

**ISSUES AND RESPONSE REPORT
ESKOM KUDU INTEGRATION PROJECT**

Issues / comment raised by:	Date	Means of comm	Issue / comment	Response
GUIDELINES TO BE FOLLOWED				
B. Conradie	24 January 2006	Registration form	Emphasised that the requirements of the National Water Act 1998 (Act 36 of 1998) must be adhered to.	All legal requirements will be adhered to.
C. de Villiers (Botanical Society of South Africa, Conservation Unit) V. Bowie (Scientific Services – Cape Nature)	27 Jan, 22 Feb, 12 April 2006	E-mail & Faxed letter	Ensure that the specialist report regarding biodiversity follow the terms of reference of environmental assessment and decision-making they forwarded. Attention should also be paid to the Fynbos Forum ecosystem guidelines for environmental assessment in the Western Cape. Cape Nature supports all comments made by the Botanical Society of SA, Conservation Unit (27 January 2006)	The botanical specialist is well-informed of these guidelines and the Botanical Society's letter was forwarded to the ecological specialist to ensure that he considers their comments.
C. de Villiers (Botanical Society of South Africa, Conservation Unit)	27 Jan 2006	Faxed letter	Regarding the Succulent Karoo: Biodiversity Hotspot; A precautionary risk-averse approach must be followed with regard to the proposed Kudu Integration Project, as the proposed transmission lines as well as new access roads will be located in a global biodiversity hotspot, The Succulent Karoo Biome, which is the only arid "hotspot" in the world. He further stated that the National Spatial Biodiversity Assessment has identified the succulent Karoo Biome as one of nine broad priority areas for conservation action at a national scale.	The sensitivity of the study area as a biodiversity hotspot with a number of endemic species and threatened floral communities is recognised and is acknowledged in the Scoping Report. The ecological specialist study will take cognisance of these sensitive features and assess the level of impacts that the proposed power line may have on them.

<p>C. de Villiers (Botanical Society of South Africa, Conservation Unit)</p>	<p>27 Jan 2006</p>	<p>Faxed letter</p>	<p>Regarding the Succulent Karoo Ecosystem Plan (SKEP); The SKEP framework for action has identified specific areas where vegetation is highly vulnerable and new options exist for achieving conservation targets. Such areas with highly irreplaceable and vulnerable biodiversity occur among others between Port Nolloth and Lekkersing, Kleinsee and Springbok, and around Lutzville-Vredendal respectively. The Oranjemund – Gromis - Juno corridor negotiates a number of landscapes features that are important for the maintenance of ecological processes. The areas with the Quartz patches in particular are Habitats that is almost uniquely associated with the Succulent Karoo Biome. The Quartz patches are centres of plant endemism and species diversification. These quartz patches are delicate ecosystems that are sensitive to transformation. Once these quartz patches are disturbed, they are virtually impossible to restore. The SKEP maps are a very useful planning tool.</p>	<p>The terms of reference for the ecological specialist include the consideration of the information in the SKEP reports. The ecological specialist will consult with Dr Phil Desmet, who has been intimately involved with SKEP.</p> <p>The ecological specialist has been informed to pay particular attention to the quartz patches and to other locations of endemic species.</p>
<p>C. de Villiers (Botanical Society of South Africa, Conservation Unit)</p>	<p>27 Jan 2006</p>	<p>Faxed letter</p>	<p>Spatial recommendations and specialists' workshop; Planning should seek to:</p> <ol style="list-style-type: none"> 1. Avoid any additional habitat loss in areas designated as highly irreplaceable for the achievement of biodiversity targets; 2. Promote functional connectivity; 3. Reduce the fragmentation of habitat by appropriate restorative actions. 4. It was strongly recommended that an 	<p>A corridor workshop was convened with a number of role players in the Succulent Karoo Biome, including SA National Parks, Cape Nature, farmers associations and municipalities. Minutes of this meeting are attached to the Scoping Report and Environmental Impact Report. The outcome of the corridor workshop was a suggested corridor that kept to existing roads and areas or historical</p>

