

PROPOSED PHOTOVOLTAIC SOLAR ENERGY FACILITY ON A SITE NORTHWEST OF VREDENDAL, WESTERN CAPE

COMMENTS AND RESPONSE REPORT: I&APs & STAKEHOLDERS
Scoping Phase: Focus Group Meetings, Public Meeting & Written Comments

No.	Issue	Raised by	Response
General			
1.	How much power will this facility generate?	Johan van der Heever, Landowner De Walle Farm, comment at public meeting.	The proposed PV facility will generate between 20 and 30 MW of power.
2.	What sort of solar panels will be installed?	Johan van der Heever, Landowner De Walle Farm, comment at public meeting.	These are fixed panels, in other words they do not rotate (like tracking PV panels) but are fixed in one position that maximizes the amount of solar radiation they receive throughout the day. They will be installed at an angle of 26 degrees. They are low lying panels with foundations drilled to ~ half a meter deep.
3.	Will there be security on site? I imagine these panels would be attractive to thieves.	Herman de Waal, Lebendal Farmers Association, comment at public meeting.	The panels may be attractive to thieves as they are worth a lot of money. There will definitely be a need for security personal and security cameras on the site.
4.	Does the Juno substation have enough capacity for the power that will be generated at the facility?	Johan van der Heever, Landowner De Walle Farm, comment at public meeting.	INCA Energy are engaging Eskom in discussions. From discussions so far it is understood Juno substation has the required capacity for the facility to link into it.
5.	The facility is in our jurisdictional area and we would like to be kept informed of any developments on the project.	Doretha Kotze, Westcoast District Municipality, comment at focus group meeting	Comment noted. The municipality will be sent hard copies of all the environmental reports and kept updated on all developments

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6.	A full heritage assessment and visual assessment must be conducted in the EIA phase	Andrew Hall, Heritage Western Cape, comment via email	A full heritage assessment and visual assessment will be conducted in the EIA phase. Heritage Western Cape will be kept informed of all developments on the project.
7.	The scoping report does not properly assess alternatives correctly, including the no-go option	Zaahir Toefy, Western Cape DEA&DP, comment sent via fax, 28 June 2011	The motivation for not assessing alternatives is discussed in chapter 2 of the Scoping and EIA report. The no-go option is assessed in Chapter 6 of the EIA report.
8.	Construction and operational impacts must be properly considered.	Zaahir Toefy, Western Cape DEA&DP, comment sent via fax, 28 June 2011	The purpose of the scoping report is not to assess impacts in detail. These impacts are assessed in the EIA report.
9.	A detailed facility layout must be included in the report.	Zaahir Toefy, Western Cape DEA&DP, comment sent via fax, 28 June 2011	This is included in the EIA report.
10.	According to Mucina and Rutherford (2006) the vegetation surrounding the site is Namaqualand Spinescent Grassland. According to the more recent CAPE fine-scale vegetation maps, the vegetation is Namaqualand Strandveld. A site visit by the ecological specialist should confirm which vegetation type(s) are present and any management requirements thereof. As the area to the north and west of the site has been determined as Critical Biodiversity Area, it is important that activities relating to the construction and operation of the photovoltaic facility do not negatively impact on the surrounding natural vegetation.	Alana Duffell-Canham, Cape Nature, Comment via email, 17 June 2011	A site visit has now been conducted by the ecologist in the EIA phase. Mitigation measures are specified in the EIA report to reduce any potential impacts to acceptable levels.

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11.	The site itself has been transformed by agricultural activities and it appears that no natural vegetation is remaining on site. The name of the farm indicates that there may be or may have been wetlands present and although there do not appear to be any on the site, this should also be confirmed by a site visit.	Alana Duffell-Canham, Cape Nature, Comment via email, 17 June 2011	This will be confirmed by a site visit in the EIA phase.
12.	Bird mortality is of some concern with regards to solar energy. Birds have been known to confuse reflective PV panels with water, confusing them in flight or causing them to fly into the panels. Some designs are less reflective and therefore pose less of a risk to birds. We are pleased to note that a Concentrator Photovoltaic (CPV) system is being proposed and not Concentrated Solar Power (CSP) which is known to pose more of a hazard to birds.	Alana Duffell-Canham, Cape Nature, Comment via email, 17 June 2011	Comment noted. Potential impacts on birds will be discussed in more detail in the ecology section(s) of the EIA report
13.	Bird collision with power lines must be mitigated by means of means of bird "flappers" (diverters) on the entire length of the powerline.	Alana Duffell-Canham, Cape Nature, Comment via email, 17 June 2011	Comment noted.
14.	The site and powerline route should be monitored during construction and at regular intervals during the operational phase of the project to determine avian and other faunal mortalities.	Alana Duffell-Canham, Cape Nature, Comment via email, 17 June 2011	Comment noted.

