9 IMPACT ASSESSMENT

9.1 Introduction

The significant environmental impacts identified in the Scoping Phase as well as any newly identified impacts have been assessed during the EIA phase.

The objective of the assessment of impacts is to identify and assess all the significant impacts that may arise as a result of the proposed project. The process of assessing the impacts of the project encompasses the following four activities:

- Identification and assessment of potential impacts;
- Prediction of the nature, extent, duration, magnitude and probability of potentially significant impacts;
- Identification of mitigation measures that could be implemented to reduce the severity or significance of the impacts of the activity; and
- Evaluation of the significance of the impact after the mitigation measures have been implemented i.e. the significance of the residual impact.

The possible impacts associated with the proposed new 400 kV powerline between the Tabor and Nzhelele substations were primarily identified in the Scoping Phase through desktop study and public consultation. Additional impacts have further been identified and assessed during the Impact Assessment Phase by means of more in-depth investigations along with consultation with interested and affected parties.

9.2 EIA process and methodology

In accordance with Government Notice R. 543, promulgated in terms of section 24 of the National Environmental Management Act, 1998 (Act 107 of 1998), specialists were required to assess the significance of potential impacts in terms of the following criteria:

- Nature of the impact;
- Extent of the impact;
- Intensity of the impact;
- Duration of the impact;
- Probability of the impact occurring;
- Impact non-reversibility;
- Cumulative impacts;
- Impact on irreplaceable resources; and
- Confidence level.

Issues were assessed in terms of the following criteria:

- The **nature**, a description of what causes the effect, what will be affected and how it will be affected;
- The physical **extent**, wherein it is indicated whether:
 - * 1 the impact will be limited to the site;
 - * 2 the impact will be limited to the local area;
 - 3 the impact will be limited to the region;
 - * 4 the impact will be national; or
 - * 5 the impact will be international;
- The **duration**, wherein it is indicated whether the lifetime of the impact will be:
 - 1 of a very short duration (0-1 years);
 - 2 of a short duration (2-5 years);
 - * 3 medium-term (5–15 years);
 - * 4 long term (> 15 years); or
 - s permanent;
- The magnitude of impact on ecological processes, quantified on a scale from 0-10, where a score is assigned:
 - 8 0 small and will have no effect on the environment;
 - * 2 minor and will not result in an impact on processes;
 - 4 low and will cause a slight impact on processes;
 - * 6 moderate and will result in processes continuing but in a modified way;
 - 8 high (processes are altered to the extent that they temporarily cease); or
 - * 10 very high and results in complete destruction of patterns and permanent cessation of processes;
- The **probability of occurrence**, which describes the likelihood of the impact actually occurring. Probability is estimated on a scale where:
 - * 1 very improbable (probably will not happen;
 - 2 improbable (some possibility, but low likelihood);
 - 8 3 probable (distinct possibility);
 - * 4 highly probable (most likely); or
 - 5 definite (impact will occur regardless of any prevention measures);
- the **significance**, which is determined through a synthesis of the characteristics described above (refer formula below) and can be assessed as low, medium or high;
- the **status**, which is described as either positive, negative or neutral;
- the degree to which the impact can be reversed;
- the degree to which the impact may cause irreplaceable loss of resources; and
- the degree to which the impact can be mitigated.

The **significance** is determined by combining the criteria in the following formula:

S = (E+D+M)*P; where

- S = Significance weighting
- E = Extent
- D = Duration

M = Magnitude

P = Probability

The **significance weightings** for each potential impact are as follows:

Points	Significant Weighting	Discussion
< 30 points	Low	where this impact would not have a direct influence on
	LOW	the decision to develop in the area
21 60 points	Medium	where the impact could influence the decision to
31-60 points	Medium	develop in the area unless it is effectively mitigated
> 60 points	High	where the impact must have an influence on the
	High	decision process to develop in the area

The findings of the impact assessment have been consolidated into **Table 9.1** to **Table 9.7** below.

Table 9.1: Detailed assessment of identified impacts for Alternative 1

Potential		Extent	Duration	Magnitude	Probability	Sig	Inificance	Status			
impact	Mitigation	(E)	(D)	(M)	(P)	(S=(E+D+M)*P)	(+ve or - ve)	Confidence		
CONSTRUCTION	I PHASE										
AGRICULTURAL	POTENTIAL										
	Nature of impact:	Loss of agricult	ural land due to	construction of	infrastructure						
	With	1	4	2	2	14	Low	-	High		
Deterioration of Soil Resource	Without	1	4	4	3	27	Low	-	High		
	Degree to which impact can be reversed:	Reversal should	eversal should be straightforward after removal of infrastructure								
	Degree of impact on irreplaceable resources:	Low to none									
	Nature of impact:	Soil erosion haz									
	With	1	1	2	2	8	Low	-	High		
	Without	2	3	6	4	44	Medium	-	High		
Deterioration of Soil Resource	Degree to which impact can be reversed:	If erosion is cau	areas								
	Degree of impact on irreplaceable resources:	Moderate									
FLORA											
	Nature of impact:	Removal of prot	ected plant spe	cies due to the	new servitude v	vithin the	corridor				
Destruction of	With	1	5	2	5	40	Medium	-	Medium		
Destruction of protected flora	Without	1	5	2	5	40	Medium	-	High		
	Degree to which impact can be reversed:	Existing/permit	ted access roads	s must be used	and the all othe	r measure	s must be follow	ved			

Potential		Extent	Duration	Magnitude	Probability	Sig	nificance	Status				
impact	Mitigation	(E)	(D)	(M)	(P)	(S=(E	+D+M)*P)	(+ve or - ve)	Confidence			
	Degree of impact on irreplaceable resources:	Area already dis	Area already disturbed and route follows existing power line									
	Nature of impact:	Destruction and	estruction and disturbance of a previously undisturbed vegetation. environments are impacted									
	With	1	5	2	2	16	Low	-	Medium			
Destruction of	Without	1	5	2	2	16	Low	-	Medium			
pristine habitat	Degree to which impact can be reversed:	Existing/permit the fact that an are impacted.										
	Degree of impact on irreplaceable resources:	Area already dis										
	Nature of impact:	Removal of veg	Removal of vegetation due to servitudes, access roads and erecting of the pylons									
	With	1	5	2	3	24	Low	-	Medium			
	Without	1	5	2	3	24	Low	-	Medium			
Vegetation clearance	Degree to which impact can be reversed:	Existing/permit the fact that an are impacted. D start on comple										
	Degree of impact on irreplaceable resources:	Area already dis										
	Nature of impact:	Vegetation clea	ring or disturba	nce may and ha	ve been fond to	increase e	encroachment/ c	umulative im	npact			
	With	1	2	4	3	21	Low	-	High			
Plant	Without	1	4	4	3	27	Low	-	Medium			
encroachment	Degree to which impact can be reversed:	Existing/permited construction it i		s must be used	and the all othe	er measures	s must be follow	ed. During				
	Degree of impact on irreplaceable resources:	Area already dis	sturbed and rou	te follows existi	ng power line							
Threat to	Nature of	Disturbance of a	an area with hig	h biodiversity w	vill increase the	probability	of encroachme	nt and biodiv	ersity will be lost.			

Potential		Extent	Duration	Magnitude	Probability	Sig	gnificance	Status			
impact	Mitigation	(E)	(D)	(M)	(P)	(S=(E+D+M)*P)	(+ve or - ve)	Confidence		
biodiversity	impact:		·	·					·		
	With	1	3	2	3	18	Low	-	Medium		
	Without	1	4	4	3	27	Low	-	Medium		
	Degree to which impact can be reversed:	Existing/permit	Existing/permitted access roads must be used and the all other measures must be followed								
	Degree of impact on irreplaceable resources:	Area already dis									
	Nature of impact:		emoval of vegetation due to the servitudes and access roads will increase the soil erosion as vegetation plays a major r eventing/minimising soil erosion (cumulative impact)								
	With	1									
Soil erosion	Without	1	3	4	5	40	Medium	-	High		
	Degree to which impact can be reversed:	Existing/permit	red								
	Degree of impact on irreplaceable resources:	Area already dis soil erosion fror	ace for the								
FAUNA											
	Nature of impact:	Adverse Impact				_		_	-		
	With	2	4	6	5	60	Medium	-	High		
	Without	2	4	6	5	60	Medium	-	High		
Loss of faunal habitat	Degree to which impact can be reversed:	Low- Realign pr activities to the		nt to avoid sens	sitive habitats a	nd restrict	vegetation clear	rance and			
	Degree of impact on irreplaceable resources:	inundated pans red listed fauna	, rupicolous outo I species includi	crops, Northern ng Giant Bullfro	Mistbelt Forest g, Northern For	as well as est Rain F	l drainage lines), suitable habitat rog, Soutpansbe ld Dog, Cheetah	for several rg Flat			
Direct Impact on associated	Nature of impact:	Adverse Impact									

Potential		Extent	Duration	Magnitude	Probability	S	ignificance	Status		
impact	Mitigation	(E)	(D)	(M)	(P)	(S=	(E+D+M)*P)	(+ve or - ve)	Confidence	
fauna and	With	2	4	4	4	40	Medium		High	
interactions with structures and	Without	2	4	6	5	60	Medium		High	
personnel	Degree to which impact can be reversed:	Restrict constru	species.							
	Degree of impact on irreplaceable resources:	The proposed a Provincial Natur lines), seasonal habitat for seve								
AVIFAUNA										
	Nature of impact:	Permanent rem	oval of habitat t	hat is used, or i	may be used, by	y avifaun	a.			
	With	1	2	4	3	21	Low		Medium	
Habitat	Without	1	2	4	5	35	Medium		Medium	
destruction	Degree to which impact can be reversed:	Partially reversi								
	Degree of impact on irreplaceable resources:	Low								
	Nature of impact:	Noise and movement, from staff and machinery, may disturb avifauna, and nests my be disturbed.								
	With	1	1	4	3	18	Low		Medium	
	Without	2	1	4	4	28	Low		Medium	
Disturbance	Degree to which impact can be reversed:	Irreversible								
	Degree of impact on irreplaceable resources:	Medium								
HERITAGE										
Destruction of heritage sites Nature of impact: Adverse impact on a identified heritage sites along alternative										
and features	With mitigation	3	5	2	5	50	Medium	-	High	

Potential		Extent	Duration	Magnitude	Probability	Sig	nificance	Status				
impact	Mitigation	(E)	(D)	(M)	(P)	(S=(E	+D+M)*P)	(+ve or - ve)	Confidence			
	Without mitigation	3	5	10	5	90	High	-	High			
	Degree to which impact can be reversed:	Medium	ledium									
	Degree of impact on irreplaceable resources:	Not Applicable	lot Applicable									
VISUAL												
Transformation	Nature of impact:	Soutpansberg a as a "scar" in th	nd private nature e landscape wil ontractors and c	re reserves. Th I create adverse onstruction veh	e same account visual impacts. icles in the area	s for the S Construc , which wil	ubstation area. tion activity will	Visibilty of t increase the	haracter, especially in the he power line servitude presence and the sense of place,			
of the visual	With	3	2	6	5	55	Medium	-	High			
quality of the	Without	3	2	6	5	55	Medium	-	High			
landscape	Degree to which impact can be reversed:	The impact can movement of co										
	Degree of impact on irreplaceable resources:	In areas of high private nature r	nsberg and									
SOCIAL												
Influx of job	Nature of impact:	The powerline c Welteverede. Hi seekers							may be from possible influx of job			
seekers, mainly unskilled labour,	With mitigation	3	1	0	2	8	Low	-	Medium to high			
from the communities	Without mitigation	3	2	4	4	36	Medium	-	Medium to high			
around the power line route having job	Degree to which impact can be reversed:	High – with the	implementation	of the relevant	mitigation mea	sures						
expectations	Degree of impact on irreplaceable resources:	Not Applicable							-			

Potential		Extent	Duration	Magnitude	Probability	Si	ignificance	Status				
impact	Mitigation	(E)	(D)	(M)	(P)	(S=	(E+D+M)*P)	(+ve or - ve)	Confidence			
Health Impacts	Nature of impact:	If toilet facilities	s on site are not	well managed,	these can lead	to advers	se health impacts	to the surrou	unding communities			
as a result of	With mitigation	1	1	0	1	2	Low	-	Medium to high			
exposure to sewage from	Without mitigation	1	1	6	3	24	Low	-	Medium to high			
construction camps and on construction	Degree to which impact can be reversed:	High – with the	High – with the implementation of the relevant mitigation measures									
camps	Degree of impact on irreplaceable resources:	Not Applicable										
	Nature of impact:	Waste on site ca and animals	an become a nu	iisance for comr	nunity members	s and on	farms and also po	ose a danger	to the health of people			
Health Impacts as a result of exposure to	With mitigation	1	1	2	3	18	Low	-	Medium			
	Without mitigation	1	2	2	3	18	Low	-	Medium			
waste (domestic and industrial)	Degree to which impact can be reversed:	High – with the		Medium								
	Degree of impact on irreplaceable resources:	Not Applicable		-								
	Nature of impact:	Where construc workers in the a				ses, these	e can be passed o	n to the com	munity members or farm			
Health impacts from	With mitigation	1	1	2	2	8	Low	-	Low			
construction sites and camps	Without mitigation	2	1	6	3	27	Low	-	Low			
as a result of infectious diseases	Degree to which impact can be reversed:	High – with the	implementatior	n of the relevant	mitigation mea	isures			Medium			
	Degree of impact on irreplaceable resources:	Not Applicable							-			
Conduct of construction	Nature of impact:	It is possible the actions can aris		ood relationship	s between conta	actors an	d community mer	mbers, negati	ve as well as positive			
workforce; Good	With mitigation	2	1	2	2	10	Low	-	Medium to high			

Potential		Extent	Duration	Magnitude	Probability	Sig	nificance	Status				
impact	Mitigation	(E)	(D)	(M)	(P)	(S=(I	E+D+M)*P)	(+ve or - ve)	Confidence			
relationships between	Without mitigation	2	1	6	4	36	Medium	-	Medium to high			
community members/ farm workers and	Degree to which impact can be reversed:	High – with the	High – with the implementation of the relevant mitigation measures									
Eskom Construction workers can result in issues such as sexual misconduct and the spread of sexually transmitted diseases	Degree of impact on irreplaceable resources:	Not Applicable	ot Applicable									
Conduct of construction	Nature of impact:	These can resul	t from factors su	uch as differenc	es in beliefs and	d cultural b	ackgrounds					
workforce; Bad	With mitigation	2	1	2	2	10	Low	-	Medium			
relationships between	Without mitigation	2	1	6	4	36	Medium	-	Medium			
community members/ farm workers and Eskom	Degree to which impact can be reversed:	High – with the	Medium									
Construction workers leading to violence	Degree of impact on irreplaceable resources:	Not Applicable	Not Applicable									
	Nature of impact:	Material can be stolen even alor				ng the rou	te especially as	material used	in powerlines is often			
Theft of material from camps and	With mitigation	1	1	0	1	2	Low	-	Medium			
along construction	Without mitigation	2	1	8	4	44	Medium	-	Medium			
sites	Degree to which impact can be reversed:	High – with the	implementation	of the relevant	mitigation mea	sures			Medium			

Potential		Extent	Duration	Magnitude	Probability	Sig	nificance	Status	
impact	Mitigation	(E)	(D)	(M)	(P)	(S=(I	E+D+M)*P)	(+ve or - ve)	Confidence
	Degree of impact on irreplaceable resources:	Not Applicable							-
Negative	Nature of impact:	It is possible the livelihoods will o			s, game farmers	owners fo	or whom visual ir	npacts are in	nportant to their
attitudes	With mitigation	2	1	2	2	10	Low	-	Medium
towards the project and the	Without mitigation	2	1	6	3	27	Low	-	Medium
formation of community groups, NGO's,	Degree to which impact can be reversed:	High – with the	Medium						
in response to the project	Degree of impact on irreplaceable resources:	Not Applicable	-						
	Nature of impact:	This would be e	_						
	With mitigation	1	1	2	2	8	Low	-	Medium
Land owners denying	Without mitigation	1	2	6	4	36	Medium	-	Medium
contractors access to their properties	Degree to which impact can be reversed:	High – with the	Medium						
	Degree of impact on irreplaceable resources:	Not Applicable	-						
	Nature of impact:	Land and crops	can be lost duri	ng the clearing	of the powerline	e corridor a	and during the c	onstruction o	f the powerline
	With mitigation	1	1	2	2	8	Low	-	Medium to high
Loss of crops	Without mitigation	1	3	6	4	40	Medium	-	Medium to high
leading to economic losses	Degree to which impact can be reversed:	High – with the	implementation	of the relevant	mitigation mea	isures			Medium
	Degree of impact on irreplaceable resources:	Not Applicable							-

Potential		Extent	Duration	Magnitude	Probability	S	ignificance	Status				
impact	Mitigation	(E)	(D)	(M)	(P)	(S=	(E+D+M)*P)	(+ve or - ve)	Confidence			
	Nature of impact:	Grazing land are	ea can be lost d	ue to clearing o	f land for the co	orridor as	well as during th	e constructio	n of access roads			
	With mitigation	1	1	2	2	8	Low	-	Medium to high			
Loss of land	Without mitigation	1	3	6	4	40	Medium	-	Medium to high			
leading to economic losses	Degree to which impact can be reversed:	High – with the	High – with the implementation of the relevant mitigation measures									
	Degree of impact on irreplaceable resources:	Not Applicable	-									
Impacts on	Nature of impact:	Construction car	Construction can disturb activities on farms									
farming activities such	With mitigation	1	1	2	2	8	Low	-	Medium to high			
as sowing, harvesting, and	Without mitigation	1	1	8	3	30	Low	-	Medium to high			
fire management programmes	Degree to which impact can be reversed:	High – with the		Medium								
leading to economic losses	Degree of impact on irreplaceable resources:	Not Applicable	-									
	Nature of impact:	This can lead to	•									
	With mitigation	1	1	2	1	4	Low	-	Medium to high			
Damage to farm infrastructure	Without mitigation	1	1	6	3	24	Low	-	Medium to high			
e.g. Irrigation equipment, gates, fences	Degree to which impact can be reversed:	High – with the	implementation	of the relevant	: mitigation mea	asures			Medium			
-	Degree of impact on irreplaceable resources:	Not Applicable							-			
Security concerns as a	Nature of impact:	It is highly likely	y that theft of g	ame and stock o	can occur. Theft	of game	can be higher or	n farms where	e Rhino is present			
result of	With mitigation	1	1	2	4	16	Low	-	Medium to high			

Potential		Extent	Duration	Magnitude	Probability	Si	gnificance	Status			
impact	Mitigation	(E)	(D)	(M)	(P)	(S=(E+D+M)*P)	(+ve or - ve)	Confidence		
poaching of game, stock	Without mitigation	1	1	10	4	48	Medium	-	Medium to high		
theft and crop theft	Degree to which impact can be reversed:	High – with the		Medium							
	Degree of impact on irreplaceable resources:	Not Applicable	-								
	Nature of impact:	The mere prese threatened	nce of construct	tion workers in o	communities an	d especia	lly on farms can	lead to unea	se and people may feel		
Security as a	With mitigation	1	1	2	2	8	Low	-	Medium to high		
result of the presence of	Without mitigation	2	1	8	3	33	Medium	-	Medium to high		
workers on farms and communities	Degree to which impact can be reversed:	High – with the		Medium							
	Degree of impact on irreplaceable resources:	Not Applicable		-							
	Nature of impact:	Construction sites are highly hazardous environments and the safety of people and animals can be compromised									
	With mitigation	1	1	2	1	4	Low	-	Medium		
Safety of community	Without mitigation	1	1	6	2	16	Low	-	Medium		
members/farm workers/animals	Degree to which impact can be reversed:	High – with the	High – with the implementation of the relevant mitigation measures								
	Degree of impact on irreplaceable resources:	Not Applicable							-		
Poor maintenance of	Nature of impact:	It is possible that	at access routes	can be of such	poor state that	maintena	ance of the power	rline is not po	ssible		
the power line	With mitigation	1	1	2	2	8	Low	-	Medium to high		
access roads: conflict between	Without mitigation	1	4	8	4	52	Medium	-	Medium to high		

Potential		Extent	Duration	Magnitude	Probability	Sigr	ificance	Status				
impact	Mitigation	(E)	(D)	(M)	(P)	(S=(E	+D+M)*P)	(+ve or - ve)	Confidence			
Eskom and the landowners on whose	Degree to which impact can be reversed:	High – with the	implementation	of the relevant	mitigation mea	sures			Medium			
responsibility it is to do maintenance on these roads. Farmers use it more often but yet expect Eskom to pay for all maintenance	Degree of impact on irreplaceable resources:	Not Applicable							-			
Loss of a sense	Nature of impact:	The presence of be spoilt	e presence of powerlines particularly in tourist attractions can result in tourists no longer visiting th spoilt									
of place/income	With mitigation	1	1	2	2	8	Low	-	Medium to high			
on game farms – Tourists want	Without mitigation	1	1	8	4	40	Medium	-	Medium to high			
to see "Africa" and the power line can disturb	Degree to which impact can be reversed:	High – with the	implementation	of the relevant	mitigation mea	sures			Medium			
the rustic African setting;	Degree of impact on irreplaceable resources:	Not Applicable							-			
OPERATION PH	ASE											
AGRICULTURAL	POTENTIAL											
It is anticipated the	nat the main impacts o	on agricultural pol	ential will occur	during the con	struction phase							
FLORA												
	Nature of impact:	Removal of prot	Removal of protected plant species due to the servitude									
Destruction of	With	1	1	2	3	12	Low	-	High			
protected flora	Without	1	1	2	3	12	Low	-	High			
	Degree to which impact can be	Existing/permitt										

Potential		Status											
impact	Mitigation	(E)	(D)	(M)	(P)	(S=(E+	+D+M)*P)	(+ve or - ve)	Confidence				
	reversed:												
	Degree of impact on irreplaceable resources:	Area already dis	sturbed and rout	te follows existi	ng power line								
	Nature of impact:	Destruction and	disturbance of	a previously un	disturbed veget	ation							
	With	1	5	2	2	16	Low	-	High				
Destruction of	Without	1	5	2	2	16	Low	-	High				
pristine habitat	Degree to which impact can be reversed:	Existing/permit	ed access roads	ed									
	Degree of impact on irreplaceable resources:	Area already dis	already disturbed and route follows existing power line/ virtually no pristine habitat										
	Nature of impact:	Removal of vegetation due to servitudes, access roads and erecting of the pylons											
	With	1	4	2	3	21	Low	-	High				
Vegetation	Without	1	4	2	3	21	Low	-	High				
clearance	Degree to which impact can be reversed:	Existing/permit	ed access roads	s must be used	and the all othe	r measures	must be follow	ed					
	Degree of impact on irreplaceable resources:	The servitude h	as to be kept cle	ear at all times	(bush clearing)								
	Nature of impact:	Vegetation clea	ring or disturbar	nce may and ha	ve been fond to	increase en	croachment/ c	umulative im	ipact				
	With	1	1	2	3	12	Low	-	High				
Plant	Without	1	1	2	3	12	Low	-	High				
encroachment	Degree to which impact can be reversed: Existing/permitted access roads must be used and the all other measures must be followed												
	Degree of impact on irreplaceable	Most of the area area											

Potential		Extent	Duration	Magnitude	Probability	Sig	nificance	Status				
impact	Mitigation	(E)	(D)	(M)	(P)	(S=(E	+D+M)*P)	(+ve or - ve)	Confidence			
	resources:					1						
	Nature of impact:	Disturbance of a	an area with hig	h biodiversity w	vill increase the	probability	of encroachme	nt and biodiv	ersity will be lost.			
	With	1	2	2	3	15	Low	-	High			
Threat to	Without	1	2	4	3	21	Low	-	High			
biodiversity	Degree to which impact can be reversed:	Existing/permit	ed access roads	s must be used	and the all othe	r measures	s must be follow	ved				
	Degree of impact on irreplaceable resources:	Area already is	a already is encroached by suikelbos, biodiversity is low									
	Nature of impact:	Removal of veg preventing/mini				ll increase	the soil erosion	as vegetatio	n plays a major role in			
	With	1	2	2	3	15	Low	-	High			
Call and tak	Without	1	2	2	3	15	Low	-	High			
Soil erosion	Degree to which impact can be reversed:	Existing/permit	ved									
	Degree of impact on irreplaceable resources:	Area already dis soil erosion fror			ng power line/ a	Iready mea	asures put in pla	ace for the				
FAUNA												
	Nature of impact:	Adverse Impact							-			
Loss of faunal	With	1	4	4	5	45	Medium	-	High			
habitat with	Without	2	4	6	5	60	Medium	-	High			
clearance of vegetation within the 55m servitude and only larger tree species impact can be reversed: The clearance of the vegetation should be restricted to the 55m servitude and only larger tree species impacting which could potential impact on the lines should be removed. The vegetation of the servitude should not be totally removed providing refuge habitat for remaining faunal species (especially arboreal species)												
	Degree of impact on irreplaceable resources:											

Potential		Extent	Duration	Magnitude	Probability	Sigr	nificance	Status			
impact	Mitigation	(E)	(D)	(M)	(P)	(S=(E	+D+M)*P)	(+ve or - ve)	Confidence		
	Nature of impact:	Adverse Impact						·			
Direct Impact	With	1	4	4	4	36	Medium				
on associated	Without	2	4	6	5	60	Medium				
fauna and interactions with structures and	Degree to which impact can be reversed:		Restrict construction activities to the 55m servitude. No intentional killing or disturbances of any aunal species. No illegal poaching or hunting activities.								
personnel	Degree of impact on irreplaceable resources:	Soutpansberg C	ne proposed alternative alignment 1 bisects the Manavhela Ben Lavin Provincial Nature Reserve, butpansberg Conservation area, rivers (non-perennial drainage lines), seasonally inundated pans, picolous outcrops, Northern Mistbelt Forest as well as suitable habitat for several red listed faunal pecies.								
AVIFAUNA											
	Nature of impact:	Collision or red	data species wit	h the overhead	line (usually th	e earth wire	e).				
	With	1	3	4	3	27	Low	-	Medium		
	Without	1	3	6	4	44	Medium	-	Medium		
Collision	Degree to which impact can be reversed:	Low							Medium		
	Degree of impact on irreplaceable resources:	Medium							-		
	Nature of impact:	Bird perches on live and earthed					oridging the air	gap between	live components and/or		
	With	1	3	4	3	27	Low	-	Medium		
	Without	1	3	6	4	44	Medium	-	Medium		
Electrocution	Degree to which impact can be reversed:	Low	Low Medium								
	Degree of impact on irreplaceable resources:	Medium -									
Nesting of birds on Tower	Nature of impact:	Routine mainter	Routine maintenance of pylons and power lines could result in disturbance of certain bird species								

Potential		Extent	Duration	Magnitude	Probability	Si	gnificance	Status					
impact	Mitigation	(E)	(D)	(M)	(P)	(S=([E+D+M)*P)	(+ve or - ve)	Confidence				
structures and	With	1	3	4	3	27	Low	-	Medium				
disturbance during routine	Without	2	3	6	4	44	Medium	-	Medium				
maintenance	Degree to which impact can be reversed:	High							Medium				
	Degree of impact on irreplaceable resources:	Medium	lium										
HERITAGE													
It is anticipated the	hat the main impacts o	on heritage will o	ritage will occur during the construction phase										
VISUAL													
Visual exposure to the Powerline Servitude,	Nature of impact:	will create adve locations in clos impact on the s	(isual exposure to the power line servitude, conductor cables and towers, as well as infrastructure at the Nzhelele Substation, will create adverse visual impacts, especially in the Soutpansberg and in, or close to private nature reserves. Sensitive viewer ocations in close proximity (<500m) are highly vulnerable to exposure of the power line, where visibility result in a negative mpact on the sense of place. Night time lighting at the Nzhelele Substation will create light pollution with adverse visual ffects of glare and sky glow.										
Conductor	With	3	4	6	5	65	High	-	High				
Cables and	Without	3	5	6	5	70	High	-	High				
Towers, as well as the Nzhelele Substation.	Degree to which impact can be reversed:						getation and avo or by selecting th						
	Degree of impact on irreplaceable resources:	In areas of high private nature r					uch as the Soupa	ansberg and					
SOCIAL													
Perceived electromagnetic	Nature of impact:	The presence of on some proper		orkers can resu	It in the treat of	safety ar	nd can possibly le	ead to actual	crimes being committed				
fields impacts	With mitigation	1	3	2	1	6	Low	-	Medium				
on humans and animals during	Without mitigation	1	5	4	2	20	Low	-	Medium				
the operational phase	Degree to which impact can be reversed:	High – with the	implementation	of the relevant	mitigation mea	sures							

Potential		Extent	Duration	Magnitude	Probability	Sig	Inificance	Status				
impact	Mitigation	(E)	(D)	(M)	(P)	(S=(E+D+M)*P)	(+ve or - ve)	Confidence			
	Degree of impact on irreplaceable resources:	N/A										
Loss of a sense of place/income	Nature of impact:	The presence of be spoilt	powerlines par	ticularly in tour	st attractions ca	an result ir	n tourists no long	ger visiting th	e area as their views will			
on game farms	With mitigation	1	1	2	3	12	Low	-	Medium			
 Tourists want to see "Africa" and the power 	Without mitigation	3	4	8	4	60	Medium	-	High			
line can disturb the rustic African setting;	Degree to which impact can be reversed:	High – with the	implementation	of the relevant	mitigation mea	sures						
Anican setting,	Degree of impact on irreplaceable resources:	Not Applicable	Applicable									
Poor maintenance of	Nature of impact:	It is possible the	r line is not p	ossible								
the power line	With mitigation	1	1	2	2	8	Low	-	Medium to high			
access roads: conflict between Eskom and the	Without mitigation	1	-	Medium to high								
landowners on whose responsibility it	Degree to which impact can be reversed:	High – with the	ligh – with the implementation of the relevant mitigation measures									
is to do maintenance on these roads. Farmers use it more often but yet expect Eskom to pay for all maintenance	Degree of impact on irreplaceable resources:	Not Applicable	lot Applicable									
Impact of the power lines on	Nature of impact:	Where powerlin	es are not visibl	e or known, pla	ne crashes can	result and	in turn electrici	ty outages m	ay occur			
aircraft as there	With mitigation	1	2	2	2	10	Low	-	Medium to high			
are airports within the study	Without mitigation	4	5	6	4	60	Medium	-	Medium to high			

Potential		Extent	Duration	Magnitude	Probability	Sig	nificance	Status				
impact	Mitigation	(E)	(D)	(M)	(P)	(S=(E	+D+M)*P)	(+ve or - ve)	Confidence			
area; one is the Louis Trichardt airport and the	Degree to which impact can be reversed:	High – with the	implementatior	of the relevant	mitigation mea	isures						
other is for light aircraft on the road towards Waterpoort from Louis Trichardt	Degree of impact on irreplaceable resources:	Not Applicable										
Decrease in property values	Nature of impact:	These can lead	ese can lead to economic losses									
and number of	With mitigation	1	3	4	1	8	Low	-	Medium to high			
visitors to lodges and	Without mitigation	2	5	6	3	39	Medium	-	Medium to high			
other areas that are popular with tourists due to the visual	Degree to which impact can be reversed:	High – with the	igh – with the implementation of the relevant mitigation measures									
impacts of powerlines	Degree of impact on irreplaceable resources:	Not Applicable										
Security issues as a result of	Nature of impact:		The presence of construction workers can result in the treat of safety and can possibly lead to actu on some properties									
the presence of	With mitigation	1	1	2	2	8	Low	-	Medium to high			
maintenance workers on	Without mitigation	1	1	4	4	24	Low	-	High			
properties	Degree to which impact can be reversed:	High – with the	implementatior	n of the relevant	mitigation mea	isures						
	Degree of impact on irreplaceable resources:			-								
Land owners denying	Nature of impact:	This can result i										
contractors	With mitigation	1	1	2	2	8	Low	-	Medium			
access to their properties	Without mitigation	1	1	8	4	40	Medium	-	High			

Potential		Extent	Duration	Magnitude	Probability	Significan	ce	Status					
impact	Mitigation	(E)	(D)	(M)	(P)	(S=(E+D+M))*P)	(+ve or - ve)	Confidence				
	Degree to which impact can be reversed:	farmers must a to gates withou access to their	com must liaise with farmers in regards to procedures for entering onto farms. Both Eskom and mers must agree on the procedures e.g. it can be agreed that, farmers must not to change locks gates without informing Eskom, and where necessary, providing them with spare keys for easy cess to their properties during maintenance. Despite this, the Landowner must still be informed of en maintenance will take place on the route on his property										
	Degree of impact on irreplaceable resources: Not Applicable												
Poaching of game as well as	Nature of impact:	This is a high p	robability										
stock theft and	With mitigation	1	1	0	1	2 Low		-	Medium to high				
theft of crops	Without mitigation	1	1	2	2	8 Low		-	Medium to high				
	Degree to which impact can be reversed:	activities such a	As maintenance will only occur once in 1 or 2 years (depending on Eskom) the likelihood for ctivities such as poaching will be minimal as contractors will only be on site for a short period and hay not have the time to plan a theft of stock or poaching of game.										
	Degree of impact on irreplaceable resources:	Not Applicable							-				
Impact on farming	Nature of impact:	During the oper very minimal as	ourist destina	tions are likely to be									
activities such	With mitigation	1	1	0	1	2 Low		-	Medium to high				
as sowing, harvesting, and	Without mitigation	1	1	2	1	4 Low		-	Medium to high				
fire management programmes leading to economic losses	Degree to which impact can be reversed:	on these activit can be through	As maintenance during the operational phase is of a shorter duration than construction, the impacts on these activities will be for a significantly shorter duration, but must at all costs be avoided. This can be through measures such as undertaking maintenance during seasons when there is likely to be high activity on farms.										
	Degree of impact on irreplaceable resources:	Not Applicable											
Impact on farming	Nature of impact:	During the oper very minimal as				ests to lodges and	other to	ourist destina	tions are likely to be				
activities such	With mitigation	1	1	0	1	2 Low		-	Medium to high				
as hunting in	Without	1	1	2	1	4 Low		-	Medium to high				

Potential		Extent	Duration	Magnitude	Probability	Sign	ificance	Status				
impact	Mitigation	(E)	(D)	(M)	(P)	(S=(E	+D+M)*P)	(+ve or - ve)	Confidence			
game farms	mitigation											
leading to economic losses. Impacts can also be on	Degree to which impact can be reversed:	High – with the	implementation	of the relevant	mitigation mea	sures						
guests in lodges leading to economic losses	Degree of impact on irreplaceable resources:	Not Applicable							-			
Increase in the voltage stability	Nature of impact:	An increased vo	ltage will ensur	e that activities	that were not a	ble to take	place will be po	ossible	-			
	With mitigation											
	Without mitigation	3	5	8	5	80	High	+	Medium			
	Degree to which impact can be reversed:	Not Applicable	lot Applicable									
	Degree of impact on irreplaceable resources:	Not Applicable	Iot Applicable									
An assurance of a reliable	Nature of impact:	Reliable electric	Reliable electricity supply is a positive impact that will improve activities such as touriam in the Mak									
electricity	With mitigation											
supply	Without mitigation	2	1	6	4	36	Medium	+	Medium			
	Degree to which impact can be reversed:	Not Applicable										
	Degree of impact on irreplaceable resources:	Not Applicable							-			
Increase of electricity	Nature of impact:	In order to grov	v the economy o	of the Makhado	Local Municipali	ty, electricit	ty is vital					
supply making it	With mitigation											
available for agriculture,	Without mitigation	3	5	8	5	80	High	+	Medium			

Potential		Extent	Duration	Magnitude	Probability	Sigr	nificance	Status					
impact	Mitigation	(E)	(D)	(M)	(P)	(S=(E	+D+M)*P)	(+ve or - ve)	Confidence				
tourism and other industries. The increase in	Degree to which impact can be reversed:	Not Applicable											
electricity can also allow for the undertaking of other activities that may have been that may not have been possible prior to the improved electricity supply	Degree of impact on irreplaceable resources:	Not Applicable											
No more backlogs in	Nature of impact:	The absence of will be possible	The absence of backlogs in electricity connections can imply that activities that can only take place where electricity is present will be possible										
electricity	With mitigation												
Connections	Without mitigation	3	5	8	5	80	High	+	Medium				
	Degree to which impact can be reversed:	Not Applicable											
	Degree of impact on irreplaceable resources:	Not Applicable							-				
The inadequate provision of	Nature of impact:												
electricity to	With mitigation												
services such as health facilities	Without mitigation	3	5	8	5	80	High	+	Medium				
will cease	Degree to which impact can be reversed:	Not Applicable											

Potential		Extent	Duration	Magnitude	Probability	Sigi	nificance	Status					
impact	Mitigation	(E)	(D)	(M)	(P)	(S=(E	+D+M)*P)	(+ve or - ve)	Confidence				
	Degree of impact on irreplaceable resources:	Not Applicable											
Electricity will be available to	Nature of impact:	The presence of	ne presence of electricity to rural areas will improve the lives of many who live in poverty										
numerous rural	Vicin initigation												
settlements that do not have this service	Without mitigation	3	5	8	5	80	High	+	Medium				
Service	Degree to which impact can be reversed:	Not Applicable											
	Degree of impact on irreplaceable resources:	Not Applicable							-				
DECOMMISSION	IING PHASE												
AGRICULTURAL	POTENTIAL												
No decommission	ing impacts are anticip	pated											
FLORA													
	Nature of impact:	Removal of prot	ected plant spe	cies due to the	servitude								
	With	1	1	4	3	18	Low	-	High				
Destruction of	Without	1	1	4	3	18	Low	-	High				
protected flora	Degree to which impact can be reversed:	Existing/permit	ted access roads	s must be used	and the all othe	r measures	s must be follow	ved					
	Degree of impact on irreplaceable resources:	Area already dis	sturbed and rou	te follows existi	ng power line								
Destruction of	Nature of impact:	Removal of veg	etation due to s	ervitudes, acces	ss roads and ere	ecting of the	e pylons						
pristine habitat	With	1	1	4	3	18	Low	-	High				
	Without	1	1	4	3	18	Low	-	High				

Potential		Extent	Duration	Magnitude	Probability	Sig	nificance	Status					
impact	Mitigation	(E)	(D)	(M)	(P)	(S=(E	+D+M)*P)	(+ve or - ve)	Confidence				
	Degree to which impact can be reversed:	Existing/permit	ed access roads	s must be used	and the all othe	er measures	s must be follow	ed					
	Degree of impact on irreplaceable resources:	Area already dis	a already disturbed and route follows existing power line										
	Nature of impact:	Removal of veg											
	With	1	1	-	High								
Vegetation	Without	1	1	4	3	18	Low	-	High				
clearance	Degree to which impact can be reversed:	Existing/permit	ing/permitted access roads must be used and the all other measures must be followed										
	Degree of impact on irreplaceable resources:	Area already dis	sturbed and rou	te follows existi	ng power line								
	Nature of impact:	Vegetation clear	ring or disturbaı	nce may and ha	ve been fond to	increase e	ncroachment/ c	umulative im	pact				
	With	2	2	4	5	40	Medium	-	High				
Plant	Without	2	2	4	5	40	Medium	-	High				
encroachment	Degree to which impact can be reversed:	Existing/permit	ed access roads	s must be used	and the all othe	er measures	s must be follow	ed					
	Degree of impact on irreplaceable resources:	Area already dis	sturbed and rou	te follows existi	ng power line								
	Nature of impact:	Disturbance of a	an area with hig	h biodiversity w	ill increase the	probability	of encroachmer	nt and biodiv	ersity will be lost.				
Threat to	With	1	3	2	3	18	Low	-	High				
biodiversity	Without	1	4	4	5	<mark>45</mark>	Medium	-	High				
	Degree to which impact can be reversed:	Existing/permit	xisting/permitted access roads must be used and the all other measures must be followed										

Potential		Extent	Duration	Magnitude	Probability	Sig	nificance	Status			
impact	Mitigation	(E)	(D)	(M)	(P)	(S=(E	+D+M)*P)	(+ve or - ve)	Confidence		
	Degree of impact on irreplaceable resources:	Area already dis	sturbed and rout	te follows existi	ng power line						
	Nature of impact:	Removal of veg preventing/mini				ill increase	the soil erosion	as vegetatio	n plays a major role in		
	With	1	1	2	3	12	Low	-	High		
	Without	1	3	4	5	40	Medium	-	High		
Soil erosion	Degree to which impact can be reversed:	Existing/permit	xisting/permitted access roads must be used and the all other measures must be followed								
	Degree of impact on irreplaceable resources:		ea already disturbed and route follows existing power line/ already measures put in place for the il erosion from the existing line								
FAUNA											
	Nature of impact:	Adverse Impact									
Direct Impact	With	1	1	2	5	20	Low		High		
on associated	Without	2	1	4	5	35	Medium		High		
fauna and interactions with structures and	Degree to which impact can be reversed:	The removal of of the vegetation									
personnel	Degree of impact on irreplaceable resources:	The proposed a Soutpansberg C rupicolous outcr species.	onservation are	a, rivers (non-p	erennial draina	ge lines), s	easonally inund	ated pans,			
AVIFAUNA											
No decommission	ing impacts are anticip	pated									
HERITAGE											
No decommission	ing impacts are anticip	pated									
VISUAL											
Visual exposure to operations to dismantle and	Nature of impact:	Activity within the servitude related to the dismantling and removal of power line infrastructure will not have significant visual impacts. Perceptions relating to the removal of visualy intrusive objects might be positive in as far as visual impacts related to the existence of the power line will decrease due to decommissioning.									