			inter-disciplinary, corridor workshop be held to draw on expert knowledge and experience of the area which can be used to identify major issues or “Show-stoppers” that can be dealt with through positive planning.	disturbance as much as possible.
C. de Villiers (Botanical Society of South Africa, Conservation Unit)	27 Jan 2006	Faxed letter	<p>National Environmental Management Principles; It was strongly recommended that all reports for the environmental process firmly demonstrate how the proponent intends complying with the following National Environmental Management Principles:</p> <ol style="list-style-type: none"> 1. Avoid, minimise or remedy disturbance of ecosystems and loss of biodiversity; 2. Avoid degradation of the environment; 3. Avoid jeopardising ecosystem integrity; 4. Pursue the best practicable environmental option by means of integrated environmental management; 5. Protect the environment as the peoples common heritage; 6. Control and minimise environmental damage; 7. Pay specific attention to management and planning and planning procedures pertaining to sensitive, vulnerable, highly dynamic or stressed ecosystems. 	<p>The National Environmental Management Principles contained in the National Environmental Management Act, 1998 are overarching principles for all decisions relating to the management of the environment and we agree that they would, therefore, be applicable to this EIA process.</p> <p>Avoidance of impacts is very much at the highest priority as far as management of environmental impacts is concerned, followed by mitigation and thereafter, substitution or replacement. The Environmental Impact Report will include a comprehensive Environmental Management Plan, which will specify detailed actions to be taken to avoid and mitigate impacts such that the NEMA principles are respected.</p>

C. de Villiers (Botanical Society of South Africa, Conservation Unit)	27 Jan 2006	Faxed letter	Recommendation: Biodiversity ToR; The Fynbos Forum Ecosystem Guidelines for Environmental Assessment in the Western Cape (Helme, in De Villiers et al. 2005, pp 58-61) can be consulted to identify critical issues that should be addressed when undertaking biodiversity assessments in the Succulent Karoo. SEF was also referred to the DEADP guideline on the involvement of biodiversity specialists in EIA processes.	These guidelines and the rest of the contents of Botsoc's letters were forwarded to the botanical expert prior to his commencement of the botanical study to ensure that he does take these guidelines into account.
V. Bowie (Scientific Services – Cape Nature)	22 Feb 2006	Faxed letter	Support of the specialist assessments to take place – must ensure that the DEADP 2005 guideline series in EIA processes are used.	The botanical specialist has been provided with a copy of the DEA&DP guidelines.
ENVIRONMENTAL IMPACTS				
V. Bowie P. Grobler E. Cloete	22 Feb, 2 March 2006	Faxed letter & Public Meeting - Vanrhynsdorp	Emphasised the extremely sensitive nature of the Knersvlakte and that extreme caution should be exercised as it can never be rehabilitated to the original state. The white quartz patches may not be disturbed under any circumstances.	This is a well known concern. This option will be regarded as the last alternative for construction
A. Le Roux	2 March 2006	Public meeting – Kamieskroon	The erection of Eskom's power lines will not be allowed through the Knersvlakte	This option will be regarded as the last alternative for construction. It was agreed at the interdisciplinary meeting that any route through the Knersvlakte is undesirable, since it would be almost impossible to rehabilitate.
A. Le Roux	2 March 2006	Public meeting - Kamieskroon	The Kamiesberg mountains have numerous endangered species, therefore Eskom will not be allowed through this area either.	The Kamiesberg Mountains have been identified as an area with a very high degree of endemism, and will therefore be regarded as an unfavourable alternative.
C. Paulsen	2 March	Public meeting – Vanrhynsdorp	It is suggested that the Hardeveld area of the Knersvlakte will not be an option for Eskom. The installation of water pipes in this area in the past	This option will be regarded as the last alternative for construction

