksmuts@sahra.org.za

CaseID: 136

Date: Monday August 20, 2012

Page No: 1



### **Interim Comment**

In terms of section 38(8) of the National Heritage Resources Act (Act 25 of 1999)

Attention: Cornelia Steyn Aurecon South Africa PO Box 494 Cape Town 8000

## Proposed Wind and Solar (Photovoltaic) Energy Facilities on Kangnas Farm near Springbok in the Northern Cape

Harris, C. May 2012. Report on site visit to potential meteorite impact site near Kangnas

South African Mainstream Renewable Power Developments (Pty) Ltd (Mainstream) has proposed the construction of a 750 MW wind energy facility and a 250 MW Photovoltaic (PV) solar energy facility on farms near Springbok in the Northern Cape. These farms are Portion 3 and the Remainder of Kangnas Farm 77, Portion 1 of Koeris Farm 78, Portion 0 of Areb Farm 75 and Portion 0 of Smorgenschaduwe Farm 127. These farms are located approximately 48 km east of Springbok and cover an area of approximately 46 535 ha.

The wind energy facility will consist of between 185 and 500 wind turbines, each capable of generating 1.5-4 MW. Each turbine will be built on a 3m deep foundation approximately 20 m x 20 m, accompanied by a construction area of 20 m x 40 m. Access roads 6 – 10 m wide will be required between each turbine. The proposed 250 MW solar energy facility will consist of either Photovoltaic (PV) and/or Concentratred PV (CPV) technology, possibly including tracking systems, and would have an approximate footprint of 1 000 hectares (ha). Onsite connection is proposed via an existing 220 kilovolt Eskom line. One main substation will link the proposed facilities and the Eskom line, while up to four new substations will link sectors of the facility to the main substation via overhead lines.

The receiving environment is predominantly low-lying and flat with granite inselbergs in the northwest. The site vegetation is Bushmanland Arid Grassland, typical of the area. The land is currently used for livestock grazing, while mining is prominent in the regional economy. No alternative location has been provided for the facilities.

The geologist conducted a preliminary site visit to determine whether the two craters located on the proposed site were the result of meteorite impacts. One was considered too small to be such a crater, while the origins of the other, which measured 1km in diameter, are unclear. The feature was possibly caused by the eruption of an olivine melilitite pipe, although none of the expected minerals were identified in the crater samples. There was no exposed rock, which might have shown stress fractures, so to determine positively that it is a meteorite crater, samples would have to be drilled from the bedrock below the calcrete, which is 80m thick inside the crater. The feature is possibly merely a reflection of the morphology of the underlying bedrock below the calcrete.



#### Kangnas Wind and Solar Project Our Ref: 9/2/066/0001

Enquiries: Kathryn Smuts Tel: 021 462 4502

Email: ksmuts@sahra.org.za

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A full Heritage Impact Assessment inclusive of a Palaeontological Impact Assessment is proposed for the EIA process.

#### Decision:

In light of the inconclusive findings regarding the origin of the larger crater, SAHRA requires that:

 A buffer should be observed around the crater and no construction should take place within that buffer zone. As the crater falls within the area demarcated for the WEF development, this buffer should be 50m from the perimeter of the crater. It is recommended that the buffer zone is demarcated by temporary fencing during construction. The no-go area should be marked on all construction maps and the ECO should be informed of the possible sensitivity of the site.

SAHRA looks forward to receiving the outstanding heritage reports. Please ensure that the impact of the wind energy facility on possible cultural landscapes is considered in the assessment.

Should you have any further queries, please contact the designated official using the case number quoted above in the case header.

Yours faithfully

Kathryn Smuts

Heritage Officer: Archaeology

South African Heritage Resources Agency

Colette Scheermeyer

SAHRA Head Archaeologist

South African Heritage Resources Agency

**ADMIN:** 



### Kangnas Wind and Solar Project Our Ref: 9/2/066/0001

Enquiries: Kathryn Smuts

Tel: 021 462 4502

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Date: Monday August 20, 2012

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(DEA, Ref: 14/12/16/3/3/2/342) (DEA, Ref: 14/12/16/3/3/2/346)

### Terms & Conditions:

- 1. This approval does not exonerate the applicant from obtaining local authority approval or any other necessary approval for proposed work.
- 2. If any heritage resources, including graves or human remains, are encountered they must be reported to SAHRA immediately.
- 3. SAHRA reserves the right to request additional information as required.



**To:** Wilson, Natasha **Subject:** RE: Internal guidelines

From: Wilson, Natasha [mailto:nwilson@wwf.org.za]

**Sent:** 13 September 2012 01:41 PM

To: Cornelia Steyn

Subject: RE: Internal guidelines

Hi Cornelia

Thanks for your patience.

WWF-SA has recently developed internal guidelines regarding renewable energy applications specifically, wind energy applications.

These guidelines are still in a draft format, used within WWF to aid decision making when it comes to commenting on applications.

The internal guidelines are specific to areas that fall inside of the protected area expansion strategy or adjacent to already protected areas.

The approach we have taken is to avoid the NIMBY standpoint but to consider the applications as they are received on a case by case basis.

We also acknowledge that renewable energy has a role to play in the future of South Africa's energy needs.

I hope this will suffice.

Many thanks Natasha

#### **Natasha Wilson**

:: Programme Manager: WWF Land Programme :: Boundary Terraces, Bridge House 1st Floor Mariendahl Lane, Newlands, 7700, Cape Town.

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