Potential		Extent	Duration	Magnitude	Probability	Si	ignificance	Status			
impact	Mitigation	(E)	(D)	(M)	(P)	(S=	(E+D+M)*P)	(+ve or - ve)	Confidence		
remove of	With	3	1	2	3	18	Low	+	High		
ower Line & Substation	Without	3	1	4	3	24	Low	+	High		
nfrastructure	Degree to which impact can be reversed:	Avoid unnecess	Avoid unnecessary disturbance of the natural environment during decommissioning operations								
	Degree of impact on irreplaceable resources:	None									
OCIAL											
	Nature of impact:	Creating employ	yment expectati	ons for job see	kers						
Influx of job seekers	With mitigation	1	1	0	1	2	Low	-	Medium to high		
	Without mitigation	1	2	2	2	10	Low	-	Medium to high		
	Degree to which impact can be reversed:	High – with the									
	Degree of impact on irreplaceable resources:	Not Applicable									
	Nature of impact:	If toilet facilities	inding communities								
Health Impacts as a result of	With mitigation	1	1	0	1	2	Low	-	Medium to high		
exposure to sewage from	Without mitigation	1	1	6	3	24	Low	-	Medium to high		
construction camps and on	Degree to which impact can be reversed:	High – with the	implementatior	n of the relevant	mitigation mea	sures					
construction camps	Degree of impact on irreplaceable resources:	Not Applicable									
Health impacts	Nature of					es, these	e can be passed o	n to the com	munity members or fai		
from	impact:	workers in the a					-				
construction	With mitigation	1	1	2	2	8	Low	-			
sites and camps	Without	2	1	6	3	27	Low	-			

Potential		Extent	Duration	Magnitude	Probability	Sig	nificance	Status				
impact	Mitigation	(E)	(D)	(M)	(P)	(S=(I	E+D+M)*P)	(+ve or - ve)	Confidence			
as a result of	mitigation											
infectious diseases	Degree to which impact can be reversed:	High – with the	implementatior	of the relevant	mitigation mea	isures						
	Degree of impact on irreplaceable resources:	Not Applicable										
Conduct of	Nature of			nbers, negati	ve as well as positive							
construction workforce; Good	impact:	actions can arise	e 1	2	2	10	Low	-	Medium to high			
relationships between	With mitigation Without mitigation	2	1	6	4	36	Medium	-	Medium to high			
community members/ farm workers and Eskom	Degree to which impact can be reversed:	High – with the										
Construction workers can result in issues such as sexual misconduct and the spread of sexually transmitted diseases	Degree of impact on irreplaceable resources:	Not Applicable	Not Applicable									
Conduct of construction	Nature of	These can result	t from factors s	uch as differenc	es in beliefs and	d cultural b	backgrounds					
workforce; Bad	impact: With mitigation	2	1	2	2	10	Low	-	Medium to high			
relationships between	Without mitigation	2	1	6	4	36	Medium	-	Medium to high			
community members/ farm workers and Eskom	Degree to which impact can be reversed:	High – with the	High – with the implementation of the relevant mitigation measures									
Construction Degree of impact workers leading on irreplaceable to violence resources:												

Potential		Extent	Duration	Magnitude	Probability	S	ignificance	Status			
impact	Mitigation	(E)	(D)	(M)	(P)	(S=(E+D+M)*P)		(+ve or - ve)	Confidence		
	Nature of impact:	Material can be targeted by crir		e sites where de	commissioning i	s taking	place as material	used in elect	ricity is often the		
	With mitigation	1	1	0	1	2	Low	-	Medium		
Theft of material from camps and along construction sites	Without mitigation	2	1	8	4	44	Medium	-	Medium		
	Degree to which impact can be reversed:	High – with the	High – with the implementation of the relevant mitigation measures								
	Degree of impact on irreplaceable resources:	Not Applicable									
Negative	Nature of impact:	It is possible th livelihoods will		ect		_	for whom visual i	mpacts are ir			
attitudes	With mitigation	2	1	2	2	10	Low	-	Medium		
towards the project and the	Without mitigation	2	1	6	3	27	Low	-	Medium		
formation of community groups, NGO's,	Degree to which impact can be reversed:	High – with the									
in response to the project;	Degree of impact on irreplaceable resources:	Not Applicable									
	Nature of impact:	This would be e	expected from la	andowners who a	are opposed to	the proje	ct				
	With mitigation	1	1	2	2	8	Low	-	Medium		
Land owners denying	Without mitigation	1	2	6	4	36	Medium	-	Medium		
contractors access to their properties	Degree to which impact can be reversed:	High – with the	implementation	n of the relevant	mitigation mea	isures					
	Degree of impact on irreplaceable resources:	Not Applicable									
Loss of crops leading to	Nature of impact:	Land and crops can be lost during the clearing of the powerline corridor and during the construction of the powerline									
economic losses	With mitigation	1	1	2	2	8	Low	-	Medium to high		

Potential		Extent	Duration	Magnitude	Probability	S	ignificance	Status				
impact	Mitigation	(E)	(D)	(M)	(P)	(S=	(E+D+M)*P)	(+ve or - ve)	Confidence			
	Without mitigation	1	3	6	4	40	Medium	-	Medium to high			
	Degree to which impact can be reversed:	High – with the										
	Degree of impact on irreplaceable resources:	Not Applicable										
	Nature of impact:	Grazing land are	ea can be lost d	ue to clearing o	f land for the co	orridor as	well as during th	e constructio	n of access roads			
	With mitigation	1	1	2	2	8	Low	-	Medium to high			
Loss of land leading to economic losses	Without mitigation	1	3	6	4	40	Medium	-	Medium to high			
	Degree to which impact can be reversed:	High – with the										
	Degree of impact on irreplaceable resources:	Not Applicable										
Impacts on	Nature of impact:	Construction can disturb activities on farms										
farming activities such	With mitigation	1	1	2	2	8	Low	-	Medium to high			
as sowing, narvesting, and	Without mitigation	1	1	8	3	30	Low	-	Medium to high			
fire management programmes	Degree to which impact can be reversed:	High – with the										
leading to economic losses	Degree of impact on irreplaceable resources:	Not Applicable										
Damage to farm infrastructure	Nature of impact:	This can lead to										
initia de la declar e	With mitigation	1	1	2	1	4	Low	-	Medium to high			
equipment, gates, fences	Without mitigation	1	1	6	3	24	Low	-	Medium to high			

Potential		Extent	Duration	Magnitude	Probability	Sig	gnificance	Status			
impact	Mitigation	(E)	(D)	(M)	(P)	(S=(E+D+M)*P)	(+ve or - ve)	Confidence		
	Degree to which impact can be reversed:	High – with the	implementation	of the relevant	mitigation mea	sures					
	Degree of impact on irreplaceable resources:	Not Applicable									
	Nature of impact:	It is highly likely	y that theft of g	O O							
Security	With mitigation	1	1	2	4	16	Low	-	Medium to high		
concerns as a result of	Without mitigation	1	1	10	4	48	Medium	-	Medium to high		
poaching of game, stock theft and crop	Degree to which impact can be reversed:	High – with the	High – with the implementation of the relevant mitigation measures								
theft	Degree of impact on irreplaceable resources:	Not Applicable									
	Nature of impact:	The mere prese threatened	se and people may feel								
Security as a	With mitigation	1	1	2	2	8	Low	-	Medium to high		
result of the presence of	Without mitigation	2	1	8	3	33	Medium	-	Medium to high		
workers on pfarms and communities	Degree to which impact can be reversed:	High – with the									
communicies	Degree of impact on irreplaceable resources:	Not Applicable	Not Applicable								
	Nature of impact:										
Safety of	With mitigation	1	1	2	1	4	Low	-	Medium		
community members/farm	Without mitigation	1	1	6	2	16	Low	-	Medium		
workers/animals	Degree to which impact can be reversed:	High – with the									

Potential		Extent	Duration	Magnitude	Probability	Si	ignificance	Status		
impact	Mitigation	(E)	(D)	(M)	(P)	(S=	(E+D+M)*P)	(+ve or - ve)	Confidence	
	Degree of impact on irreplaceable resources:	Not Applicable								
Poor maintenance of	Nature of impact:	It is possible th	at access routes	s can be of such	poor state that	maintena	ance of the powe	rline is not po	ossible	
the power line	With mitigation	1	1	2	2	8	Low	-	Medium to high	
access roads: conflict between Eskom and the	Without mitigation	1	4	8	4	52	Medium	-	Medium to high	
landowners on whose responsibility it	Degree to which impact can be reversed:	High – with the	High – with the implementation of the relevant mitigation measures							
is to do maintenance on these roads. Farmers use it more often but yet expect Eskom to pay for all maintenance	Degree of impact on irreplaceable resources:	Not Applicable								
CUMULATIVE IN	IPACTS									
AGRICULTURAL	POTENTIAL									
No cumulative im	pacts are anticipated									
FLORA										
	Nature of impact:	Vegetation clea	ring or disturba	nce may and ha	ve been fond to	increase	encroachment/ o	cumulative im	ipact	
	With	1	1	2	3	12	Low	-	High	
Plant	Without	1	1	2	3	12	Low	-	High	
encroachment	Degree to which impact can be reversed:	Existing/permit	ted access roads	s must be used	and the all othe	r measur	res must be follow	ved		
	Degree of impact on irreplaceable resources:	Area already dis	sturbed and rou	te follows existi	ng power line					
				9-32						

Potential		Extent	Duration	Magnitude	Probability	Sig	inificance	Status			
impact	Mitigation	(E)	(D)	(M)	(P)	(S=((S=(E+D+M)*P)		Confidence		
	Nature of impact:	Removal of veg preventing/mini				ll increase	the soil erosion	as vegetation	n plays a major role in		
	With	1	1	2	2	8	Low	-	High		
	Without	1	1	2	2	8	Low	-	High		
Soil erosin	Degree to which impact can be reversed:	Existing/permit	xisting/permitted access roads must be used and the all other measures must be followed								
	Degree of impact on irreplaceable resources:		Area already disturbed and route follows existing power line/ already measures put in place for the soil erosiom from the existing line								
FAUNA											
	Nature of impact:	Adverse Impact									
	With	2	4	6	5	60	Medium		High		
	Without	2	4	6	5	60	Medium		High		
Loss of faunal habitat	Degree to which impact can be reversed:	Realign preferre activities to the	and								
	Degree of impact on irreplaceable resources:	The proposed al inundated pans, red listed fauna Python, Soutpar Wild Dog, Cheet	for several rican								
	Nature of impact:	Adverse Impact									
Direct Impact	With	2	4	4	4	40	Medium		High		
on associated	Without	2	4	6	5	60	Medium		High		
fauna and interactions with structures and	Degree to which impact can be reversed:	Restrict constru	ction activities t	the 55m serv	itude. No intent	ional killin	g of any faunal s	pecies.			
personnel	Degree of impact on irreplaceable resources:	The proposed al Soutpansberg C rupicolous outcr species.	ated pans,								

Potential		Extent	Duration	Magnitude	Probability	Significance	Status	
impact	Mitigation	(E)	(D)	(M)	(P)	(S=(E+D+M)*P)	(+ve or - ve)	Confidence
AVIFAUNA								
No cumulative im	pacts are anticipated							
HERITAGE								
No cumulative im	pacts are anticipated							
VISUAL								
Impact 1:	Nature of impact:	intensified impr lines are observ Lastly cumulativ	ession of a pre- ed from location e impacts arise of images and ir	existing power l ns from which n through an inc npressions of po	ine in the lands nore than one po rease in the inci	ower line would now be s	s an increased seen in differen eptions of diffe	perception where power t parts of the landscape. rent power lines through
Increased visual	With	3	5	0	3	24 Low	-	Low
exposure to Power Line	Without	3	5	6	5	70 High	-	High
Infrastructure.	Degree to which impact can be reversed:	The impact can material. Active						
	Degree of impact on irreplaceable resources:	In areas of high and private nat	tpansberg					
SOCIAL								
Poaching of	Nature of impact:	It is highly likely	y that theft of g	ame and stock of	can occur. Theft	of game can be higher o	on farms where	Rhino is present
game impacting on the loss of	With mitigation	2	3	4	3	27 Low	-	Medium to high
game and in turn affecting	Without mitigation	5	5	8	4	72 High	-	High
the tourism industry of the Municipality and	Degree to which impact can be reversed:	the construction operational pha	and decommis se	sioning phases	as well as during	or placed in secure enclo g maintenance as an act		
that of the country at large	Degree of impact on irreplaceable resources:	The impact will						
Loss of a sense of place	Nature of impact:	Tourists visit pla them				e presence of powerlines	s can therefore	spoil this experience for
resulting in	With mitigation	1	2	2	2	10 Low	-	Medium to high

Potential		Extent	Duration	Magnitude	Probability	Si	gnificance	Status				
impact	Mitigation	(E)	(D)	(M)	(P)	(S=((E+D+M)*P)	(+ve or - ve)	Confidence			
economic losses especially for	Without mitigation	3	4	6	3	39	Medium	-	Medium to high			
tourism sector in turn impact	Degree to which impact can be reversed:	Liaise with Visu would be to use					other suggested	measures				
growth of the Makhado Municipality	Degree of impact on irreplaceable resources:	N/A	I/A									
Increase in power supply	Nature of impact:						Ild be vital to the		al Municipality as			
and in the	With mitigation	3	4	6	4	52	Medium	+	Medium to high			
stability of the network. In turn	Without mitigation	3	4	6	4	52	Medium	+	Medium to high			
numerous existing developments	Degree to which impact can be reversed:	N/A										
such as lodges and other tourist attractions can be improved.	Degree of impact on irreplaceable resources:	N/A										
NO-GO ALTERNA	TIVE											
AGRICULTURAL	POTENTIAL											
In the event that t	the transmission lines	are not construc	ted, there will b	e no impact on	the agricultural	potential	, therefore the st	atus quo will	remain.			
FLORA												
	the transmission lines	are not construc	ted, there will b	e no impact on	the flora, there	fore the s	tatus quo will ren	nain.				
FAUNA												
	the transmission lines	are not construc	ted, there will b	e no impact on	the fauna, there	efore the	status quo will re	main.				
AVIFAUNA												
	the transmission lines	are not construc	ted, there will b	e no impact on	the avifauna, th	erefore t	he status quo wil	remain.				
HERITAGE												
	the transmission lines	are not construc	ted, there will b	e no impact on	heritage sites, t	herefore	the status quo wi	III remain.				
VISUAL				0.05								

Potential		Extent	Duration	Magnitude	Probability	Sig	nificance	Status			
impact	Mitigation	(E)	(D)	(M)	(P)	(S=(E	+D+M)*P)	(+ve or - ve)	Confidence		
In the event that	the transmission lines	are not construct	ed, there will b	e no visual impa	act, therefore th	ie status q	uo will remain.				
SOCIAL											
Not constructing the Powerlines linking the Tabor	Nature of impact:	weakest part of	the Northern G rlines linking th	rid Network due e Tabor substat	to being operation to the new l	ted beyond Bokmakirie	l its reliability. T e (Nzhelele) Sub	here is there station in orc	Spencer power is the fore a need for a new ler to strengthen the astructure		
substation to	with	2	1	2	1	5	Low	-	Medium to high		
the new Bokmakirie	without	4	5	8	3	51	Medium	-	Medium to high		
(Nzhelele) Substation	degree to which impact can be reversed:	Construct the po	owerlines								
	degree of impact on irreplaceable resources:	N/A									
No increase in	Nature of							t being shut o	down leading to effects		
the voltage stability	impact:	such as loss of data and the inability to undertake certain activities on farms etc.11214Low-Medium									
Stability	with	1	1	2	1	4	Low	-			
	without	3	5	8	3	48	Medium	-	Medium		
	degree to which impact can be reversed:	Ensure that the									
	degree of impact on irreplaceable resources:	N/A									
No increase and assurance of electricity	Nature of impact:	An unreliable ele manufacturing, Municipality may	and mining sect	ors. A lack of el					e agricultural, tourism, the Makhado		
supply making it	with	1	1	2	1	4	Low	-	Medium		
unavailable for agriculture,	without	3	5	8	4	64	High	-	Medium		
tourism and other industries as well as	degree to which impact can be reversed:	Increase electric and ensure that			uch as the cons	truction of	the proposed po	ower line			
allowing for the undertaking of	degree of impact on irreplaceable	N/A									

Potential		Extent	Duration	Magnitude	Probability	Sign	ificance	Status	
impact	Mitigation	(E)	(D)	(M)	(P)	(S=(E	+D+M)*P)	(+ve or - ve)	Confidence
other activities that may not have been possible before. The absence of an increase in electricity may also hinder the undertaking of other activities that may only be possible with electricity supply	resources:								
Continuation of backlogs in	Nature of impact:	The backlogs ar of electricity is i					ages. The rend	ering of servi	ces that require the use
electricity	with	2	1	4	2	14	Low	-	
connections	without	3	4	8	4	60	Medium	-	
	degree to which impact can be reversed:	The Makhado Lo increased budge adequate mater	ets to allow for a						
	degree of impact on irreplaceable resources:	N/A							
Continuation of the inadequate	Nature of impact:	In services such	as health facil	ities, lack of ele	ctricity can resu	lt in losses	of lives		
provision of	with	1	1	0	2	4	Low	-	Medium to high
electricity to critical services	without	3	5	10	4	72	High	-	Medium to high
such as health facilities	degree to which impact can be reversed:	The necessity of that adverse im			s imperative and	I the propos	sed powerline c	an ensure	
	degree of impact on irreplaceable resources:	N/A							
Continuation of	Nature of	A lack of electric	city means that	the lifestyles wi	ithin this rural a	rea will con	tinue. These in	clude the cut	ting of trees to use the

Potential		Extent	Duration	Magnitude	Probability	Sigr	nificance	Status	
impact	Mitigation	(E)	(D)	(M)	(P)	(S=(E+D+M)*P)		(+ve or - ve)	Confidence
the unavailability of	impact:	wood for heating of protected spe		The cutting of tr	ees has numero	ous adverse	impacts such a	is deforestati	on and the possible loss
electricity in	with	1	1	2	2	8	Low	-	Medium
numerous rural settlements	without	3	5	8	4	64	High	-	Medium
Sectionents	degree to which impact can be reversed:	Provide electrici	ty to rural areas	5					
	degree of impact on irreplaceable resources:	N/A							

Potential		Extent	Duration	Magnitude	Probability	Signific	ance	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	d+m)*p)	(+ve or - ve)	Confidence
Construction ph	ase								
Agricultural pot									
Deterioration of soil resource	Nature of impact:	Loss of agricult	ural land due to	construction of	infrastructure			_	
	With	1	4	0	2	10	Low	-	
	Without	1	4	2	3	21	Low	-	
	Degree to which impact can be reversed:	Reversal should	be straightforw	vard after remo	val of infrastruc	ture			
	Degree of impact on irreplaceable resources:	Low to none							
Deterioration of soil resource	Nature of impact:	Soil erosion haz	ard due to cons	truction activiti	es				
	With	1	1	2	2	8	Low	-	
	Without	2	2	4	3	24	Low	-	
	Degree to which impact can be reversed:	If erosion is cau	ised, reversal is	often difficult a	and time-consun	ning, espe	cially in steeper	areas	
	Degree of impact on irreplaceable resources:	Moderate							
Flora									
Destruction of protected flora	Nature of impact:	Removal of prot	ected plant spe	cies due to the	servitude				
	With	1	5	2	5	40	Medium	-	High
	Without	1	5	2	5	40	Medium	-	High
	Degree to which impact can be reversed:	Existing/permit	ted access roads	s must be used	and the all othe	er measure	es must be follow	ved	

Table 9.2: Detailed assessment of identified impacts for alternative 1a

Potential		Extent	Duration	Magnitude	Probability	Signifi	cance	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e-	⊦d+m)*p)	(+ve or - ve)	Confidence
	Degree of impact on irreplaceable resources:			oute follows exist	5.1				
Destruction of pristine habitat	Nature of impact:	Destruction a	nd disturbance o	of a previously u	ndisturbed vegel	ation			
	With	1	1	2	2	8	Low	-	High
	Without	1	1	2	2	8	Low	-	High
	Degree to which impact can be reversed:			ds must be used		er measur	es must be foll	owed	
	Degree of impact on irreplaceable resources:			oute follows exist					
Vegetation clearance	Nature of impact:	Removal of ve	egetation due to	servitudes, acce	ess roads and er	ecting of	the pylons		
	With	1	1	2	5	20	Low	-	High
	Without	1	1	2	5	20	Low	-	High
	Degree to which impact can be reversed:	Existing/perm	itted access roa	ds must be used	and the all othe	er measur	es must be foll	owed	
	Degree of impact on irreplaceable resources:		·	clear at all times					
Plant encroachment	Nature of impact:	Vegetation cle	earing or disturb	ance may and h	ave been fond to	increase	encroachment		-
	With	1	1	2	2	8	Low	-	High
	Without	1	1	2	2	8	Low	-	High
	Degree to which impact can be reversed:			ds must be used		er measur	es must be foll	owed	
	Degree of impact on irreplaceable resources:	There is an ex							
Threat to biodiversity	Nature of impact:	Disturbance o	f an area with h	igh biodiversity	will increase the	probabili	ty of encroachn	nent and biodiv	ersity will be lost.

Potential		Extent	Duration	Magnitude	Probability	Signific	ance	Status				
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	d+m)*p)	(+ve or - ve)	Confidence			
	With	1	1	2	2	8	Low	-	High			
	Without	1	1	2	2	8	Low	-	High			
	Degree to which impact can be reversed:	Existing/permit	ted access road	s must be used	and the all othe	er measure	s must be follow	wed				
	Degree of impact on irreplaceable resources:	Area already dis			51							
Soil erosion	Nature of impact:	Removal of veg preventing/min			and servitudes	will increas	se the soil erosi	on as vegetat	ion plays a major role ir			
	With	1	1	2	2	8	Low	-	High			
	Without	1	1	2	3	12	Low	-	High			
	Degree to which impact can be reversed:	Existing/permit	ted access road	s must be used	I I I I I I I I Existing/permitted access roads must be used and the all other measures must be followed - - -							
	Degree of impact on irreplaceable resources:	Area already di soil erosion fror			ing power line/	already m	easures put in	place for the				
Fauna	on irreplaceable				ing power line/	already m	easures put in	place for the				
Fauna Loss of faunal habitat	on irreplaceable		n the existing li		ing power line/	already m	easures put in	place for the				
Loss of faunal	on irreplaceable resources: Nature of	soil erosion fror	n the existing li		ing power line/	already m	easures put in Medium	place for the	High			
Loss of faunal	on irreplaceable resources: Nature of impact:	soil erosion from	n the existing li	ne					High High			
Loss of faunal	on irreplaceable resources: Nature of impact: With	soil erosion from Adverse impact 2 2 Low- realign ali the 55m servitu	n the existing li 4 4 gnment to avoid ide.	ne 6 6 sensitive habi	5 5 tats and restrict	60 60 vegetatio	Medium Medium n clearance and	- - I activities to	5			
Loss of faunal habitat	on irreplaceable resources: Nature of impact: With Without Degree to which impact can be reversed: Degree of impact on irreplaceable resources:	soil erosion from Adverse impact 2 2 Low- realign ali the 55m servitu Medium-high the inundated pans species includir dog, cheetah ar	A the existing li 4 4 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	ne 6 6 d sensitive habi ignment bisect cky outcrops as g, muller's velv	5 5 tats and restrict s rivers (non- well as suitabl	60 60 vegetatio perennial e habitat	Medium Medium n clearance and drainage lines for several red	- - l activities to), seasonally listed faunal	5			
Loss of faunal	on irreplaceable resources: Nature of impact: With Without Degree to which impact can be reversed: Degree of impact on irreplaceable resources:	soil erosion from Adverse impact 2 2 Low- realign ali the 55m servitu Medium-high the inundated pans species includir	A the existing li 4 4 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	ne 6 6 d sensitive habi ignment bisect cky outcrops as g, muller's velv	5 5 tats and restrict s rivers (non- well as suitabl	60 60 vegetatio perennial e habitat	Medium Medium n clearance and drainage lines for several red	- - l activities to), seasonally listed faunal	5			
Loss of faunal habitat Direct impact on	on irreplaceable resources: Nature of impact: With Without Degree to which impact can be reversed: Degree of impact on irreplaceable resources: Nature of	soil erosion from Adverse impact 2 2 Low- realign ali the 55m servitu Medium-high the inundated pans species includir dog, cheetah ar	A the existing li 4 4 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	ne 6 6 d sensitive habi ignment bisect cky outcrops as g, muller's velv	5 5 tats and restrict s rivers (non- well as suitabl	60 60 vegetatio perennial e habitat	Medium Medium n clearance and drainage lines for several red	- - l activities to), seasonally listed faunal	5			

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence
structures and personnel	Degree to which impact can be reversed:	Restrict constru					•	•	
	Degree of impact on irreplaceable resources:	The proposed inundated pans							
Avifauna									
Habitat destruction	Nature of impact:	Permanent rem	oval of habitat t	hat is used, or	may be used, by	y avifauna.			
	With	1	2	4	3	21	Low	-	Medium
	Without	1	2	4	5	35	Medium	-	Medium
	Degree to which impact can be reversed:	Partially reversi	ble					•	
	Degree of impact on irreplaceable resources:	Low							
Disturbance	Nature of impact:	Noise and move	ement, from sta	ff and machiner	y, may disturb a	avifauna, ar	nd nests my be	disturbed.	
	With	1	1	4	3	18	Low	-	Medium
	Without	2	1	4	4	28	Low	-	Medium
	Degree to which impact can be reversed:	Irreversible							
	Degree of impact on irreplaceable resources:	Medium							
Heritage									
Destruction of	Nature of impact:	Adverse impact	on a identified	heritage sites a	long alternative				
heritage sites	With mitigation	3	5	2	5	50	Medium	-	High
and features	Without mitigation	3	5	10	5	90	High	-	High

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence
	Degree to which impact can be reversed:	Medium							High
	Degree of impact on irreplaceable resources:	Not applicable							High
Visual									
Transformation of the visual quality of the	Nature of impact:								aracter, especially in the vill create adverse visual
landscape	With	3	2	6	5	55	Medium	-	High
	Without	3	2	6	5	55	Medium	-	High
	Degree to which impact can be	The impact car material. Active						construction	
	reversed:			or vegetation w	here it has been	r cicurcu, is	also required.		
	reversed: Degree of impact on irreplaceable resources:	In areas of high private nature r	n visual quality a	and where there	e are no hv pow	ver lines, su	•	ansberg and	
Social	Degree of impact on irreplaceable	In areas of high	n visual quality a	and where there	e are no hv pow	ver lines, su	•	ansberg and	
Social Theft of material from camps and	Degree of impact on irreplaceable	In areas of high private nature r	visual quality a eserves, the de stolen from co	and where there gree of impact nstruction sites	e are no hv pow will be very hig and in areas a	ver lines, su 1.	ch as the soupa	-	ed in powerlines is often
Theft of material from camps and along	Degree of impact on irreplaceable resources:	In areas of high private nature r Material can be	visual quality a eserves, the de stolen from co	and where there gree of impact nstruction sites	e are no hv pow will be very hig and in areas a	ver lines, su 1.	ch as the soupa	-	ed in powerlines is often Medium
Theft of material from camps and along construction	Degree of impact on irreplaceable resources: Nature of impact:	In areas of high private nature r Material can be stolen even alor	visual quality a reserves, the de stolen from con ng powerlines th	and where there gree of impact nstruction sites nat are in opera	e are no hv pow will be very hig and in areas a	ver lines, su n. ong the rou	ch as the soupa ute especially as	s material us	
Theft of material from camps and along	Degree of impact on irreplaceable resources: Nature of impact: With	In areas of high private nature r Material can be stolen even alor 1	stolen from con powerlines the stolen from con powerlines the stolen from con powerlines the stolen from con the stolen from c	and where there gree of impact nstruction sites nat are in opera 0 8	e are no hv pow will be very high and in areas a tion 1 4	ver lines, su n. long the rou 2	ch as the soupa ute especially as	s material us	Medium
Theft of material from camps and along construction	Degree of impact on irreplaceable resources: Nature of impact: With Without Degree to which impact can be	In areas of high private nature r Material can be stolen even alor 1 2 High – with imp N/A	n visual quality a reserves, the de stolen from cong powerlines th 1 1 lementation of	and where there gree of impact nstruction sites nat are in opera 0 8 relevant mitigat	e are no hv pow will be very high and in areas a tion 1 4 tion measures	ver lines, su ong the rou 2 44	ch as the soupa ute especially as Low Medium	s material us - -	Medium Medium
Theft of material from camps and along construction sites Negative attitudes	Degree of impact on irreplaceable resources: Nature of impact: With Without Degree to which impact can be reversed: Degree of impact on irreplaceable resources: Nature of impact:	In areas of high private nature r Material can be stolen even alor 1 2 High – with imp N/A	n visual quality a reserves, the de stolen from cong powerlines th 1 1 lementation of the hat land owner	and where there gree of impact nstruction sites nat are in opera 0 8 relevant mitigat	e are no hv pow will be very high and in areas a tion 1 4 tion measures	ver lines, su ong the rou 2 44	ch as the soupa ute especially as Low Medium	s material us - -	Medium
Theft of material from camps and along construction sites Negative	Degree of impact on irreplaceable resources: Nature of impact: With Without Degree to which impact can be reversed: Degree of impact on irreplaceable resources: Nature of impact:	In areas of high private nature r Material can be stolen even alor 1 2 High – with imp N/A It is possible t	n visual quality a reserves, the de stolen from cong powerlines th 1 1 lementation of the hat land owner	and where there gree of impact nstruction sites nat are in opera 0 8 relevant mitigat	e are no hv pow will be very high and in areas a tion 1 4 tion measures	ver lines, su ong the rou 2 44	ch as the soupa ute especially as Low Medium	s material us - -	Medium Medium

Potential		Extent	Duration	Magnitude	Probability	Significa	ance	Status			
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+a	l+m)*p)	(+ve or - ve)	Confidence		
formation of community groups, NGO's,	Degree to which impact can be reversed:	High – with imp	lementation of r	relevant mitigat	ion measures						
in response to the project;	Degree of impact on irreplaceable resources:	N/A	/A								
Land owners denying	Nature of impact:	This would be e	xpected from la	ndowners who	are opposed to	the project					
contractors	With	1	1	2	2	8	Low	-	Medium		
access to their properties	Without	1	2	6	4	36	Medium	-	Medium		
properties	Degree to which impact can be reversed:	High – with imp	lementation of r	relevant mitigat	ion measures						
	Degree of impact on irreplaceable resources:	N/A									
Loss of crops leading to	Nature of impact:	Land and crops	can be lost duri	ng the clearing	of the powerlin	e corridor a	and during the c	onstruction o	f the powerline		
economic losses	With	1	1	2	2	8	Low	-	Medium to high		
	Without	1	3	6	4	40	Medium	-	Medium to high		
	Degree to which impact can be reversed:	High – with imp	lementation of r	relevant mitigat	ion measures						
	Degree of impact on irreplaceable resources:	N/A									
Loss of land leading to	Nature of impact:	Grazing land are	ea can be lost d	e construction	n of access roads						
economic losses	With	1	1	2	2	8	Low	-	Medium to high		
	Without	1	3	6	4	40	Medium	-	Medium to high		
	Degree to which impact can be reversed:	High – with imp	lementation of r	relevant mitigal	ion measures						

Potential		Extent	Duration	Magnitude	Probability	Signifie	cance	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	-d+m)*p)	(+ve or - ve)	Confidence
	Degree of impact on irreplaceable resources:	N/A							
Impacts on farming	Nature of impact:	Construction ca	n disturb activit	ies on farms					
activities such	With	1	1	2	2	8	Low	-	Medium to high
as sowing, harvesting, and	Without	1	1	8	3	30	Low	-	Medium to high
fire management programmes	Degree to which impact can be reversed:	High – with imp	lementation of	relevant mitigal	tion measures				
leading to economic losses	Degree of impact on irreplaceable resources:	N/A							
Damage to farm infrastructure	Nature of impact:	This can lead to	conflicts with c	community men	bers and farme	ers			
e.g. irrigation	With	1	1	2	1	4	Low	-	Medium to high
equipment, gates, fences	Without	1	1	6	3	24	Low	-	Medium to high
5,	Degree to which impact can be reversed:	High – with imp	lementation of	relevant mitigal	tion measures				
	Degree of impact on irreplaceable resources:	N/A							
Security concerns as a	Nature of impact:	It is highly likel	y that theft of g	ame and stock	can occur. Thef	t of game	can be higher o	n farms where	e rhino is present
result of	With	1	1	2	4	16	Low	-	Medium to high
poaching of game, stock	Without	1	1	10	4	<mark>48</mark>	Medium	-	Medium to high
theft and crop theft	Degree to which impact can be reversed:	High – with imp	lementation of	relevant mitigal	tion measures				
	Degree of impact on irreplaceable resources:	The impact can							
Security as a result of the	Nature of impact:	The mere prese threatened	ence of construc	tion workers in	communities a	nd especi	ally on farms ca	an lead to une	ase and people may feel

Potential		Extent	Duration	Magnitude	Probability	Signifi	cance	Status		
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e-	+d+m)*p)	(+ve or - ve)	Confidence	
presence of	With	1	1	2	2	8	Low	-	Medium to high	
workers on farms and	Without	2	1	8	3	33	Medium	-	Medium to high	
communities	Degree to which impact can be reversed:	High – with imp	lementation of	relevant mitiga	tion measures					
	Degree of impact on irreplaceable resources:	N/a	'a							
Safety of community	Nature of impact:	Construction sit	es are highly ha	azardous enviro	nments and the	safety of	f people and anii	mals can be co	mpromised	
members/farm	With	1	1	2	1	4	Low	-	Medium	
workers/animals	Without	1	1	6	2	16	Low	-	Medium	
	Degree to which impact can be reversed:	High – with imp	lementation of	relevant mitiga	tion measures					
	Degree of impact on irreplaceable resources:	N/a								
Poor maintenance of	Nature of impact:	It is possible the	at access routes	s can be of such	poor state that	mainten	ance of the pow	erline is not po	ossible	
the power line	With	1	1	2	2	8	Low	-	Medium to high	
access roads: conflict between	Without	1	4	8	4	52	Medium	-	Medium to high	
eskom and the landowners on whose	Degree to which impact can be reversed:	High – with imp	lementation of	relevant mitiga	tion measures					
responsibility it is to do maintenance on these roads. Farmers use it more often but yet expect eskom to pay for all maintenance	Degree of impact on irreplaceable resources:	N/a								

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence
Loss of a sense of place/income	Nature of impact:	The presence of be spoilt	f powerlines par	ticularly in tour	ist attractions ca	an result in	tourists no long	ger visiting th	e area as their views will
on game farms	With	1	1	2	2	8	Low	-	Medium to high
– tourists want to see	Without	1	1	8	4	40	Medium	-	Medium to high
"africa"and the power line can disturb the	Degree to which impact can be reversed:	High – with imp	lementation of	relevant mitigat	ion measures				
rustic african setting;	Degree of impact on irreplaceable resources:	N/A							
Operation phase	2								
Agricultural pot	ential								
It is anticipated the	nat the main impacts o	on agricultural po	tential will occu	r during the cor	struction phase	9			
Flora									
Destruction of protected flora	Nature of impact:	Removal of prot	ected plant spe	cies due to the	servitude				
	With	1	1	2	2	8	Low	-	High
	Without	1	1	2	2	8	Low	-	High
	Degree to which impact can be reversed:	Existing/permit	ted access roads	s must be used	and the all othe	er measures	s must be follow	ed	
	Degree of impact on irreplaceable resources:	Area already dis	sturbed and rou	te follows existi	ng power line				
Destruction of pristine habitat	Nature of impact:	Removal of veg	-			ecting of the	e pylons		
	With	1	1	2	2	8	Low	-	High
	Without	1	1	2	2	8	Low	-	High
	Degree to which impact can be	Existing/permit	ted access road	s must be used	and the all othe	er measures	must be follow	ed	
		·		0.47					

Potential		Extent	Duration	Magnitude	Probability	Significance	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d+m)*p)	(+ve or - ve)	Confidence
	reversed:							
	Degree of impact on irreplaceable resources:	Area already di	sturbed and rou	ite follows exist	ing power line/ v	virtually no pristine hal	pitat	
Vegetation clearance	Nature of impact:	Removal of veo	getation due to s	servitudes, acce	ss roads and ere	ecting of the pylons		
	With	1	4	2	2	14 Low	-	High
	Without	1	5	2	2	16 Low	-	High
	Degree to which impact can be reversed:	Existing/permit	ted access road	s must be used	and the all othe	er measures must be fo	llowed	
	Degree of impact on irreplaceable resources:				(bush clearing)			
Plant encroachment	Nature of impact:	Vegetation clea	aring or disturba	nce may and ha	ave been fond to	increase encroachme	nt/ cumulative in	npact
	With	1	1	2	2	8 Low	-	High
	Without	1	1	2	2	8 Low	-	High
	Degree to which impact can be reversed:	Existing/permit	ted access road	s must be used	and the all othe	er measures must be fo	ollowed	
	Degree of impact on irreplaceable resources:	There is an exi	sting powerline	and encroachme	ent is likely			
Threat to biodiversity	Nature of impact:	Disturbance of	an area with hig	gh biodiversity v	will increase the	probability of encroach	ment and biodiv	ersity will be lost.
	With	1	1	2	2	8 Low	-	High
	Without	1	1	2	2	8 Low	-	High
	Degree to which impact can be reversed:	Existing/permit	ted access road	s must be used	and the all othe	er measures must be fo	llowed	
	Degree of impact on irreplaceable	Area already di	sturbed and rou	ite follows exist	ing power line			

Potential		Extent	Duration	Magnitude	Probability	Significa	ance	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+o	d+m)*p)	(+ve or - ve)	Confidence
	resources:								
Soil erosion	Nature of impact:	Removal of veg preventing/mini				vill increase	e the soil erosio	n as vegetat	ion plays a major role in
	With	1	1	2	2	8	Low	-	High
	Without	1	1	2	2	8	Low	-	High
	Degree to which impact can be reversed:	Existing/permit	ted access road	s must be used	and the all othe	er measure	s must be follow	ed	
	Degree of impact on irreplaceable resources:	Area already dis soil erosion fror			ting power line/	already m	easures put in p	lace for the	
Fauna									
Loss of faunal habitat with	impact:	Adverse impact							
clearance of	With	1	4	4	5	45	Medium		High
vegetation within the 55m	Without	2	4	6	5	60	Medium		High
servitude	Degree to which impact can be reversed:	the servitude s (especially arbo	ng which could hould not be to real species)	potential impa- tally removed	ct on the lines a providing refuge	should be i e habitat fo	removed. The ve or remaining fau	egetation of unal species	
	Degree of impact on irreplaceable resources:	dog, cheetah ar	, rupicolous/roo ng giant bullfroo nd white rhinoce	ky outcrops as , muller's velv	s well as suitabl	e habitat f		isted faunal	
Direct impact on associated	Nature of impact:	Adverse impact							
fauna and	With	1	4	4	4	36	Medium		
interactions with structures and	Without	2	4	6	5	60	Medium		
personnel	Degree to which impact can be reversed:	Medium-restrict any faunal spec				No intentio	nal killing or dist	urbances of	