			proved extremely difficult.	
A. Le Roux	2 March	Public meeting- Kamieskroon	Highlighted the fact that the most environmental damage will be from the movements of construction vehicles and not necessarily the actual erection of the power line.	This is confirmed by the botanical specialist.
V. Bowie P. Grobler E. Cloete	22 February - 2 March 2006	Faxed letter & Public Meeting - Vanrhynsdorp	Eskom must fly in pylons & cables (or walk in) in sensitive areas, vehicles are NOT to be used.	This option will be addressed. This way of construction may be used in some areas.
H. Kohrg	2 March 2006	Public meeting – Kamieskroon	Concerned that maintenance of the power lines, will in future have a negative impact on the environment and that this needs to be considered.	Will be addressed in the Environmental Management Plan. The issue is noted and EIA team will consider it during the EIA
A. Le Roux P. Grobler	2 March 2006	Public meeting – Kamieskroon & Vanrhynsdorp	Sand will rehabilitate more easily than the Knersvlakte.	Noted the issue
G. Nel	2 March 2006	Public meeting – Vanrhynsdorp	Enquired of E. Cloete what the impact on the environment would be if, for example, the Juno substation expanded by one hectare.	Impact would be minimal on the Knersvlakte.
R. Smart	2 March 2006	Public meeting – Kamieskroon	The main reason for the corridor expansion of the Namaqua National Park is to ensure species survival through Global Warming	Issue noted
K. Kritzinger	2 March 2006	Public meeting – Vanrhynsdorp	A small patch of fynbos exists close to the coast inline with the proposed coastal alternative. This patch of fynbos needs to be bypassed and not disturbed in any way.	Comment noted
A. Le Roux	2 March 2006	Public meeting – Kamieskroon	It is suggested that an environmental control officer be present at all times during construction.	The need of an environmental control officer during construction will be included in the EIA report.

AVIAN IMPACTS				
V. Bowie P. Grobler E. Cloete	22 Feb, 2 March 2006	Faxed letter & Public Meeting - Vanrhynsdorp	Mitigation measures must be implemented to prevent raptors from nesting above the conductors – option of nest platforms should be investigated.	Plastic spikes are attached to the pylons, just above the conductors. This ensures that no bird will sit or nest on or above the conductors/
S. Davids	9 May 2006	E-mail	Pylons may have a negative effect on the birds frequenting the region	Noted. This has been addressed in the avian impact assessment.
P. Grobler	2 March 2006	Public meeting – Vanrhynsdorp	Commented that power lines along the coast will have a lesser impact on bird life than those erected more inland.	The person tasked with the Avifauna studies will be in contact with him to ensure that all impacts and mitigation measures are addressed.
VISUAL IMPACTS				
S. Davids	9 May 2006	E-mail	The pylons will have a severe negative visual impact on the area and this in turn will have a negative socio-economic impact on the region. Tourism in general and eco-tourism in particular, forms a cornerstone of the area's socio-economic development (Kamiesberg IDP 2005: 34,44,46,47, 73, 77, 83, 90, 97, 98, 100, 102, 113, 121). He further stated that the unsightly pylons will go against the grain of this marketing campaign that aims to benefit this poverty stricken area. He believes that pylons will not be neutral static structures, but will function negatively for years to rob the community of potential economic income it can derive from its major natural resource, namely an undisturbed landscape. The cumulative cost to the community may run into millions over a few years while the human cost of not empowering the disadvantaged through tourism, will be substantial.	Comment noted. Issue will be addressed in social and tourism report in the EIR.