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15.	As this is a relatively arid area, water used for washing of panels should be recycled if possible. Also consider storing stormwater runoff from the panels to use for washing activities. This will also help to prevent erosion	Alana Duffell-Canham, Cape Nature, Comment via email, 17 June 2011	The panels will most likely be cleaned using compressed air. In the event water is used it will be distilled water that is transported to the site.
16.	The site is currently zoned Agricultural zone 1. In terms of land use planning ordinance of 1985 rezoning approval will need to be in place prior to construction proceeding.	DGI O'Neil, Municipal Manager, Matzikama Municipality, Comment via Fax, 28 June 2011.	Rezoning is a separate process from the EIA process and can be completed by INCA Energy only after authorization for the facility has been received.
17.	Current guidelines specify that no wind / solar facilities should be built in areas of high agricultural potential or currently cultivated or irrigated areas where it may impact negatively on production (existing or planned).	AS Roux, Director: Sustainable Resource Management, Western Cape Department of Agriculture, Comment via email, 4 July 2011	The current site is of low agricultural potential as specified in the agricultural potential study which forms part of the EIA report.
18.	In terms of the current guidelines regarding agricultural land and wind / solar facilities no wind or solar facilities should result in significant degradation of the natural resources in the area, especially soil resources. This is also applicable to the ancillary infrastructure, cabling, roads and power lines.	AS Roux, Director: Sustainable Resource Management, Western Cape Department of Agriculture, Comment via email, 4 July 2011	Mitigation measures in this regard will be specified in the EIA report and EMPR in order to reduce potential impacts associated with the construction and operation of the proposed facility to acceptable levels.
19.	It is the responsibility of the developer to limit erosion as much as possible.	AS Roux, Director: Sustainable Resource Management, Western Cape Department of Agriculture, Comment via email, 4 July 2011	Mitigation measures in the regard will form part of the EIA report and accompanying Environmental Management Programme as specified by the soils and ecology specialists.

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20.	The facilities should not be positioned on slopes of more than 20%.	AS Roux, Director: Sustainable Resource Management, Western Cape Department of Agriculture, Comment via email, 4 July 2011	The proposed facility is positioned on an almost completely flat area.
21.	A detailed soils assessment should be conducted as part of the EIA.	AS Roux, Director: Sustainable Resource Management, Western Cape Department of Agriculture, Comment via email, 4 July 2011	A detailed soils assessment is conducted as part of the EIA report.

EIA Phase: Focus Group Meetings, Public Meeting & Written Comments

No.	Issue	Raised by	Response
General			
22.	Cape Nature does not have any serious issues with the project as the site appears to be located away from sensitive areas.	Wentzel Hornimann, Cape Nature, comment at public meeting.	Comment Noted.
23.	I would like to see the Environmental Management Plan for the proposed project.	Wentzel Hornimann, Cape Nature, comment at public meeting.	The draft EMP forms parts of the EIA report which is available for public review.

No.	Issue	Raised by	Response
24.	<p>I see that you refer to a ~1 km 66 kV line from your site to Juno 400/132/66 kV substation. It is not clear to me if this solution has been cleared with Eskom as a best practical solution.</p> <p>Eskom Sere wind farm (on 132 kV level) is committed to take up 100 MW peak capacity, that leaves us with say 40 MW on the 125 MVA 400/132 kV transformers during low load conditions and high generation. Assume there are current applications on Juno networks, therefore any available capacity to be determined by early December 2011. Further assume these applicants are on the 66 kV networks. It means that if any are successful, it will not leave 30 MW capacity on the 40 MVA 132/66 kV transformers. Any increase in required capacity will then have to cater for increase in 132/66 kV transformer capacity, as well as 400/132 kV capacity. It means that 66 kV additional generation will result in double transformation in Juno substation – not preferred solution. It is recommended that Juno 400/132 kV transformer capacity be increased, based on various requests for renewable energy generation. It means that any new project should really consider going directly from generation MV voltage to 132 kV. In your case, consider directly 132/33 kV for the onsite substation. The Juno upgrade will also be based on firm projects and will required about 5 years lead time.</p>	<p>Riaan Smit, Eskom, Comment via Email, 21 November 2011</p>	<p>The voltage of the power line as assessed in the final EIA report is 132 kV.</p>
Comments & Response Report	<p>- Depending on exact location, such substation may share a 132 kV line in northerly direction to also connect new loads / generation.</p>		Page 6