AvifaunaCollisionNature impact: WithCollisionNature impact: WithWithoutDegree free impact reversedDegree free impact resourceDegree free impact reversedElectrocutionNature impact: WithWithoutDegree free on irrep resourceElectrocutionNature impact reversedDegree free on irrep resourceDegree free on irrep resourceNesting of birdsNature	of impact placeable es: of to which can be l: of impact placeable	inundated pans species includin dog, cheetah an Collision or red 1 1 Low Medium Bird perches on	a, rupicolous/roc ng giant bullfrog nd white rhinoce data species with 4 4 4	cky outcrops as g, muller's velv eros th the overheac 2 4	well as suitable ret gecko, ground l line (usually the 3 4	n-perennia le habitat nd pango ne earth v 21 36	Low Medium	listed faunal	Confidence Medium Medium
AvifaunaCollisionNature impact: WithCollisionNature impact: WithoutDegree d impact reversedDegree d on irrep resourceElectrocutionNature impact: WithElectrocutionNature impact: WithWithoutDegree d impact: WithDegree d impact: mpact: WithoutDegree d impact: reversedDegree d impact: reversedNature impact: reversedNesting of birdsNature	to which can be l: placeable es:	inundated pans species includin dog, cheetah an Collision or red 1 1 Low Medium Bird perches on	a, rupicolous/roc ng giant bullfrog nd white rhinoce data species with 4 4 4	cky outcrops as g, muller's velv eros th the overheac 2 4	well as suitable ret gecko, ground l line (usually the 3 4	le habitat nd pango ne earth w 21 36	: for several red lin, brown hyaer vire). Low Medium	listed faunal	
CollisionNature impact: WithWithWithoutDegree impact reversedDegree on impact resourceElectrocutionNature impact: WithElectrocutionNature impact reversedDegree on irrep resourceOutput Degree on irrep resourceElectrocutionNature impact reversedDegree on irrep reversedOutput Degree on irrep resourceNesting of birdsNature	to which can be l: of impact placeable es:	1 Low Medium Bird perches on	4 4 pylon and caus	2 4	3	21 36	Low Medium		
impact:WithWithoutDegree fillimpactreversedDegree contractDegree contractSecond contractElectrocutionNatureimpact:WithWithoutDegree fillDegree fillimpactWithDegree fillimpactreversedDegree fillimpactreversedDegree fillimpactreversedDegree fillSetting of birdsNature	to which can be l: of impact placeable es:	1 Low Medium Bird perches on	4 4 pylon and caus	2 4	3	21 36	Low Medium		
WithoutDegreeimpactreversedDegreeOnresourceElectrocutionNatureimpact:WithWithoutDegreeDegreeimpactreversedDegreeOnimpactreversedDegreeDegreeonimpactreversedDegreeNesting of birdsNature	to which can be l: of impact placeable es:	1 Low Medium Bird perches on	4 pylon and caus	4	4	36	Medium		
Degree impact reversedDegree on irrep resourceElectrocutionNature impact: WithWith WithoutDegree impact impact reversedDegree on impact reversedNesting of birdsNature	to which can be l: of impact placeable es:	Low Medium Bird perches on	pylon and caus						Medium
impact reversed Degree of on irrep resourceElectrocutionNature impact: With WithoutDegree fi impact reversed Degree fi impact reversed Degree fi on irrep resourceNesting of birdsNature	can be l: of impact placeable es:	Medium Bird perches on		ses an electrical	short circuit by		·		
onirrep resourceElectrocutionNature impact:WithWithoutDegree impactDegree conDegree reversedDegree conNesting of birdsNature	placeable es:	Bird perches on		ses an electrical					
impact: With Without Degree to impact reversed Degree to on irrep resource Nesting of birds	of			ses an electrical	short circuit by				
Without Degree frequencies impact reversed Degree frequencies on irrepresource Nesting of birds		inve and earthet	d components, r	esulting in deat	th or severe inju		ly bridging the ai	r gap betweer	n live components and/or
Degree finished impact reversed Degree construction on irrepresource Nesting of birds Nature		1	4	2	3	21	Low		Medium
impact reversed Degree of on irrep resource Nesting of birds Nature		1	4	4	4	36	Medium		Medium
on irreg resource Nesting of birds Nature	to which can be I:	Low						•	
	of impact placeable es:	Medium							
on tower impact:	of	Routine mainter		and power line	s could result in	n disturba	nce of certain bir	d species	
structures and With		1	2	4	2	14	Low		Medium
disturbance during routine Without		2	2	4	3	24	Low		Medium
maintenance Degree fimpact reversed	to which can be	High							
Degree o on irrep resource		Medium							

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence
Heritage									
It is anticipated th	hat the main impacts o	on heritage will o	cur during the o	construction ph	ase				
Visual									
Visual exposure to the powerline servitude, conductor cables and	Nature of impact:	will create adve proximity (<500	erse visual impa Om) are highly	acts, especially vulnerable to	in and close to exposure of the	o private n power line	ature reserves. e, where visibili	Sensitive v ty result in a	the nzhelele substation, viewer locations in close negative impact on the visual effects of glare and
towers, as well	With	3	5	6	5	70	High	-	High
as the nzhelele substation.	Without	3	4	6	5	65	High	-	High
	Degree to which impact can be reversed: Degree of impact on irreplaceable	The impact car proximity to se option. In areas of high private nature n	nsitive viewer l visual quality a	ocations throug	gh careful route	e planning, er lines, su	or by selecting	g the no-go	
Social	resources:								
Perceived electromagnetic	Nature of impact:	The presence of on some proper		orkers can resu	It in the treat o	f safety and	d can possibly l	ead to actual	crimes being committed
fields impacts	With mitigation	1	3	2	1	6	Low	-	Medium
on humans and animals during	Without mitigation	1	5	4	2	20	Low	-	Medium
the operational phase	Degree to which impact can be reversed:	High – with the	implementation	of the relevant	t mitigation mea	sures			
	Degree of impact on irreplaceable resources:	N/a							
Loss of a sense of place/income	Nature of impact:	The presence of be spoilt	powerlines par	ticularly in tour	ist attractions ca	an result in	tourists no long	ger visiting th	e area as their views will
on game farms	With mitigation	1	1	2	3	12	Low	-	Medium
– tourists want to see "africa"	Without mitigation	3	4	8	4	60	Medium	-	High

Potential		Extent	Duration	Magnitude	Probability	Significa	ince	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	l+m)*p)	(+ve or - ve)	Confidence
and the power line can disturb the rustic	Degree to which impact can be reversed:	High – with the	implementation	of the relevant	t mitigation mea	asures			
african setting;	Degree of impact on irreplaceable resources:	N/a							
Poor maintenance of	Nature of impact:	It is possible that	at access routes	can be of such	poor state that	maintenar	ice of the power	line is not po	ssible
the power line	With mitigation	1	1	2	2	8	Low	-	Medium to high
access roads: conflict between	Without mitigation	1	4	8	4	52	Medium	-	Medium to high
eskom and the landowners on whose responsibility it	Degree to which impact can be reversed:	High – with the	implementation	of the relevant	t mitigation mea	asures			
is to do maintenance on these roads. Farmers use it more often but yet expect eskom to pay for all maintenance	Degree of impact on irreplaceable resources:	N/A							
Impact of the power lines on	Nature of impact:	Where powerline	es are not visibl	e or known, pla	ane crashes can	result and	in turn electricit	y outages m	ay occur
aircraft as there are airports	With mitigation	1	2	2	2	10	Low	-	Medium to high
are airports within the study area; one is the	Without mitigation	4	5	6	4	60	Medium	-	Medium to high
louis trichardt airport and the other is for light	Degree to which impact can be reversed:	High – with the	implementation	of the relevant	t mitigation mea	asures			
aircraft on the road towards waterpoort from louis trichardt	Degree of impact on irreplaceable resources:	N/a							

Potential		Extent	Duration	Magnitude	Probability	Significa	ince	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	l+m)*p)	(+ve or - ve)	Confidence
Decrease in property values	Nature of impact:	These can lead	to economic los	ses					
and number of	With mitigation	1	3	4	1	8	Low	-	Medium to high
visitors to lodges and other areas that	Without mitigation	2	5	6	3	39	Medium	-	Medium to high
are popular with tourists due to the visual	Degree to which impact can be reversed:	Vegetation can impact specialis		en the powerli	nes and other r	neasures c	an be discussed	l with visual	
impacts of powerlines	Degree of impact on irreplaceable resources:	N/a							
Security issues as a result of	Nature of impact:				-	_			-
the presence of maintenance	With mitigation	1	1	2	2	8	Low	-	Medium to high
workers on properties	Without mitigation	1	1	4	4	24	Low	-	High
properties	Degree to which impact can be reversed:	High – with the	implementatior	of the relevan	t mitigation mea	asures			
	Degree of impact on irreplaceable resources:	The impact can	be high where	endangered spe	ecies such as rhi	no occur			
Land owners denying	Nature of impact:	This can result i	in maintenance	not occurring					
contractors access to their	With mitigation	1	1	2	2	8	Low	-	Medium
properties	Without mitigation	1	1	8	4	40	Medium	-	High
	Degree to which impact can be reversed:	High – with the	implementatior	of the relevan	t mitigation mea	asures			
	Degree of impact on irreplaceable resources:	N/a							

Potential		Extent	Duration	Magnitude	Probability	Signifi	cance	Status			
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	⊦d+m)*p)	(+ve or - ve)	Confidence		
Poaching of game as well as	Nature of impact:	This is a high pr	robability								
stock theft and	With mitigation	1	1	0	1	2	Low	-	Medium to high		
theft of crops	Without mitigation	1	1	2	2	8	Low	-	Medium to high		
	Degree to which impact can be reversed:	High – with the	High – with the implementation of the relevant mitigation measures								
	Degree of impact on irreplaceable resources:	N/a									
Impact on farming	Nature of impact:	During the oper	ing the operational phase, impacts on farm activities are likely to be very minimal								
activities such as sowing,	With mitigation	1	1	0	1	2	Low	-	Medium to high		
harvesting, and	Without mitigation	1	1	2	1	4	Low	-	Medium to high		
fire management programmes	Degree to which impact can be reversed:	High – with the	High – with the implementation of the relevant mitigation measures								
leading to economic losses	Degree of impact on irreplaceable resources:	N/a									
Impact on farming	Nature of impact:	During the oper very minimal	rational phase,	impacts on ac	ctivities and on	guests to	lodges and ot	ner tourist des	tinations are likely to be		
activities such	With mitigation	1	1	0	1	2	Low	-	Medium to high		
as hunting in game farms	Without mitigation	1	1	2	1	4	Low	-	Medium to high		
leading to economic losses. Impacts can also be on	Degree to which impact can be reversed:	High – with the	implementatior	n of the relevan	t mitigation mea	asures					
guests in lodges leading to economic losses	Degree of impact on irreplaceable resources:	N/a									
Increase in the voltage stability	Nature of impact:	An increased vo	ltage will ensur	e that activities	that were not a	able to tak	ke place will be	possible			

Potential		Extent	Duration	Magnitude	Probability	Significa	ance	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+c	l+m)*p)	(+ve or - ve)	Confidence
	With mitigation								
	Without mitigation	3	5	8	5	80	High	+	Medium
	Degree to which impact can be reversed:	N/a							
	Degree of impact on irreplaceable resources:	N/a							
An assurance of a reliable	Nature of impact:	Reliable electric	ity supply is a p	ositive impact I	that will improve	e activities	such as tourism	in the makha	ado local municipality
electricity	With mitigation	3	4	2	4	36	Medium	+	Medium
supply	Without mitigation	2	1	6	4	36	Medium	+	Medium
	Degree to which impact can be reversed:	N/a							
	Degree of impact on irreplaceable resources:	N/a							
Increase of electricity	Nature of impact:	In order to grov	v the economy o	of the makhado	local municipali	ity, electric	ity is vital		
supply making it	With mitigation								
available for agriculture,	Without mitigation	3	5	8	5	80	High	+	Medium
tourism and other industries. The increase in electricity can	Degree to which impact can be reversed:	N/a							
also allow for the undertaking of other activities that may have been that may not have been possible prior to	Degree of impact on irreplaceable resources:	N/a							

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence
the improved electricity supply									
No more backlogs in	Nature of impact:	The absence of present will be		ectricity conne	ctions can mea	ns that act	ivities that can	only take p	place where electricity is
electricity	With mitigation								
connections	Without mitigation	3	5	8	5	80	High	+	Medium
	Degree to which impact can be reversed:	N/a							
	Degree of impact on irreplaceable resources:	N/a							
The inadequate provision of	Nature of impact:								
electricity to	With mitigation								
services such as health facilities will cease	Without mitigation	3	5	8	5	80	High	+	Medium
will Cease	Degree to which impact can be reversed:	N/a							
	Degree of impact on irreplaceable resources:	N/a							
Electricity will be available to	Nature of impact:	The presence of	f electricity to ru	ıral areas will in	nprove the lives	of many w	ho live in pover	ty	
numerous rural	With mitigation								
settlements that do not have this	Without mitigation	3	5	8	5	80	High	+	Medium
service	Degree to which impact can be reversed:	N/a							

Potential		Extent	Duration	Magnitude	Probability	Significan	ce	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d+	·m)*p)	(+ve or - ve)	Confidence
	Degree of impact on irreplaceable resources:	N/a							
Decommissionin	ig phase								
Agricultural pote	ential								
No decommission	ing impacts are anticip	oated							
Flora									
Destruction of protected flora	Nature of impact:	Removal of pro	tected plant spe	cies due to the	servitude				
	With	1	1	2	3	12	Low	-	High
	Without	1	1	2	3	12	Low	-	High
	Degree to which Existing/permitted access roads must be used and the all other measures must be followed impact can be reversed: reversed:								
	Degree of impact on irreplaceable resources:	Area already di	sturbed and rou	te follows existi	ng power line				
Destruction of pristine habitat	Nature of impact:	Removal of veg	etation due to s	ervitudes, acces	ss roads and ere	ecting of the	pylons		
	With	1	1	2	2	8	Low	-	High
	Without	1	1	2	2	8	Low	-	High
	Degree to which impact can be reversed:	Existing/permit	ted access road	s must be used	and the all othe	er measures i	nust be follow	ed	
	Degree of impact on irreplaceable resources:		sturbed and rou						
Vegetation clearance	Nature of impact:	Removal of veg	etation due to s	ervitudes, acces	ss roads and ere	ecting of the	pylons		
	With	1	1	2	5	20	Low	-	High
	Without	1	1	2	5	20	Low	-	High

Potential		Extent	Duration	Magnitude	Probability	Significa	ince	Status				
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d		(+ve or - ve)	Confidence			
	Degree to which impact can be reversed:	Existing/permit	ted access road	s must be used	and the all othe	er measures	s must be follow	ed				
	Degree of impact on irreplaceable resources:	The servitude h	as to be kept cl	ear at all times	(bush clearing)							
Plant encroachment	Nature of impact:	Vegetation clea	ring or disturba	nce may and ha	ave been fond to	o increase e	ncroachment/ c	umulative im	ipact			
	With	1	1	2	2	8	Low	-	High			
	Without	1	1	2	2	8	Low	-	High			
	Degree to which impact can be reversed:		ting/permitted access roads must be used and the all other measures must be followed									
	Degree of impact on irreplaceable resources:	There is an exis			·							
Threat to biodiversity	Nature of impact:	Disturbance of	an area with hig	h biodiversity v	will increase the	probability	of encroachmer	nt and biodiv	ersity will be lost.			
	With	1	1	2	2	8	Low	-	High			
	Without	1	1	2	2	8	Low	-	High			
	Degree to which impact can be reversed:	Existing/permit	ted access road	s must be used	and the all othe	er measures	must be follow	ed				
	Degree of impact on irreplaceable resources:	Area already di										
Soil erosion	Nature of impact:	Removal of veg preventing/min				will increase	e the soil erosio	n as vegetat	ion plays a major role in			
	With	1	1	2	2	8	Low	-	High			
	Without	1	1	2	3	12	Low	-	High			
	Degree to which impact can be reversed:	Existing/permit	ted access road	s must be used	and the all othe	er measures	must be follow	ed				

Potential		Extent	Duration	Magnitude	Probability	Significa	ince	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	l+m)*p)	(+ve or - ve)	Confidence
	Degree of impact on irreplaceable resources:	Area already dis soil erosion fror			ing power line/	already me	ausures put in	place for the	
Fauna									
Direct impact on associated	Nature of impact:	Adverse impact							
fauna and	With	1	1	2	5	20	Low		High
interactions with structures and	Without	2	1	4	5	35	Medium		High
personnel	Degree to which impact can be reversed:	The removal of of the vegetation	on within the cle	eared servitude.					
	Degree of impact on irreplaceable resources:	The proposed a inundated pans species includir dog, cheetah ar	, rupicolous/ro ng giant bullfro	cky outcrops as g, muller's velv	s well as suitabl	e habitat f	or several red	listed faunal	
Avifauna									
No decommission	ing impacts are anticip	pated							
Heritage									
No decommission	ing impacts are anticip	pated							
Visual									
Visual exposure to operations to dismantle and	Nature of impact:		ptions relating	to the removal					ot have significant visual as visual impacts will be
remove of	With	3	1	2	3	18	Low	+	High
power line & substation	Without	3	1	2	3	18	Low	+	High
infrastructure	Degree to which impact can be reversed:	Avoid unnecess	ary disturbanc	e of the natural	environment du	iring decom	missioning op	erations	
	Degree of impact on irreplaceable resources:	None							
Social									
Theft of material	Nature of	Material can be	atalan fuan						

Potential		Extent	Duration	Magnitude	Probability	Signifi	icance	Status				
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e	+d+m)*p)	(+ve or - ve)	Confidence			
from camps and	impact:	targeted by crir	ninals		-							
along construction	With mitigation	1	1	0	1	2	Low	-	Medium			
sites	Without mitigation	2	1	8	4	44	Medium	-	Medium			
	Degree to which impact can be reversed:	High – with the	implementatior	n of the relevan	t mitigation mea	asures						
	Degree of impact on irreplaceable resources:	N/A										
oss of crops eading to	Nature of impact:	Crops can be lo	st during this pl	hase as the acti	vities are almos	t as inter	nse as those duri	ng the constru	ction phase			
economic losses	With mitigation	1	1	2	2	8	Low	-	Medium to high			
Without mitigation	mitigation	1	3	6	4	40	Medium	-	Medium to high			
Degree to whic impact can b reversed:		High – with the	ligh – with the implementation of the relevant mitigation measures									
	Degree of impact on irreplaceable resources:	N/a										
Impacts on Farming	Nature of impact:	Decommissioni	ng can disturb a	ctivities on farr	ns							
activities such	With mitigation	1	1	2	2	8	Low	-	Medium to high			
is sowing, arvesting, and	Without mitigation	1	1	8	3	30	Low	-	Medium to high			
ire management programmes	Degree to which impact can be reversed:	High – with the	implementatior	n of the relevan	t mitigation mea	asures						
eading to economic losses	Degree of impact on irreplaceable resources:	N/a										
Damage to farm infrastructure	Nature of impact:	This can lead to	conflicts with c	community men	nbers and farme	rs						
e.g. irrigation	With mitigation	1	1	2	1	4	Low	-	Medium to high			

Potential		Extent	Duration	Magnitude	Probability	Signific	cance	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	·d+m)*p)	(+ve or - ve)	Confidence
equipment, gates, fences	Without mitigation	1	1	6	3	24	Low	-	Medium to high
	Degree to which impact can be reversed:	High – with the	implementation	of the relevan	t mitigation mea	asures			
	Degree of impact on irreplaceable resources:	N/a							
Security concerns as a	Nature of impact:	It is highly likely	y that theft of g	ame and stock	can occur. Thef	t of game	can be higher or	farms where	rhino is present
result of	With mitigation	1	1	2	4	16	Low	-	Medium to high
poaching of game, stock	Without mitigation	1	1	10	4	<mark>48</mark>	Medium	-	Medium to high
theft and crop theft	Degree to which impact can be reversed:	High – with the	implementation	of the relevan	t mitigation mea	asures			
	Degree of impact on irreplaceable resources:	The impact can	be high where e	endangered spe	ecies such as rhi	no occur			
Security as a result of the	Nature of impact:	The mere prese threatened	nce of construc	tion workers in	communities a	nd especia	ally on farms ca	n lead to une	ase and people may feel
presence of	With mitigation	1	1	2	2	8	Low	-	Medium to high
workers on pfarms and	Without mitigation	2	1	8	3	33	Medium	-	Medium to high
communities	Degree to which impact can be reversed:	High – with the	implementation	of the relevan	t mitigation mea	asures			
	Degree of impact on irreplaceable resources:	N/a							
Safety of community	Nature of impact:	As decommissio	ning involves th	ne dismantling o	of structures, th	e safety o	f people and ani	mals can be c	ompromised
members/farm	With mitigation	1	1	2	1	4	Low	-	Medium
workers/animals	Without mitigation	1	1	6	2	16	Low	-	Medium

Potential		Extent	Duration	Magnitude	Probability	Significance	e	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d+m	ı)*p)	(+ve or - ve)	Confidence
	Degree to which impact can be reversed:	High – with the	implementatior	n of the relevan	t mitigation mea	asures			
	Degree of impact on irreplaceable resources:	N/a							
Cumulative impa	acts								
Agricultural pote	ential								
No cumulative imp	pacts are anticipated								
Flora									
Plant encroachment	Nature of impact:	Vegetation clea	iring or disturba	nce may and ha	ave been fond to	increase encro	oachment/ c	umulative im	pact
	With	1	1	2	3	12 Lo	ow	-	High
	Without	1	1	2	2	8 Lo	w	-	High
	Degree to which impact can be reversed:	Existing/permit	ted access road	s must be used	and the all othe	er measures mu	ust be follow	ed	
	Degree of impact on irreplaceable resources:	Area already di	sturbed and rou	te follows exist	ing power line				
Soil erosion	Nature of impact:		getation due to imising soil eros			will increase th	e soil erosio	n as vegetat	ion plays a major role ir
	With	1	1	2	3	12 Lo	w	-	High
	Without	2	2	2	3	18 Lo	w	-	High
	Degree to which impact can be reversed:	Existing/permit	ted access road	s must be used	and the all othe	er measures mu	ust be follow	ed	
	Degree of impact on irreplaceable resources:		isturbed and rou m the existing li		ting power line/	already measu	ures put in p	lace for the	
Fauna									
Loss of faunal habitat	Nature of impact:	Adverse impact							

Potential		Extent	Duration	Magnitude	Probability	Signific	cance	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	·d+m)*p)	(+ve or - ve)	Confidence
	With	1	4	6	5	55	Medium	-	High
	Without	2	4	6	5	60	Medium	-	High
	Degree to which impact can be reversed:	activities to the	55m servitude.				ict vegetation cl		
	Degree of impact on irreplaceable resources:	inundated pans	s, rupicolous/rooning giant bullfroo	cky outcropsas g, muller's velv	well as suitable	e habitat	l drainage lines) for several red in, brown hyaer	listed faunal	
Direct impact on associated	Nature of impact:	Adverse impact	-	_	_				
fauna and	With	1	4	4	4	36	Medium	-	High
interactions with structures and	Without	2	4	6	5	60	Medium	-	High
personnel	Degree to which impact can be reversed:	Medium-restrict species.	construction a	activities to the	e 55m servitude	e. No inte	ntional killing o	f any faunal	
	Degree of impact on irreplaceable resources:	inundated pans	s, rupicolous/roo ng giant bullfroo	cky outcropsas g, muller's velv	well as suitable	e habitat	l drainage lines) for several red in, brown hyaer	listed faunal	
Avifauna									
No cumulative im	pacts are anticipated								
Heritage									
No cumulative im	pacts are anticipated								
Visual									
Increased visual exposure to power line infrastructure.	Nature of impact:	intensified impr lines are observ Lastly cumulativ the recurrence encountered wh	ession of a pre- ved from locatio ve impacts arise of images and then moving thro	existing power ns from which i through an ind impressions of	line in the lands more than one p crease in the inc of power lines a	ower line idence of it various	will also occur as would now be s sequential perce	s an increased een in differer ptions of diffe	e to an extended and/or perception where power it parts of the landscape. rent power lines through which are continuously
	With	3	5	0	3	24	Low	-	Low
	Without	3	5	6	5	70	High	-	High

Social Poaching of game impacting on the loss of game and turn affecting	Mitigation Degree to which impact can be reversed: Degree of impact on irreplaceable resources: Nature of impact: With Without Degree to which	2	e rehabilitation of visual quality a eserves, the dep	of vegetation wi and where there gree of impact w	here it has beer e are no hv pow will be very high	er lines, su	removing all o also required.		Confidence
Social Poaching of game impacting on the loss of game and in turn affecting	impact can be reversed: Degree of impact on irreplaceable resources: Nature of impact: With Without	material. Active In areas of high private nature n It is highly likely 2	e rehabilitation of visual quality a eserves, the dep	of vegetation wi and where there gree of impact w	here it has beer e are no hv pow will be very high	er lines, su	also required.		
Social Poaching of game impacting on the loss of game and in turn affecting	on irreplaceable resources: Nature of impact: With Without	private nature r It is highly likely 2	eserves, the dep y that theft of ga	gree of impact	will be very high		ch as the soupa	insberg and	
Poaching of game impacting on the loss of game and in turn affecting	impact: With Without	2		ame and stock	can occur. Theft				
game impacting on the loss of game and in turn affecting	impact: With Without	2		ame and stock	can occur. Theft				
game and in turn affecting	Without		-			_	an be higher on	farms where	rhino is present
turn affecting			3	4	3	27	Low	-	Medium to high
	Degree to which	5	5	8	4	72	High	-	High
industry of the municipality and	impact can be reversed: Degree of impact	Where possible, the construction operational phase The impact will	n and decommis se	ssioning phases	s as well as dur	ing mainter			
country at large	on irreplaceable resources:		2	5 .			of nowerlines c	an therefore	spoil this experience for
	impact:	them							spon this experience for
	With	1	2	2	2	10	Low	-	Medium to high
economic losses especially for	Without	3	4	6	3	39	Medium	-	Medium to high
tourism sector in turn impact	Degree to which impact can be reversed:	Liaise with visua would be to use					other suggeste	d measures	
makhado local	Degree of impact on irreplaceable resources:	N/a							
	Nature of impact:	An increase in a electricity is on							ado local municipality as
	With	3	4	6	4	52	Medium	+	Medium
stability of the network. In turn	Without	3	4	6	4	52	Medium	+	Medium
numerous	Degree to which impact can be	N/a							

Potential		Extent	Duration	Magnitude	Probability	Significan	ice	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d+	-m)*p)	(+ve or - ve)	Confidence
developments such as lodges and other	reversed:								
and other tourist attractions can be improved.	Degree of impact on irreplaceable resources:	N/a							
No-go alternativ	e								
Agricultural pot	ential								
In the event that	the transmission lines	are not construct	ted, there will b	e no impact on	the agricultural	potential, th	erefore the sta	atus quo will	remain.
Flora									
In the event that	the transmission lines	are not construct	ted, there will b	e no impact on	the flora, there	fore the stat	us quo will rem	nain.	
Fauna									
In the event that	the transmission lines	are not construct	ted, there will b	e no impact on	the fauna, there	efore the sta	tus quo will re	main.	
Avifauna									
In the event that	the transmission lines	are not construct	ted, there will b	e no impact on	the avifauna, th	nerefore the	status quo will	remain.	
Heritage									
In the event that	the transmission lines	are not construct	ted, there will b	e no impact on	heritage sites,	therefore the	e status quo wi	ll remain.	
Visual									
	the transmission lines	are not construct	ted, there will b	e no visual imp	act, therefore th	ne status quo	o will remain.		
Social									
Powerlines linking the tabor substation to the new	Nature of impact:	part of the nort Powerlines linking that the expansion	hern grid netwo ng the tabor sub	ork due to being ostation to the r	g operated beyo new bokmakirie	ond its reliab (nzhelele) si	ility. There is t ubstation in or	therefore a n der to streng	er power is the weakest eed for a new powerline. then the northern grid or
bokmakirie	With	2	1	2	1	5	Low	-	Medium to high
(nzhelele) substation will	Without	4	5	8	3	51	Medium	-	Medium to high
not be constructed.	Degree to which impact can be reversed:	Construct the po	owerlines						

Potential		Extent	Duration	Magnitude	Probability	Significa	ance	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+c	l+m)*p)	(+ve or - ve)	Confidence
	Degree of impact on irreplaceable resources:	N/a							
No increase in the voltage	Nature of impact:	The voltage is of such as loss of the second						ent being shu	t down leading to effects
stability	With	1	1	2	1	4	Low	-	Medium
	Without	3	5	8	3	48	Medium	-	Medium
	Degree to which impact can be reversed:	Ensure that the	voltage is stabi	lised				·	
	Degree of impact on irreplaceable resources:	N/a							
No increase and assurance of electricity	Nature of impact:		and mining s	ectors. A lack					the agricultural, tourism, growth of the makhado
supply making it unavailable for	With	1	1	2	1	4	Low	-	Medium
agriculture,	Without	3	5	8	4	64	High	-	Medium
tourism and other industries as well as	Degree to which impact can be reversed:	Increase electri and ensure that			such as the co	nstruction	of the propose	ed power line	
allowing for the undertaking of other activities that may not have been possible before. The absence of an increase in electricity may also hinder the undertaking of other activities that may only be possible with electricity	Degree of impact on irreplaceable resources:	N/a							

Potential		Extent	Duration	Magnitude	Probability	Significa	ince	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	l+m)*p)	(+ve or - ve)	Confidence
supply									
Continuation of backlogs in	Nature of impact:				lack of funds a electricity ava		ortages . The r	endering of s	services that require the
electricity	With	2	1	4	2	14	Low	-	Medium to high
connections	Without	3	4	8	4	60	Medium	-	Medium to high
	Degree to which impact can be reversed:	The makhado l increased budg adequate mate	ets to allow fo						
	Degree of impact on irreplaceable resources:	N/a							
Continuation of the inadequate	Nature of impact:	In services such	n health as facili	ties, lack of ele		It in losses	of lives		
provision of	With	1	1	0	2	4	Low	-	Medium
electricity to critical services	Without	3	5	10	4	72	High	-	Medium
such as health facilities	Degree to which impact can be reversed:	The necessity of that adverse in			is imperative a	nd the prop	oosed powerline	can ensure	
	Degree of impact on irreplaceable resources:	N/a							
Continuation of the unavailability of	Nature of impact:		ig and cooking.						utting of trees to use the tion and the possible loss
electricity in	With	1	1	2	2	8	Low	-	Medium
numerous rural settlements	Without	3	5	8	4	64	High	-	Medium
	Degree to which impact can be reversed:	Provide electric	ity to rural area	S					
	Degree of impact on irreplaceable resources:	N/a							

Potential		Extent	Duration	Magnitude	Probability	Significa	ance	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+e	d+m)*p)	(+ve or - ve)	Confidence
Construction ph	ase								
Agricultural pot	ential								
Deterioration of soil resource	Nature of impact:	Loss of agricultu	ural land due to	construction of	infrastructure				
	With	1	4	2	2	14	Low	-	
	Without	1	4	4	3	27	Low	-	
	Degree to which impact can be reversed:	Reversal should	be straightforw	vard after remo	val of infrastruct	ture			
	Degree of impact on irreplaceable resources:	Low to none							
Deterioration of soil resource	Nature of impact:	Soil erosion haz	ard due to cons	truction activiti	es				
	With	1	1	2	2	8	Low	-	
	Without	2	3	6	4	44	Medium	-	
	Degree to which impact can be reversed:	If erosion is cau	sed, reversal is	often difficult a	and time-consun	ning, espec	cially in steeper	areas	
	Degree of impact on irreplaceable resources:	Moderate							
Flora									
Destruction of protected flora	Nature of impact:	Removal of prot	ected plant spe	cies due to the	servitude				
	With	1	1	2	2	8	Low	-	High
	Without	1	1	4	3	18	Low	-	High
	Degree to which impact can be reversed:	Existing/permit	ed access roads	s must be used	and the all othe	er measure	s must be follow	ved	

Table 9.3: Detailed assessment of identified impacts for Alternative 1b

Potential		Extent	Duration	Magnitude	Probability	Signif	icance	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e	+d+m)*p)	(+ve or - ve)	Confidence
	Degree of impact on irreplaceable resources:			ute follows exist	5.1				
Destruction of pristine habitat	Nature of impact:	Destruction ar	nd disturbance o	of a previously ur	ndisturbed vegel	ation			
	With	1	1	2	2	8	Low	-	High
	Without	1	1	2	2	8	Low	-	High
	Degree to which impact can be reversed:			ds must be used		er measu	res must be foll	owed	
	Degree of impact on irreplaceable resources:			ute follows exist					
Vegetation clearance	Nature of impact:	Removal of ve	getation due to	servitudes, acce	ess roads and er	ecting of	the pylons		
	With	1	1	2	2	8	Low	-	High
	Without	1	1	2	2	8	Low	-	High
	Degree to which impact can be reversed:	Existing/perm	itted access roa	ds must be used	and the all othe	er measu	res must be foll	owed	
	Degree of impact on irreplaceable resources:			clear at all times					
Plant encroachment	Nature of impact:	Vegetation cle	aring or disturb	ance may and ha	ave been fond to	o increase	e encroachment		-
	With	1	1	2	2	8	Low	-	High
	Without	2	2	4	3	24	Low	-	High
	Degree to which impact can be reversed:			ds must be used		er measu	res must be foll	owed	
	Degree of impact on irreplaceable resources:	There is an ex	isting powerline	and encroachm	ent is likely				
Threat to biodiversity	Nature of impact:	Disturbance o	f an area with h	igh biodiversity	will increase the	probabili	ity of encroachn	nent and biodiv	ersity will be lost.

Potential		Extent	Duration	Magnitude	Probability	Signific	ance	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	d+m)*p)	(+ve or - ve)	Confidence
	With	1	1	2	2	8	Low	-	High
	Without	1	1	2	2	8	Low	-	High
	Degree to which impact can be reversed:	Existing/permit	ted access road	s must be used	and the all othe	er measure	es must be follow	ved	
	Degree of impact on irreplaceable resources:	Area already di	sturbed and rou	ite follows exist	ing power line				
Soil erosion	Nature of impact:	Removal of veg preventing/min			and servitudes	will increas	se the soil erosic	on as vegetat	ion plays a major role in
	With	1	1	2	2	8	Low	-	High
	Without	1	1	2	2	8	Low	-	High
	Degree to which impact can be reversed:	Existing/permit	ted access road	s must be used	and the all othe	er measure	es must be follow	ved	
	Degree of impact on irreplaceable	Area already di soil erosiom fro			ing power line/	already m	neasures put in p	place for the	
	resources:			ine					
Fauna	resources:								
Fauna Loss of faunal habitat	resources: Nature of impact:	Adverse impact							
Loss of faunal	Nature of			4	3	27	Low	-	High
Loss of faunal	Nature of impact:	Adverse impact	- 		3	27 48	Low Medium	-	High High
Loss of faunal	Nature of impact: With	Adverse impact	4 4 eferred alignme	4 6 ent to avoid ser	4	48		-	-
Loss of faunal habitat	Natureofimpact:WithWithWithoutDegree to whichimpact can bereversed:Degree of impacton irreplaceableresources:	Adverse impact 1 2 Low- realign pr clearance and a The proposed a well as suitable african python	4 4 eferred alignme activities to the alternative align e habitat for se	4 6 ent to avoid ser 55m servitude. ment 1b bisect	4 nsitive habitats s a seasonally in	48 (seasonal	Medium	- t vegetation outcrops as	-
Loss of faunal	Natureofimpact:WithWithWithoutDegree to whichimpact can bereversed:Degree of impacton irreplaceableresources:	Adverse impact 1 2 Low- realign pr clearance and a The proposed a well as suitable	4 4 eferred alignme activities to the alternative align e habitat for se	4 6 ent to avoid ser 55m servitude. ment 1b bisect	4 nsitive habitats s a seasonally in	48 (seasonal	pan) and restric	- t vegetation outcrops as	-
Loss of faunal habitat Direct impact on	Natureofimpact:WithWithoutDegree to whichimpact can bereversed:Degree of impacton irreplaceableresources:Natureofimpact:	Adverse impact 1 2 Low- realign pr clearance and a The proposed a well as suitable african python	4 4 eferred alignme activities to the alternative align e habitat for se	4 6 ent to avoid ser 55m servitude. ment 1b bisect	4 nsitive habitats s a seasonally in	48 (seasonal	pan) and restric	- t vegetation outcrops as	-

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d		(+ve or - ve)	Confidence
structures and personnel	Degree to which impact can be reversed:	Restrict constru				_			
	Degree of impact on irreplaceable resources:	The proposed a well as suitable african python							
Avifauna									
Habitat destruction	Nature of impact:	Permanent rem	oval of habitat t	hat is used, or	may be used, by	y avifauna.			
	With	1	2	4	3	21	Low	-	Medium
	Without	1	2	4	5	35	Medium	-	Medium
	Degree to which impact can be reversed:	Partially reversi	ble						
	Degree of impact on irreplaceable resources:	Low							
Disturbance	Nature of impact:	Noise and move	ement, from stat	ff and machiner	y, may disturb a	avifauna, an	d nests my be	disturbed.	
	With	1	1	4	3	18	Low	-	Medium
	Without	2	1	4	4	28	Low	-	Medium
	Degree to which impact can be reversed:	Irreversible							
	Degree of impact on irreplaceable resources:	Medium							
Heritage									
Destruction of	Nature of impact:	Adverse impact	on a identified	heritage sites a	long alternative				
heritage sites	With mitigation	3	5	2	5	50	Medium	-	High
and features	Without mitigation	3	5	10	5	90	High	-	High

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence
	Degree to which impact can be reversed:	Medium							High
	Degree of impact on irreplaceable resources:	Not applicable							High
Visual									
Transformation of the visual quality of the	Nature of impact:								naracter, especially in the will create adverse visual
landscape	With	3	2	6	5	55	Medium	-	High
	Without	3	2	6	5	55	Medium	-	High
	Degree to which impact can be reversed:	The impact car material. Active						construction	
	Degree of impact on irreplaceable resources:	In areas of high private nature r					ich as the soupa	ansberg and	
Social	on irreplaceable						ich as the soupa	ansberg and	
Influx of job seekers, mainly	on irreplaceable resources:	private nature r	eserves, the de an create emplo	gree of impact	will be very high ations for job se	n. eekers. Alor	ng this route, th	ne job seeker	rs may be from the louis ob seekers
Influx of job seekers, mainly unskilled labour,	on irreplaceable resources:	private nature r The powerine c	eserves, the de an create emplo	gree of impact	will be very high ations for job se	n. eekers. Alor	ng this route, th	ne job seeker	
Influx of job seekers, mainly unskilled labour, from the	on irreplaceable resources: Nature of impact:	private nature r The powerine c trichart town ar	eserves, the de an create emple ea. High unemp	gree of impact oyment expecta loyment rates i	will be very high ations for job se in the area could	n. eekers. Alor d be the driv	ng this route, th	ne job seeker ble influx of j	ob seekers
Influx of job seekers, mainly unskilled labour, from the communities around the power line route	on irreplaceable resources: Nature of impact: With	private nature r The powerine c trichart town ar 3	an create emplo an create emplo ea. High unemp 1 2	gree of impact byment expecta loyment rates i 4 8	will be very high ations for job se in the area could 2 4	eekers. Alor be the driv 16 52	ng this route, th ver of the possil	ne job seeker ble influx of j	ob seekers Medium to high
Influx of job seekers, mainly unskilled labour, from the communities around the	on irreplaceable resources: Nature of impact: With Without Degree to which impact can be	private nature r The powerine c trichart town ar 3 3	an create emplo an create emplo ea. High unemp 1 2	gree of impact byment expecta loyment rates i 4 8	will be very high ations for job se in the area could 2 4	eekers. Alor be the driv 16 52	ng this route, th ver of the possil	ne job seeker ble influx of j	ob seekers Medium to high
Influx of job seekers, mainly unskilled labour, from the communities around the power line route having job	on irreplaceable resources: Nature of impact: With Without Degree to which impact can be reversed: Degree of impact on irreplaceable resources:	private nature r The powerine c trichart town ar 3 3 High – with the N/a	eserves, the de an create emple ea. High unemp 1 2 implementation	gree of impact byment expecta loyment rates i 4 8 of the relevant	will be very high ations for job se in the area could 2 4 t mitigation mea	eekers. Alor be the driv 16 52 asures	ng this route, th ver of the possil Low Medium	ne job seeker ble influx of j -	ob seekers Medium to high
Influx of job seekers, mainly unskilled labour, from the communities around the power line route having job expectations health impacts	on irreplaceable resources: Nature of impact: With Without Degree to which impact can be reversed: Degree of impact on irreplaceable resources: Nature of	private nature r The powerine c trichart town ar 3 3 High – with the N/a	eserves, the de an create emple ea. High unemp 1 2 implementation	gree of impact byment expecta loyment rates i 4 8 of the relevant	will be very high ations for job se in the area could 2 4 t mitigation mea	eekers. Alor be the driv 16 52 asures	ng this route, th ver of the possil Low Medium	ne job seeker ble influx of j -	ob seekers Medium to high Medium to high