C. Paulsen	2 March 2006	Public meeting – Vanrynsdorp	It is suggested that the visual impact of the power lines will be less in the sand as compared to the Knersvlakte because plants are taller in the sand area.	K. Rau added that, if possible, Eskom should erect power lines during the rainy season to ensure minimal impact and faster rehabilitation.
PROPOSED POWERLINE ROUTES & ISSUES ASSOCIATED WITH EACH				
J. Deventer G. de Kock K. Helmut R. Smart A. Le Roux	2 March 2006	Public meeting - Kamieskroon	It is suggested that the power line routes along the coast, cut through the Namaqua National Park alongside the Hondeklip road and then south again allowing for at least 2.5-3km distance from the eastern edge of the new park boundary.	This issue was noted
K. Rau	2 March 2006	Public meeting – Vanrhynsdorp	It is suggested that construction along the Lutzville-Nuwerus or Hondeklip roads are best alternatives.	This issue was noted
J. Deventer G. de Kock H. Kohrg R. Smart A. Le Roux	2 March 2006	Public meeting - Kamieskroon	Preferred power line route to go through the Boesmanland area, second alternative is down the coast and through the Namaqua National Park along the Hondeklip road and the least preferred alternative along the N7.	It was explained that the route through the Boesmanland will be very costly and that the people residing in the Boesmanland will have issues with the line as well.
H. Kohrg	2 March 2006	Public meeting – Kamieskroon	Preferred the power lines to be erected through the Boesmanland area, past Vaalputs.	It was explained that the route through the Boesmanland will be very costly and that the people residing in the Boesmanland will have issues with the line as well.
J. Deventer	2 March 2006	Public meeting – Kamieskroon	Preferred the power lines to be erected alongside the N7	A. Le Roux again emphasized that the erection of power lines will not be allowed in the Knersvlakte (Quarts area).
P. Grobler C. vd Merwe E. Cloete T. Mehtoor K. Rau J. de V Kritzinger	2 March 2006	Public meeting – Vanrhynsdorp	It was decided that the first alternative suggested by SANParks (through the Boesmanland area) is not the best alternative, due to the negative impact on the Knersvlakte. The alternative that routs along the coast and cuts through the Namaqua National Park must be considered to be the most preferred alternative.	This issue was noted.

C. Paulsen A. Khan				
C. Paulsen	2 March 2006	Public meeting – Vanrhynsdorp	It is suggested that the Boesmanland alternative be viewed as the second best alternative as the environmental impacts are relatively high.	J. Kritzinger suggested that the Springbok Mountains must not be an option for Eskom.
J. Kritzinger C. Paulsen P. Grobler C. vd Merve E. Cloete T. Mehtoor K. Rau A. Kahn	2 March 2006	Public meeting – Vanrhynsdorp	Preferred the coastal route for the erection of power lines	SANParks initially agreed with this alternative.
K. Rau	2 March 2006	Public meeting – Vanrhynsdorp	It is noted that mining already exists along the coast, therefore the erection of the power lines close to the coast will impact the environment minimally.	It is agreed that a route through the mining areas will have minimal impact.
K. Rau	2 March 2006	Public meeting – Vanrhynsdorp	Cautioned regarding the coastal mist.	Eskom would prefer not to erect their power lines within 10km from the coast to prevent corrosion of the pylons.
S. Davids	9 May 2006	E-mail	<p>Unique plant material occurs in patches and the patches can easily be avoided by rerouting the power lines. An honest appraisal of the area by the specialists doing the vegetation assessment will reveal the well-known location of globally unique areas such as the Riethuis quartz patch. The power line must be routed around such sensitive areas.</p> <p>He referred the following biodiversity experts working in the area to assist in this regard. Dr. Phil Desmet. Cell: 082-352-2955 email: factoryrider@absamail.co.za Annalise Roux. Cell 082-484-6993. email:</p>	<p>The botanical specialist appointed to the project team has a substantial amount of experience in the Succulent Karoo, and has been working closely with Dr Phil Desmet. He has identified and mapped the Riethuis Quartz Patch – refer to botanical specialist study.</p> <p>Annalise le Roux of Cape Nature and Charl de Villiers of the Botanical Society of South Africa have registered as I&APs with SEF.</p>