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25.	As the area to the north and west of the site has been determined as Critical Biodiversity Area, it is important that activities relating to the construction and operation of the photovoltaic facility do not negatively impact on the surrounding natural vegetation. If the site is not already fenced, it should be fenced off prior to construction.	Alana Duffell-Canham, Cape Nature, Comment via email, 23 November 2011	This mitigation measure is proposed in the EIA report and accompanying Environmental Management Plan.
26.	A site visit should also have been conducted to confirm the presence/absence of drainage channels. The power line route should be clearly indicated and should also be ground-truthed as it appears that it may need to pass through natural vegetation.	Alana Duffell-Canham, Cape Nature, Comment via email, 23 November 2011	Comment noted. The route for the powerline will be groundtruthed prior to construction as per the recommendations of the EIA report.
27.	The site has been determined to be of low agricultural potential. However, the loss of this site for the construction of a solar energy facility should not lead to natural vegetation elsewhere being cleared or becoming degraded.	Alana Duffell-Canham, Cape Nature, Comment via email, 23 November 2011	Comment noted.
28.	Bird collision with power lines must be mitigated by means of means of bird "flappers" (diverters) on the entire length of the powerline.	Alana Duffell-Canham, Cape Nature, Comment via email, 23 November 2011	This mitigation measure is proposed in the EIA report.

No.	Issue	Raised by	Response
29.	The CPV site and powerline route should be monitored during construction and at regular intervals during the operational phase of the project to determine avian and other faunal mortalities	Alana Duffell-Canham, Cape Nature, Comment via email, 23 November 2011	There are two threatened mammal species, one near threatened reptile and one threatened and one near threatened bird species that could make use of available habitats in the proposed study area. The two bird species are likely to move away in the event that construction takes place on site, whereas the other three species, if they occur on site, are more likely to be restricted to the site. Both bird species are only likely to use the site for foraging only and not for breeding. The significance of this impact has been rated as low in the ecology assessment.
30.	Monitoring and clearing of alien vegetation must be done regularly - preferably on a biannual basis.	Alana Duffell-Canham, Cape Nature, Comment via email, 23 November 2011	This mitigation measure is proposed in the EIA report and accompanying Environmental Management Plan.
31.	Erosion of roads and the site is also of high concern and regular maintenance must be undertaken	Alana Duffell-Canham, Cape Nature, Comment via email, 23 November 2011	This mitigation measure is proposed in the EIA report and accompanying Environmental Management Plan.
32.	The West Coast District municipality supports renewable energy development provided they are appropriately located and impacts on the environment can be managed and receive the proper attention prior to development.	Doretha Kotze, Matzikamma Municipality, comment via fax, 30 June 2011	Comment noted.
33.	The site lies near a Critical Biodiversity Area. Any development should be excluded from occurring within any CBA area.	Doretha Kotze, Matzikamma Municipality, comment via fax, 30 June 2011	This is a recommendation within the EIA report.
34.	The West Coast District municipality discourages the use of on-site construction workers.	Doretha Kotze, Matzikamma Municipality, comment via fax, 30 June 2011	Construction workers will most likely not be housed on-site but in the nearby town of Vredendal.
35.	Noise impacts and dust suppression during construction must be addressed.	Doretha Kotze, Matzikamma Municipality, comment via fax, 30 June 2011	This is addressed in the draft Environmental Management Plan appended to the EIA report.

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36.	Issues around ablution and waste disposal must be addressed so that hazardous substances are not released into the environment.	Doretha Kotze, Matzikamma Municipality, comment via fax, 30 June 2011	This is addressed in the draft Environmental Management Plan appended to the EIA report.
37.	Decommissioning of the facility needs to be addressed.	Doretha Kotze, Matzikamma Municipality, comment via fax, 30 June 2011	This is addressed in the draft Environmental Management Plan appended to the EIA report.
38.	Water use during construction and operation must be addressed.	Doretha Kotze, Matzikamma Municipality, comment via fax, 30 June 2011	Compressed air will be used to clean the panels during operation. During construction there will very limited water use (if any). No cement batching is required during construction.
39.	A copy of the authorization and EMP must be submitted to the municipality to facilitate monitoring of construction and operation of the facility.	Doretha Kotze, Matzikamma Municipality, comment via fax, 30 June 2011	These documents will be sent to the municipality prior to construction commencing on site.