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence
construction camps and on construction	Degree to which impact can be reversed:	High – with the	implementation	of the relevant	t mitigation mea	asures			
camps	Degree of impact on irreplaceable resources:	N/a							
Health impacts as a result of	Nature of impact:	Waste on site c and animals	an become a nu	isance for com	munity member	rs and on fa	arms and also p	ose a dangei	to the health of people
exposure to	With	1	1	0	1	2	Low	-	Medium
waste (domestic and industrial)	Without	1	2	2	3	15	Low	-	Medium
	Degree to which impact can be reversed:	High – with the	implementation	of the relevant	t mitigation mea	asures			
	Degree of impact on irreplaceable resources:	N/a							
Health impacts from	Nature of impact:	Where construct workers in the a				ses, these c	an be passed o	n to the com	munity members or farm
construction	With	1	1	2	2	8	Low	-	Medium
sites and camps as a result of	Without	2	1	6	3	27	Low	-	Medium
infectious diseases	Degree to which impact can be reversed:	High – with the	implementation	of the relevant	t mitigation mea	asures			
	Degree of impact on irreplaceable resources:	N/a							
Conduct of construction	Nature of impact:	It is possible th actions can aris		good relationsh	ips between co	ntactors an	d community m	nembers, neg	ative as well as positive
workforce; good	With	2	1	2	2	10	Low	-	Medium to high
relationships between	Without	2	1	6	4	36	Medium	-	Medium to high
community members/ farm	Degree to which impact can be reversed:	High – with the	implementation	of the relevant	t mitigation mea	asures			

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence
workers and eskom construction workers can result in issues such as sexual misconduct and the spread of sexually transmitted diseases	Degree of impact on irreplaceable resources:	N/a							
Conduct of construction	Nature of impact:	These can result	t from factors s	uch as differenc	es in beliefs and	l cultural ba	ackgrounds		
workforce; bad relationships	With	2	1	2	2	10	Low	-	Low
between	Without	2	1	6	4	36	Medium	-	Low
community members/ farm workers and	Degree to which impact can be reversed:	High – with the	implementation	of the relevant	: mitigation mea	sures			
eskom construction workers leading to violence	Degree of impact on irreplaceable resources:	N/a							
Theft of material from camps and	Nature of impact:	Material can be targeted by crim		he sites where	decommissioni	ng is takin	g place as ma	terial used in	n electricity is often the
along	With	1	1	0	1	2	Low	-	Medium
construction sites	Without	1	1	8	4	40	Medium	-	Medium
	Degree to which impact can be reversed:	High – with the	implementation	of the relevant	: mitigation mea	sures			
	Degree of impact on irreplaceable resources:								
Negative attitudes	Nature of impact:	It is possible the livelihoods will content to the librory of the			ners, game far	mers owne	rs for whom v	isual impacts	are important to their
towards the	With	2	1	2	2	10	Low	-	Medium

Potential		Extent	Duration	Magnitude	Probability	Signific	cance	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	-d+m)*p)	(+ve or - ve)	Confidence
project and the	Without	3	1	6	3	30	Low	-	Medium
formation of community groups, NGO's,	Degree to which impact can be reversed:	High – with the	implementatior	of the relevan	t mitigation mea	asures			
in response to the project;	Degree of impact on irreplaceable resources:	N/a							
Land owners denying	Nature of impact:	This would be e	xpected from la	ndowners who	are opposed to				
contractors	With	1	1	2	2	8	Low	-	Medium
access to their properties	Without	1	2	6	4	36	Medium	-	Medium
properties	Degree to which impact can be reversed:	High – with the	implementatior	of the relevan	t mitigation mea	asures			
	Degree of impact on irreplaceable resources:	N/a							
Loss of crops leading to	Nature of impact:	Land and crops	can be lost duri	ng the clearing	of the powerlin	e corridor	and during the	construction o	f the powerline
economic losses	With	1	1	2	2	8	Low	-	Medium to high
	Without	1	3	6	4	40	Medium	-	Medium to high
	Degree to which impact can be reversed:	High – with the	implementatior	of the relevan	t mitigation mea	asures			
	Degree of impact on irreplaceable resources:	N/a							
Loss of land leading to	Nature of impact:	Grazing land ar	ea can be lost d	ue to clearing o	of land for the co	orridor as	well as during th	e constructior	n of access roads
economic losses	With	1	1	2	2	8	Low	-	Medium to high
	Without	1	3	6	4	40	Medium	-	Medium to high
	Degree to which impact can be reversed:	High – with the	implementatior	n of the relevan	t mitigation mea	asures			

Potential		Extent	Duration	Magnitude	Probability	Signific	ance	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	d+m)*p)	(+ve or - ve)	Confidence
	Degree of impact on irreplaceable resources:	• where the los	s of land is pern	nanent, eskom	should discuss o	compensat	ion with landow	ner	
Impacts on farming	Nature of impact:	Construction ca	n disturb activit	ies on farms					
activities such	With	1	1	2	2	8	Low	-	Medium to high
as sowing, harvesting, and	Without	1	1	8	3	30	Low	-	Medium to high
fire management programmes	Degree to which impact can be reversed:	High – with the	implementatior	of the relevant	t mitigation mea	asures			
leading to economic losses	Degree of impact on irreplaceable resources:	N/a							
Damage to farm infrastructure	Nature of impact:	This can lead to	conflicts with c	ommunity men	bers and farme	ers			
e.g. irrigation	With	1	1	2	1	4	Low	-	Medium to high
equipment, gates, fences	Without	1	1	6	3	24	Low	-	Medium to high
· · ·	Degree to which impact can be reversed:	High – with the	implementatior	of the relevant	t mitigation mea	asures			
	Degree of impact on irreplaceable resources:	N/a							
Security concerns as a	Nature of impact:	It is highly likel	y that theft of g	ame and stock	can occur. Thef	t of game o	can be higher o	n farms where	rhino is present
result of	With	1	1	2	4	16	Low	-	Medium to high
poaching of game, stock	Without	1	1	10	4	<mark>48</mark>	Medium	-	Medium to high
theft and crop theft	Degree to which impact can be reversed:	High – with the	implementatior	n of the relevant	t mitigation mea	asures			
	Degree of impact on irreplaceable resources:	The impact can	be high where	endangered spe	ecies such as rhi	no occur			
Security as a result of the	Nature of impact:	The mere prese threatened by t		tion workers in	communities a	nd especia	Illy on farms ca	an lead to une	ase and people may feel

Potential		Extent	Duration	Magnitude	Probability	Signifi	cance	Status				
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e-	+d+m)*p)	(+ve or - ve)	Confidence			
presence of	With	1	1	2	2	8	Low	-	Medium to high			
workers on farms and	Without	2	1	8	3	33	Medium	-	Medium to high			
communities	Degree to which impact can be reversed:	High – with the	gh – with the implementation of the relevant mitigation measures									
	Degree of impact on irreplaceable resources:	N/a										
Safety of community	Nature of impact:	Construction sit	es are highly ha	azardous enviro	nments and the	safety of	f people and anii	mals can be co	mpromised			
members/farm	With	1	1	2	1	4	Low	-	Medium			
workers/animals	Without	1	1	6	2	16	Low	-	Medium			
	Degree to which impact can be reversed:	High – with the	ligh – with the implementation of the relevant mitigation measures									
	Degree of impact on irreplaceable resources:	N/a										
Poor maintenance of	Nature of impact:	It is possible th	at access routes	s can be of such	poor state that	mainten	ance of the pow	erline is not po	ossible			
the power line	With	1	1	2	2	8	Low	-	Medium to high			
access roads: conflict between	Without	1	4	8	4	52	Medium	-	Medium to high			
eskom and the landowners on whose	Degree to which impact can be reversed:	High – with the	implementatior	n of the relevan	t mitigation mea	isures						
responsibility it is to do maintenance on these roads. Farmers use it more often but yet expect eskom to pay for all maintenance	Degree of impact on irreplaceable resources:	N/a										

Potential		Extent	Duration	Magnitude	Probability	Significa	ance	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+o	l+m)*p)	(+ve or - ve)	Confidence
Loss of a sense of place/income	Nature of impact:	The presence of be spoilt	f powerlines par	ticularly in tour	ist attractions c	an result ir	tourists no lon	ger visiting th	e area as their views will
on game farms	With	1	1	2	2	8	Low	-	Medium to high
– tourists want to see "africa"	Without	1	1	8	4	40	Medium	-	Medium to high
and the power line can disturb the rustic	Degree to which impact can be reversed:	High – with the	implementatior	n of the relevant	t mitigation mea	asures			
african setting;	Degree of impact on irreplaceable resources:	N/A							
Operation phase	2								
Agricultural pot	ential								
It is anticipated the	nat the main impacts o	on agricultural po	tential will occu	r during the cor	nstruction phase	9			
Flora									
Destruction of protected flora	Nature of impact:	Removal of prot	tected plant spe	cies due to the	servitude				
	With	1	3	4	3	24	Low	-	High
	Without	1	3	4	3	24	Low	-	High
	Degree to which impact can be reversed:	Existing/permit	ted access roads	s must be used	and the all othe	er measure	s must be follov	ved	
	Degree of impact on irreplaceable resources:	Area already dis	sturbed and rou	te follows existi	ng power line				
Destruction of pristine habitat	Nature of impact:	Destruction and	l disturbance of	a previously un	disturbed veget	ation			
	With	1	1	2	2	8	Low	-	High
	Without	1	1	2	2	8	Low	-	High
	Degree to which impact can be reversed:	Existing/permit	ted access road	s must be used	and the all othe	er measure	s must be follov	ved	

Potential		Extent	Duration	Magnitude	Probability	Signifi	cance	Status			
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e-	+d+m)*p)	(+ve or - ve)	Confidence		
	Degree of impact on irreplaceable resources:			ute follows exist							
Vegetation clearance	Nature of impact:	Removal of ve	getation due to	servitudes, acce	ess roads and ere	ecting of	the pylons				
	With	1	5	4	5	50	Medium	-	High		
	Without	1	5	4	5	50	Medium	-	High		
	Degree to which impact can be reversed:					er measur	res must be follo	wed			
	Degree of impact on irreplaceable resources:		•		(bush clearing)						
Plant encroachment	Nature of impact:	Vegetation cle	Vegetation clearing or disturbance may and have been fond to increase encroachment								
	With	1	2	4	3	21	Low	-	High		
	Without	1	2	6	4	36	Medium	-	High		
	Degree to which impact can be reversed:	Existing/permi	tted access road	ls must be used	and the all othe	er measur	res must be follo	wed			
	Degree of impact on irreplaceable resources:			and encroachm							
Threat to biodiversity	Nature of impact:	Disturbance of	an area with hi	gh biodiversity v		probabili	ty of encroachm	ent and biodiv	ersity will be lost.		
	With	1	1	4	3	18	Low	-	High		
	Without	1	1	4	3	18	Low	-	High		
	Degree to which impact can be reversed:					er measur	res must be follo	wed			
	Degree of impact on irreplaceable resources:			ute follows exist							
Soil erosion	Nature of impact:		getation due to nimising soil ero		and servitudes	will increa	ase the soil eros	ion as vegetat	ion plays a major role ir		

Potential	Mitigation	Extent	Duration	Magnitude	Probability	Signific	ance	Status			
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	d+m)*p)	(+ve or - ve)	Confidence		
	With	1	2	2	3	15	Low	-	High		
	Without	2	3	4	3	27	Low	-	High		
	Degree to which impact can be reversed:	Existing/permit	ted access road	s must be used	and the all othe	er measure	es must be follow	wed			
	Degree of impact on irreplaceable resources:	Area already di soil erosion fror			ting power line/	already m	neasures put in	place for the			
Fauna											
Loss of faunal habitat with	impact:	Adverse impact				-					
clearance of	With	1	4	4	3	27	Low	-	High		
vegetation within the 55m	Without	2	4	6	4	<mark>48</mark>	Medium	-	High		
			he clearance of the vegetation should be restricted to the 55m servitude and only larger tree pecies impacting which could potential impact on the lines should be removed. The vegetation of ne servitude should not be totally removed providing refuge habitat for remaining faunal species especially arboreal species)								
servitude	Degree to which impact can be reversed:	species impacti the servitude s	ng which could hould not be to	potential impa	ct on the lines s	should be	removed. The	egetation of			
servitude	Degree to which impact can be reversed: Degree of impact on irreplaceable resources:	species impacti the servitude s (especially arbo	ng which could hould not be to preal species)	potential impa	ct on the lines s	should be	removed. The	egetation of			
servitude Direct impact on	Degree to which impact can be reversed: Degree of impact on irreplaceable resources: Nature of	species impacti the servitude s	ng which could hould not be to preal species)	potential impa	ct on the lines s	should be	removed. The	egetation of			
servitude Direct impact on associated fauna and	Degree to which impact can be reversed: Degree of impact on irreplaceable resources: Nature of impact:	species impacti the servitude s (especially arbo	ng which could hould not be to preal species)	potential impa	ct on the lines s	should be	removed. The	egetation of	Medium-high		
servitude Direct impact on associated fauna and interactions with	Degree to which impact can be reversed: Degree of impact on irreplaceable resources: Nature of impact: With Without	species impacti the servitude s (especially arbo Adverse impact	ng which could hould not be to preal species)	potential impa stally removed	ct on the lines s providing refuge	should be e habitat f	removed. The v	vegetation of nunal species	Medium-high Medium-high		
servitude Direct impact on associated fauna and	Degree to which impact can be reversed: Degree of impact on irreplaceable resources: Nature of impact: With Without	species impacti the servitude s (especially arbo Adverse impact	ng which could hould not be to preal species) 4 4 4 uction activities	potential impa otally removed 4 6 to the 55m se	ct on the lines s providing refuge 3 4 ervitude. No inte	should be e habitat f 27 48	removed. The vector remaining fate of the vec	- -			
servitude Direct impact on associated fauna and interactions with structures and	Degree to which impact can be reversed: Degree of impact on irreplaceable resources: Nature of impact: With Without Degree to which impact can be	species impacti the servitude s (especially arbo Adverse impact 1 2 Restrict constru faunal species. The proposed a	ng which could hould not be to preal species) 4 4 uction activities No illegal poach	potential impa stally removed 4 6 to the 55m se ing or hunting ment 1b bisects	ct on the lines s providing refuge 3 4 ervitude. No inte activities.	should be e habitat f 27 48 entional ki nundated	removed. The store of remaining factors for remaining factors for the store of the	- - - ances of any			
servitude Direct impact on associated fauna and interactions with structures and	Degree to which impact can be reversed: Degree of impact on irreplaceable resources: Nature of impact: With Without Degree to which impact can be reversed: Degree of impact on irreplaceable	species impacti the servitude s (especially arbo Adverse impact 1 2 Restrict constru faunal species. The proposed a well as suitable	ng which could hould not be to preal species) 4 4 uction activities No illegal poach	potential impa stally removed 4 6 to the 55m se ing or hunting ment 1b bisects	ct on the lines s providing refuge 3 4 ervitude. No inte activities. s a seasonally in	should be e habitat f 27 48 entional ki nundated	removed. The store of remaining factors for remaining factors for the store of the	- - - ances of any			
servitude Direct impact on associated fauna and interactions with structures and personnel	Degree to which impact can be reversed: Degree of impact on irreplaceable resources: Nature of impact: With Without Degree to which impact can be reversed: Degree of impact on irreplaceable	species impacti the servitude s (especially arbo Adverse impact 1 2 Restrict constru faunal species. The proposed a well as suitable	ng which could hould not be to preal species) 4 4 4 uction activities No illegal poach Ilternative align e habitat for se	potential impa otally removed 4 6 to the 55m se ing or hunting ment 1b bisect veral red listed	ct on the lines s providing refuge 3 4 ervitude. No inte activities. s a seasonally in I faunal species	should be e habitat f 27 48 entional ki nundated j including	removed. The store of remaining factors for remaining factors for the store of the	- - - ances of any			

Potential		Extent	Duration	Magnitude	Probability	Signifi	cance	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e-	+d+m)*p)	(+ve or - ve)	Confidence
	Without	1	4	4	4	36	Medium	-	Medium
	Degree to which impact can be reversed:	Low	·			<u>.</u>			
	Degree of impact on irreplaceable resources:	Medium							
Electrocution	Nature of impact:	Bird perches live and earth	on pylon and cau ed components,	uses an electrica resulting in dea	l short circuit by th or severe inju	[,] physical Iry.	ly bridging the a	air gap betwee	n live components and/or
	With	1	4	2	3	21	Low	-	Medium
	Without	1	4	4	4	36	Medium	-	Medium
	Degree to which impact can be reversed:	Low							
	Degree of impact on irreplaceable resources:	Medium							
Nesting of birds on tower	Nature of impact:	Routine main	tenance of pylon	s and power line	s could result in	disturba	nce of certain bi	rd species	
structures and	With	1	2	4	2	14	Low	-	Medium
disturbance during routine	Without	2	2	4	3	24	Low	-	Medium
maintenance	Degree to which impact can be reversed:	High	·						
	Degree of impact on irreplaceable resources:	Medium							
Heritage									
It is anticipated th	hat the main impacts of	on heritage will	occur during the	e construction ph	lase				
Visual									
Visual exposure to the powerline servitude,	Nature of impact:	close to priva	re to the power te nature reserv e, where visibility	es. Sensitive vi	ewer locations i	n close pr	roximity (<500n	dverse visual i n) are highly v	mpacts, especially in and ulnerable to exposure of
conductor	With	3	5	6	5	70	High	-	High

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence
cables and	Without	3	4	6	5	65	High	-	High
towers.	Degree to which impact can be reversed:	The impact car proximity to se option.							
	Degree of impact on irreplaceable resources:	In areas of high private nature r					ch as the soupa	ansberg and	
Social									
Perceived electromagnetic	Nature of impact:	The presence of on some proper		orkers can resu	It in the treat o	of safety and	d can possibly le	ead to actual	crimes being committed
fields impacts	With mitigation	1	3	2	1	6	Low	-	Medium
on humans and animals during	Without mitigation	1	5	4	2	20	Low	-	Medium
the operational phase	Degree to which impact can be reversed:	High – with the	implementation	of the relevant	t mitigation mea	asures			
	Degree of impact on irreplaceable resources:	N/a							
Loss of a sense of place/income	Nature of impact:	The presence of be spoilt	powerlines par	ticularly in tour	ist attractions c	an result in	tourists no long	jer visiting th	e area as their views will
on game farms	With mitigation	1	1	2	3	12	Low	-	Medium
 tourists want to see "africa" 	Without mitigation	3	4	8	4	60	Medium	-	High
and the power line can disturb the rustic african setting;	Degree to which impact can be reversed:	High – with the	implementation	of the relevant	t mitigation mea	asures			
anical setting,	Degree of impact on irreplaceable resources:	N/a							
Poor maintenance of	Nature of impact:	It is possible that	at access routes	can be of such	poor state that	maintenan	ce of the power	line is not po	ssible
the power line	With mitigation	1	1	2	2	8	Low	-	Medium to high
access roads: conflict between	Without mitigation	1	4	8	4	52	Medium	-	Medium to high

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence
eskom and the landowners on whose	Degree to which impact can be reversed:	High – with the	implementation	of the relevant	mitigation mea	asures			
responsibility it is to do maintenance on these roads. Farmers use it more often but yet expect eskom to pay for all maintenance	Degree of impact on irreplaceable resources:	Put a firm negol	tiated contract i	n place during t	he operational	phase			
Impact of the power lines on	Nature of impact:	Where powerline	es are not visibl	e or known, pla	ne crashes can	result and i	n turn electricty	/ outages ma	y occur
aircraft as there are airports	With mitigation	1	2	2	2	10	Low	-	Medium to high
within the study	Without mitigation	4	5	6	4	60	Medium	-	Medium to high
area; one is the louis trichardt airport and the other is for light	Degree to which impact can be reversed:	High – with the	implementation	of the relevant	mitigation mea	asures			
aircraft on the road towards waterpoort from louis trichardt	Degree of impact on irreplaceable resources:	N/a							
decrease in property values	Nature of impact:	These can lead	to economic los	ses					
and number of visitors to	With mitigation	1	3	4	1	8	Low	-	Medium to high
visitors to lodges and other areas that	Without mitigation	2	5	6	3	39	Medium	-	Medium to high
are popular with tourists due to	Degree to which impact can be reversed:	High – with the	implementation	of the relevant	mitigation mea	asures			

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status				
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence			
the visual impacts of powerlines	Degree of impact on irreplaceable resources:	N/a										
Security issues as a result of	Nature of impact:	The mere prese threatened	mere presence of construction workers in communities and especially on farms can lead to une atened									
the presence of	With mitigation	1	1	2	2	8	Low	-	Medium to high			
maintenance workers on	Without mitigation	1	1	4	4	24	Low	-	High			
properties	Degree to which impact can be reversed:	High – with the	implementation	of the relevant	mitigation mea	asures						
	Degree of impact on irreplaceable resources:	The impact can	be high where e	endangered spe	cies such as rhi	no occur						
Land owners denying	Nature of impact:	This can result i	n maintenance	not occurring								
contractors	With mitigation	1	1	2	2	8	Low	-	Medium			
access to their properties	Without mitigation	1	1	8	4	40	Medium	-	High			
	Degree to which impact can be reversed:	High – with the	implementation	of the relevant	mitigation mea	asures						
	Degree of impact on irreplaceable resources:	N/a										
Poaching of game as well as	Nature of impact:	This is a high pr	his is a high probability									
stock theft and	With mitigation	1	1	0	1	2	Low	-	Medium to high			
theft of crops	Without mitigation	1	1	2	2	8	Low	-	Medium to high			
	Degree to which impact can be reversed:	as maintenanc activities such a may not have th	s poaching will	be minimal as	contractors will	only be on						

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status				
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence			
	Degree of impact on irreplaceable resources:	N/a						-				
Impact on farming	Nature of impact:	During the oper										
activities such	With mitigation	1	1	0	1	2	Low	-	Medium to high			
as sowing, harvesting, and fire	Without mitigation	1	1	2	1	4	Low	-	Medium to high			
management programmes leading to economic losses	Degree to which impact can be reversed:	on these activiti can be through	naintenance during the operational phase is of a shorter duration than construction, the impacts these activities will be for a significantly shorter duration, but must at all costs be avoided. This be through measures such as undertaking maintenance during seasons when there is likely to high activity on farms.									
	Degree of impact on irreplaceable resources:	N/a										
Impact on farming	Nature of impact:	During the oper very minimal	iring the operational phase, impacts on activities and on guests to lodges and other tourist destinatio ry minimal									
activities such	With mitigation	1	1	0	1	2	Low	-	Medium to high			
as hunting in game farms	Without mitigation	1	1	2	1	4	Low	-	Medium to high			
leading to economic losses. Impacts can also be on	Degree to which impact can be reversed:	N/A										
guests in lodges leading to economic losses	Degree of impact on irreplaceable resources:	N/a	√a									
Increase in the voltage stability	Nature of impact:	An increased vo	ltage will ensure	e that activities	that were not a	ble to take	place will be po	ssible				
	With mitigation											
	Without mitigation	3	5	8	5	80	High	+	Medium			
	Degree to which impact can be reversed:											

Potential		Extent	Duration	Magnitude	Probability	Significa	ance	Status				
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+a	l+m)*p)	(+ve or - ve)	Confidence			
	Degree of impact on irreplaceable resources:	N/a										
An assurance of a reliable	Nature of impact:	Reliable electric	ity supply is a p	ositive impact t	hat will improve	e activities	such as tourism	n in the makha	ado local municipality			
electricity	With mitigation	3	4	2	4	36	Medium	+	Medium			
supply	Without mitigation	2	1	6	4	36	Medium	+	Medium			
	Degree to which impact can be reversed:	N/a										
	Degree of impact on irreplaceable resources:	N/a	′a									
Increase of electricity	Nature of impact:	In order to grov	v the economy o	of the makhado								
supply making it available for	With mitigation											
agriculture, tourism and	Without mitigation	3	5	8	5	80	High	+	Medium			
other industries. The increase in electricity can	Degree to which impact can be reversed:	N/a										
also allow for the undertaking of other activities that may have been that may not have been possible prior to the improved elect.ricity supply	Degree of impact on irreplaceable resources:	N/a										
No more backlogs in	Nature of impact:	The absence of will be possible	backlogs in ele	ctricy connectio	ons can imply th	at activitie	s that can only	take place w	here electicity is present			

Potential		Extent	Duration	Magnitude	Probability	Significa	ance	Status			
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+o	d+m)*p)	(+ve or - ve)	Confidence		
electricity	With mitigation										
connections	Without mitigation	3	5	8	5	80	High	+	Medium		
	Degree to which impact can be reversed:	N/a	a								
	Degree of impact on irreplaceable N/a resources:										
The inadequate provision of	Nature of impact:										
electricity to	With mitigation										
services such as health facilities	Without mitigation	3	5	8	5	80	High	+	Medium		
will cease	Degree to which impact can be reversed:	N/a	l/a								
	Degree of impact on irreplaceable resources:	N/a									
Electricity will be available to	Nature of impact:	The presence of	electricity to ru	ıral areas will ir	nprove the lives	of many v	vho live in pover	ty			
numerous rural	With mitigation										
settlements that do not have this	Without mitigation	3	5	8	5	80	High	+	Medium		
service	Degree to which impact can be reversed:	N/a									
	Degree of impact on irreplaceable resources:	N/a									
Decommissionin	ng phase										
Agricultural pote	ential										
No decommissioni	ing impacts are anticip	oated									

Potential		Extent	Duration	Magnitude	Probability	Signific	ance	Status		
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	d+m)*p)	(+ve or - ve)	Confidence	
Flora										
Destruction of protected flora	Nature of impact:	Removal of pro	etected plant spe	ecies due to the	servitude					
	With	1	1	2	2	8	Low	-	High	
	Without	1	1	4	3	18	Low	-	High	
	Degree to which impact can be reversed:	Existing/permit	ted access roac	ls must be used	and the all othe	er measure	s must be follow	ved		
	Degree of impact on irreplaceable resources:			ute follows exist						
Destruction of pristine habitat	Nature of impact:	Destruction and	d disturbance of	f a previously ur	ndisturbed veget	tation				
	With	1	1	2	2	8	Low	-	High	
	Without	1	1	2	2	8	Low	-	High	
	Degree to which impact can be reversed:	Existing/permit	ted access roac	ls must be used	and the all othe	er measure	s must be follow	ved		
	Degree of impact on irreplaceable resources:	Area already di	sturbed and rou	ute follows exist	ing power line					
Vegetation clearance	Nature of impact:	Removal of veg	getation due to	servitudes, acce	ss roads and er	ecting of th	ne pylons			
	With	1	1	2	2	8	Low	-	High	
	Without	1	1	2	2	8	Low	-	High	
	Degree to which impact can be reversed:	Existing/permit	Existing/permitted access roads must be used and the all other measures must be followed							
	Degree of impact on irreplaceable resources:				(bush clearing)					
Plant encroachment	Nature of impact:	Vegetation clea	aring or disturba	ance may and ha	ave been fond to	increase	encroachment			
	With	1	1	2	2	8	Low	-	High	

Potential		Extent	Duration	Magnitude	Probability	Signifie	cance	Status					
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	·d+m)*p)	(+ve or - ve)	Confidence				
	Without	1	1	2	2	8	Low	-	High				
	Degree to which impact can be reversed:	versed:											
	Degree of impact on irreplaceable resources:		here is an existing powerline and encroachment is likely										
Threat to biodiversity	Nature of impact:	Disturbance of	isturbance of an area with high biodiversity will increase the probability of encroachment and biod										
	With	1	1	2	2	8	Low	-	High				
	Without	2	2	4	3	24	Low	-	High				
	Degree to which impact can be reversed:	Existing/perm	Existing/permitted access roads must be used and the all other measures must be followed										
	Degree of impact on irreplaceable resources:	Area already c	listurbed and ro	ute follows exist	ing power line								
Soil erosion	Nature of impact:		egetation due to nimising soil ero		and servitudes	will increa	se the soil eros	sion as vegetat	ion plays a major role in				
	With	1	1	2	2	8	Low	-	High				
	Without	1	1	2	2	8	Low	-	High				
	Degree to which impact can be reversed:	Existing/perm	itted access road	ds must be used	and the all othe	er measur	es must be follo	owed					
	Degree of impact on irreplaceable resources:		disturbed and room the existing	ute follows exis line	ting power line/	already r	neasures put ir	place for the					
Fauna													
Direct impact on associated	Nature of impact:	Adverse impac	t										
fauna and	With	1	1	2	5	20	Low		High				
interactions with structures and	Without	2	1	4	5	35	Medium		High				
personnel	Degree to which impact can be			ons and lines m eared servitude.		to the 5	5m servitude.	Rehabilitation					

Potential		Extent	Duration	Magnitude	Probability	Significance	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d+m)	*p) (+ve or - ve)	Confidence
	reversed:							
	Degree of impact on irreplaceable resources:						upicolous outcrops as bullfrog and southern	
Avifauna								
No decommissioni	ing impacts are anticip	pated						
Heritage								
No decommissioni	ing impacts are anticip	pated						
Visual								
Visual exposure to operations to dismantle and	Nature of impact:		ptions relating	to the removal				not have significant visual as visual impacts will be
remove of	With	3	1	2	3	18 Low	<i>i</i> +	High
power line & substation	Without	3	1	2	3	18 Low	<i>i</i> +	High
infrastructure	Degree to which impact can be reversed:	Avoid unnecess	ary disturbance	e of the natural	environment du	iring decommission	oning operations	
	Degree of impact on irreplaceable resources:	None						
Access roads	Nature of impact:	None						
	With	3	1	2	3	18 Low	/ +	High
	Without	3	1	2	3	18 Low	/ +	High
	Degree to which impact can be reversed:	Road reserves introduction of s			struction mater	ial and actively	rehabilitated by the	
	Degree of impact on irreplaceable resources:	None						
Social								
Influx of job	Nature of	The decommisi	oning of a pow	erline can crea	ting employmer	nt expectations	for job seekers again	st the background of low

Potential		Extent	Duration	Magnitude	Probability	Significa	ince	Status				
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence			
seekers	impact:		d, the size of						time this powerline is higher than during the			
	With mitigation	1	1	0	1	2	Low	-	Medium to high			
	Without mitigation	1	2	2	2	10	Low	-	Medium to high			
	Degree to which impact can be reversed:	High – with the	ligh – with the implementation of the relevant mitigation measures									
	Degree of impact on irreplaceable resources:	N/a	a toilet facilities on site are not well managed, these can lead to adverse health impacts to the surrou									
health impacts as a result of	Nature of impact:	If toilet facilities										
exposure to sewage from	With mitigation	1	1	0	1	2	Low	-	Medium to high			
construction	Without mitigation	1	1	6	3	24	Low	-	Medium to high			
camps and on construction camps	Degree to which impact can be reversed:	High – with the	High – with the implementation of the relevant mitigation measures									
	Degree of impact on irreplaceable resources:	N/a										
health impacts from	Nature of impact:	Where construct workers in the a				ses, these o	can be passed of	n to the com	munity members or farm			
construction	With mitigation	1	1	2	2	8	Low	-				
sites and camps as a result of infectious	Without mitigation	2	1	6	3	27	Low	-				
diseases	Degree to which impact can be reversed:	High – with the	implementation	of the relevant	t mitigation mea	sures						
	Degree of impact on irreplaceable resources:	N/a										
Conduct of construction	Nature of impact:	It is possible th actions can aris		good relationsh	ips between cor	ntactors an	d community m	embers, neg	ative as well as positive			

Potential		Extent	Duration	Magnitude	Probability	Signific	ance	Status				
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	d+m)*p)	(+ve or - ve)	Confidence			
workforce; good	With mitigation	2	1	2	2	10	Low	-	Medium to high			
relationships between	Without mitigation	2	1	6	4	36	Medium	-	Medium to high			
community members/ farm workers and eskom	Degree to which impact can be reversed:	High – with the	implementatior	n of the relevan	t mitigation mea	asures						
construction workers can result in issues such as sexual misconduct and the spread of sexually transmitted diseases	Degree of impact on irreplaceable resources:	N/a										
" conduct of	Nature of impact:	These can resul	nese can result from factors such as differences in beliefs and cultural backgrounds									
construction	With mitigation	2	1	2	2	10	Low	-				
workforce; bad relationships	Without mitigation	2	1	6	4	36	Medium	-				
between community members/ farm workers and	Degree to which impact can be reversed:	High – with the	implementatior	n of the relevan	t mitigation mea	asures						
eskom construction workers leading to violence	Degree of impact on irreplaceable resources:	N/a										
Theft of material	Nature of impact:	Material can be	stolen from cor	struction sites	and in areas alo	ng the rou	te					
from camps and	With mitigation	1	1	0	1	2	Low	-	Medium			
along construction	Without mitigation	2	1	8	4	44	Medium	-	Medium			

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status				
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence			
sites	Degree to which impact can be reversed:	High – with the	implementation	of the relevant	mitigation mea	isures						
	Degree of impact on irreplaceable resources:											
Negative	Nature of impact:	ture of It is possible that land owners eg lodge owners, game farmers owners for whom visual impact										
attitudes	With mitigation	2	1	2	2	10	Low	-	Medium			
towards the project and the	Without mitigation	2	1	6	3	27	Low	-	Medium			
formation of community groups, ngo's,	Degree to which impact can be reversed:	High – with the	implementation	of the relevant	mitigation mea	isures						
in response to the project;	Degree of impact on irreplaceable resources:	N/a	/a									
Land owners	Nature of impact:	This would be e	nis would be expected from landowners who are opposed to the project									
denying	With mitigation	1	1	2	2	8	Low	-	Medium			
contractors access to their	Without mitigation	1	2	6	4	36	Medium	-	Medium			
properties	Degree to which impact can be reversed:	High – with the	High – with the implementation of the relevant mitigation measures									
	Degree of impact on irreplaceable resources:	N/a										
Loss of crops	Nature of impact:	of Land and crops can be lost during the clearing of the powerline corridor and during the construction of the powerline										
leading to	With mitigation	1	1	2	2	8	Low	-	Medium to high			
economic losses	Without mitigation	1	3	6	4	40	Medium	-	Medium to high			
	Degree to which impact can be reversed:	 ensure that where possible loss 	c construction e, powerline to		when the la located along the of							

Potential		Extent	Duration	Magnitude	Probability	Significance		Status					
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d+m)*	*p)	(+ve or - ve)	Confidence				
		when the the second sec	e land and owners tha	is t the loss of lar	fallow and will only be d	s, ensure that cor nd with luring the constru- line after constru-	no uction pha	crops se as some					
	Degree of impact on irreplaceable resources:	N/a	1										
Loss of land	Nature of impact:	Grazing land are	n of access roads										
leading to economic losses	With mitigation	1	1	2	2	8 Low	1	-	Medium to high				
economic losses	Without mitigation	1	3	6	4	40 Med	lium	-	Medium to high				
	Degree to which impact can be reversed:	High – with the	gh – with the implementation of the relevant mitigation measures										
	Degree of impact on irreplaceable resources:	Where the loss	/here the loss of land is permanent, eskom should discuss compensation with landowner										
Impacts on	Nature of impact:	Construction ca	Construction can disturb activities on farms										
farming	With mitigation	1	1	2	2	8 Low	1	-	Medium to high				
activities such as sowing,	Without mitigation	1	1	8	3	30 Low	,	-	Medium to high				
harvesting, and fire management programmes leading to	Degree to which impact can be reversed:	In the case of	Construction should not take place during seasons when there is likely to be high activity on farms. n the case of sowing, construction can occur before this happens, in the case of harvesting, onstruction can occur after this has taken place and fire management can take place before onstruction										
economic losses	Degree of impact on irreplaceable resources:	N/a											
Damage to farm	Nature of impact:	This can lead to	conflicts with c	ommunity men	bers and farme	rs							
infrastructure	With mitigation	1	1	2	1	4 Low	1	-	Medium to high				
e.g. irrigation equipment,	Without mitigation	1	1	6	3	24 Low	,	-	Medium to high				

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status					
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence				
gates, fences	Degree to which impact can be reversed:	High – with the	implementation	of the relevant	t mitigation mea	asures							
	Degree of impact on irreplaceable resources:	N/a											
Security	Nature of impact:	It is highly likely	is highly likely that theft of game and stock can occur. Theft of game can be higher on farms when										
concerns as a	With mitigation	1	1	2	4	16	Low	-	Medium to high				
result of poaching of	Without mitigation	1	1	10	4	48	Medium	-	Medium to high				
game, stock theft and crop theft	Degree to which impact can be reversed:	High – with the	implementation	of the relevant	t mitigation mea	asures							
	Degree of impact on irreplaceable resources:	The impact can	be high where e	endangered spe	cies such as rhi	no occur							
Security as a	Nature of impact:		ne mere presence of construction workers in communities and especially on farms can lead to unease and people may feel reatened by their presence										
result of the	With mitigation	1	1	2	2	8	Low	-	Medium to high				
presence of workers on farms and	Without mitigation	2	1	8	3	33	Medium	-	Medium to high				
farms and communities	Degree to which impact can be reversed:	High – with the	implementation	of the relevant	t mitigation mea	asures							
	Degree of impact on irreplaceable resources:	N/a											
Safety of	Nature of impact:	Construction site	Construction sites are highly hazardous environments and the safety of people and animals can be compro										
community	With mitigation	1	1	2	1	4	Low	-	Medium				
members/farm workers/animals	Without mitigation	1	1	6	2	16	Low	-	Medium				
	Degree to which impact can be reversed:	High – with the	High – with the implementation of the relevant mitigation measures										

Potential		Extent	Duration	Magnitude	Probability	Significa	ance	Status		
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+o	d+m)*p)	(+ve or - ve)	Confidence	
	Degree of impact on irreplaceable resources:	N/a								
Poor maintenance of	Nature of impact:	It is possible the	at access routes	s can be of such	poor state that	: maintenar	nce of the powe	erline is not po	ssible	
the power line	With mitigation	1	1	2	2	8	Low	-	Medium to high	
access roads: conflict between Eskom and the	Without mitigation	1	4	8	4	52	Medium	-	Medium to high	
landowners on whose responsibility it	Degree to which impact can be reversed:	High – with the	gh – with the implementation of the relevant mitigation measures							
is to do maintenance on these roads. Farmers use it more often but yet expect Eskom to pay for all maintenance	Degree of impact on irreplaceable resources:	N/a								
Cumulative impa	acts									
Agricultural pote	ential									
No cumulative imp	pacts are anticipated									
Flora Plant encroachment	Nature of impact:	Vegetation clea	-							
	With	1	1	2	3	12 12	Low	-	High	
	Without Degree to which impact can be reversed:	1 Existing/permit	1 ted access roads		3 and the all othe		s must be follo	- wed	High	
	Degree of impact on irreplaceable resources:	There is an exis	ting powerline a	and encroachme	ent is likely					

Potential		Extent	Duration	Magnitude	Probability	Significa	ance	Status			
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+o	d+m)*p)	(+ve or - ve)	Confidence		
Soil erosion	Nature of impact:	Removal of veg preventing/mini			and servitudes	will increas	e the soil erosic	on as vegetat	ion plays a major role in		
	With	1	1	2	3	12	Low	-	High		
	Without	1	1	2	3	12	Low	-	High		
-	Degree to which impact can be reversed:		kisting/permitted access roads must be used and the all other measures must be followed								
	Degree of impact on irreplaceable resources:	Area already dis soil erosion fron			ing power line/	already m	easures put in p	place for the			
Fauna											
Loss of faunal habitat	Nature of impact:	Adverse impact									
	With	1	4	4	3	27	Low	-	High		
	Without	2	4	6	4	48	Medium	-	High		
-	Degree to which impact can be reversed:	Low- realign preferred alignment to avoid sensitive habitats and restrict vegetation clearance and activities to the 55m servitude.									
	Degree of impact on irreplaceable resources:	The proposed a well as suitable african python									
Direct impact on associated	Nature of impact:	Adverse impact									
	With	1	4	4	4	36	Medium	-	High		
interactions with structures and	Without	2	4	6	4	48	Medium	-	High		
personnel	Degree to which impact can be reversed:	Medium-restrict species.					5				
	Degree of impact on irreplaceable resources:	The proposed a well as suitable african python									
Avifauna											
No cumulative imp	acts are anticipated										
Heritage											

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence
No cumulative imp	pacts are anticipated								
Visual									
Increased visual exposure to power line infrastructure.	Nature of impact:	intensified impr lines are observ Lastly cumulativ the recurrence encountered wh	ession of a pre- ed from location /e impacts arise of images and ien moving thro	existing power ns from which r through an inc impressions o ugh it.	line in the lands nore than one p rease in the inc f power lines a	cape. It wi ower line w idence of se it various p	Il also occur as yould now be se equential percep points in the la	an increased en in differer ptions of diffe	e to an extended and/or perception where power of parts of the landscape. erent power lines through which are continuously
	With	3	5	0	3	24	Low	-	Low
	Without	3	5	6	5	70	High	-	High
	Degree to which impact can be reversed:	The impact car material. Active						construction	
	Degree of impact on irreplaceable resources:	In areas of high private nature r					ch as the soupa	ansberg and	
Social									
Poaching of game impacting	Nature of impact:	It is highly likely	y that theft of g	ame and stock	can occur. Theft	of game ca	an be higher on	farms where	rhino is present
on the loss of	With	2	3	4	3	27	Low	-	Medium to high
game and in turn affecting	Without	5	5	8	4	72	High	-	High
the tourism industry of the municipality and that of the country at large	Degree to which impact can be reversed: Degree of impact on irreplaceable	Where possible, the constructior operational pha The impact will	n and decommis se	ssioning phases	s as well as dur	ing mainter			
	resources:								
Loss of a sense of place		Tourists visit pl them					of powerlines c	an therefore	spoil this experience for
resulting in	With	1	2	2	2	10	Low	-	Medium to high
economic losses especially for	Without	3	4	6	3	39	Medium	-	Medium to high
tourism sector in turn impact	Degree to which impact can be reversed:	Liaise with visue would be to use					other suggeste	d measures	

Potential		Extent	Duration	Magnitude	Probability	Signific	ance	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	d+m)*p)	(+ve or - ve)	Confidence
on the economic growth of the makado municipality	Degree of impact on irreplaceable resources:	N/a							
Increase in power supply	Nature of impact:	An increase in electricity is on							ado local municipality as
and in the	With	3	4	6	4	52	Medium	+	Medium
stability of the network. In turn	Without	3	4	6	4	52	Medium	+	Medium
numerous existing developments	Degree to which impact can be reversed:	N/a					•	•	
such as lodges and other tourist attractions can be improved.	Degree of impact on irreplaceable resources:	N/a							
No-go alternativ	/e								
Agricultural pote	ential								
In the event that	the transmission lines	are not construct	ted, there will b	e no impact on	the agricultural	potential,	therefore the s	tatus quo will	remain.
Flora									
In the event that	the transmission lines	are not construct	ted, there will b	e no impact on	the flora, there	ore the st	atus quo will re	main.	
Fauna									
In the event that	the transmission lines	are not construct	ted, there will b	e no impact on	the fauna, there	efore the s	status quo will re	emain.	
Avifauna									
In the event that	the transmission lines	are not construct	ted, there will b	e no impact on	the avifauna, th	erefore th	ne status quo wi	ll remain.	
Heritage									
	the transmission lines	are not construct	ted, there will b	e no impact on	heritage sites, t	herefore t	the status quo w	vill remain.	
Visual									
In the event that	the transmission lines	are not construct	ted, there will b	e no visual imp	act, therefore th	ie status c	quo will remain.		