			rouxa@cncjnk.wcape.gov.za	
K. Rau	2 March 2006	Public meeting – Vanrynsdorp	Mentioned that there are existing roads in the sand and that Eskom and SEF should consider these when finalising the power line route.	Comment noted. The power lines will be routes along existing infrastructure like as far as possible to minimise the impact.
CONSTRUCTION ACTIVITIES				
J. de Jager Maass Namakwa Boerdery BK	22 Feb 2006	Registration form	Construction workers do not stay within the construction site and that vehicles drive all over the veld and adjacent farms. Workers also trample bushes.	The impact of access by contractors to areas that are regarded as sensitive to farming operations is acknowledged as potentially significant. Appropriate mitigation will be proposed in the Environmental Management Plan (EMP). It is recommended that farmers agree on appropriate controls with contractors prior to the start of construction so that access is limited to suitable areas.
J. de Jager Maass Namakwa Boerdery BK	22 Feb 2006	Registration form	Eskom closes and opens gates without permission as well as cutting farm fences. Important that this gets addressed as livestock constantly move around.	
Namakwa Boerdery BK	22 Feb 2006	Registration form	Emphasises that Eskom must keep their construction sites clean from waste and fuel.	Issue was noted. Appropriate mitigation will be included in the EMP.
K. Kritzinger	2 March 2006	Public meeting – Vanrynsdorp	Emphasised that construction must remain alongside the roads and not in the dunes.	The dunes areas are regarded to be sensitive to erosion and as far as possible, the power line will be kept away from dunes.
BENEFITS OF THE POWERLINE				
H. Kohrg	2 March 2006	Public meeting - Kamieskroon	Enquired as to what benefits Namaqualand would receive from the project. If nothing, then why should the Namaqualand community comply?	There is no benefit to the people in Namaqualand, apart from the possibility of tap offs from the line by communities. There is a major shortage of electricity in the Cape Metropolitan area. Allowing the power line will only help to address this problem.
J. Deventer G. de Kock H. Kohrg R. Smart	2 March 2006	Public meeting - Kamieskroon	It is suggested that Eskom should subsidise Namaqua National Park's electricity	Issue noted. Eskom has indicated that it is prepared to negotiate terms and conditions with Sanparks, including purchase of land or providing electricity to

A. Le Roux				Sanparks.
B.J. Kennedy	15 Feb 2006	Letter	Interested in accessing electricity should the power line be erected alongside the Groenrivier road or through his farm.	Issue noted and confirmed by phone call to the I&AP. The appropriate contact persons to negotiate with regarding this possibility will be provided.
COMMUNITY UPLIFTMENT / WORK OPPORTUNITIES				
W. B. Hendriks G. Cloete	8-23 Feb 2006	Registration form/Telephonically	Enquired with regards to contract or subcontract work.	Most of the construction work is undertaken by highly specialised contractors. There is scope for local contractors for activities like fencing.
A. Kahn	2 March 2006	Public meeting – Vanrynsdorp	Enquired as to whether Eskom was looking at any possible opportunities for the local communities.	A database of all interested parties has been compiled and Eskom will consult this in order to meet employment stipulations with regards to local communities.
A. Kahn	2 March 2006	Public meeting – Vanrynsdorp	Stated that he owns the largest herbicide company in South Africa and that he has done work for Eskom before.	Advised to send details of companies to be registered and included in the database.
GENERAL ISSUES				
R. Smit	1 Feb 2006	Registration form faxed	Address the impact this project will have on existing electrical lines.	Eskom will ensure that no other services , including existing power lines, are negatively affected.
H. K. J. Kohrs	22 Feb 2006	Registration form	Enquired as to whether the power line was a new one to be erected or upgrading an existing line.	It was responded that this will be a new power line.
M. Dreyer	9 Feb 2006	Registration form	Enquired as to whether the power line will be erected in a zig-zag manner or straight line. All households along the route need to be notified of activities. Specifics of where the power line will be erected between Garies & Bitterfontein.	Response by phone call: The plan is to have a line that is as straight as possible, depending on the location of sensitive areas.
C. Paulsen	2 March 2006	Public meeting – Vanrhynsdorp	Enquired as to why electricity had to go to the Juno substation when Eskom has a national grid.	The national grid cannot be sorted into incoming/outgoing electricity. Lines are erected for a specific reason and to serve specific areas.