Potential		Extent	Duration	Magnitude	Probability	Signifi	cance	Status					
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	⊦d+m)*p)	(+ve or - ve)	Confidence				
Social													
Powerlines linking the tabor substation to the new	Nature of impact:	weakest part o powerline. Pow	f the northern o erlines linking t	rid network du he tabor subst	ie to being oper ation to the ne	rated bey w bokma	ond its reliability	y. There is the substation in	nd spencer power is the erefore a need for a new order to strengthen the astructure				
bokmakirie	With	2	1	2	1	5	Low	-	Medium to high				
(nzhelele) substation will	Without	4	5	8	3	51	Medium	-	Medium to high				
not be constructed.	Degree to which impact can be reversed:	Construct the p	owerlines			<u>.</u>							
	Degree of impact on irreplaceable resources:												
No increase in the voltage	Nature of impact:		he voltage is currently unstable. This can result in impacts such as electrical equipment being shut down leading to effects uch as loss of data and the inability to undertake certain activities on farms etc.										
stability	With	1	1	2	1	4	Low	-	Medium				
	Without	3	5	8	3	<mark>48</mark>	Medium	-	Medium				
	Degree to which impact can be reversed:		voltage is stabi	lised			•						
	Degree of impact on irreplaceable resources:												
No increase and assurance of electricity	Nature of impact:	manufacturing,		ectors. A lack					the agricultural, tourism, growth of the makhado				
supply making it	With	1	1	2	1	4	Low	-	Medium				
unavailable for agriculture,	Without	3	5	8	4	64	High	-	Medium				
tourism and other industries as well as	Degree to which impact can be reversed:		icity supply thro t these are well		such as the co	nstructior	n of the propose	ed power line					
allowing for the undertaking of other activities that may not	Degree of impact on irreplaceable resources:	N/a											

Potential		Extent	Duration	Magnitude	Probability	Significar	ıce	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d-	⊦m)*p)	(+ve or - ve)	Confidence
have been possible before. The absence of an increase in electricity may also hinder the undertaking of other activities that may only be possible with electricity supply									
Continuation of backlogs in	impact:	the use of election					ff shortages. Tl	ne rendering	of services that require
electricity	With	2	1	4	2	14	Low	-	Medium to high
connections	Without	3	4	8	4	60	Medium	-	Medium to high
	Degree to which impact can be reversed:	The makhado lo increased budg adequate mater	ets to allow for						
	Degree of impact on irreplaceable resources:	N/a							
Continuation of the inadequate	Nature of impact:	In services such	as health facili	ties, lack of elec	tricity can resul	t in losses o	of lives		
provision of	With	1	1	0	2	4	Low	-	Medium
electricity to critical services	Without	3	5	10	4	72	High	-	Medium
such as health facilities	Degree to which impact can be reversed:	The necessity o that adverse im			is imperative ar	nd the propo	osed powerline	can ensure	
	Degree of impact on irreplaceable resources:	N/a							
Continuation of the unavailability of	Nature of impact:		ig and cooking.						utting of trees to use the estation and the possible

Potential		Extent	Duration	Magnitude	Probability	Significa	ance	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+a	i+m)*p)	(+ve or - ve)	Confidence
electricity in	With	1	1	2	2	8	Low	-	Medium
numerous rural settlements	Without	3	5	8	4	64	High	-	Medium
Settlements	Degree to which impact can be reversed:	Provide electrici	ty to rural areas	5					
	Degree of impact on irreplaceable resources:	N/a							

Potential		Extent	Duration	Magnitude	Probability	Signific	ance	Status				
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	d+m)*p)	(+ve or - ve)	Confidence			
Construction ph	ase											
Agricultural pot	ential											
Deterioration of soil resource	impact:	Loss of agricult										
	With	1	4	2	2	14	Low	-				
	Without	1	4	2	3	21	Low	-				
	Degree to which impact can be reversed:	Reversal should	be straightforw	ard after remo	val of infrastruct	ture						
	Degree of impact on irreplaceable resources:	Low to none										
Deterioration of soil resource	Nature of impact:	Soil erosion haz	Soil erosion hazard due to construction activities									
	With	1	1	2	2	8	Low	-				
	Without	2	2	4	3	24	Low	-				
	Degree to which impact can be reversed:	If erosion is cau	ised, reversal is	often difficult a	and time-consun	ning, espe	cially in steeper	areas				
	Degree of impact on irreplaceable resources:	Moderate										
Flora												
Destruction of protected flora	Nature of impact:	Removal of prot	ected plant spe	cies due to the	servitude							
	With	1	1	2	3	12	Low	-	High			
	Without	1	1	2	3	12	Low	-	High			
	Degree to which impact can be reversed:	Existing/permit	ted access roads	s must be used	and the all othe	er measure	s must be follow	ved				

Table 9.4: Detailed assessment of identified impacts for Alternative 2

Potential		Extent	Duration	Magnitude	Probability	Signifi	cance	Status					
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	+d+m)*p)	(+ve or - ve)	Confidence				
	Degree of impact on irreplaceable resources:			ute follows exist	5.								
Destruction of pristine habitat	Nature of impact:	Destruction ar	nd disturbance o	f a previously ur	ndisturbed vegel	ation							
	With	1	1	2	3	12	Low	-	High				
	Without	1	1	2	3	12	Low	-	High				
	Degree to which impact can be reversed:	e to which Existing/permitted access roads must be used and the all other measures must be followed t can be											
	Degree of impact on irreplaceable resources:		rea already disturbed and route follows existing power line										
Vegetation clearance	Nature of impact:	Removal of ve	Removal of vegetation due to servitudes, access roads and erecting of the pylons										
	With	1	1	2	3	12	Low	-	High				
	Without	1	1	2	3	12	Low	-	High				
	Degree to which impact can be reversed:	Existing/perm	itted access roa	ds must be used	l and the all othe	er measur	es must be foll	owed					
	Degree of impact on irreplaceable resources:			clear at all times									
Plant encroachment	Nature of impact:	Vegetation cle	aring or disturb	ance may and ha	ave been fond to	o increase	encroachment						
	With	1	1	2	3	12	Low	-	High				
	Without	1	1	2	3	12	Low	-	High				
	Degree to which impact can be reversed:			ds must be used		er measur	es must be foll	owed					
	Degree of impact on irreplaceable resources:	There is an ex	isting powerline	and encroachm	ent is likely								
Threat to biodiversity	Nature of impact:	Disturbance o	f an area with h	igh biodiversity	will increase the	probabilit	ty of encroachn	nent and biodiv	ersity will be lost.				

Potential		Extent	Duration	Magnitude	Probability	Significa	ance	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+e	d+m)*p)	(+ve or - ve)	Confidence
	With	1	1	2	3	12	Low	-	High
	Without	1	1	2	3	12	Low	-	High
	Degree to which impact can be reversed:	Existing/permit	ted access road	s must be used	and the all othe	r measure	s must be follow	ved	
	Degree of impact on irreplaceable resources:		sturbed and rou						
Soil erosion	Nature of impact:		getation due to imising soil eros				se the soil erosio	on as vegetat	ion plays a major role in
	With	1	1	2	3	12	Low	-	High
	Without	1	1	2	3	12	Low	-	High
	Degree to which impact can be reversed:	Existing/permit	ted access road	s must be used	and the all othe	r measure	s must be follow	ved	
	Degree of impact on irreplaceable resources:		sturbed and round round the existing line		ing power line/	already m	easures put in p	place for the	
Fauna									
Loss of faunal habitat	Nature of impact:	Adverse impact							
	Impacti								
	With	1	4	4	4	36	Medium	-	High
		1 2	1	4 6	4 5	36 60	Medium Medium	-	High High
	With	2 Low- realign p	4 4	6	5	60		-	-
	With Without Degree to which impact can be reversed: Degree of impact on irreplaceable resources:	2 Low- realign p activities to the The proposed inundated pan bullfrog and so	4 eferred alignme 55m servitude. alternative alig s as well as su uthern african p	6 ent to avoid se nment 2 bisec itable habitat	5 nsitive habitats ts rivers (non-	and restric	Medium	- earance and	-
Direct impact on associated	WithWithoutDegree to whichimpact can bereversed:Degree of impacton irreplaceableresources:Natureofimpact:	2 Low- realign p activities to the The proposed inundated pan bullfrog and so	4 eferred alignme 55m servitude. alternative alig s as well as su uthern african p	6 ent to avoid se nment 2 bisec itable habitat	5 nsitive habitats ts rivers (non-	and restric	Medium ct vegetation clu drainage lines)	- earance and	-
	WithWithoutDegree to whichimpact can bereversed:Degree of impacton irreplaceableresources:Natureof	2 Low- realign p activities to the The proposed inundated pan bullfrog and so	4 eferred alignme 55m servitude. alternative alig s as well as su uthern african p	6 ent to avoid se nment 2 bisec itable habitat	5 nsitive habitats ts rivers (non-	and restric	Medium ct vegetation clu drainage lines)	- earance and	-

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status			
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence		
structures and personnel	Degree to which impact can be reversed:	Restrict constru	ction activities t	to the 55m serv	itude. No intent	ional killing	of any faunal s	pecies.			
	Degree of impact on irreplaceable resources:	inundated pans	The proposed alternative alignment 2 bisects rivers (non-perennial drainage lines), seasonally inundated pans as well as suitable habitat for several red listed faunal species including giant bullfrog and southern african python								
Avifauna											
Habitat destruction	Nature of impact:	Permanent rem	manent removal of habitat that is used, or may be used, by avifauna.								
	With	1	2	4	3	21	Low	-	Medium		
	Without	1	2	4	5	35	Medium	-	Medium		
	Degree to which impact can be reversed:	Partially reversi	ble								
	Degree of impact on irreplaceable resources:	Low									
Disturbance	Nature of impact:	Noise and movement, from staff and machinery, may disturb avifauna, and nests my be disturbed.									
	With	1	1	4	3	18	Low	-	Medium		
	Without	2	1	4	4	28	Low	-	Medium		
	Degree to which impact can be reversed:	Irreversible									
	Degree of impact on irreplaceable resources:	Medium									
Heritage											
Destruction of	Nature of impact:	Adverse impact	on a identified	heritage sites a	long alternative						
heritage sites	With mitigation	3	5	2	5	50	Medium	-	High		
and features	Without mitigation	3	5	10	5	90	High	-	High		

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence
	Degree to which impact can be reversed:	Medium							High
	Degree of impact on irreplaceable resources:	Not applicable							High
Visual									
Transformation of the visual quality of the	Nature of impact:								aracter, especially in the vill create adverse visual
landscape	With	3	2	6	5	55	Medium	-	High
	Without	3	2	6	5	55	Medium	-	High
	Degree to which impact can be reversed:	The impact car material. Active		construction					
	Degree of impact on irreplaceable resources:	In areas of high private nature r					ch as the soupa	insberg and	
Social									
Influx of job seekers, mainly									raal and harmony. Low e influx of job seekers
unskilled labour,	With	3	1	0	2	8	Low	-	Medium to high
from the communities	Without	3	2	4	4	36	Medium	-	Medium to high
around the power line route having job	Degree to which impact can be reversed:	High – with the	implementation	of relevant mit	tigation measure	es			
expectations	Degree of impact on irreplaceable resources:	N/a							
health impacts as a result of	Nature of impact:	If toilet facilities	s on site are not	well managed,	these can lead	to adverse	health impacts	to the surrou	nding communities
us a result of									
exposure to sewage from	With	1	1	0	1	2	Low	-	Medium to high

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status			
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence		
construction camps and on construction	Degree to which impact can be reversed:	High – with the	implementation	n of relevant mi	tigation measur	es					
camps	Degree of impact on irreplaceable resources:	N/a									
Health impacts as a result of	Nature of impact:	re of Waste on site can become a nuisance for community members and on farms and also pose a danger									
exposure to	With	1	1	0	1	2	Low	-	High		
waste (domestic and industrial)	Without	1	2	2	3	15	Low	-	High		
	Degree to which impact can be reversed:	High – with the	implementation	of relevant mi	tigation measur	es					
	Degree of impact on irreplaceable resources:	N/a									
health impacts from	Nature of impact:	Where construct workers in the a				ses, these c	an be passed o	n to the com	munity members or farm		
construction	With	1	1	2	2	8	Low	-			
sites and camps as a result of	Without	2	1	6	3	27	Low	-			
infectious diseases	Degree to which impact can be reversed:	High – with the	implementation	of relevant mi	tigation measur	es					
	Degree of impact on irreplaceable resources:	N/a									
Conduct of construction	Nature of impact:	It is possible th actions can aris		good relationsh	ips between co	ntactors an	d community m	nembers, neg	ative as well as positive		
workforce; good	With	2	1	2	2	10	Low	-	Medium to high		
relationships between	Without	2	1	6	4	36	Medium	-	Medium to high		
community members/ farm	Degree to which impact can be reversed:	High – with the	implementation	n of relevant mi	tigation measur	es					

Potential		Extent	Duration	Magnitude	Probability	Significar	ıce	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d-	⊦m)*p)	(+ve or - ve)	Confidence
workers and eskom construction workers can result in issues such as sexual misconduct and the spread of sexually transmitted diseases	Degree of impact on irreplaceable resources:	N/a							
" conduct of	Nature of impact:	These can resul	t from factors s		es in beliefs and	d cultural ba	ckgrounds		
construction	With	2	1	2	2	10	Low	-	Low
workforce; bad relationships	Without	2	1	6	4	36	Medium	-	Low
between community members/ farm	Degree to which impact can be reversed:	High – with the	implementation	of relevant mit	tigation measure	es			
workers and eskom construction workers leading to violence "	Degree of impact on irreplaceable resources:	N/a							
Theft of material	Nature of impact:	Material can be stolen even alor				ong the rou	te especially a	s material us	ed in powerlines is often
from camps and	With	1	1	0	1	2	Low	-	Medium
along construction	Without	2	1	8	4	44	Medium	-	Medium
sites	Degree to which impact can be reversed:	High – with the	implementation	of relevant mit	tigation measure	es			
	Degree of impact on irreplaceable resources:								

Potential		Extent	Duration	Magnitude	Probability	Significa	ance	Status				
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	l+m)*p)	(+ve or - ve)	Confidence			
Negative	Nature of impact:	It is possible t livelihoods will o			ners, game far	mers owne	ers for whom v	visual impacts	s are important to their			
attitudes towards the	With	2	1	2	2	10	Low	-	Medium			
towards the project and the	Without	2	1	6	3	27	Low	-	Medium			
formation of community groups, ngo's,	Degree to which impact can be reversed:	High – with the	ligh – with the implementation of relevant mitigation measures									
in response to the project;	Degree of impact on irreplaceable resources:	N/a										
Land owners	Nature of impact:	This would be e	xpected from la	ndowners who	are opposed to	the project						
denying	With	1	1	2	2	8	Low	-	Medium			
contractors access to their	Without	1	2	6	4	36	Medium	-	Medium			
properties	Degree to which impact can be reversed:	High – with the	implementation	of relevant mi	tigation measur	es						
	Degree of impact on irreplaceable resources:	N/a										
Loss of crops	Nature of impact:	Land and crops	can be lost duri	ng the clearing	of the powerlin	e corridor a	and during the c	onstruction o	f the powerline			
leading to	With	1	1	2	2	8	Low	-	Medium to high			
economic losses	Without	1	3	6	4	40	Medium	-	Medium to high			
	Degree to which impact can be reversed:	High – with the	implementation	of relevant mi	tigation measur	es						
	Degree of impact on irreplaceable resources:	N/a										
Loss of land	Nature of impact:	Grazing land are	ea can be lost d	ue to clearing o	of land for the co	orridor as w	vell as during the	e constructior	n of access roads			
leading to	With	1	1	2	2	8	Low	-	Medium to high			
economic losses	Without	1	3	6	4	40	Medium	-	Medium to high			

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status		
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence	
	Degree to which impact can be reversed:	High – with the	implementation	of relevant mi	tigation measure	es				
	Degree of impact on irreplaceable resources:	Where the loss	of land is perma	anent, eskom sł	nould discuss co	mpensatior	with landowne	r		
Impacts on	Nature of impact:	Construction ca	n disturb activit	ies on farms						
farming	With	1	1	2	2	8	Low	-	Medium to high	
activities such as sowing,	Without	1	1	8	3	30	Low	-	Medium to high	
harvesting, and fire management	Degree to which impact can be reversed:	High – with the	implementation	of relevant mi	tigation measure	es				
programmes leading to economic losses	Degree of impact on irreplaceable resources:	N/a								
Damage to farm	Nature of impact:	This can lead to	conflicts with c	ommunity men	bers and farme	rs				
infrastructure	With	1	1	2	1	4	Low	-	Medium to high	
e.g. irrigation equipment,	Without	1	1	6	3	24	Low	-	Medium to high	
gates, fences	Degree to which impact can be reversed:	High – with the	implementation	of relevant mi	tigation measure	es				
	Degree of impact on irreplaceable resources:	N/a								
Security	Nature of It is highly likely that theft of game and stock can occur. Theft of game can be higher on farms wh									
concerns as a	With	1	1	2	4	16	Low	-	Medium to high	
result of poaching of	Without	1	1	10	4	<mark>48</mark>	Medium	-	Medium to high	
game, stock theft and crop	Degree to which impact can be reversed:	High – with the	implementation	of relevant mi	tigation measure	es				

Potential		Extent	Duration	Magnitude	Probability	Signifi	cance	Status				
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	⊦d+m)*p)	(+ve or - ve)	Confidence			
theft	Degree of impact on irreplaceable resources:	The impact can	be high where	endangered spe	ecies such as rhi	no occur						
Security as a	Nature of impact:	The mere prese threatened by t		tion workers in	communities a	nd especi	ally on farms c	an lead to une	ease and people may feel			
result of the	With	1	1	2	2	8	Low	-	Medium to high			
presence of workers on	Without	2	1	8	3	33	Medium	-	Medium to high			
farms and communities	Degree to which impact can be reversed:	High – with the	implementatior	n of relevant mi	tigation measur	es						
	Degree of impact on irreplaceable resources:	N/a										
Cafabi	Nature of impact:	Construction sit	onstruction sites are highly hazardous environments and the safety of people and animals can be compromised									
Safety of community	With	1	1	2	1	4	Low	-	Medium			
members/farm	Without	1	1	6	2	16	Low	-	Medium			
workers/animals	Degree to which impact can be reversed:	High – with the	implementatior	n of relevant mi	tigation measur	es						
	Degree of impact on irreplaceable resources:	N/a										
	Nature of impact:	It is possible th	at access routes	s can be of such	n poor state that	: mainten	ece of the power	rline is not pos	sible			
Poor maintenance of	With	1	1	2	2	8	Low	-	Medium to high			
the power line	Without	1	4	8	4	52	Medium	-	Medium to high			
access roads: conflict between eskom and the	Degree to which impact can be reversed:	High – with the	es									
landowners on whose responsibility it is to do maintenance on these roads. Farmers use it	Degree of impact on irreplaceable resources:	N/a										

Potential		Extent	Duration	Magnitude	Probability	Signifi	icance	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e-	+d+m)*p)	(+ve or - ve)	Confidence
more often but yet expect eskom to pay for all maintenance									
Loss of a sense of place/income	Nature of impact:	The presenc be spoilt	e of powerlines pa	articularly in tou	ist attractions c	an result	in tourists no lo	nger visiting th	e area as their views wil
on game farms	With	1	1	2	2	8	Low	-	Medium to high
 tourists want to see "africa" 	Without	1	1	8	4	40	Medium	-	Medium to high
and the power line can disturb the rustic african setting;	Degree to which impact can be reversed: Degree of impact on irreplaceable resources:	High – with N/A	the implementation	on of relevant mi	tigation measur	es			
Operation phase Agricultural pote									
	nat the main impacts of	on agricultural	potential will occ	cur during the co	nstruction phase	2			
Flora				i i i i i i i i i i i i i i i i i i i	F	-			
Destruction of protected flora	Nature of impact:	Removal of	protected plant sp	pecies due to the	servitude				
	With	1	1	2	3	12	Low	-	High
	Without	1	1	2	3	12	Low	-	High
	Degree to which impact can be reversed:		mitted access roa			er measu	res must be follo	owed	
	Degree of impact on irreplaceable resources:		disturbed and ro						
Destruction of pristine habitat	Nature of impact:	Destruction	and disturbance c	of a previously ur	ndisturbed veget	tation			

Potential impact	Mitigation With	(e)									
			(d)	(m)	(p)	(s=(e+	⊦d+m)*p)	(+ve or - ve)	Confidence		
		1	1	2	3	12	Low	-	High		
	Without	1	1	2	3	12	Low	-	High		
	Degree to which impact can be reversed:	Existing/permit	ted access road	ds must be used	and the all othe	er measur	es must be follo	owed			
	Degree of impact on irreplaceable resources:		rea already disturbed and route follows existing power line								
Vegetation clearance	Nature of impact:	Removal of veg	etation due to	servitudes, acce		ecting of t	the pylons				
	With	1	1	2	3	12	Low	-	High		
	Without	2	2	2	3	18	Low	-	High		
	Degree to which impact can be reversed:	Existing/permit	ted access road	ds must be used	and the all othe	er measur	es must be follo	owed			
	Degree of impact on irreplaceable resources:	The servitude h	as to be kept o	clear at all times	(bush clearing)						
Plant encroachment	Nature of impact:	Vegetation clea	ring or disturba	ance may and ha	ave been fond to) increase	encroachment				
	With	1	1	2	3	12	Low	-	High		
	Without	1	1	2	3	12	Low	-	High		
	Degree to which impact can be reversed:	Existing/permit	ted access road	ds must be used	and the all othe	er measur	es must be follo	owed			
	Degree of impact on irreplaceable resources:		here is an existing powerline and encroachment is likely								
Threat to biodiversity	Nature of impact:	Disturbance of	an area with hi	igh biodiversity v	will increase the	probabilit	ty of encroachm	nent and biodiv	ersity will be lost.		
	With	1	1	2	3	12	Low	-	High		
	Without	1	1	2	3	12	Low	-	High		
	Degree to which impact can be	Existing/permit	ted access road	ds must be used	and the all othe	er measur	es must be folle	owed			

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d		(+ve or - ve)	Confidence
	reversed:			•				·	
	Degree of impact on irreplaceable resources:	Area already dis	sturbed and rou	te follows existi	ing power line				
Soil erosion	Nature of impact:	Removal of veg preventing/mini			and servitudes	will increase	e the soil erosio	n as vegetat	ion plays a major role i
	With	1	1	2	3	12	Low	-	High
	Without	1	1	2	3	12	Low	-	High
	Degree to which impact can be reversed:	Existing/permitt	ed access roads	s must be used	and the all othe	r measures	must be follow	ed	
	Degree of impact on irreplaceable resources:	Area already dis soil erosion fron			ing power line/	already me	asures put in p	lace for the	
Fauna									
Loss of faunal habitat with	Nature of impact:	Adverse impact							
clearance of	With	1	4	4	5	45	Medium	-	High
vegetation within the 55m	Without	2	4	6	5	60	Medium	-	High
servitude	Degree to which impact can be reversed:	The clearance of species impacting the servitude sl (especially arbo	ng which could hould not be to	potential impa	ct on the lines s	should be re	emoved. The ve	egetation of	
	Degree of impact on irreplaceable resources:	The proposed inundated pans bullfrog and sou	as well as su	itable habitat					
Direct impact on associated	Nature of impact:	Adverse impact	1						
fauna and	With	1	4	4	4	36	Medium	-	High
interactions with structures and	Without	2	4	6	5	60	Medium	-	High
personnel	Degree to which impact can be reversed:	Restrict constru faunal species.				entional kill	ing or disturba	nces of any	

Potential		Extent	Duration	Magnitude	Probability	Signific	ance	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	d+m)*p)	(+ve or - ve)	Confidence
	Degree of impact on irreplaceable resources:		as well as su	itable habitat			drainage lines) unal species inc		
Avifauna									
Collision	Nature of impact:	Collision or red	data species wil	th the overhead	l line (usually th	e earth w	ire).		
	With	1	4	2	3	21	Low	-	Medium
	Without	1	4	4	4	36	Medium	-	Medium
	Degree to which impact can be reversed:	Low							
	Degree of impact on irreplaceable resources:	Medium							
Electrocution	Nature of impact:	Bird perches on live and earthed					y bridging the ai	r gap betweer	n live components and/or
	With	1	4	2	3	21	Low	-	Medium
	Without	1	4	4	4	36	Medium	-	Medium
	Degree to which impact can be reversed:	Low							
	Degree of impact on irreplaceable resources:	Medium							
Nesting of birds on tower	Nature of impact:	Routine mainter	nance of pylons	and power line	s could result in	disturban	ice of certain bird	d species	
structures and	With	1	2	4	2	14	Low	-	Medium
disturbance during routine	Without	2	2	4	3	24	Low	-	Medium
maintenance	Degree to which impact can be reversed:	High							
	Degree of impact on irreplaceable resources:	Medium							

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence
Heritage									
It is anticipated th	nat the main impacts of	on heritage will o	cur during the	construction ph	ase				
Visual									
Visual exposure to the powerline servitude,	impact:	close to private the power line,	nature reserves	s. Sensitive vie	ewer locations ir	n close pro>	(<500m)		mpacts, especially in and vulnerable to exposure of
conductor	With	3	5	6	5	70	High	-	High
cables and towers.	Without	3	4	6	5	65	High	-	High
	Degree to which impact can be reversed:	The impact can proximity to se option.	nsitive viewer l	ocations through	gh careful route	e planning,	or by selecting	g the no-go	
	Degree of impact on irreplaceable resources:	In areas of high private nature r					ch as the soupa	ansberg and	
Social									
Perceived electromagnetic	Nature of impact:	The presence of on some proper		orkers can resu	ult in the treat o	of safety and	d can possibly l	ead to actual	crimes being committed
fields impacts	With mitigation	1	3	2	1	6	Low	-	Medium
on humans and animals during	Without mitigation	1	5	4	2	20	Low	-	Medium
the operational phase	Degree to which impact can be reversed:	High – with the	implementation	of relevant mi	tigation measure	es			
	Degree of impact on irreplaceable resources:								
Loss of a sense of place/income		The presence of be spoilt	powerlines par	ticularly in tour	ist attractions co	an result in	tourists no long	ger visiting th	e area as their views will
on game farms	With mitigation	1	1	2	3	12	Low	-	Medium
- tourists want to see "africa"	Without mitigation	3	4	8	4	60	Medium	-	High
and the power line can disturb the rustic	Degree to which impact can be reversed:	High – with the	implementation	of relevant mi	tigation measure	es			

Potential		Extent	Duration	Magnitude	Probability	Signifi	cance	Status				
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e-	+d+m)*p)	(+ve or - ve)	Confidence			
african setting;	Degree of impact on irreplaceable resources:	N/a										
Poor maintenance of	Nature of impact:	It is possible th	nat access route	s can be of such	n poor state that	: mainten	ance of the pow	erline is not po	ssible			
the power line	With mitigation	1	1	2	2	8	Low	-	Medium to high			
access roads: conflict between	Without mitigation	1	4	8	4	52	Medium	-	Medium to high			
eskom and the landowners on whose responsibility it	Degree to which impact can be reversed:	N/a										
is to do maintenance on these roads. Farmers use it more often but	Degree of impact on irreplaceable	Put a firm poor										
yet expect eskom to pay for all maintenance	resources:		otiated contract	in place during	the operational	phase						
eskom to pay for all maintenance	resources: Nature of						d in turn electric	cty outages ma	ay occur			
eskom to pay for all maintenance Impact of the power lines on aircraft as there	resources: Nature of impact: With mitigation						d in turn electric	cty outages ma	ay occur Medium to high			
eskom to pay for all maintenance Impact of the power lines on aircraft as there are airports within the study	resources: Nature of impact: With mitigation Without mitigation	Where powerlin	nes are not visit	ble or known, pla	ane crashes can	result an		-	-			
eskom to pay for all maintenance Impact of the power lines on aircraft as there are airports within the study area; one is the louis trichardt airport and the	resources: Nature of impact: With mitigation Without mitigation Degree to which	Where powerlin 1 4	nes are not visib 2 5	ble or known, pla	ane crashes can 2 4	result an	Low	-	Medium to high			
eskom to pay for all maintenance Impact of the power lines on aircraft as there are airports within the study area; one is the	resources: Nature of impact: With mitigation Without mitigation Degree to which impact can be reversed:	Where powerlin 1 4	nes are not visib 2 5	ole or known, pla	ane crashes can 2 4	result an	Low	-	Medium to high			

Potential		Extent	Duration	Magnitude	Probability	Signific	ance	Status					
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	d+m)*p)	(+ve or - ve)	Confidence				
and number of	With mitigation	1	3	4	1	8	Low	-	Medium to high				
visitirs to lodges and other areas	Without mitigation	2	5	6	3	39	Medium	-	Medium to high				
that are popular with tourists due to the	Degree to which impact can be reversed:	High – with the	implementatior	n of relevant mi	tigation measur	es							
visual impacts of powerlines	Degree of impact on irreplaceable resources:	N/a	/a										
Security issues as a result of	Nature of impact:												
the presence of	With mitigation	1	1	2	2	8	Low	-	Medium to high				
maintenance workers on properties	Without mitigation	1	1	4	4	24	Low	-	High				
properties	Degree to which impact can be reversed:	High – with the	implementatior	n of relevant mi	tigation measur	es							
	Degree of impact on irreplaceable resources:	The impact can	be high where	endangered spe	cies such as rhi	no occur							
Land owners denying	Nature of impact:	This can result i	n maintenance	not occurring									
contractors	With mitigation	1	1	2	2	8	Low	-	Medium				
access to their properties	Without mitigation	1	1	8	4	40	Medium	-	High				
	Degree to which impact can be reversed:	High – with the	implementatior	n of relevant mi	tigation measur	es							
	Degree of impact on irreplaceable resources:	N/a											
Poaching of game as well as	Nature of impact:	This is a high p	obability										
stock theft and	With mitigation	1	1	0	1	2	Low	-	Medium to high				
theft of crops	Without mitigation	1	1	2	2	8	Low	-	Medium to high				

Potential		Extent	Duration	Magnitude	Probability	Significar	nce	Status					
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d-	+m)*p)	(+ve or - ve)	Confidence				
	Degree to which impact can be reversed:	High – with the	gh – with the implementation of relevant mitigation measures										
	Degree of impact on irreplaceable resources:	N/a											
Impact on farming	Nature of impact:	During the oper	ational phase, i	mpacts on farm	actvities are lik	kely to be ve	ry minimal						
activities such	With mitigation	1	1	0	1	2	Low	-	Medium to high				
as sowing, harvesting, and fire	Without mitigation	1	1	2	1	4	Low	-	Medium to high				
management programmes	Degree to which impact can be reversed:	High – with the	implementatior	n of relevant mit	igation measure	es							
leading to economic losses	Degree of impact on irreplaceable resources:	N/a											
Impact on farming	Nature of impact:	During the oper minimal	ational phase, i	mpacts on actv	vities and on gu	ests to lodge	es and other to	urist destniat	ions are likely to be very				
activities such	With mitigation	1	1	0	1	2	Low	-	Medium to high				
as hunting in game farms leading to	Without mitigation	1	1	2	1	4	Low	-	Medium to high				
economic losses. Impacts can also be on	Degree to which impact can be reversed:												
guests in lodges leading to economic losses	Degree of impact on irreplaceable resources:	N/a											
Increase in the voltage stability	Nature of impact:	An increased vo	ltage will ensur	e that activities	that were not a	able to take	place will be po	ossible					
	With mitigation												
	Without mitigation	3	5	8	5	80	High	+	Medium				

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status				
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence			
	Degree to which impact can be reversed:	N/a										
	Degree of impact on irreplaceable resources:											
An assurance of a reliable	Nature of impact:	Reliable electric	ity supply is a p	in the makha	ado local municipality							
electricity	With mitigation	3	4	2	4	36	Medium	+	Medium			
supply	Without mitigation	2	1	6	4	36	Medium	+	Medium			
	Degree to which impact can be reversed:	N/a										
	Degree of impact on irreplaceable resources:	N/a										
Increase of electricity	Nature of impact:	In order to grow	n order to grow the economy of the makhado local municipality, electricity is vital									
supply making it	With mitigation											
available for agriculture,	Without mitigation	3	5	8	5	80	High	+	Medium			
tourism and other industries. The increase in electricity can	Degree to which impact can be reversed:	N/a	N/a									
also allow for the undertaking of other activities that may have been that may not have been possible prior to the improved elect.ricity supply	Degree of impact on irreplaceable resources:	N/a										

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status			
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence		
No more backlogs in	Nature of impact:	The absence of will be possible	backlogs in ele	ctricy connectio	ons can imply th	nat activitie	s that can only	take place w	here electicity is present		
electricity	With mitigation										
connections	Without mitigation	3	5	8	5	80	High	+	Medium		
	Degree to which impact can be reversed:	N/a									
	Degree of impact on irreplaceable resources:	N/a									
The inadequate provision of	Nature of impact:					1					
electricity to services such as	With mitigation										
health facilities	Without mitigation	3	5	8	5	80	High	+	Medium		
will cease	Degree to which impact can be reversed:	N/a									
	Degree of impact on irreplaceable resources:	N/a	V/a								
Electricity will be available to	Nature of impact:	The presence of	f electricity to ru	ıral areas will ir	nprove the lives	of many w	ho live in pover	ty			
numerous rural	With mitigation										
settlements that do not have this service	Without mitigation	3	5	8	5	80	High	+	Medium		
Service	Degree to which impact can be reversed:	N/a									
	Degree of impact on irreplaceable resources:	N/a									

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status	
impact	Mitigation	(e)	(d)	(d) (m) ((s=(e+d	+m)*p)	(+ve or - ve)	Confidence
Decommissionin	ng phase								
Agricultural pot	ential								
No decommission	ing impacts are anticip	oated							
Flora									
Destruction of protected flora	Nature of impact:	Removal of prot	tected plant spe	cies due to the	servitude				
	With	1	1	2	3	12	Low	-	High
	Without	1	1	2	3	12	Low	-	High
	Degree to which impact can be reversed:	Existing/permit	ted access road	s must be used	and the all othe	er measures	must be follow	ed	
	Degree of impact on irreplaceable resources:	Area already dis							
Destruction of pristine habitat	Nature of impact:	Destruction and	disturbance of	a previously un	disturbed veget	ation			
p	With	1	1	2	3	12	Low	-	High
	Without	1	1	2	3	12	Low	-	High
	Degree to which impact can be reversed:	Existing/permit	ted access road	s must be used	and the all othe	er measures	must be follow	ed	
	Degree of impact on irreplaceable resources:	Area already dis	sturbed and rou	te follows existi	ng power line				
Vegetation clearance Nature impact: of Removal of vegetation due to servitudes, access roads and erecting of the pylons									
	With	1	1	2	3	12	Low	-	High
	Without	1	1	2	3	12	Low	-	High
	Degree to which impact can be reversed:	Existing/permit	ted access road	s must be used	and the all othe	er measures	must be follow	ed	

Potential		Extent	Duration	Magnitude	Probability	Signifi	cance	Status					
impact	Mitigation	(e)	(d)	(m)	(p)		+d+m)*p)	(+ve or - ve)	Confidence				
	Degree of impact on irreplaceable resources:	The servitude has to be kept clear at all times (bush clearing) Vegetation clearing or disturbance may and have been fond to increase encroachment											
Plant encroachment	Nature of impact:	Vegetation clea	ring or disturba	nce may and ha	ave been fond to	o increase	e encroachment						
	With	1	1	2	2	8	Low	-	High				
	Without	1	1	2	3	12	Low	-	High				
	Degree to which impact can be reversed:				and the all othe	er measur	res must be follo	owed					
	Degree of impact on irreplaceable resources: There is an existing powerline and encroachment is likely												
Threat to biodiversity	Nature of impact:	Disturbance of	Disturbance of an area with high biodiversity will increase the probability of encroachment and biodiversity will be lost.										
	With	1	1	2	3	12	Low	-	High				
	Without	1	1	2	3	12	Low	-	High				
	Degree to which impact can be reversed:	Existing/permitted access roads must be used and the all other measures must be followed											
	Degree of impact on irreplaceable resources:	Area already di	sturbed and rou	ite follows exist	ing power line								
Soil erosion	Nature of impact:	Removal of veg preventing/min			and servitudes	will increa	ase the soil eros	sion as vegetat	ion plays a major role i				
	With	1	1	2	2	8	Low	-	High				
	Without	1	1	2	2	8	Low	-	High				
	Degree to which impact can be reversed:	Existing/permit	ted access road	s must be used	and the all othe	er measur	res must be follo	owed					
	Degree of impact on irreplaceable resources:	Area already di soil erosion fror	place for the										
Fauna													

Potential		Extent	Duration	Magnitude	Probability	Significa	ance	Status				
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	l+m)*p)	(+ve or - ve)	Confidence			
Direct impact on associated	Nature of impact:	Adverse impact										
fauna and	With	1	1	2	5	20	Low	-	High			
interactions with structures and	Without	2	1	4	5	35	Medium	-	High			
personnel	Degree to which impact can be reversed:	The removal of of the vegetatio	n within the cle	ared servitude.								
	Degree of impact on irreplaceable resources:	inundated pans	The proposed alternative alignment 2 bisects rivers (non-perennial drainage lines), seasonally inundated pans as well as suitable habitat for several red listed faunal species including giant bullfrog and southern african python									
Avifauna												
No decommissioni	ing impacts are anticip	pated										
Heritage												
No decommissioni	ing impacts are anticip	bated										
Visual												
Visual exposure to operations to dismantle and	Nature of impact:		ptions relating t	to the removal					ot have significant visual as visual impacts will be			
remove of	With	3	1	2	3	18	Low	+	High			
power line & substation	Without	3	1	2	3	18	Low	+	High			
infrastructure	Degree to which impact can be reversed:	Avoid unnecess	ary disturbance	of the natural	environment du	iring decom	missioning oper	rations				
	Degree of impact on irreplaceable resources:	None										
Social												
Influx of job seekers	Nature of impact:	Creating employ	/ment expectati	ons for job see	kers							
	With mitigation	1	1	0	1	2	Low	-	Medium to high			
	Without mitigation	1	2	2	2	10	Low	-	Medium to high			