C. Paulsen	2 March 2006	Public meeting – Vanrynsdorp	Enquired as to when Eskom would begin construction.	The EIA process is currently being conducted and only once that is complete and the Record of Decision (RoD) has been issued can construction commence. It is not possible to say at this stage when that will be. Another thirty days is allowed for appeals from all I&APs after the RoD has been issued.
J du Toit S.F. du Toit	22 Feb 2006	Registration form	Intends to build guest houses on his farm and does not want power lines to cross his farm.	Issue noted. The EIA includes a visual impact assessment and a socio-economic assessment that assesses the impacts of this nature.
C. Paulsen	2 March 2006	Public meeting – Vanrynsdorp	It is suggested that Eskom would save funds if they construct their power lines through sand rather than granite.	Comment noted. However, as indicated above, sandy soil is sensitive to erosion, and for this reason may need to be avoided.
H. Kohrg	2 March 2006	Public meeting – Kamieskroon	It is suggested that Eskom should consider incorporating the extra R600 million (for the longer route through the Boesmanland area) in user tariffs. This will amount to a minimal increase in tariffs that consumers should be willing to pay to protect the environment.	Decisions regarding the application of user tariffs is something about which Eskom would need to make a decision.
C. Du Toit Mostert J.C.J Rossouw	22 Feb 2006	Registration form	Would like to know whether the project will affect him in any way	The exact route of the power line is not known. The route will be presented to all registered and affected landowners I&AP's prior to construction.
PEOPLE/ ORGANIZATIONS TO BE CONTACTED				
T.A. Anderson V. Bowie (Scientific Services – Cape Nature)	27 Jan 2006 22 Feb 2006	Registration form/Faxed letter	Local expert with knowledge and experience in the Succulent Karoo must be appointed. Dr P. Desmet has done botanical work on the Knersvlakte (as well as visual modelling) and should be consulted– if possible included in the project team.	Dr Des met was extensively consulted by the EIA team's botanical specialist.

V. Bowie P. Grobler E. Cloete	22 Feb - 2 March 2006	Faxed letter & Public Meeting - Vanrhynsdorp	Dr P. Desmet must be consulted with the exact positioning of pylons.	The exact positions of pylons will be determined by a walk-through inspection of the route prior to construction. This inspection will be undertaken by a botanist, a bird specialist and an archaeologist. The EIA process will recommend a 2km wide corridor, and then exact location of the pylons within the corridor will be determined through the walk-through inspection where specific sensitive areas will be recorded and the pylon positions will be optimised to avoid these features.
A. van der Westhuizen	9 Feb 2006	Registration form	Notify the Knersvlakte Biosphere Association – M. Langenhoven	The Knersvlakte Biosphere Association was added to the I&AP database.
G. de Kock C. Paulsen J. Kritzinger	2 March 2006	Public meeting – Kamieskroon & Vanrhynsdorp	Important tourist routes need to be considered before finalizing the route of the power lines. Herbert Howe of the Matzikamma Tourist Bureau should be contacted in this regard.	Tourism routes have been considered in the Social Impact Assessment.
J. J. Cloete (Garies Development Movement)	9 Feb 2006	Registration form	Notify the Kamiesberg Municipal area & Garies Economies of all activities within their area.	Issue was noted.
M. Dreyer	9 Feb 2006	Registration form	All households along the route need to be notified of activities.	Notification of all affected landowners forms part of the EIA process.
M. J. Runkel (SANRA)	31 Jan 06	Letter	Application needs to be made to SANRAL (SA National Roads Agency) if there is a need for a road crossing and installation within the road reserve.	SANRAL is registered as an interested and affected party and have the opportunity to raise issues regarding their infrastructure.
REQUEST FOR ADDITIONAL INFORMATION				
S. E. Cloete	30 Jan	Letter/	These respondents saw the adverts / notices	N.A.

J. Maas A. van der Westhuizen	2006 17 Feb 2006	Telephonically /Registration form	about the EIA or were informed about it by other means and requested additional information about the project. No questions or comments were raised.	
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