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status					
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence				
	Degree to which impact can be reversed:	High – with the	implementation	of relevant mit	igation measure	es							
	Degree of impact on irreplaceable resources:	N/a											
health impacts as a result of	Nature of impact:	If toilet facilities	on site are not	well managed,	these can lead	to adverse l	health impacts	to the surrou	nding communities				
exposure to	With mitigation	1	1	0	1	2	Low	-	Medium to high				
sewage from construction	Without mitigation	1	1	6	3	24	Low	-	Medium to high				
camps and on construction sites	Degree to which impact can be reversed:	High – with the	implementation	of relevant mit	igation measure	es							
	Degree of impact on irreplaceable resources:	N/a	/a										
health impacts from	Nature of impact:		here construction workers are infected with infectious diseases, these can be passed on to the community members orkers in the area within which work is being undetaken										
construction	With mitigation	1	1	2	2	8	Low	-					
sites and camps as a result of infectious	Without mitigation	2	1	6	3	27	Low	-					
diseases	Degree to which impact can be reversed:	High – with the	High – with the implementation of relevant mitigation measures										
	Degree of impact on irreplaceable resources:	N/a											
Conduct of construction	Nature of impact:	It is possible th actions can arise		good relationshi	ips between cor	ntactors and	d community m	embers, neg	ative as well as positive				
workforce; good	With mitigation	2	1	2	2	10	Low	-	Medium to high				
relationships between community	Without mitigation	2	1	6	4	36	Medium	-	Medium to high				
community members/ farm workers and	Degree to which impact can be reversed:	High – with the	implementation	of relevant mit	igation measure	es							

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status				
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence			
eskom construction workers can result in issues such as sexual misconduct and the spread of sexually transmitted diseases	Degree of impact on irreplaceable resources:	N/a			•							
" conduct of	conduct of Nature of These can result from factors such as differences in beliefs and cultural backgrounds											
construction	With mitigation	2	1	2	2	10	Low	-	Low			
workforce; bad relationships between	Without mitigation	2	1	6	4	36	Medium	-	Low			
community members/ farm workers and	Degree to which impact can be reversed:	High – with the	High – with the implementation of relevant mitigation measures									
eskom construction workers leading to violence	Degree of impact on irreplaceable resources:	N/a	N/a									
Theft of material	Nature of impact:	Material can be targeted by crin		he sites where	decommissioni	ng is takin	g place as mat	erial used in	n electricity is often the			
from camps and	With mitigation	1	1	0	1	2	Low	-	Medium			
along construction sites	Without mitigation	2	1	8	4	44	Medium	-	Medium			
51(5)	Degree to which impact can be reversed:	High – with the	High – with the implementation of relevant mitigation measures									
	Degree of impact on irreplaceable resources:											

Potential		Extent	Duration	Magnitude	Probability	Signifi	cance	Status			
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e-	+d+m)*p)	(+ve or - ve)	Confidence		
Loss of crops	Nature of impact:	Crops can be lo	ost during the cle	earing of the po	werline corridor	and duri	ng the construct	tion of the pow	erline		
leading to	With mitigation	1	1	2	2	8	Low	-	Medium to high		
economic losses	Without mitigation	1	3	6	4	40	Medium	-	Medium to high		
	Degree to which impact can be reversed:	High – with the	implementation	n of relevant mi	tigation measur	es					
	Degree of impact on irreplaceable resources:	N/a									
Impacts on	Nature of impact:	Construction ca	in disturb activit	ies on farms							
farming activities such	With mitigation	1	1	2	2	8	Low	-	Medium to high		
as sowing,	Without mitigation	1	1	8	3	30	Low	-	Medium to high		
harvesting, and fire management programmes	Degree to which impact can be reversed:	High – with the									
leading to economic losses	Degree of impact on irreplaceable resources:	N/a									
Damage to farm	Nature of impact:	This can lead to	o conflicts with c	community men	nbers and farme	ers					
infrastructure	With mitigation	1	1	2	1	4	Low	-	Medium to high		
e.g. irrigation equipment,	Without mitigation	1	1	6	3	24	Low	-	Medium to high		
gates, fences	Degree to which impact can be reversed:	High – with the	implementation	n of relevant mi	tigation measur	es					
	Degree of impact on irreplaceable resources:	N/a	N/a								
Security	Nature of impact:	It is highly like	y that theft of g	ame and stock	can occur. Thef	t of game	e can be higher o	on farms where	rhino is present		

Potential		Extent	Duration	Magnitude	Probability	Signifi	cance	Status				
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e-	⊦d+m)*p)	(+ve or - ve)	Confidence			
concerns as a	With mitigation	1	1	2	4	16	Low	-	Medium to high			
result of poaching of	Without mitigation	1	1	10	4	48	Medium	-	Medium to high			
game, stock theft and crop theft	Degree to which impact can be reversed:	High – with the	implementatior	n of relevant mi	tigation measur	es						
	Degree of impact on irreplaceable resources:		he impact can be high where endangered species such as rhino occur									
Security as a	Nature of impact:	The mere prese threatened by t		an lead to une	ase and people may feel							
result of the	With mitigation	1	1	2	2	8	Low	-	Medium to high			
presence of workers on	Without mitigation	2	1	8	3	33	Medium	-	Medium to high			
farms and communities	Degree to which impact can be reversed:	High – with the	implementatior	n of relevant mi	tigation measur	es						
	Degree of impact on irreplaceable resources:	N/a										
Safety of community	Nature of impact:	The mere prese threatened	nce of construc	tion workers in	communities a	nd especi	ally on farms c	an lead to une	ase and people may feel			
members/farm	With mitigation	1	1	2	1	4	Low	-	Medium			
workers/animals	Without mitigation	1	1	6	2	16	Low	-	Medium			
	Degree to which impact can be reversed:	High – with the	implementatior	n of relevant mi	tigation measur	es						
	Degree of impact on irreplaceable resources:	N/a										
Cumulative impa	acts											
Agricultural pot	ential											
No cumulative imp	pacts are anticipated											

Potential		Extent	Duration	Magnitude	Probability	Signific	cance	Status				
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	d+m)*p)	(+ve or - ve)	Confidence			
Flora												
Plant encroachment	Nature of impact:	Vegetation clea	ring or disturba	nce may and ha	ave been fond to) increase	encroachment					
	With	1	2	2	3	15	Low	-	High			
	Without	2	3	4	5	45	Medium	-	High			
	Degree to which impact can be reversed:	Existing/permit				er measure	es must be follo	wed				
	Degree of impact on irreplaceable resources:	There is an exis	ere is an existing powerline and encroachment is likely									
Soil erosion	Nature of impact:		emoval of vegetation due to the servitudes and servitudes will increase the soil erosion as vegetation plays a major eventing/minimising soil erosion									
	With	1	1	2	2	8	Low	-	High			
	Without	2	2	4	3	24	Low	-	High			
	Degree to which impact can be reversed:	Existing/permit	Existing/permitted access roads must be used and the all other measures must be followed									
	Degree of impact on irreplaceable resources:	Area already di soil erosion fror										
Fauna												
Loss of faunal habitat	Nature of impact:	Adverse impact										
	With	1	4	4	5	<mark>45</mark>	Medium	-	High			
	Without	2	4	6	5	60	Medium	-	High			
	Degree to which impact can be reversed:	Low- realign pr activities to the	55m servitude				-					
	Degree of impact on irreplaceable resources:	The proposed inundated pans bullfrog and sou	s as well as su uthern african p	uitable habitat								
Direct impact on associated	Nature of impact:	Adverse impact	:									

Potential		Extent	Duration	Magnitude	Probability	Signific	ance	Status					
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	d+m)*p)	(+ve or - ve)	Confidence				
fauna and	With	1	4	4	4	36	Medium	-	High				
interactions with structures and	Without	2	4	6	5	60	Medium	-	High				
personnel	Degree to which impact can be reversed:	species.											
	Degree of impact on irreplaceable resources:	inundated pans	proposed alternative alignment 2 bisects rivers (non-perennial drainage lines), seasonally ated pans as well as suitable habitat for several red listed faunal species including giant og and southern african python										
Avifauna													
No cumulative im	pacts are anticipated												
Heritage													
No cumulative im	pacts are anticipated												
Visual													
Increased visual exposure to power line infrastructure.	Nature of impact:	intensified impr lines are observ Lastly cumulati the recurrence	ession of a pre- ved from location ve impacts arise	existing power ns from which r through an inc impressions o	line in the lands more than one p crease in the inc	scape. It woower line idence of a	vill also occur as would now be s sequential perce	an increased een in differer ptions of diffe	e to an extended and/or perception where power it parts of the landscape. rent power lines through which are continuously				
	With	3	5	0	3	24	Low	-	High				
	Without	3	5	6	5	70	High	-	High				
	Degree to which impact can be reversed:	material. Activ	n be reversed e rehabilitation	of vegetation w	here it has beer	l cleared, i	s also required.						
	Degree of impact	In areas of high	areas of high visual quality and where there are no hv power lines, such as the soupansberg and rivate nature reserves, the degree of impact will be very high.										
	on irreplaceable resources:		reserves, the de	gree of impact	will be very high	۱.							
Social	resources:	private nature	·	- ·									
Social Poaching of game impacting	resources: Nature of	private nature	y that theft of g	- ·			can be higher of	n farms where	rhino is present				
Poaching of	resources: Nature of	private nature	·	- ·			can be higher of	n farms where	rhino is present Medium to high				

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d		(+ve or - ve)	Confidence
turn affecting the tourism industry of the municpality and that of the country at large		Where possible, the contaruction operational pha The impact will	nand decommis se	sioning phases	as well as duri	ng mainter			
Loss of a sense of place		them			-	•			spoil this experience for
resulting in economic losses	With	1	2	2	2	10	Low	-	Medium to high
especially for	Without	3	4	6	3	39	Medium	-	Medium to high
tourism sector in turn imact on the economic growth of the	Degree to which impact can be reversed: Degree of impact	Liase with visua would be to use N/a					other suggested	d measures	
makhado municipality	on irreplaceable resources:								
Increase in power supply	Nature of impact:	An increase in electricity is on							ado local municipality as
and in the	With	3	4	6	4	52	Medium	+	Medium
stability of the network. In turn	Without	3	4	6	4	52	Medium	+	Medium
numerous existing developments such as lodges and other tourist attractions can be improved.	Degree to which impact can be reversed: Degree of impact on irreplaceable resources:	N/a N/a							
No-go alternativ Agricultural pote									
	the transmission lines	are not construct	ted there will b	e no impact on	the agricultural	notential +	herefore the sta	atus quo will	remain
					the agricultural	potentiai, t			

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence
Flora									
In the event that	the transmission lines	are not construct	ted, there will b	e no impact on	the flora, there	fore the sta	tus quo will rem	nain.	
Fauna									
In the event that	the transmission lines	are not construct	ted, there will b	e no impact on	the fauna, there	efore the st	atus quo will re	main.	
Avifauna									
In the event that	the transmission lines	are not construct	ted, there will b	e no impact on	the avifauna, th	nerefore the	status quo will	remain.	
Heritage									
In the event that	the transmission lines	are not construct	ted, there will b	e no impact on	heritage sites, t	therefore th	e status quo wi	ll remain.	
Visual									
In the event that	the transmission lines	are not construct	ted, there will b	e no visual imp	act, therefore th	ne status qu	o will remain.		
Social			-						
Powerlines linking the tabor substation to the new	Nature of impact:	weakest part of	the northern gerlines linking t	rid network du he tabor subst	e to being oper ation to the ne	ated beyon w bokmaki	d its reliability. rie (nzhelele) s	There is the ubstation in	nd spencer power is the erefore a need for a new order to strengthen the astructure
bokmakirie	With	2	1	2	1	5	Low	-	Medium to high
(nzhelele) substation will	Without	4	5	8	3	51	Medium	-	Medium to high
not be constructed.	Degree to which impact can be reversed:	construct the	powerlines	1					
	Degree of impact on irreplaceable resources:	N/a							
No increase in	Nature of							nt being shu	t down leading to effects
the voltage stability	impact: With	such as loss of o	ata and the ina	2	<u>ake certain actv</u> 1 1	4	ns etc. Low	-	Medium
ocasincy	Without	3	5	8	3	48	Medium	_	Medium
	Degree to which	5 Ensure that the			5	40	ricului		neululli
	impact can be reversed:		voitage is stabl	liseu					

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence
	Degree of impact on irreplaceable resources:	N/a							
No increase and assurance of electricity	Nature of impact:		and mining se	ectors. A lack					the agricultural, tourism, growth of the makhado
supply making it	With	1	1	2	1	4	Low	-	Medium
unavailable for agriculture,	Without	3	5	8	4	64	High	-	Medium
tourism and other industries as well as	Degree to which impact can be reversed:	Increase electri and ensure that			such as the co	nstruction c	of the proposed	power line	
allowing for the undertaking of other activities that may not have been possible before. The absence of an increase in electricity may also hinder the undertaking of other activities that may only be possible with electricity supply	Degree of impact on irreplaceable resources:								
Continuation of backlogs in		use of electricity		when there is no			-	endering of s	services that require the
electricity	With	2	1	4	2	14	Low	-	
connections	Without	3	4	8	4	<mark>60</mark>	Medium	-	
	Degree to which impact can be reversed:	The makhado lo increased budg adequate mater	ets to allow for						

Potential		Extent	Extent Duration Magnitude Probability Significance Status								
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	d+m)*p)	(+ve or - ve)	Confidence		
	Degree of impact on irreplaceable resources:	N/a									
Continuation of the inadequate	Nature of impact:	In services such	n as health faci	lities, lack of el	ectricity can res	ult in losse	es of lives				
provision of	With	1	1	0	2	4	Low	-			
electricity to critical services	Without	3	5	10	4	72	High	-			
such as health facilities	Degree to which impact can be reversed:	The necessity of that adverse im			is imperative a	nd the pro	posed powerline	e can ensure			
	Degree of impact on irreplaceable resources:	N/a									
Continuation of the unavailability of	Nature of impact:		eating and cook						ne cutting of trees to use estation and the possible		
electricity in	With	1	1	2	2	8	Low	-	Medium		
numerous rural settlements	Without	3	5	8	4	64	High	-	Medium		
Sectionents	Degree to which impact can be reversed:	Provide electric	ity to rural area	S							
	Degree of impact on irreplaceable resources:	N/a									

Potential		Extent	Duration	Magnitude	Probability	Signifi	cance	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	-d+m)*p)	(+ve or - ve)	Confidence
Construction ph	ase								
Agricultural pot									
Deterioration of soil resource	impact:	Loss of agricult	ural land due to	_					
	With	1	4	2	2	14	Low	-	High
	Without	1	4	2	3	21	Low	-	High
	Degree to which impact can be reversed:	Reversal should	be straightforv	vard after remo	val of infrastruc	ture			
	Degree of impact on irreplaceable resources:	Low to none							
Deterioration of soil resource	Nature of impact:	Soil erosion haz	ard due to cons	struction activiti	es				
	With	1	1	2	2	8	Low	-	High
	Without	2	2	4	3	24	Low	-	High
	Degree to which impact can be reversed:	If erosion is cau	ised, reversal is	often difficult a	and time-consur	ning, espe	ecially in steepe	r areas	
	Degree of impact on irreplaceable resources:	Moderate							
Flora									
Destruction of protected flora	Nature of impact:	Removal of pro	tected plant spe	ecies due to the	servitude				
	With	1	5	6	5	60	Medium	-	High
	Without	1	5	6	5	60	Medium	-	High
	Degree to which impact can be reversed:	Existing/permit	ted access road	s must be used	and the all othe	er measur	es must be follo	wed	

Table 9.5: Detailed assessment of identified impacts for Alternative 3

Potential		Extent	Duration	Magnitude	Probability	Signific	ance	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	d+m)*p)	(+ve or - ve)	Confidence
	Degree of impact on irreplaceable resources:	irreplaceable access roads							
Destruction of pristine habitat	Nature of impact:	Destruction and	l disturbance of	a previously ur	ndisturbed veget	tation			
	With	2	5	6	5	65	High	-	High
	Without	2	5	6	5	65	High	-	High
	Degree to which impact can be reversed:				and the all othe				
	Degree of impact on irreplaceable resources:	The route is on access roads			·	-		here are not	
Vegetation clearance	Nature of impact:	Removal of veg	etation due to s	ervitudes, acce	ss roads and er	ecting of th	ne pylons		
	With	1	5	6	5	60	Medium	-	High
	Without	1	5	6	5	60	Medium	-	High
	Degree to which impact can be reversed:	Existing/permit	ted access road	s must be used	and the all othe	er measure	s must be follov	ved	
	Degree of impact on irreplaceable resources:		·		(bush clearing)				
Plant encroachment	Nature of impact:	Vegetation clea	-	nce may and ha	ave been fond to	o increase	encroachment		
	With	1	5	4	3	30	Low	-	High
	Without	1	5	6	5	<mark>60</mark>	Medium	-	High
	Degree to which impact can be reversed:	Existing/permit	ted access road	s must be used	and the all othe	er measure	s must be follov	ved	
	Degree of impact on irreplaceable resources:	The area is pris							
Threat to biodiversity	Nature of impact:	Disturbance of	an area with hig	h biodiversity v	will increase the	probability	of encroachme	nt and biodiv	ersity will be lost.

Potential		Extent	Duration	Magnitude	Probability	Signific	ance	Status		
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	d+m)*p)	(+ve or - ve)	Confidence	
	With	1	3	6	5	50	Medium	-	High	
	Without	1	4	6	5	55	Medium	-	High	
	Degree to which impact can be reversed:	Existing/permit	ted access road	s must be used	and the all othe	er measure	es must be follow	wed		
	Degree of impact on irreplaceable resources:		iodiversity is high along this route and thus prone to invasion							
Soil erosion	Nature of				and servitudes v	will increas	se the soil erosi	on as vegetat	ion plays a major role ir	
	impact: With	preventing/min	-	ion 4	4	28	Low	-	High	
	-	1	2	-		-			High	
	Without	2	3	4	4	36	Medium	-	High	
	Degree to which impact can be	Existing/permit	ted access road	s must be used	and the all othe	er measure	es must be follow	wed		
	reversed:									
		The area is vir erosion	tually undisturl	oed and there	no access road	s, to buil	d roads would	increase soil		
Fauna	reversed: Degree of impact on irreplaceable		tually undisturl	oed and there	no access road	s, to buil	d roads would	increase soil		
Fauna Loss of faunal habitat	reversed: Degree of impact on irreplaceable			oed and there	no access road	s, to buil	d roads would	increase soil		
Loss of faunal	reversed: Degree of impact on irreplaceable resources:	erosion		oed and there	no access road	s, to build	d roads would	increase soil	High	
Loss of faunal	reversed: Degree of impact on irreplaceable resources: Nature of impact:	erosion Adverse impact							High High	
Loss of faunal	reversed: Degree of impact on irreplaceable resources: Nature of impact: With Without Degree to which impact can be	erosion Adverse impact 2	4 4 referred alignme	6 6 ent to avoid ser	5	60 60	Medium Medium	-		
Loss of faunal	reversed: Degree of impact on irreplaceable resources: Nature of impact: With Without Degree to which	erosion Adverse impact 2 2 Low- realign pr activities to the Medium-high tl	4 4 eferred alignme 55m servitude. he proposed al	6 6 ent to avoid ser ignment bisect	5 5 nsitive habitats s rivers (non-	60 60 and restri	Medium Medium ct vegetation c drainage lines	- - learance and), rupicolous		
Loss of faunal	reversed: Degree of impact on irreplaceable resources: Nature of impact: With Without Degree to which impact can be reversed: Degree of impact on irreplaceable	erosion Adverse impact 2 2 Low- realign pr activities to the Medium-high th outcrops, north	4 4 eferred alignme 55m servitude. he proposed al ern mistbelt fo	6 6 ent to avoid ser ignment bisect rest as well as	5 5 nsitive habitats s rivers (non- suitable habita	60 60 and restri perennial t for seve	Medium Medium ct vegetation c drainage lines ral red listed fa	- - learance and), rupicolous		
Loss of faunal habitat	reversed: Degree of impact on irreplaceable resources: Nature of impact: With Without Degree to which impact can be reversed: Degree of impact on irreplaceable resources:	erosion Adverse impact 2 2 Low- realign pr activities to the Medium-high th outcrops, north including giant	4 4 55m servitude. he proposed al ern mistbelt fo bullfrog, southe	6 6 ent to avoid ser ignment bisect rest as well as	5 5 nsitive habitats s rivers (non- suitable habita	60 60 and restri perennial t for seve	Medium Medium ct vegetation c drainage lines ral red listed fa	- - learance and), rupicolous		
Loss of faunal	reversed: Degree of impact on irreplaceable resources: Nature of impact: With Without Degree to which impact can be reversed: Degree of impact on irreplaceable resources:	erosion Adverse impact 2 2 Low- realign pr activities to the Medium-high th outcrops, north	4 4 55m servitude. he proposed al ern mistbelt fo bullfrog, southe	6 6 ent to avoid ser ignment bisect rest as well as	5 5 nsitive habitats s rivers (non- suitable habita	60 60 and restri perennial t for seve	Medium Medium ct vegetation c drainage lines ral red listed fa	- - learance and), rupicolous		
Loss of faunal habitat Direct impact on	reversed: Degree of impact on irreplaceable resources: Nature of impact: With Without Degree to which impact can be reversed: Degree of impact on irreplaceable resources: Nature of	erosion Adverse impact 2 2 Low- realign pr activities to the Medium-high th outcrops, north including giant	4 4 55m servitude. he proposed al ern mistbelt fo bullfrog, southe	6 6 ent to avoid ser ignment bisect rest as well as	5 5 nsitive habitats s rivers (non- suitable habita	60 60 and restri perennial t for seve	Medium Medium ct vegetation c drainage lines ral red listed fa	- - learance and), rupicolous		

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence
structures and personnel	Degree to which impact can be reversed:	Medium-restrict species.							
Degree of impact on irreplaceable resources: Medium-high the proposed alignment bisects rivers (non-perennial drainage lines outcrops, northern mistbelt forest as well as suitable habitat for several red listed for including giant bullfrog, southern african python, ground pangolin and brown hyaena									
Avifauna									
Habitat destruction	Nature of impact:	Permanent rem	oval of habitat t	hat is used, or I	may be used, by	y avifauna.			
	With	1	2	4	3	21	Low	-	Medium
	Without	1	2	4	5	35	Medium	-	Medium
	Degree to which impact can be reversed:	Partially reversi	ble						
	Degree of impact on irreplaceable resources:	Low							
Disturbance	Nature of impact:	Noise and move	ment, from staf	f and machiner	y, may disturb a	avifauna, ar	id nests my be	disturbed.	
	With	1	1	4	3	18	Low	-	Medium
	Without	2	1	4	4	28	Low	-	Medium
	Degree to which impact can be reversed:	Irreversible							
	Degree of impact on irreplaceable resources:	Medium							
Heritage									
Destruction of	Nature of impact:	Adverse impact	on a identified l	heritage sites al	ong alternative				
heritage sites	With mitigation	3	5	2	5	50	Medium	-	High
and features	Without mitigation	3	5	10	5	90	High	-	High

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status			
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence		
	Degree to which impact can be reversed:	Medium							High		
	Degree of impact on irreplaceable resources:	Not applicable							High		
Visual											
Transformation of the visual quality of the	Nature of impact:	activity will incr	earing of vegetation to establish a 55m corridor will result in the transformation of the landscape or tivity will increase the presence and movement of contractors and construction vehicles, which w apacts and negatively affect the sense of place, especially in or close to private nature reserves.								
landscape	With	3	2	6	5	55	Medium	-	High		
	Without	3	2	6	5	55	Medium	-	High		
	Degree to which impact can be reversed:	The impact car material. Active	e rehabilitation	of vegetation w	here it has been	cleared, is	also required.				
	Degree of impact on irreplaceable resources:	In areas of high private nature r					ch as the soupa	ansberg and			
Social											
Conduct of construction	Nature of impact:	As this route ru	ns through farm	ns good relation	ships between c	ontactors a	nd farm worker	s are possibl	e		
workforce; good	With mitigation	2	1	2	2	10	Low	-	Medium to high		
relationships between / farm workers and	Without mitigation	2	1	6	4	36	Medium	-	Medium to high		
workers and eskom construction workers can	Degree to which impact can be reversed:	High – with imp	lementation of	relevant mitigat	ion measures						
result in issues such as sexual misconduct and the spread of sexually transmitted diseases	Degree of impact on irreplaceable resources:	N/a									

Potential		Extent	Duration	Magnitude	Probability	Signifi	cance	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	-d+m)*p)	(+ve or - ve)	Confidence
Conduct of construction	Nature of impact:	As this route ru factors such as					and farm work	ers are possibl	e. These can result from
workforce; bad	With mitigation	2	1	2	2	10	Low	-	Medium to high
relationships between farm workers and	Without mitigation	2	1	6	4	36	Medium	-	Medium to high
workers and eskom construction workers leading	Degree to which impact can be reversed:	High – with imp	lementation of	relevant mitiga	tion measures				
to violence	Degree of impact on irreplaceable resources:	N/a							
Theft of material from camps and	Nature of impact:	Material can be stolen even alor				long the r	oute especially	as material us	ed in powerlines is often
along construction	With mitigation	1	1	0	1	2	Low	-	Medium
sites	Without mitigation	2	1	8	4	44	Medium	-	Medium
	Degree to which impact can be reversed:	High – with imp	lementation of	relevant mitiga	tion measures				
	Degree of impact on irreplaceable resources:								
Negative attitudes	Nature of impact:	It is possible t livelihoods will			ners, game far	mers ow	ners for whom	visual impacts	s are important to their
towards the project and the	With mitigation	2	1	2	2	10	Low	-	Medium
formation of community	Without mitigation	2	1	6	3	27	Low	-	Medium
groups, ngo's, in response to the project;	Degree to which impact can be reversed:	High – with imp	lementation of	relevant mitiga	tion measures				
	Degree of impact on irreplaceable resources:	N/a							
Land owners denying	Nature of impact:	This would be e	xpected from la	ndowners who	are opposed to	the projec	t		
contractors	With mitigation	1	1	2	2	8	Low	-	Medium

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Potential		Extent	Duration	Magnitude	Probability	Significa	ance	Status		
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+a	d+m)*p)	(+ve or - ve)	Confidence	
access to their properties	Without mitigation	1	2	6	4	36	Medium	-	Medium	
	Degree to which impact can be reversed:	High – with imp								
	Degree of impact on irreplaceable resources:	N/a								
Loss of crops leading to	Nature of impact:	Land and crops	can be lost duri	ng the clearing	of the powerline	e corridor a	and during the c	onstruction o	f the powerline	
economic losses	With mitigation	1	1	2	2	8	Low	-	Medium to high	
	Without mitigation	1	3	6	4	40	Medium	-	Medium to high	
	Degree to which impact can be reversed:	High – with imp	lementation of I	relevant mitigal	tion measures					
	Degree of impact on irreplaceable resources:	N/a								
Loss of land leading to	Nature of impact:	Grazing land are	ea can be lost d	ue to clearing o	of land for the co	orridor as w	vell as during the	e construction	n of access roads	
economic losses	With mitigation	1	1	2	2	8	Low	-	Medium to high	
	Without mitigation	1	3	6	4	40	Medium	-	Medium to high	
	Degree to which impact can be reversed:	High – with imp	gh – with implementation of relevant mitigation measures							
	Degree of impact on irreplaceable resources:	• where the loss	where the loss of land is permanent, eskom should discuss compensation with landowner							
Impacts on farming	Nature of impact:	Construction ca	n disturb activit	ies on farms						
activities such	With mitigation	1	1	2	2	8	Low	-	Medium to high	
as sowing, harvesting, and	Without mitigation	1	1	8	3	30	Low	-	Medium to high	

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status				
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence			
fire management programmes	Degree to which impact can be reversed:	High – with imp	lementation of r	relevant mitigat	ion measures							
leading to economic losses	Degree of impact on irreplaceable resources:	N/a	/a									
Damage to farm infrastructure	Nature of impact:	This can lead to	is can lead to conflicts with community members and farmers									
e.g. irrigation	With mitigation	1	1	2	1	4	Low	-	Medium to high			
equipment, gates, fences	Without mitigation	1	1	6	3	24	Low	-	Medium to high			
	Degree to which impact can be reversed:	High – with imp	lementation of r	relevant mitigat	ion measures							
	Degree of impact on irreplaceable resources:	N/a										
Security concerns as a	Nature of impact:	It is highly likely	rhino is present									
result of	With mitigation	1	1	2	4	16	Low	-	Medium to high			
poaching of game, stock theft and crop	Without mitigation	1	1	10	4	48	Medium	-	Medium to high			
theft and crop theft	Degree to which impact can be reversed:	High – with imp	lementation of r	relevant mitigat	ion measures							
	Degree of impact on irreplaceable resources:	The impact can	he impact can be high where endangered species such as rhino occur									
Security as a result of the	Nature of impact:	The mere prese threatened	The mere presence of construction workers in communities and especially on farms can lead to un hreatened									
presence of	With mitigation	1	1	2	2	8	Low	-	Medium to high			
workers on farms and communities	Without mitigation	2	1	8	3	33	Medium	-	Medium to high			
communities	Degree to which impact can be reversed:	High – with imp	lementation of r	relevant mitigat	ion measures							

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status			
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence		
	Degree of impact on irreplaceable resources:	N/a									
Safety of community	Nature of impact:	Construction sit	es are highly ha	zardous enviro	nments and the	safety of p	eople and animation	als can be co	mpromised		
members/farm	With mitigation	1	1	2	1	4	Low	-	Medium		
workers/animals	Without mitigation	1	1	6	2	16	Low	-	Medium		
	Degree to which impact can be reversed:	High – with imp	n – with implementation of relevant mitigation measures								
	Degree of impact on irreplaceable resources:	N/a									
Poor maintenance of	Nature of impact:	It is possible the	at access routes	can be of such	poor state that	maintenec	e of the powerli	ne is not pos	sible		
the power line	With mitigation	1	1	2	2	8	Low	-	Medium to high		
access roads: conflict between eskom and the	Without mitigation	1	4	8	4	52	Medium	-	Medium to high		
landowners on whose responsibility it	Degree to which impact can be reversed:	High – with imp	High – with implementation of relevant mitigation measures								
is to do maintenance on these roads. Farmers use it more often but yet expect eskom to pay for all maintenance	Degree of impact on irreplaceable resources:	N/a									
Loss of a sense of place/income	Nature of impact:	The presence of be spoilt	powerlines par	ticularly in tour	ist attractions ca	an result in	tourists no long	ger visiting th	e area as their views will		
on game farms	With mitigation	1	1	2	2	8	Low	-	Medium to high		

Potential		Extent	Duration						
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence
- tourists want to see	Without mitigation	1	1	8	4	40	Medium	-	Medium to high
"africa"and the power line can disturb the	Degree to which impact can be reversed:		istruction in se corridors amps should no		e the least	hunting impact on farm areas		avoided; industry;	
rustic african setting;	Degree of impact on irreplaceable resources:								
Operation phase	2								
Agricultural pot	ential								
It is anticipated th	nat the main impacts o	on agricultural po	tential will occu	r during the con	struction phase				
Flora									
Destruction of protected flora	Nature of impact:	Removal of prot	ected plant spe	cies due to the	servitude				
	With	1	4	6	5	55	Medium	-	High
	Without	2	5	6	5	65	High	-	High
	Degree to which impact can be reversed:	Existing/permit	ed access roads	s must be used	and the all othe	r measures	must be follow	ed	
	Degree of impact on irreplaceable resources:	The route is on access roads	a virtually und	isturbed area a	nd passes throu	igh a nature	e reserve ad th	ere are not	
Destruction of pristine habitat	Nature of impact:	Destruction and	disturbance of	a previously un	disturbed veget	ation			
	With	2	5	8	5	75	High	-	High
	Without	2	5	8	5	75	High	-	High
	Degree to which impact can be reversed:	Existing/permit	ed access roads	s must be used	and the all othe	r measures	must be follow	ed	

Potential		Extent	Duration	Magnitude	Probability	Significa	ince	Status					
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	l+m)*p)	(+ve or - ve)	Confidence				
	Degree of impact on irreplaceable resources:	re reserve ad t	here are not										
Vegetation clearance	Nature of impact:	Removal of veg	moval of vegetation due to servitudes, access roads and erecting of the pylons										
	With	2	5	8	5	75	High	-	High				
	Without	2	5	8	5	75	High	-	High				
	Degree to which impact can be reversed:		isting/permitted access roads must be used and the all other measures must be followed										
	Degree of impact on irreplaceable resources:	The servitude h	-										
Plant encroachment	Nature of impact:	Vegetation clea		nce may and ha	ave been fond to	increase e	ncroachment						
	With	1	3	6	3	30	Low	-	High				
	Without	2	3	6	3	33	Medium	-	High				
	Degree to which impact can be reversed:	Existing/permit	ted access road	s must be used	and the all othe	er measures	s must be follow	wed					
	Degree of impact on irreplaceable resources:				se the possibilit								
Threat to biodiversity	Nature of impact:	Disturbance of	an area with hig	h biodiversity v	will increase the	probability	of encroachme	ent and biodiv	ersity will be lost.				
	With	1	2	6	5	45	Medium	-	High				
	Without	2	3	6	5	55	Medium	-	High				
	Degree to which impact can be reversed:	Existing/permit					s must be follo	wed					
	Degree of impact on irreplaceable resources:	Biodiversity is h											
Soil erosion	Nature of impact:	Removal of veg preventing/min			and servitudes	will increase	e the soil erosi	on as vegetat	ion plays a major role ir				

Potential		Extent	Duration	Magnitude	Probability	Significa	ance	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+e	l+m)*p)	(+ve or - ve)	Confidence
	With	1	1	6	4	32	Medium	-	High
	Without	1	2	6	4	36	Medium	-	High
	Degree to which impact can be reversed:	Existing/permit	ted access road	s must be used	and the all othe	er measure	s must be follow	wed	
	Degree of impact on irreplaceable resources:	The area is vir erosion	tually undisturb	bed and there	no access road	ls, to build	l roads would	increase soil	
Fauna									
Loss of faunal habitat with	impact:	Adverse impact							
clearance of	With	1	4	4	5	45	Medium	-	High
vegetation within the 55m	Without	2	4	6	5	60	Medium	-	High
						EE			
servitude	Degree to which impact can be reversed:	The clearance species impacti the servitude s (especially arbo	ng which could hould not be to	potential impa	ct on the lines s	should be	removed. The v	egetation of	
	impact can be reversed: Degree of impact on irreplaceable resources:	species impacti the servitude s (especially arbo Medium-high t outcrops, north including giant	ng which could hould not be to real species) he proposed a ern mistbelt fo bullfrog, southe	potential impa- otally removed lignment bisec rest as well as	ct on the lines s providing refuge ts rivers (non- suitable habita	should be e habitat f perennial t for sever	removed. The or for remaining fa drainage lines al red listed fa	vegetation of unal species), rupicolous	
Direct impact on	impact can be reversed: Degree of impact on irreplaceable resources: Nature of	species impacti the servitude s (especially arbo Medium-high t outcrops, north including giant	ng which could hould not be to real species) he proposed a ern mistbelt fo bullfrog, southe	potential impa- otally removed lignment bisec rest as well as	ct on the lines s providing refuge ts rivers (non- suitable habita	should be e habitat f perennial t for sever	removed. The or for remaining fa drainage lines al red listed fa	vegetation of unal species), rupicolous	
Direct impact on associated fauna and	impact can be reversed: Degree of impact on irreplaceable resources: Nature of impact:	species impacti the servitude s (especially arbo Medium-high t outcrops, north including giant	ng which could hould not be to real species) he proposed a ern mistbelt fo bullfrog, southe	potential impa- otally removed lignment bisec rest as well as	ct on the lines s providing refuge ts rivers (non- suitable habita	should be e habitat f perennial t for sever	removed. The or for remaining fa drainage lines al red listed fa	vegetation of unal species), rupicolous	High
Direct impact on associated fauna and interactions with	impact can be reversed: Degree of impact on irreplaceable resources: Nature of impact:	species impacti the servitude s (especially arbo Medium-high t outcrops, north including giant Adverse impact	ng which could hould not be to <u>real species)</u> he proposed a ern mistbelt fo <u>bullfrog, southe</u>	potential impa otally removed lignment bisec rest as well as rn african pytho	ct on the lines s providing refuge ts rivers (non- suitable habita on, ground pang	should be e habitat f perennial t for sever olin and br	removed. The operation of the operation	vegetation of Junal species), rupicolous Junal species	High High
Direct impact on associated fauna and	impact can be reversed: Degree of impact on irreplaceable resources: Nature of impact: With	species impacti the servitude s (especially arbo Medium-high t outcrops, north including giant Adverse impact	ng which could hould not be to preal species) he proposed a ern mistbelt fo bullfrog, southe 4 4 construction ac	potential impa- otally removed lignment bisec rest as well as rn african pytho 4 6 ctivities to the 5	ct on the lines s providing refuge ts rivers (non- suitable habita on, ground pang 4 5 55m servitude. 1	should be e habitat f perennial t for sever olin and br 36 60	removed. The or remaining far drainage lines; al red listed far own hyaena.	vegetation of iunal species , rupicolous iunal species - -	
Direct impact on associated fauna and interactions with structures and	impact can be reversed: Degree of impact on irreplaceable resources: Nature of impact: With Without Degree to which impact can be	species impacti the servitude s (especially arbo Medium-high t outcrops, north including giant Adverse impact 1 2 Medium-restrict	ng which could hould not be to <u>real species</u>) he proposed a ern mistbelt fo bullfrog, southe 4 4 construction ac ies. No illegal p alternative aliguern mistbelt fo	potential impa- otally removed lignment bisec rest as well as rn african pytho 4 6 ctivities to the 5 oaching or hunt nment 3 bisect rest as well as	ct on the lines s providing refuge ts rivers (non- suitable habita on, ground pang 4 5 55m servitude. I ting activities. ts rivers (non- suitable habita	should be e habitat f perennial t for sever olin and br 36 60 No intentio -perennial t for sever	removed. The or remaining far drainage lines drainage dra	 regetation of junal species rupicolous junal species - -<td></td>	
Direct impact on associated fauna and interactions with structures and	impact can be reversed: Degree of impact on irreplaceable resources: Nature of impact: With Without Degree to which impact can be reversed: Degree of impact on irreplaceable	species impacti the servitude s (especially arbo Medium-high t outcrops, north including giant Adverse impact 1 2 Medium-restrict any faunal spec The proposed outcrops, north	ng which could hould not be to <u>real species</u>) he proposed a ern mistbelt fo bullfrog, southe 4 4 construction ac ies. No illegal p alternative aliguern mistbelt fo	potential impa- otally removed lignment bisec rest as well as rn african pytho 4 6 ctivities to the 5 oaching or hunt nment 3 bisect rest as well as	ct on the lines s providing refuge ts rivers (non- suitable habita on, ground pang 4 5 55m servitude. I ting activities. ts rivers (non- suitable habita	should be e habitat f perennial t for sever olin and br 36 60 No intentio -perennial t for sever	removed. The or remaining far drainage lines drainage dra	 regetation of junal species rupicolous junal species - -<td></td>	
Direct impact on associated fauna and interactions with structures and personnel	impact can be reversed: Degree of impact on irreplaceable resources: Nature of impact: With Without Degree to which impact can be reversed: Degree of impact on irreplaceable	species impacti the servitude s (especially arbo Medium-high t outcrops, north including giant Adverse impact 1 2 Medium-restrict any faunal spec The proposed outcrops, north including giant	ng which could hould not be to <u>preal species</u>) he proposed a ern mistbelt fo <u>bullfrog, southe</u> 4 4 construction ac ies. No illegal p alternative aligi- ern mistbelt fo bullfrog, southe	potential impa- otally removed lignment bisec rest as well as rn african pytho 4 6 ctivities to the 5 oaching or hunt nment 3 bisect rest as well as rn african pytho	ct on the lines s providing refuge ts rivers (non- suitable habita on, ground pang 4 5 55m servitude. f ting activities. ts rivers (non- suitable habita on, ground pang	should be e habitat f perennial t for sever olin and br 36 60 No intentio -perennial t for sever olin and br	removed. The vor remaining fainage lines; al red listed fainage lines; al red lines	 regetation of junal species rupicolous junal species - -<td></td>	

Potential		Extent	Duration	Magnitude	Probability	Signifi	cance	Status			
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	⊦d+m)*p)	(+ve or - ve)	Confidence		
	Without	1	4	4	4	36	Medium	-	Medium		
	Degree to which Low impact can be reversed:										
	Degree of impact on irreplaceable resources:	Medium									
Electrocution	Nature of impact:	Bird perches or live and earthe	d perches on pylon and causes an electrical short circuit by physically bridging the air gap betwe and earthed components, resulting in death or severe injury.								
	With	1	4	2	3	21	Low	-	Medium		
	Without	1	4	4	4	36	Medium	-	Medium		
	Degree to which impact can be reversed:	Low									
	Degree of impact on irreplaceable resources:	Medium									
Nesting of birds on tower	Nature of impact:	Routine mainte	nance of pylons	and power line	s could result in	disturbar	nce of certain bi	rd species			
structures and	With	1	2	4	2	14	Low	-	Medium		
disturbance during routine	Without	2	2	4	3	24	Low	-	Medium		
maintenance	Degree to which impact can be reversed:	High						·			
	Degree of impact on irreplaceable resources:	Medium									
Heritage											
It is anticipated the	hat the main impacts of	heritage will occur during the construction phase									
Visual											
Visual exposure to the powerline servitude,	Nature of impact:	close to private	nature reserve	s. Sensitive vie	ewer locations i	bles and towers will create adverse visual impacts, especially in ns in close proximity (<500m) are highly vulnerable to exposute on the sense of place.					
conductor	With	3	5	6	5	70	High	-	High		

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence
cables and	Without	3	4	6	5	65	High	-	High
towers.	Degree to which impact can be reversed:	The impact car proximity to se option.							
	Degree of impact on irreplaceable resources:	In areas of high private nature r					ch as the soupa	ansberg and	
Social									
Perceived electromagnetic	Nature of impact:	The presence of on some proper		orkers can resu	It in the treat o	of safety and	d can possibly l	ead to actual	crimes being committed
fields impacts	With mitigation	1	3	2	1	6	Low	-	Medium
on humans and animals during	Without mitigation	1	5	4	2	20	Low	-	Medium
the operational phase	Degree to which impact can be reversed:	High – with imp	lementation of r	relevant mitigat	ion measures				
	Degree of impact on irreplaceable resources:	N/a							
Loss of a sense of place/income	Nature of impact:	The presence of be spoilt	powerlines par	ticularly in tour	ist attractions c	an result in	tourists no long	ger visiting th	e area as their views will
on game farms	With mitigation	1	1	2	3	12	Low	-	Medium
 tourists want to see "africa" and the power 	Without mitigation	3	4	8	4	60	Medium	-	High
line can disturb the rustic african setting;	Degree to which impact can be reversed:	High – with imp	lementation of r	relevant mitigat	ion measures				
anical setting,	Degree of impact on irreplaceable resources:	N/a							
Poor maintenance of	Nature of impact:	It is possible the	at access routes	can be of such	poor state that	maintenan	ce of the power	line is not po	ssible
the power line	With mitigation	1	1	2	2	8	Low	-	Medium to high
access roads: conflict between	Without mitigation	1	4	8	4	52	Medium	-	Medium to high

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status		
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence	
eskom and the landowners on whose	Degree to which impact can be reversed:	N/a			•					
responsibility it is to do maintenance on these roads. Farmers use it more often but yet expect eskom to pay for all maintenance	Degree of impact on irreplaceable resources:	Put a firm negot	tiated contract i	n place during t	he operational p	ohase				
Impact of the power lines on	Nature of impact:	Where powerline	es are not visibl	e or known, pla	ne crashes can	result and i	n turn electricty	v outages ma	y occur	
aircraft as there	With mitigation	1	2	2	2	10	Low	-	Medium to high	
are airports within the study	Without mitigation	4	5	6	4	60	Medium	-	Medium to high	
area; one is the louis trichardt airport and the other is for light	Degree to which impact can be reversed:	High – with imp	lementation of ı	relevant mitigat	ion measures					
aircraft on the road towards waterpoort from louis trichardt	Degree of impact on irreplaceable resources:	N/a								
decrease in property values	Nature of impact:	These can lead	nese can lead to economic losses							
and number of	With mitigation	1	3	4	1	8	Low	-	Medium to high	
visitors to lodges and other areas that	Without mitigation	2	5	6	3	39	Medium	-	Medium to high	
are popular with tourists due to	Degree to which impact can be reversed:	High – with imp	lementation of I	relevant mitigat	ion measures					

Potential		Extent	Duration	Magnitude	Probability	Significa	ince	Status		
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence	
the visual impacts of powerlines	Degree of impact on irreplaceable resources:	N/a								
Security issues as a result of	Nature of impact:									
the presence of	With mitigation	1	1	2	2	8	Low	-	Medium to high	
maintenance workers on	Without mitigation	1	1	4	4	24	Low	-	High	
properties	Degree to which impact can be reversed:	High – with imp	lementation of r	relevant mitigat	ion measures					
	Degree of impact on irreplaceable resources:	The impact can	be high where e	endangered spe	cies such as rhi	no occur				
Land owners denying	Nature of impact:	This can result i	n maintenance	not occurring						
contractors access to their	With mitigation	1	1	2	2	8	Low	-	Medium	
properties	Without mitigation	1	1	8	4	40	Medium	-	High	
	Degree to which impact can be reversed:	High – with imp	lementation of r	relevant mitigat	ion measures					
	Degree of impact on irreplaceable resources:	N/a								
Poaching of game as well as	Nature of impact:	This is a high pr	his is a high probability							
stock theft and	With mitigation	1	1	0	1	2	Low	-	Medium to high	
theft of crops	Without mitigation	1	1	2	2	8	Low	-	Medium to high	
	Degree to which impact can be reversed:	High – with imp	lementation of r	relevant mitigat	ion measures					

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status		
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence	
	Degree of impact on irreplaceable resources:	N/a								
Impact on farming	Nature of impact:	During the oper	ational phase, ii							
activities such	With mitigation	1	1	-	Medium to high					
as sowing, harvesting, and	Without mitigation	1	1	2	1	4	Low	-	Medium to high	
fire management programmes leading to	Degree to which impact can be reversed:	High – with imp	lementation of r	relevant mitigat	ion measures					
economic losses	Degree of impact on irreplaceable resources:	N/a								
Impact on farming	Nature of impact:	During the oper very minimal	rational phase,	impacts on ac	tivities and on	guests to lo	odges and othe	r tourist des	tinations are likely to be	
activities such as hunting in	With mitigation	1	1	0	1	2	Low	-	Medium to high	
game farms	Without mitigation	1	1	2	1	4	Low	-	Medium to high	
leading to economic losses. Impacts can also be on	Degree to which impact can be reversed:	High – with imp	lementation of r	relevant mitigat	ion measures					
guests in lodges leading to economic losses	Degree of impact on irreplaceable resources:									
Increase in the voltage stability	Nature of impact:	An increased vo	n increased voltage will ensure that activities that were not able to take place will be possible							
	With mitigation									
	Without mitigation	3	5	8	5	80	High	+	Medium	
	Degree to which impact can be reversed:	N/a								

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status			
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence		
	Degree of impact on irreplaceable resources:	N/a									
An assurance of a reliable	Nature of impact:	Reliable electric	ity supply is a p	ositive impact t	hat will improve	e activities s	such as touriam	in the makha	ado local municipality		
electricity	With mitigation	3	4 2 4 36 Medium +								
supply	Without mitigation	2	1	6	4	36	Medium	+	Medium		
	Degree to which impact can be reversed:	N/a									
	Degree of impact on irreplaceable resources:	N/a									
Increase of electricity	Nature of impact:	In order to grov	v the economy c	of the makhado	local municipali	ty, electrici	ty is vital				
supply making it available for	With mitigation										
agriculture, tourism and	Without mitigation	3	5	8	5	80	High	+	Medium		
other industries. The increase in electricity can	Degree to which impact can be reversed:	N/a									
also allow for the undertaking of other activities that may have been that may not have been possible prior to the improved elect.ricity supply	Degree of impact on irreplaceable resources:	N/a									
No more backlogs in	Nature of impact:	The absence of will be possible	backlogs in elec	tricity connection	ons can imply th	nat activities	s that can only t	take place wi	nere electricity is present		

Potential		Extent	Duration	Magnitude	Probability	Significa	ance	Status			
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+e	d+m)*p)	(+ve or - ve)	Confidence		
electricity	With mitigation										
connections	Without mitigation	3	5	8	5	80	High	+	Medium		
	Degree to which impact can be reversed:	N/a									
	Degree of impact on irreplaceable resources:	N/a									
The inadequate provision of	Nature of impact:										
electricity to	With mitigation										
services such as health facilities	Without mitigation	3	5	8	5	80	High	+	Medium		
will cease	Degree to which impact can be reversed:	N/a	N/a								
	Degree of impact on irreplaceable resources:	N/a									
Electricity will be available to	Nature of impact:	The presence of	electricity to ru	ıral areas will ir	nprove the lives	s of many v	vho live in pover	ty			
numerous rural	With mitigation										
settlements that do not have this	Without mitigation	3	5	8	5	80	High	+	Medium		
service	Degree to which impact can be reversed:	N/a									
	Degree of impact on irreplaceable resources:	N/a									
Decommissionin	g phase										
Agricultural pote	ential										
No decommissioni	ng impacts are anticip	oated									

Potential		Extent	Duration	Magnitude	Probability	Signific	ance	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	d+m)*p)	(+ve or - ve)	Confidence
Flora									
Destruction of protected flora	Nature of impact:	Removal of pro	tected plant spe	ecies due to the	servitude				
	With	1	5	6	5	<mark>60</mark>	Medium	-	High
	Without	1	5	6	5	60	Medium	-	High
	Degree to which impact can be reversed:				and the all othe				
	Degree of impact on irreplaceable resources:	The route is on access roads				-	ure reserve ad t	here are not	
Destruction of pristine habitat	Nature of impact:	Destruction and	disturbance of	a previously ur	ndisturbed veget	tation			
	With	2	5	6	5	65	High	-	High
	Without	2	5	6	5	65	High	-	High
	Degree to which impact can be reversed:	Existing/permit	ted access road	s must be used	and the all othe	er measure	es must be follow	wed	
	Degree of impact on irreplaceable resources:	The route is on access roads	a virtually unc	listurbed area a	and passes throu	ugh a nati	ure reserve ad t	here are not	
Vegetation clearance	Nature of impact:	Removal of veg	etation due to s	servitudes, acce	ss roads and er	ecting of tl	he pylons		
	With	1	5	6	5	<mark>60</mark>	Medium	-	High
	Without	1	5	6	5	60	Medium	-	High
	Degree to which impact can be reversed:	Existing/permit							
	Degree of impact on irreplaceable resources:	The servitude h	•						
Plant encroachment	Nature of impact:	Vegetation clea	ring or disturba	nce may and ha	ave been fond to	increase	encroachment		
	With	1	5	4	3	30	Low		High

Potential		Status									
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	⊦d+m)*p)	(+ve or - ve)	Confidence		
	Without	1	5	6	3	36	Medium	-	High		
	Degree to which impact can be reversed:	Existing/permi	wed								
	Degree of impact on irreplaceable resources:		stine and distur		·						
Threat to biodiversity	Nature of impact:	Disturbance of	an area with hi	gh biodiversity v	will increase the	probabilit	ty of encroachm	ent and biodiv	ersity will be lost.		
	With	1	3	6	5	50	Medium	-	High		
	Without	1	4	6	5	55	Medium	-	High		
	Degree to which impact can be reversed:	Existing/permi	Existing/permitted access roads must be used and the all other measures must be followed								
	Degree of impact on irreplaceable resources:	Biodiversity is	high along this	route and thus p	prone to invasion	n					
Soil erosion	Nature of impact:		egetation due to nimising soil ero		and servitudes	will increa	ase the soil eros	ion as vegetat	ion plays a major role in		
	With	1	2	4	4	28	Low	-	High		
	Without	2	3	4	4	36	Medium	-	High		
	Degree to which impact can be reversed:	Existing/permi	itted access road	ds must be used	and the all othe	er measur	es must be follo	wed			
	Degree of impact on irreplaceable resources:	The area is v erosion	The area is virtually undisturbed and there no access roads, to build roads would increase soil prosion								
Fauna											
Direct impact on associated	Nature of impact:		Adverse impact								
fauna and	With	1	1	2	5	20	Low	-	High		
interactions with structures and	Without	2	1	4	5	35	Medium	-	High		
personnel	Degree to which impact can be		of the tower pylo ion within the cl			to the 5	5m servitude.	Rehabilitation			

Potential		Extent	Duration	Magnitude	Probability	Significa	ince	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence
	reversed:								
	Degree of impact on irreplaceable resources:	The proposed outcrops, north including giant l	ern mistbelt fo	rest as well as	suitable habita	t for sever	al red listed fai		
Avifauna									
No decommissioni	ng impacts are anticip	bated							
Heritage									
No decommission	ng impacts are anticip	pated							
Visual									
Visual exposure to operations to dismantle and	Nature of impact:		ptions relating	to the removal					ot have significant visual as visual impacts will be
remove of	With	3	1	2	3	18	Low	+	High
power line & substation	Without	3	1	2	3	18	Low	+	High
infrastructure	Degree to which impact can be reversed:	Avoid unnecess	ary disturbance	of the natural	environment du	ring decom	missioning oper	rations	
	Degree of impact on irreplaceable resources:	None							
Social									
Theft of material from camps and	Nature of impact:	Material can be targeted by crin		he sites where	decommissioni	ng is takir	ig place as ma	terial used i	n electricity is often the
along	With mitigation	1	1	0	1	2	Low	-	Medium
construction sites	Without mitigation	2	1	8	4	44	Medium	-	Medium
	Degree to which impact can be reversed:	High – with imp	lementation of	relevant mitigal	tion measures				
	Degree of impact on irreplaceable resources:	N/a							

Potential		Extent	Duration	Magnitude	Probability	Signifi	cance	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e-	⊦d+m)*p)	(+ve or - ve)	Confidence
Loss of crops leading to	Nature of impact:	Crops can be lo	st during this pl	hase as the activ	vities are almost	as inten	se as those duri	ng the construc	ction phase
economic losses	With mitigation	1	1	2	2	8	Low	-	Medium to high
	Without mitigation	1	3	6	4	40	Medium	-	Medium to high
	Degree to which impact can be reversed:	High – with imp	elementation of	relevant mitigal	tion measures				
	Degree of impact on irreplaceable resources:	N/a							
Impacts on farming	Nature of impact:	Decommissioni	ng can disturb a	ctivities on farn	ns				
activities such as sowing,	With mitigation	1	1	2	2	8	Low	-	Medium to high
narvesting, and	Without mitigation	1	1	8	3	30	Low	-	Medium to high
fire management programmes	Degree to which impact can be reversed:	High – with imp	elementation of	relevant mitigal	tion measures				
eading to economic losses	Degree of impact on irreplaceable resources:	N/a							
Damage to farm	Nature of impact:	This can lead to	conflicts with c	ommunity men	bers and farme	rs			
e.g. irrigation	With mitigation	1	1	2	1	4	Low	-	Medium to high
equipment, jates, fences	Without mitigation	1	1	6	3	24	Low	-	Medium to high
	Degree to which impact can be reversed:	High – with imp	elementation of	relevant mitigal	tion measures				
	Degree of impact on irreplaceable resources:	N/a							
Security concerns as a	Nature of impact:	It is highly likel	y that theft of g	ame and stock	can occur. Thef	t of game	can be higher o	on farms where	rhino is present
esult of	With mitigation	1	1	2	4	16	Low	-	Medium to high

Potential		Extent	Duration	Magnitude	Probability	Signific	ance	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	d+m)*p)	(+ve or - ve)	Confidence
poaching of game, stock	Without mitigation	1	1	10	4	48	Medium	-	Medium to high
theft and crop theft	Degree to which impact can be reversed:	High – with imp	lementation of	relevant mitigat	tion measures				
	Degree of impact on irreplaceable resources:	The impact can	be high where e	endangered spe	ecies such as rhi	no occur			
Security as a result of the	Nature of impact:	The mere prese threatened	ence of contruct	ion workers in	communities ar	d especia	lly on farms ca	n lead to une	ase and people may feel
presence of	With mitigation	1	1	2	2	8	Low	-	Medium to high
workers on pfarms and	Without mitigation	2	1	8	3	33	Medium	-	Medium to high
communities	Degree to which impact can be reversed:	High – with imp	lementation of I	relevant mitigal	tion measures				
	Degree of impact on irreplaceable resources:	N/a							
Safety of community	Nature of impact:	As decommissio	ning involves th	ne dismantling o	of structures, th	e safety o	f people and ani	mals can be c	ompromised
members/farm	With mitigation	1	1	2	1	4	Low	-	Medium
workers/animals	Without mitigation	1	1	6	2	16	Low	-	Medium
	Degree to which impact can be reversed:	High – with imp	lementation of	relevant mitigat	tion measures				
	Degree of impact on irreplaceable resources:	N/a							
Cumulative impa	acts								
Agricultural pote	ential								
No cumulative imp	pacts are anticipated								
Flora									

Potential		Extent	Duration	Magnitude	Probability	Signifi	cance	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	-d+m)*p)	(+ve or - ve)	Confidence
Plant encroachment	Nature of impact:	F Vegetation cl	learing or disturb	ance may and h	ave been fond to	o increase	encroachment		
	With	1	5	4	3	30	Low	-	High
	Without	1	5	6	3	36	Medium	-	High
	Degree to which impact can be reversed:	5.1	nitted access roa	ds must be used	and the all othe	er measur	es must be follo	wed	
	Degree of impact on irreplaceable resources:								
Soil erosion	Nature of impact:		vegetation due to ninimising soil ero					ion as vegetat	ion plays a major role in
	With	1	2	4	4	28	Low	-	High
	Without	2	3	4	4	36	Medium	-	High
	Degree to which impact can be reversed:		nitted access roa	ds must be used	and the all othe	er measur	es must be follo	wed	
	Degree of impact on irreplaceable resources:								
Fauna									
Loss of faunal habitat	Nature of impact:	f Adverse impa	act						
	With	1	4	4	5	45	Medium	-	High
	Without	2	4	6	5	60	Medium	-	High
	Degree to which impact can be reversed:	activities to t	preferred alignm he 55m servitude	e.			_		
	Degree of impact on irreplaceable resources:	outcrops, no	d alternative ali rthern mistbelt f nt bullfrog, south	orest as well as	suitable habita	it for seve	eral red listed f		
Direct impact on associated	Nature of impact:			F 7 -	· · · · · ·				
fauna and	With	1	4	4	4	36	Medium	_	High

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence
interactions with	Without	2	4	6	5	60	Medium	-	High
structures and personnel	Degree to which impact can be reversed:	Medium-restrict species.	construction a	ctivities to the	55m servitude	. No inten	tional killing of	any faunal	
	Degree of impact on irreplaceable resources:	The proposed a outcrops, north including giant l	ern mistbelt fo	rest as well as	suitable habita	t for sever	al red listed fa		
Avifauna									
No cumulative imp	pacts are anticipated								
Heritage									
No cumulative imp	pacts are anticipated								
Visual									
exposure to power line infrastructure.	impact:	lines are observ Lastly cumulativ	ed from locatio ve impacts arise of images and	ns from which r through an inc impressions o	more than one p crease in the inc f power lines a	ower line w idence of se t various p	ould now be se equential perce	en in differer ptions of diffe	I perception where power nt parts of the landscape. erent power lines through I which are continuously
	With	3	5	0	3	24	Low	-	High
	Without	3	5	6	5	70	High	-	High
	Degree to which impact can be reversed:	The impact car material. Active						construction	
	Degree of impact on irreplaceable resources:	In areas of high private nature r					ch as the soup	ansberg and	
Social									
Poaching of game impacting	Nature of impact:			•	-	-	_		e rhino is present
on the loss of	With	2	3	4	3	27	Low	-	Medium to high
game and in turn affecting	Without	5	5	8	4	72	High	-	High
the tourism industry of the	Degree to which impact can be	Where possible, the construction							

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence
municipality and that of the country at large	reversed:	operational pha	se Is should be	fitted with track	king device				
country at large	Degree of impact on irreplaceable resources:	The impact will	high where end	angered species	s such as rhino	occur			
Loss of a sense of place	impact:	them						an therefore	spoil this experience for
resulting in economic losses	With	1	2	2	2	10	Low	-	Medium to high
especially for	Without	3	4	6	3	39	Medium	-	Medium to high
tourism sector in turn impact on the economic	Degree to which impact can be reversed:	Liaise with visu would be to use					other suggeste	ed measures	
growth of the makhado local municipality	Degree of impact on irreplaceable resources:	N/a							
Increase in power supply	impact:	electricity is on	e of the hindrar			area and in			ado local municipality as
and in the	With	3	4	6	4	52	Medium	+	Medium
stability of the network. In turn	Without	3	4	6	4	52	Medium	+	Medium
numerous existing developments	Degree to which impact can be reversed:	N/a							
such as lodges and other tourist attractions can be improved.	Degree of impact on irreplaceable resources:	N/a							
No-go alternativ	/e								
Agricultural pot									
In the event that	the transmission lines	are not construc	ted, there will b	e no impact on	the agricultural	potential, t	herefore the st	atus quo will	remain.
Flora									
				9-162					

Potential		Extent	Duration	Magnitude	Probability	Significan	се	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d+	·m)*p)	(+ve or - ve)	Confidence
In the event that	the transmission lines	are not construc	ted, there will b	e no impact on	the flora, there	fore the statu	us quo will rem	nain.	
Fauna									
In the event that	the transmission lines	are not construc	ted, there will b	e no impact on	the fauna, there	efore the stat	tus quo will rei	main.	
Avifauna									
In the event that	the transmission lines	are not construc	ted, there will b	e no impact on	the avifauna, th	nerefore the s	status quo will	remain.	
Heritage									
In the event that	the transmission lines	are not construc	ted, there will b	e no impact on	heritage sites,	therefore the	status quo wi	ll remain.	
Visual									
In the event that	the transmission lines	are not construc	ted, there will b	e no visual imp	act, therefore th	ne status quo	will remain.		
Social									
Powerlines linking the tabor substation to the new	Nature of impact:	weakest part of	the northern g rlines linking t	grid network du he tabor substa	e to being oper ation to the ne	ated beyond w bokmakirie	its reliability. e (nzhelele) s	There is the ubstation in	nd spencer power is the prefore a need for a new order to strengthen the astructure
bokmakirie	With	2	1	2	1	5	Low	-	Medium to high
(nzhelele) substation will	Without	4	5	8	3	51	Medium	-	Medium to high
not be constructed.		Construct the p	owerlines						
	Degree of impact on irreplaceable resources:	N/a							
No increase in the voltage	Nature of impact:	The voltage is of such as loss of o						nt being shu	t down leading to effects
stability	With	1	1	2	1	4	Low	-	Medium
	Without	3	5	8	3	48	Medium	-	Medium
	Degree to which impact can be reversed:	Ensure that the	voltage is stabi	lised					
	Degree of impact on irreplaceable	N/a							
	resources:								

Potential		Extent	Duration	Magnitude	Probability	Significa	ance	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+e	d+m)*p)	(+ve or - ve)	Confidence
No increase and assurance of electricity	Nature of impact:		and mining s	ectors. A lack					the agricultural, tourism, growth of the makhado
supply making it	With	1	1	2	1	4	Low	-	Medium
unavailable for agriculture,	Without	3	5	8	4	<mark>64</mark>	High	-	Medium
tourism and other industries as well as	Degree to which impact can be reversed:	and ensure that		-	such as the co	onstruction	of the proposed	power line	
allowing for the undertaking of other activities that may not have been possible before. The absence of an increase in electricity may also hinder the undertaking of other activities that may only be possible with electricity supply	Degree of impact on irreplaceable resources:								
Continuation of backlogs in		The backlogs ar use of electricity					shortages. The r	endering of s	services that require the
electricity	With	2	1	4	2	14	Low	-	Medium to high
connections	Without	3	4	8	4	60	Medium	-	Medium to high
	Degree to which impact can be reversed:	adequate mater	ets to allow for				e backlogs. This y out the job a		
	Degree of impact on irreplaceable resources:	N/a							

Potential		Extent	Duration	Magnitude	Probability	Signific	ance	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	d+m)*p)	(+ve or - ve)	Confidence
Continuation of the inadequate	Nature of impact:	In services such	n as health facil	lities, lack of ele	ectricity can resu	ult in losse	s of lives		
provision of	With	1	1	0	2	4	Low	-	Medium
electricity to critical services	Without	3	5	10	4	72	High	-	Medium
such as health facilities	Degree to which impact can be reversed:	that adverse im			is imperative a	nd the pro	posed powerline	e can ensure	
	Degree of impact on irreplaceable resources:	N/a							
Continuation of the unavailability of	Nature of impact:		g and cooking.						utting of trees to use the tion and the possible loss
electricity in	With	1	1	2	2	8	Low	-	Medium
numerous rural settlements	Without	3	5	8	4	64	High	-	Medium
	Degree to which impact can be reversed:	Provide electrici	ty to rural area	S					
	Degree of impact on irreplaceable resources:	N/a							

Potential		Extent	Duration	Magnitude	Probability	Significa	ance	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+o	l+m)*p)	(+ve or - ve)	Confidence
Construction ph	ase								
Agricultural pot	ential								
Deterioration of soil resource	impact:	Loss of agricultu			_				
	With	1	4	2	3	21	Low	-	
	Without	1	4	4	2	18	Low	-	
	Degree to which impact can be reversed:	Reversal should	be straightforw	ard after remo	val of infrastruct	ture			
	Degree of impact on irreplaceable resources:	Low to none							
Deterioration of soil resource	Nature of impact:	Soil erosion haz	ard due to cons	truction activiti	es				
	With	1	1	2	2	8	Low	-	
	Without	2	3	6	4	44	Medium	-	
	Degree to which impact can be reversed:	If erosion is cau	sed, reversal is	often difficult a	and time-consun	ning, espec	ially in steeper	areas	
	Degree of impact on irreplaceable resources:	Moderate							
Flora									
Destruction of protected flora	Nature of impact:	Removal of prot	ected plant spe	cies due to the	servitude				
	With	2	5	8	5	75	High	-	High
	Without	2	5	8	5	75	High	-	High
	Degree to which impact can be reversed:	Existing/permit	ed access roads	s must be used	and the all othe	er measure	s must be follow	ed	

Table 9.6: Detailed assessment of identified impacts for Alternative 4

Potential		Extent	Duration	Magnitude	Probability	Signific	ance	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	d+m)*p)	(+ve or - ve)	Confidence
	Degree of impact on irreplaceable resources:	Along this route			•				
Destruction of pristine habitat	Nature of impact:	Destruction and	l disturbance of	a previously ur	ndisturbed veget	ation			
	With	1	5	8	5	70	High	-	High
	Without	1	5	8	5	70	High	-	High
	Degree to which impact can be reversed:	Existing/permit	ted access road	s must be used	and the all othe	er measure	es must be follo	wed	
	Degree of impact on irreplaceable resources:	Pristine habitat		-					
Vegetation clearance	Nature of impact:	Removal of veg	etation due to s	ervitudes, acce	ss roads and er	ecting of t	he pylons		
	With	1	5	6	5	60	Medium	-	High
	Without	1	5	8	5	70	High	-	High
	Degree to which impact can be reversed:	Existing/permit	ted access road	s must be used	and the all othe	er measure	es must be follo	wed	
	Degree of impact on irreplaceable resources:	Along this route	e there is a lot o	f protected plai	nt species				
Plant encroachment	Nature of impact:	Vegetation clea	ring or disturba	nce may and ha	ave been fond to	increase	encroachment (cumulative im	
	With	1	2	8	5	55	Medium	-	High
	Without	1	3	8	5	<mark>60</mark>	Medium	-	High
	Degree to which impact can be reversed:	vegetation clea	ring needs to be	e continuosly to	ed and the all of prevent the gro	wth of for	eign plants		
	Degree of impact on irreplaceable resources:	The area is virt prone to invasion	on ¹					-	
Threat to biodiversity	Nature of impact:	Disturbance of	an area with hig	Ih biodiversity v	will increase the	probability	y of encroachme	ent and biodiv	ersity will be lost.

		Extent	Duration	Magnitude	Probability	Significa	ance	Status	
Potential impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+e	d+m)*p)	(+ve or - ve)	Confidence
	With	1	5	8	5	70	High	-	High
	Without	1	5	8	5	70	High	-	High
	Degree to which impact can be reversed:	Existing/permit	ted access road	s must be used	and the all othe	er measure	s must be follow	wed	
	Degree of impact on irreplaceable resources:	Biodiversity is h	nigh especially ir	n the ridge alor	ng this route and	d thus pror	ne to invasion		
Soil erosion	Nature of impact:	Removal of veg preventing/min					e the soil erosi	on as vegetat	ion plays a major role i
	With	1	2	2	5	25	Low	-	High
	Without	1	3	4	5	40	Medium	-	High
	Degree to which impact can be	Existing/permit	ted access road	s must be used	and the all othe	er measure	s must be follow	wed	
	reversed:								
	Degree of impact on irreplaceable resources:	The area is vir erosion	tually undisturl	oed and there	no access road	ls, to build	f roads would	increase soil	
Fauna	Degree of impact on irreplaceable		tually undisturl	oed and there	no access road	ls, to build	l roads would	increase soil	
Loss of faunal	Degree of impact on irreplaceable resources:		·	oed and there	no access road	ls, to build	l roads would	increase soil	
	Degree of impact on irreplaceable resources:	erosion	·	oed and there	no access road	ls, to build	i roads would	increase soil	High
	Degree of impact on irreplaceable resources: Nature of impact:	erosion Adverse impact							High High
Loss of faunal	Degree of impact on irreplaceable resources: Nature of impact: With Without Degree to which impact can be reversed:	erosion Adverse impact 2 2 Low- realign al and activities to	4 4 ternative alignr the 55m servit	6 6 nent 4 to avoid ude.	5 5 sensitive habi	60 60 tats and r	Medium Medium estrict vegetation	- - on clearance	5
Loss of faunal	Degree of impact on irreplaceable resources: Nature of impact: With Without Degree to which impact can be reversed: Degree of impact on irreplaceable	erosion Adverse impact 2 2 Low- realign al and activities to The proposed perennial drain	4 4 ternative alignr the 55m servit alignment bise age lines), seas	6 6 nent 4 to avoid ude. cts the soutpation	5 5 sensitive habi nsberg through ed pans, rupicol	60 60 tats and ro the sanc ous outcro	Medium Medium estrict vegetation f river gorge, ps, northern m	- - on clearance rivers (non- istbelt forest	5
Loss of faunal	Degree of impact on irreplaceable resources: Nature of impact: With Without Degree to which impact can be reversed: Degree of impact	erosion Adverse impact 2 2 Low- realign al and activities to The proposed	4 4 ternative alignr o the 55m servit alignment bise age lines), seas able habitat for , soutpansberg	6 6 nent 4 to avoid ude. cts the soutpa conally inundate several red lis flat lizard, mu	5 5 d sensitive habi nsberg through ed pans, rupicol sted faunal spec	60 60 tats and ro the sanc ous outcro cies includ	Medium Medium estrict vegetation f river gorge, ps, northern m ing giant bullfr	- - on clearance rivers (non- istbelt forest og, northern	5
Loss of faunal	Degree of impact on irreplaceable resources: Nature of impact: With Without Degree to which impact can be reversed: Degree of impact on irreplaceable	erosion Adverse impact 2 2 Low- realign al and activities to The proposed perennial drain as well as suit forest rain frog lion, wild dog, o	4 4 ternative alignr o the 55m servit alignment bise age lines), seas able habitat for soutpansberg cheetah and whi	6 6 nent 4 to avoid ude. cts the soutpa conally inundate several red lis flat lizard, mu	5 5 sensitive habi nsberg through ed pans, rupicol sted faunal spec	60 60 tats and ro the sanc ous outcro cies includ	Medium Medium estrict vegetation f river gorge, ps, northern m ing giant bullfr	- - on clearance rivers (non- istbelt forest og, northern	5

Potential		Extent	Duration	Magnitude	Probability	Signifi	cance	Status			
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	-d+m)*p)	(+ve or - ve)	Confidence		
interactions with	Without	2	4	6	5	60	Medium	-	High		
structures and personnel	Degree to which impact can be reversed:	Restrict constru	ction activities t	to the 55m serv	vitude. No intent	ional killiı	ng of any faunal	species.			
	Degree of impact on irreplaceable resources:										
Avifauna											
Habitat destruction	Nature of impact:		nanent removal of habitat that is used, or may be used, by avifauna.								
	With	1	2	4	3	21	Low	-	Medium		
	Without	1	2	4	5	35	Medium	-	Medium		
	Degree to which impact can be reversed:	Partially reversi	Partially reversible								
	Degree of impact on irreplaceable resources:	Low									
Disturbance	Nature of impact:	Noise and move	ement, from stat	ff and machiner	ry, may disturb	avifauna,	and nests may l	be disturbed.			
	With	1	1	4	3	18	Low	-	Medium		
	Without	2	1	6	5	45	Medium	-	Medium		
	Degree to which impact can be reversed:	Irreversible	•				1				
	Degree of impact on irreplaceable resources:	Medium									
Heritage											
Destruction of heritage sites	Nature of impact:	Adverse impact	on a identified	heritage sites a	long alternative						
and features	With mitigation	3	5	2	5	50	Medium	-	High		

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status			
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence		
	Without mitigation	3	5	10	5	90	High	-	High		
	Degree to which impact can be reversed:	Medium							High		
	Degree of impact on irreplaceable resources:	Not applicable							High		
Visual											
Transformation of the visual quality of the landscape	Nature of impact:	soutpansberg ar	nd private natur nicles, which wil	aracter, especially in the ement of contractors and e, specifically in the sand							
	With	3	2	6	5	55	Medium	-	High		
	Without	3	2	6	5	55	Medium	-	High		
	Degree to which impact can be reversed:	The impact can be reversed by terminating construction activity and removing all construction material. Active rehabilitation of vegetation where it has been cleared, is also required.									
	Degree of impact on irreplaceable resources:	In areas of high private nature r					ch as the soupa	ansberg and			
Social											
Influx of job seekers, mainly unskilled labour, from the	Nature of impact:	hamantsha and	madaheni. It is nd to these vil	possible that h	nigh unemploym	ent rates w	hich are preval	ent in the ma	ments such as muraleni, akhado local municipality likely viewed as a high		
communities	With mitigation	3	1	4	2	16	Low	-	Medium to high		
around the power line route having job	Without mitigation	3	1	8	4	48	Medium	-	Medium to high		
expectations Degree to which impact can be reversed: High – with implementation of relevant mitigation measures											
	Degree of impact on irreplaceable resources:										

Potential		Extent	Duration	Magnitude	Probability	Signifi	cance	Status			
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	-d+m)*p)	(+ve or - ve)	Confidence		
Health impacts as a result of	Nature of impact:	If toilet facilitie	s on site are not	: well managed,	these can lead	to advers	e health impact	s to the surrou	inding communities		
exposure to	With mitigation	1	1	0	1	2	Low	-	Medium to high		
sewage from construction	Without mitigation	1	1	6	4	32	Medium	-	Medium to high		
camps and on construction camps	Degree to which impact can be reversed:	High – with imı	olementation of	relevant mitiga	tion measures						
	Degree of impact on irreplaceable resources:										
Health impacts as a result of	Nature of impact:	Waste on site of and animals	can become a nu	uisance for com	munity membe	rs and on	farms and also	pose a dange	r to the health of people		
exposure to	With mitigation	1	1	0	1	2	Low	-	High		
waste (domestic and industrial)	Without mitigation	1	2	2	3	15	Low	-	High		
	Degree to which impact can be reversed:	High – with implementation of relevant mitigation measures									
	Degree of impact on irreplaceable resources:	N/a									
health impacts from	Nature of impact:	Where construe workers in the	ction workers ar area within whic	e infected with h work is being	infectious disea: undertaken	ses, these	e can be passed	on to the com	munity members or farm		
construction sites and camps	With mitigation	1	1	2	2	8	Low	-			
as a result of infectious	Without mitigation	2	1	6	4	36	Medium	-			
diseases	Degree to which impact can be reversed:	High – with im	plementation of	relevant mitiga	tion measures						
	Degree of impact on irreplaceable resources:	N/a									
Conduct of construction	Nature of impact:	It is possible t actions can aris		good relationsh	ips between co	ntactors a	and community	members, neg	ative as well as positive		
workforce; good	With mitigation	2	1	2	2	10	Low	-	Medium to high		

Potential		Extent	Duration	Magnitude	Probability	Significa	ance	Status					
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+c	i+m)*p)	(+ve or - ve)	Confidence				
relationships between	Without mitigation	2	1	6	4	36	Medium	-	Medium to high				
community members/ farm workers and eskom	Degree to which impact can be reversed:	High – with imp	lementation of I	relevant mitigat	ion measures								
construction workers can result in issues such as sexual misconduct and the spread of sexually transmitted diseases	Degree of impact on irreplaceable resources:	N/a	3										
" conduct of	Nature of impact:	These can resul	t from factors s	uch as differend	es in beliefs and	d cultural b	ackgrounds						
construction	With mitigation	2	1	2	2	10	Low	+					
workforce; bad relationships between	Without mitigation	2	1	6	4	36	Medium	-					
community members/ farm workers and	Degree to which impact can be reversed:	High – with imp	lementation of	relevant mitigat	ion measures								
eskom construction workers leading to violence	Degree of impact on irreplaceable resources:	N/a											
Theft of material	Nature of impact:	Material can be	stolen from con	struction sites	and in areas alo	ng the rout	te						
from camps and	With mitigation	1	1	0	1	2	Low	-	Medium				
along construction	Without mitigation	2	1	8	4	44	Medium	-	Medium				

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status				
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence			
sites	Degree to which impact can be reversed:	High – with imp										
	Degree of impact on irreplaceable resources:											
Negative	Nature of impact:	It is possible the livelihoods will of the librory			ners, game far	mers owne	rs for whom v	isual impacts	s are important to their			
attitudes	With mitigation	2	1	2	2	10	Low	-	Medium			
towards the project and the	Without mitigation	2	1	6	3	27	Low	-	Medium			
formation of community groups, ngo's, in response to	Degree to which impact can be reversed:	High – with imp	- with implementation of relevant mitigation measures									
the project;	Degree of impact on irreplaceable resources:	N/a										
Land owners	Nature of impact:	This would be e	his would be expected from landowners who are opposed to the project									
denying	With mitigation	1	1	2	2	8	Low	-	Medium			
contractors access to their	Without mitigation	1	2	6	4	36	Medium	-	Medium			
properties	Degree to which impact can be reversed:	High – with imp	High – with implementation of relevant mitigation measures									
	Degree of impact on irreplaceable resources:	N/a										
Loss of crops	Nature of impact:	of Crops can be lost during the clearing of the powerline corridor and during the construction of the powerline										
leading to	With mitigation	1	1	2	2	8	Low	-	Medium to high			
economic losses	Without mitigation	1	3	6	4	40	Medium	-	Medium to high			
	Degree to which impact can be reversed:	High – with imp	lementation of r	elevant mitigat	ion measures							

Potential		Extent	Duration	Magnitude	Probability	Signific	ance	Status				
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	d+m)*p)	(+ve or - ve)	Confidence			
	Degree of impact on irreplaceable resources:	N/a										
Loss of land	Nature of impact:	Grazing land are	n of access roads									
leading to	With mitigation	1	1	2	2	8	Low	-	Medium to high			
economic losses	Without mitigation	1	3	6	4	40	Medium	-	Medium to high			
	Degree to which impact can be reversed:	High – with imp	- with implementation of relevant mitigation measures e the loss of land is permanent, eskom should discuss compensation with landowner									
	Degree of impact on irreplaceable resources:	Where the loss										
Impacts on	Nature of impact:	Construction ca	truction can disturb activities on farms									
farming activities such	With mitigation	1	1	2	2	8	Low	-	Medium to high			
activities such as sowing, harvesting, and	Without mitigation	1	1	8	3	30	Low	-	Medium to high			
fire management	Degree to which impact can be reversed:	High – with imp										
programmes leading to economic losses	Degree of impact on irreplaceable resources:	N/a	N/a									
Damage to farm	Nature of impact:	This can lead to	conflicts with c	ommunity men	bers and farme	rs						
infrastructure	With mitigation	1	1	2	1	4	Low	-	Medium to high			
e.g. irrigation equipment,	Without mitigation	1	1	6	3	24	Low	-	Medium to high			
gates, fences	Degree to which impact can be reversed:	High – with imp										
	Degree of impact on irreplaceable resources:											

Potential		Extent	Duration	Magnitude	Probability	Signific	ance	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	d+m)*p)	(+ve or - ve)	Confidence
Security	Nature of impact:	The location of game and stock							highly likely that theft of
concerns as a	With mitigation	1	1	2	4	16	Low	-	Medium to high
result of poaching of	Without mitigation	1	1	10	4	<mark>48</mark>	Medium	-	Medium to high
game, stock theft and crop theft	Degree to which impact can be reversed:	High – with imp	lementation of	relevant mitiga	tion measures				
	Degree of impact on irreplaceable resources:	The impact can	-						
Security as a	Nature of impact:	The mere prese threatened by t		ion workers in	communities ar	nd especial	ly on farms car	n lead to une	ase and people may feel
result of the	With mitigation	1	1	2	2	8	Low	-	Medium to high
presence of workers on	Without mitigation	2	1	8	3	33	Medium	-	Medium to high
pfarms and communities	Degree to which impact can be reversed:	High – with imp	lementation of	relevant mitiga	tion measures				
	Degree of impact on irreplaceable resources:	N/a							
Safety of	Nature of impact:	Construction sit	es are highly ha	irzadous enviro	nments and the	safety of	people and anim	als can be co	mpromised
community	With mitigation	1	1	2	1	4	Low	-	Medium
members/farm workers/animals	Without mitigation	1	1	6	2	16	Low	-	Medium
	Degree to which impact can be reversed:	High – with imp	lementation of	relevant mitiga	tion measures				
	Degree of impact on irreplaceable resources:	N/a							
Loss of a sense	Nature of impact:	The presence of be spoilt	f powerlines par	ticularly in tour	ist attractions c	an result ir	n tourists no lon	ger visiting th	e area as their views will
of place/income	With mitigation	1	1	2	2	8	Low	-	Medium to high

Potential		Extent	Duration	Magnitude	Probability	Signifie	cance	Status					
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	-d+m)*p)	(+ve or - ve)	Confidence				
on game farms – tourists want	Without mitigation	1	1	8	4	40	Medium	-	Medium to high				
to see "africa" and the power line can disturb	Degree to which impact can be reversed:	High – with imp	lementation of	relevant mitiga	tion measures								
the rustic african setting;	Degree of impact on irreplaceable resources:	n irreplaceable N/a											
Operation phase	•												
Agricultural pote	ential												
It is anticipated th	nat the main impacts o	on agricultural po	ricultural potential will occur during the construction phase										
Flora													
Destruction of protected flora	Nature of impact:	Removal of prot	ected plant spe	cies due to the	servitude								
	With	1	5	8	5	70	High	-	High				
	Without	2	5	8	5	75	High	-	High				
	Degree to which impact can be reversed:	Existing/permit											
	Degree of impact on irreplaceable resources:	The area is virt prone to invasio		ed and in pristi	ne condition and	d has a lo	ot of procted pla	ants and very					
Destruction of pristine habitat	Nature of impact:	Destruction and	disturbance of	a previously un	disturbed veget	ation							
	With	1	5	8	5	70	High	-	High				
	Without	2	5	8	5	75	High	-	High				
	Degree to which impact can be reversed:	Existing/permit											
	Degree of impact on irreplaceable resources:	Pristine habitat biodiversity	s are prone	to invasion/en	croachment on	ce distur	bed. The ridge	e is high in					
Vegetation clearance	Nature of impact:	Removal of veg	Removal of vegetation due to servitudes, access roads and erecting of the pylons										

Impact reversed Degree on irre resourcePlant encroachmentNature impact: With WithoutPlant encroachmentNature impact: WithoutPlant encroachmentNature impact: reversed Degree impactThreat biodiversityNature impact: With WithoutThreat biodiversityNature impact: Oegree impactThreat biodiversityNature impact impact Oegree impact		Extent	Duration	Magnitude	Probability	Signifi	cance	Status				
WithoutDegreeimpactreversedDegreeon irreresourcePlantencroachmentWithoutPlantencroachmentWithoutDegreeimpact:WithoutDegreeimpactThreattobiodiversityThreatbiodiversityWithoutDegreeimpact:WithoutDegreeimpact:WithoutDegreeimpact:WithoutDegreeimpact:WithoutDegreeimpact:WithoutDegreeimpactreversedDegreeinpactSoil erosionNature	gation	(e)	(d)	(m)	(p)	(s=(e+	-d+m)*p)	(+ve or - ve)	Confidence			
Degree impact reversed Degree 	1	2	5	8	5	75	High	-	High			
impact reversed Degree on irre resourcePlant encroachmentNature impact: With Without Degree impact reversed Degree impact With Uth Degree impact With Uth Degree impact With Uth Uth Degree impact With Uth Uth Uth Con irre reversed Degree impact Uth	out	2	5	8	5	75	High	-	High			
Plant encroachment Plant encroachment Plant encroachment Plant encroachment Plant encroachment Plant P		Existing/perm	itted access road	ds must be used	and the all othe	er measur	es must be follo	wed				
encroachment impact: With Without Degree impact reversed Degree on irre resource Threat biodiversity Threat biodiversity Threat Degree impact reversed Degree on irre resource With Uthout Degree on irre resource Degree on irre resource Soil erosion Nature			egetation clearing or disturbance may and have been fond to increase encroachment (cumulative impact)									
WithoutDegreeimpactreversedDegreeon irreresourceNatureimpact:WithWithWithoutDegreeDegreeimpact:WithDegreeon irrereversedDegreeimpactDegreeimpactreversedDegreeon irreresourceSoil erosionNature	act:	Vegetation cle										
Threat to biodiversity to Mithout Degree impact: Threat to biodiversity to Mithout Degree impact: With Without Degree impact reversed D	l	1	1	8	5	50	Medium	-	High			
Threat to biodiversity to Mature impact: With Without Degree impact: With Degree impact: With Solution in the mature impact for the	out	2	2	8	5	60	Medium	-	High			
on irre resourceThreattobiodiversityNature impact:WithWithWithoutDegree impact reversedDegree on irre resourceSoil erosionNature	ree to which act can be rsed:	Existing/perm										
biodiversity impact: With Without Degree impact reversed Degree on irre resource Soil erosion Nature	ree of impact irreplaceable urces:	The area is vi prone to invas	rtually undisturb sion	ed and in pristir	ne condition and	has a lot	of protected pla	ants and very				
Soil erosion Mature		Disturbance o	Disturbance of an area with high biodiversity will increase the probability of encroachment and biod									
Soil erosion Autor	1	1	4	6	5	55	Medium	-	High			
Soil erosion Autore	out	2	5	8	5	75	High	-	High			
Soil erosion Nature		vegetation cle	nitted access roa earing needs to b	e continuosly to	prevent the gro	wth of fo		followed and				
	Degree of impact on irreplaceable resources:Biodiversity is high along this route and thus prone to invasion											
	act:		egetation due to inimising soil ero					ion as vegetat	ion plays a major role in			
With	l	1	3	6	5	50	Medium	-	High			
Without	out	2	4	8	5	70	High	-	High			
		Degree to which impact can be Existing/permitted access roads must be used and the all other measures must be followed										

Potential		Extent	Duration	Magnitude	Probability	Significa	ince	Status				
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+a	l+m)*p)	(+ve or - ve)	Confidence			
	reversed:											
	Degree of impact on irreplaceable resources:	The area is vir erosion	tually undisturb	oed and there	no access road	s, to build	roads would in	ncrease soil				
Fauna												
Loss of faunal habitat with	Nature of impact:	Adverse impact										
clearance of	With	1	4	4	5	45	Medium	-	High			
vegetation within the 55m	Without	2	4	6	5	60	Medium	-	High			
servitude	Degree to which impact can be reversed:	species impacti the servitude s (especially arbo	e clearance of the vegetation should be restricted to the 55m servitude and only larger tree cies impacting which could potential impact on the lines should be removed. The vegetation of servitude should not be totally removed providing refuge habitat for remaining faunal species pecially arboreal species) e proposed alignment bisects the soutpansberg through the sand river gorge, rivers (non-									
	Degree of impact on irreplaceable resources:	perennial draina as well as suita forest rain frog lion, wild dog, c	age lines), seas able habitat for , soutpansberg heetah and whi	onally inundate several red lis flat lizard, mu	ed pans, rupicol sted faunal spec	ous outcro cies includi	os, northern mis ng giant bullfro	stbelt forest				
Direct impact on associated	Nature of impact:	Adverse impact										
fauna and	With	1	4	4	4	36	Medium	-	High			
interactions with structures and	Without	2	4	6	5	60	Medium	-	High			
personnel	Degree to which impact can be reversed:	Medium-restrict any faunal spec	ies. No illegal p	oaching or hunt	ing activities.		_					
	Degree of impact on irreplaceable resources:	The proposed perennial draina as well as suita forest rain frog lion, wild dog, c	age lines), seas able habitat for , soutpansberg	onally inundate several red lis flat lizard, mu	ed pans, rupicol sted faunal spec	ous outcro cies includi	os, northern mis ng giant bullfro	stbelt forest				
Avifauna												
Collision	Nature of impact:	Collision or red	data species wi	th the overhead	l line (usually th	e earth wir	re).					

Potential		Extent	Duration	Magnitude	Probability	Signifi	cance	Status					
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e-	+d+m)*p)	(+ve or - ve)	Confidence				
	With	1	4	4	4	36	Medium	-	Medium				
	Without	1	4	4	5	45	Medium	-	Medium				
	Degree to which impact can be reversed:	Low		•		·							
	Degree of impact on irreplaceable resources:	Medium											
Electrocution	Nature of impact:		perches on pylon and causes an electrical short circuit by physically bridging the air gap between live components and earthed components, resulting in death or severe injury.										
	With	1	4	2	3	21	Low	-	Medium				
	Without	1	4	6	5	55	Medium	-	Medium				
	Degree to which impact can be reversed:	Low											
	Degree of impact on irreplaceable resources:	Medium											
Nesting of birds on tower	Nature of impact:	Routine mainte	nance of pylons	and power line	s could result in	disturba	nce of certain bir	d species					
structures and	With	1	2	4	3	21	Low	-	Medium				
disturbance during routine	Without	2	2	4	4	32	Medium	-	Medium				
maintenance	Degree to which impact can be reversed:	High					•						
	Degree of impact on irreplaceable resources:	Medium											
Heritage													
It is anticipated th	hat the main impacts of	on heritage will o	ccur during the	construction ph	lase								
Visual													
Visual exposure to the powerline servitude,	Nature of impact:	close to private	e nature reserve	es. Sensitive vi	iewer locations i	in close p		n), specifically	mpacts, especially in and in the sand river gorge, e sense of place.				

Potential		Extent	Duration	Magnitude	Probability	Signific	ance	Status				
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	d+m)*p)	(+ve or - ve)	Confidence			
conductor	With	3	5	6	5	70	High	-	High			
cables and towers.	Without	3	4	6	5	65	High	-	High			
towers.	Degree to which impact can be reversed: Degree of impact	The impact car proximity to se option. In areas of high	nsitive viewer	ocations throu	gh careful route	e planning	, or by selectin	ig the no-go				
	on irreplaceable resources:	private nature r										
Social												
Perceived electromagnetic	Nature of impact:	The presence of on some proper										
fields impacts	With mitigation	1	3	2	1	6	Low	-	Medium			
on humans and animals during the operational	Without mitigation	1	5	4	2	20	Low	-	Medium			
phase	Degree to which impact can be reversed:	High – with imp	lementation of	relevant mitigal	tion measures							
	Degree of impact on irreplaceable resources:	N/a										
Loss of a sense of place/income	Nature of impact:	The presence of be spoilt	f powerlines par	ticularly in tour	ist attractions c	an result i	n tourists no lon	iger visiting th	ne area as their views will			
on game farms	With mitigation	1	1	2	3	12	Low	-	Medium			
 tourists want to see "africa" and the neuron 	Without mitigation	3	4	8	4	60	Medium	-	High			
and the power line can disturb the rustic african setting;	Degree to which impact can be reversed:	High – with imp	lementation of	relevant mitigal	tion measures							
amean setting,	Degree of impact on irreplaceable resources:	N/a										
Poor maintenance of	Nature of impact:	It is possible the	at access routes	can be of such	poor state that	maintene	ce of the power	line is not pos	sible			
the power line	With mitigation	1	1	2	2	8	Low	-	Medium to high			
access roads:	Without	1	4	8	4	52	Medium	-	Medium to high			

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status				
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence			
conflict between	mitigation											
eskom and the landowners on whose responsibility it	Degree to which impact can be reversed:	N/a										
is to do maintenance on these roads. Farmers use it more often but yet expect eskom to pay for all maintenance	Degree of impact on irreplaceable resources:	Put a firm negot	iated contract i	n place during t	he operational p	phase						
Impact of the power lines on	Nature of impact:	Where powerline	here powerlines are not visible or known, plane crashes can result and in turn electricty outages may occur									
aircraft as there	With mitigation	1	2	2	2	10	Low	-	Medium to high			
are airports within the study	Without mitigation	4	5	6	4	60	Medium	-	Medium to high			
area; one is the louis trichardt airport and the other is for light	Degree to which impact can be reversed:	High – with imp	lementation of r	elevant mitigat	ion measures							
aircraft on the road towards waterpoort from louis trichardt	Degree of impact on irreplaceable resources:	N/a										
decrease in property values	Nature of impact:	These can lead	ese can lead to economic losses									
and number of	With mitigation	1	3	4	1	8	Low	-	Medium to high			
visitors to lodges and	Without mitigation	2	5	6	3	39	Medium	-	Medium to high			
other areas that are popular with tourists due to	Degree to which impact can be reversed:	High – with imp	lementation of r	elevant mitigat	ion measures							

Potential		Extent	Duration	Magnitude	Probability	Significa	ince	Status					
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	l+m)*p)	(+ve or - ve)	Confidence				
the visual impacts of powerlines	Degree of impact on irreplaceable resources:	N/a											
Security issues as a result of	Nature of impact:												
the presence of	With mitigation	1	1	2	2	8	Low	-	Medium to high				
maintenance workers on	Without mitigation	1	1	4	4	24	Low	-	High				
properties	Degree to which impact can be reversed:	High – with imp	gh – with implementation of relevant mitigation measures										
	Degree of impact on irreplaceable resources:	The impact can	be high where e	endangered spe	cies such as rhi	no occur							
Land owners denying	Nature of impact:	This can result i	his can result in maintenance not occuring										
contractors	With mitigation	1	1	2	2	8	Low	-	Medium				
access to their properties	Without mitigation	1	1	8	4	40	Medium	-	High				
	Degree to which impact can be reversed:	High – with imp	lementation of r	relevant mitigat	ion measures								
	Degree of impact on irreplaceable resources:	N/a											
Poaching of game as well as	Nature of impact:	This is a high pr	This is a high probability										
stock theft and	With mitigation	1	1	0	1	2	Low	-	Medium to high				
theft of crops	Without mitigation	1	1	2	2	8	Low	-	Medium to high				
	Degree to which impact can be reversed:	High – with imp	lementation of r	relevant mitigat	ion measures								

Potential		Extent	Duration	Magnitude	Probability	Significa	ince	Status				
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence			
	Degree of impact on irreplaceable resources:	N/a										
impact on farming	Nature of impact:	During the oper	During the operational phase, impacts on farm actvities are likely to be very minimal									
activities such	With mitigation	1	1	0	1	2	Low	-	Medium to high			
as sowing, harvesting, and	Without mitigation	1	1	2	1	4	Low	-	Medium to high			
fire management programmes leading to	Degree to which impact can be reversed:	High – with imp	lementation of r									
economic losses	Degree of impact on irreplaceable resources:	N/a										
impact on farming	Nature of impact:	During the oper very minimal	ring the operational phase, impacts on activities and on guests to lodges and other tourist destinations are likely to be ry minimal									
activities such	With mitigation	1	1	0	1	2	Low	-	Medium to high			
as hunting in game farms	Without mitigation	1	1	2	1	4	Low	-	Medium to high			
leading to economic losses. Impacts can also be on	Degree to which impact can be reversed:											
guests in lodges leading to economic losses	Degree of impact on irreplaceable resources:	N/a	/a									
Increase in the voltage stability	Nature of impact:	An increased vo	Itage will ensure	e that activities	that were not a	ble to take	place will be po	ossible				
	With mitigation											
	Without mitigation	3	5	8	5	80	High	+	Medium			
Degree to which impact can be reversed:												

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status				
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence			
	Degree of impact on irreplaceable resources:	N/a										
An assurance of a reliable	Nature of impact:	Reliable electric	ado local municipality									
electricity	With mitigation	3	4	2	4	36	Medium	+	Medium			
supply	Without mitigation	2	1	6	4	36	Medium	+	Medium			
	Degree to which impact can be reversed:	N/a										
	Degree of impact on irreplaceable resources:	N/a										
Increase of electricity	Nature of impact:	In order to grov	n order to grow the economy of the makhado local municipality, electricity is vital									
supply making it available for	With mitigation											
agriculture, tourism and	Without mitigation	3	5	8	5	80	High	+	Medium			
other industries. The increase in electricity can	Degree to which impact can be reversed:	N/a										
also allow for the undertaking of other activities that may have been that may not have been possible prior to the improved elect.ricity supply	Degree of impact on irreplaceable resources:	N/a										
No more backlogs in	Nature of impact:	The absence of will be possible	backlogs in elec	tricity connection	ons can imply th	nat activities	s that can only t	take place wi	nere electricity is present			

Potential		Extent	Duration	Magnitude	Probability	Significa	ance	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+e	d+m)*p)	(+ve or - ve)	Confidence
electricity	With mitigation								
connections	Without mitigation	3	5	8	5	80	High	+	Medium
	Degree to which impact can be reversed:	N/a							
	Degree of impact on irreplaceable resources:	N/a							
The inadequate provision of	Nature of impact:								
electricity to	With mitigation								
services such as health facilities	Without mitigation	3	5	8	5	80	High	+	Medium
will cease	Degree to which impact can be reversed:	N/a							
	Degree of impact on irreplaceable resources:	N/a							
Electricity will be available to	Nature of impact:	The presence of	electricity to ru	ıral areas will ir	nprove the lives	s of many v	vho live in pover	ty	
numerous rural	With mitigation								
settlements that do not have this	Without mitigation	3	5	8	5	80	High	+	Medium
service	Degree to which impact can be reversed:	N/a							
	Degree of impact on irreplaceable resources:	N/a							
Decommissionin	g phase								
Agricultural pote	ential								
No decommissioni	ng impacts are anticip	oated							

Potential		Extent	Duration	Magnitude	Probability	Signifi	cance	Status					
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	-d+m)*p)	(+ve or - ve)	Confidence				
Flora													
Destruction of protected flora	Nature of impact:	Removal of pro	Removal of protected plant species due to the servitude										
	With	2	5	8	5	75	High	-	High				
	Without	2	5	8	5	75	High	-	High				
	Degree to which impact can be reversed:	wed											
	Degree of impact on irreplaceable resources:	prone to invasi	e area is virtually undisturbed and in pristine condition and has a lot of protected plants and very one to invasion										
Destruction of pristine habitat	Nature of impact:	Destruction an	d disturbance o	f a previously ur	ndisturbed veget	ation							
	With	1	5	8	5	70	High	-	High				
	Without	1	5	8	5	70	High	-	High				
	Degree to which impact can be reversed:	Existing/permitted access roads must be used and the all other measures must be followed											
	Degree of impact on irreplaceable resources:	Pristine habitats are prone to invasion/encroachment once disturbed. The ridge is high in biodiversity											
Vegetation clearance	Nature of impact:	Removal of veg	getation due to	servitudes, acce	ss roads and ere	ecting of t	he pylons						
	With	1	5	6	5	60	Medium	-	High				
	Without	1	5	8	5	70	High	-	High				
	Degree to which impact can be reversed:	Existing/permit	Existing/permitted access roads must be used and the all other measures must be followed										
	Degree of impact on irreplaceable resources:	Along this rout	e there is a lot	of protected plai	nt species								
Plant encroachment	Nature of impact:	Vegetation clea	aring or disturba	ance may and ha	ave been fond to	increase	encroachment (cumulative im	ipact)				
	With	1	2	8	5	55	Medium	-	High				

Potential		Extent	Duration	Magnitude	Probability	Signifi	cance	Status				
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	⊦d+m)*p)	(+ve or - ve)	Confidence			
	Without	1	3	8	5	60	Medium	-	High			
	Degree to which impact can be reversed:	Existing/permi	itted access road	ds must be used	and the all othe	er measur	es must be follo	wed				
	Degree of impact on irreplaceable resources:											
Threat to biodiversity	Nature of impact:	Disturbance of	isturbance of an area with high biodiversity will increase the probability of encroachment and biodi									
	With	1	5	8	5	70	High	-	High			
	Without	1	5	8	5	70	High	-	High			
	Degree to which impact can be reversed:	Existing/permi	Existing/permitted access roads must be used and the all other measures must be followed									
	Degree of impact on irreplaceable resources:	Biodiversity is	high along this	route and thus p	prone to invasion	n						
Soil erosion	Nature of impact:		egetation due to nimising soil ero		and servitudes v	vill increa	se the soil erosi	ion as vegetat	ion plays a major role in			
	With	1	2	2	5	25	Low	-	High			
	Without	1	3	4	5	40	Medium	-	High			
	Degree to which impact can be reversed:	Existing/permi	itted access road	ds must be used	and the all othe	er measur	es must be follo	wed				
	Degree of impact on irreplaceable resources:	Thre area is v erosion	virtually undistu	irbed and there	no access road	ds, to bui	ild roads would	increase soil				
Fauna												
Direct impact on associated	Nature of impact:	Adverse impac	Adverse impact									
fauna and	With	1	1	2	5	20	Low	-	High			
interactions with structures and	Without	2	1	4	5	35	Medium	-	High			
personnel	Degree to which impact can be			ons and lines meared servitude.		to the 5	5m servitude.	Rehabilitation				

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status					
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d-	+m)*p)	(+ve or - ve)	Confidence				
	reversed:												
	Degree of impact on irreplaceable resources:	The proposed perennial drains as well as suits forest rain frog lion, wild dog, c	age lines), seas able habitat for , soutpansberg	onally inundate several red lis flat lizard, mu	ed pans, rupicolosted faunal spec	ous outcrop: cies includin	s, northern mis ig giant bullfro	stbelt forest g, northern					
Avifauna													
No decommissioni	ng impacts are anticip	oated	ed										
Heritage													
No decommissioni	ng impacts are anticip	oated	d										
Visual													
Visual exposure to operations to dismantle and	Nature of impact:	impacts. Perce	ctivity within the servitude related to the dismantling and removal of power line infrastructure will not have significant visual npacts. Perceptions relating to the removal of visually intrusive objects might be positive in as far as visual impacts will be ecreased due to decommissioning.										
remove of	With	3	1	2	3	18	Low	+	High				
power line & substation	Without	3	1	2	3	18	Low	+	High				
infrastructure	Degree to which impact can be reversed:	Avoid unnecess	ary disturbance	of the natural	environment du	iring decomr	missioning oper	ations					
	Degree of impact on irreplaceable resources:	None											
Social													
Influx of job seekers	Nature of impact:	employment ra	ates in the ma . It is also possi	akhado local n ible that by the	nunicipality white time this powe	ich may co rline is deco	ontinue up to ommisioned, the	the period e size of the	t the background of low when the powerline is settlements close to this nase				
	With mitigation	1	1	0	1	2	Low	-	Medium to high				
	Without mitigation	1	2	2	2	10	Low	-	Medium to high				
	Degree to which impact can be	High – with imp	lementation of I	relevant mitigat	ion measures								

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status					
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence				
	reversed:							, ,					
	Degree of impact on irreplaceable resources:	N/a											
Health impacts as a result of	Nature of impact:	If toilet facilities	s on site are not	well managed,	these can lead	to adverse	health impacts	to the surrou	nding communities				
exposure to	With mitigation	1	1	0	1	2	Low	-	Medium to high				
sewage from construction camps and on	Without mitigation	1	1	6	3	24	Low	-	Medium to high				
construction camps	Degree to which impact can be reversed:	High – with imp	lementation of ı	relevant mitigat	ion measures								
	Degree of impact on irreplaceable resources:	N/a											
Health impacts from	Nature of impact:		here construction workers are infected with infectious diseases, these can be passed on to the community members or farm orkers in the area within which work is being undetaken										
construction	With mitigation	1	1	2	2	8	Low	-					
sites and camps as a result of infectious	Without mitigation	2	1	6	3	27	Low	-					
diseases	Degree to which impact can be reversed:	High – with imp	High – with implementation of relevant mitigation measures										
	Degree of impact on irreplaceable resources:	N/a											
Conduct of construction	Nature of impact:	It is possible th actions can aris		good relationsh	ips between coi	ntactors an	d community m	nembers, neg	ative as well as positive				
workforce; good relationships	With mitigation	2	1	2	2	10	Low	-	Medium to high				
between community	Without mitigation	2	1	6	4	36	Medium	-	Medium to high				
members/ farm workers and	Degree to which impact can be reversed:	High – with imp	lementation of I	relevant mitigat	ion measures								

Potential		Extent	Duration	Magnitude	Probability	Significa	ince	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence
eskom construction workers can result in issues such as sexual misconduct and the spread of sexually transmitted diseases	Degree of impact on irreplaceable resources:	N/a							
Conduct of construction	Nature of impact:	These can resul pronounced in t					backgrounds. Tł	nese differen	ces are likely to be more
workforce; bad	With mitigation	2	1	2	2	10	Low	-	Low
relationships between	Without mitigation	2	1	6	4	36	Medium	-	Low
community members/ farm workers and eskom	Degree to which impact can be reversed:	High – with imp	lementation of ı	relevant mitigat	ion measures				
construction workers leading to violence	Degree of impact on irreplaceable resources:	N/a							
Theft of material from camps and	Nature of impact:	Material can be targeted by crin		he sites where	decommissioni	ng is takir	ig place as mat	terial used ii	n electricity is often the
along	With mitigation	1	1	0	1	2	Low	-	Medium
construction sites	Without mitigation	2	1	8	4	44	Medium	-	Medium
	Degree to which impact can be reversed:	High – with imp	lementation of I	relevant mitigat	ion measures				
	Degree of impact on irreplaceable resources:								
Loss of crops	Nature of impact:	Land and crops	can be lost duri	ng the clearing	of the powerline	e corridor a	nd during the co	onstruction o	f the powerline
leading to	impact.								

Potential		Extent	Duration	Magnitude	Probability	Signifi	cance	Status				
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	+d+m)*p)	(+ve or - ve)	Confidence			
	Without mitigation	1	3	6	4	40	Medium	-	Medium to high			
	Degree to which impact can be reversed:	High – with imp	lementation of	relevant mitiga	tion measures							
	Degree of impact on irreplaceable resources:	N/a										
oss of land eading to	Nature of impact:	Grazing land ar	ea can be lost d	lue to clearing o	of land for the co	orridor as	well as during th	e construction	n of access roads			
economic losses	With mitigation	1	1	2	2	8	Low	-	Medium to high			
	Without mitigation	1	3	6	4	40	Medium	-	Medium to high			
	Degree to which impact can be reversed:	High – with imp	gh – with implementation of relevant mitigation measures									
	Degree of impact on irreplaceable resources:	• where the los	where the loss of land is permanent, eskom should discuss compensation with landowner									
Impacts on Farming	Nature of impact:	Construction ca	Construction can disturb activities on farms									
activities such	With mitigation	1	1	2	2	8	Low	-	Medium to high			
s sowing, arvesting, and	Without mitigation	1	1	8	3	30	Low	-	Medium to high			
ire nanagement programmes	Degree to which impact can be reversed:	High – with imp	lementation of	relevant mitiga	tion measures							
eading to economic losses	Degree of impact on irreplaceable resources:	N/a										
Damage to farm nfrastructure	Nature of impact:	This can lead to	conflicts with c	community men	nbers and farme	ers						
e.g. irrigation	With mitigation	1	1	2	1	4	Low	-	Medium to high			
equipment, gates, fences	Without mitigation	1	1	6	3	24	Low	-	Medium to high			

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status					
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence				
	Degree to which impact can be reversed:	High – with imp	lementation of r	relevant mitigat	ion measures								
	Degree of impact on irreplaceable resources:	N/a											
Security concerns as a	Nature of impact:	It is highly likely	rhino is present										
result of	With mitigation	1	1	2	4	16	Low	-	Medium to high				
poaching of game, stock	Without mitigation	1	1	10	4	48	Medium	-	Medium to high				
theft and crop theft	Degree to which impact can be reversed:	High – with imp	gh – with implementation of relevant mitigation measures										
	Degree of impact on irreplaceable resources:	The impact can	e impact can be high where endangered species such as rhino occur										
Security as a result of the	Nature of impact:		he mere presence of contruction workers in communities and especially on farms can lead to u hreatened by their presence										
presence of	With mitigation	1	1	2	2	8	Low	-	Medium to high				
workers on pfarms and communities	Without mitigation	2	1	8	3	33	Medium	-	Medium to high				
communities	Degree to which impact can be reversed:	High – with imp	High – with implementation of relevant mitigation measures										
	Degree of impact on irreplaceable resources:	N/a											
Safety of community	Nature of impact:	During decomm	issioning the dis	smatling of stru	ctures can resul	t in possibl	injury to huma	ns and anima	ils				
members/farm	With mitigation	1	1	2	1	4	Low	-	Medium				
workers/animals	Without mitigation	1	1	6	2	16	Low	-	Medium				
	Degree to which impact can be reversed:	High – with imp											

Proteining act Mitigation (e) (d) (m) (p) (s=(e+d+m)*p) (+ve or - confidence Poor Observe of impact in impact. N/a Impact.	Potential		Extent	Duration	Magnitude	Probability	Significa	ance	Status	
on increptaceable resources: N/a Poor maintenance conflict between access roads. Statum access roads. Statum access roads. Statum access roads. Statum access roads. Statum access roads. Statum andowner so whose responsibility is to do maintenance. Nature is possible that access routes can be of such poor state that maintenece of the powerline is not possible. Medium to high Degree to which impact can be responsibility is to do maintenance. 1 1 2 2 8 Low - Medium to high Degree to which impact can be responsibility is to do maintenance. 1 4 8 4 52 Medium - Medium to high Degree of impact in orreptaceable eskom to pay for all maintenance. High - with implementation of relevant mitigation measures - Medium to high Degree of impact in orreptaceable eskom to pay for all maintenance. - Medium to high Degree of impact in orreptaceable eskom to pay for all maintenance. - Medium to high Degree of impact in orreptaceable eskom to pay for all maintenance. N/a - Medium to high Degree of impact eskom to pay for all maintenance. - - Medium to high Degree of impact eskom to pay for all maintenance. - - - - Vithout 2 - - - - - Medium to high - <th></th> <th>Mitigation</th> <th>(e)</th> <th>(d)</th> <th>(m)</th> <th>(p)</th> <th>(s=(e+d</th> <th>l+m)*p)</th> <th></th> <th>Confidence</th>		Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	l+m)*p)		Confidence
maintenance of the powerine is not possible that access routes can be of such poor state that maintence of the powerine is not possible that between access routes can be of such poor state that maintence of the powerine is not possible that between access routes can be of such poor state that maintence of the powerine is not possible that between access routes can be of such poor state that maintence of the powerine is not possible that between access routes can be of such poor state that maintence of the powerine is not possible that between access routes can be of such poor state that maintence of the powerine is not possible that between access routes can be of such poor state that maintence of the powerine is not possible that between access routes can be of such poor state that maintence of the powerine is not possible that between access routes can be of such poor state that maintence of the powerine is not possible that between access routes can be of such poor state that maintence of the powerine is not possible that between access routes can be of such poor state that maintence of the powerine is not possible that access routes can be of such poor state that maintence of the powerine is not possible. Degree of impact is not possible that access routes can be of such poor state that maintence of the powerine is not possible. Heading that the high access routes can be of such poor state that maintence of the powerine is not possible. Medium to high access routes representes can be of such poor state that maintence of the powerine is not possible. Degree of impact is not possible that access routes routes and the power of the powerine is not possible. Not powerine is not possible. Not powerine is not possible. Medium to high access routes		on irreplaceable	N/a							
access roads: conflict between initigation 1 4 8 4 52 Medium - Medium to high escond and the landowners on whose responsibility it its to do maintenance on these roads. Notation of relevant mitigation measures - Medium - Medium to high Degree of impact on irreplaceable resources: Degree of impact on irreplaceable resources: N/a - - Medium - Medium to high Value Degree of impact on irreplaceable resources: Degree of impact on irreplaceable N/a - - Medium to high Value Degree of impact on irreplaceable resources: N/a - - - - - - Medium - Medium to high Value Degree of impact on irreplaceable resources: Degree of impact N/a - <t< th=""><th></th><th></th><th>It is possible th</th><th>at access routes</th><th>s can be of such</th><th>n poor state that</th><th>: maintened</th><th>e of the power</th><th>line is not pos</th><th>sible</th></t<>			It is possible th	at access routes	s can be of such	n poor state that	: maintened	e of the power	line is not pos	sible
conflict between eskom and the landowners on whose responsibility it is to do maintenance on these roads. Farmers use it more often but yet expect eskom to pay for all versed: 1 4 8 4 52 Medium - Medium to high Willout 1 4 8 4 52 Medium - Medium to high Indowners on whose responsibility it is to do maintenance on on irreplaceable resources: High - with implementation of relevant mitigation measures Implementation of relevant mitigati		With mitigation	1	1	2	2	8	Low	-	Medium to high
Iandowners on whose responsibility it is to do maintenance on these roads. Degree of impact can be reversed: High - with implementation of relevant mitigation measures Image: State S	conflict between	mitigation	1	4	8	4	52	Medium	-	Medium to high
is to do maintenance on Sample of impact provide of these roads. Farmers use it more often but yet expect eskom to pay for all maintenance Cumulative impacts Agricultural potential No cumulative impacts are anticipated Flora Plant encroachment Mithout 1 1 3 6 5 50 Medium - Hi impact: With 1 1 3 6 5 50 Medium - Hi impact: With 1 1 3 6 5 50 Medium - Hi impact: With 1 1 8 8 5 70 High - Hi Degree to which, impact can be reversed: Degree of impact The area is virtually undisturbed and in pristine condition and has a lot of protected plants and very	landowners on whose	impact can be	High – with imp	lementation of	relevant mitiga	tion measures				
Magnicultural potential No cumulative impacts are anticipated Flora Plant encroachment encroachment Vegetation clearing or disturbance may and have been fond to increase encroachment With 1 3 6 5 50 Medium - Hi Without 2 4 8 5 70 High - Hi Degree to which impact can be reversed: Existing/permitted access roads must be used and the all other measures must be followed encrease for the impact can be reversed: The area is virtually undisturbed and in pristine condition and has a lot of protected plants and very Impact can be root invasion	is to do maintenance on these roads. Farmers use it more often but yet expect eskom to pay for all	on irreplaceable	N/a							
No cumulative impacts are anticipated Flora Plant encroachment Nature of Vegetation clearing or disturbance may and have been fond to increase encroachment With 1 3 6 5 50 Medium - Without 2 4 8 5 70 High - Hi Degree to which impact can be reversed: Degree of impact The area is virtually undisturbed and in pristine condition and has a lot of protected plants and very prone to invasion	Cumulative imp	acts								
Flora Nature impact: of impact: Vegetation clearing or disturbance may and have been fond to increase encroachment With 1 3 6 5 50 Medium - Hi Without 2 4 8 5 70 High - Hi Degree to which impact can be reversed: Existing/permitted access roads must be used and the all other measures must be followed Existing/permitted access roads must be used and the all other measures must be followed Image: Control of the protected plants and very prone to invasion	Agricultural pot	ential								
Plant encroachment Nature impact: of protect Vegetation clearing or disturbance may and have been fond to increase encroachment With 1 3 6 5 50 Medium - Hi Without 2 4 8 5 70 High - Hi Degree to which impact can be reversed: Existing/permitted access roads must be used and the all other measures must be followed Image: Clear of the area is virtually undisturbed and in pristine condition and has a lot of protected plants and very Image: Clear of the area is virtually undisturbed and in pristine condition and has a lot of protected plants and very Image: Clear of the area is virtually undisturbed and in pristine condition and has a lot of protected plants and very Image: Clear of the area is virtually undisturbed and in pristine condition and has a lot of protected plants and very Image: Clear of the area is virtually undisturbed and in pristine condition and has a lot of protected plants and very Image: Clear of the area is virtually undisturbed and in pristine condition and has a lot of protected plants and very	No cumulative im	pacts are anticipated								
With 1 3 6 5 50 Medium - Hi Without 2 4 8 5 70 High - Hi Degree to which impact can be reversed: Existing/permitted access roads must be used and the all other measures must be followed - Hi Degree of impact on irreplaceable The area is virtually undisturbed and in pristine condition and has a lot of protected plants and very prone to invasion The area is virtually undisturbed and in pristine condition and has a lot of protected plants and very Image: Content of the analysis	Flora Plant	Nature of	Vegetation clea	ring or disturba	nce may and ha	ave been fond to) increase e	encroachment		
Degree to which impact can be reversed: Existing/permitted access roads must be used and the all other measures must be followed Degree of impact on irreplaceable The area is virtually undisturbed and in pristine condition and has a lot of protected plants and very prone to invasion			1	3	6	5	50	Medium	-	Hi
impact can be reversed: Impact can be reversed: <th></th> <th>Without</th> <th>2</th> <th>4</th> <th>8</th> <th>5</th> <th>70</th> <th>High</th> <th>-</th> <th>Hi</th>		Without	2	4	8	5	70	High	-	Hi
on irreplaceable prone to invasion		impact can be reversed:								
		on irreplaceable			ed and in pristin	e condition and	has a lot c	of protected pla	ints and very	

Potential		Extent	Duration	Magnitude	Probability	Signific	ance	Status					
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	d+m)*p)	(+ve or - ve)	Confidence				
Soil erosion	Nature of impact:	Removal of veg preventing/mini			and servitudes	will increa	se the soil eros	ion as vegetat	ion plays a major role in				
	With	1	3	8	5	60	Medium	-	Hi				
	Without	2	4	8	5	70	High	-	Hi				
	Degree to which impact can be reversed:	5.1	kisting/permitted access roads must be used and the all other measures must be followed										
	Degree of impact on irreplaceable resources:	The area is vir erosion	tually undisturb	bed and there	no access road	ls, to buil	d roads would	increase soil					
Fauna		1											
Loss of faunal habitat	Nature of impact:					-							
	With	2	4	6	5	60	Medium		High				
	Without	2	4	8	5	70	High		High				
	Degree to which impact can be reversed:	Extremely limit sand river gorge	e	-	-	-		-					
	Degree of impact on irreplaceable resources:	The proposed perennial draina as well as suita forest rain frog lion, wild dog, c	age lines), seas able habitat for , soutpansberg	onally inundate several red lis flat lizard, mu	ed pans, rupicol sted faunal spe	ous outcro cies incluo	ops, northern n ling giant bullf	nistbelt forest rog, northern					
Direct impact on associated	Nature of impact:	Adverse impact											
fauna and	With	1	4	4	4	36	Medium		High				
interactions with structures and	Without	2	4	6	5	60	Medium		High				
personnel	Degree to which impact can be reversed:	Restrict constru	ction activities t	to the 55m serv	itude. No intent	ional killir	ng of any faunal	species.					
	Degree of impact on irreplaceable resources:	The proposed perennial draina as well as suita forest rain frog lion, wild dog, c	age lines), seas able habitat for , soutpansberg	onally inundate several red lis flat lizard, mu	ed pans, rupicol sted faunal spe	ous outcro cies incluo	ops, northern m ding giant bullf	nistbelt forest rog, northern					

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence
Avifauna									
No cumulative imp	pacts are anticipated								
Heritage									
No cumulative imp	pacts are anticipated								
Visual									
Increased visual exposure to power line infrastructure.	Nature of impact:	intensified impr lines are observ Lastly cumulativ	ession of a pre- ed from location e impacts arise of images and	existing power ns from which r through an inc impressions o	line in the lands nore than one p rrease in the inc	cape. It will ower line w idence of se	l also occur as ould now be se quential percep	an increased en in differer ptions of diffe	e to an extended and/or perception where power at parts of the landscape. rent power lines through which are continuously
	With	3	5	0	3	24	Low	-	High
	Without	3	5	6	5	70	High	-	High
	Degree to which impact can be reversed:	The impact car material. Active						construction	
	Degree of impact on irreplaceable resources:	In areas of high private nature r					ch as the soupa	ansberg and	
Social									
Poaching of game impacting	Nature of impact:	It is highly likely	y that theft of g	ame and stock	can occur. Theft	c of game ca	n be higher on	farms where	rhino is present
on the loss of	With	2	3	4	3	27	Low	-	Medium to high
game and in turn affecting	Without	5	5	8	4	72	High	-	High
the tourism industry of the municipality and	impact can be reversed:	Where possible, the construction operational pha	n and decommis se	ssioning phases	s as well as dur	ing mainter			
that of the country at large	Degree of impact on irreplaceable resources:	The impact will	-						
Loss of a sense of place		Tourists visit pl them	aces to relax a	nd be immerse	d in nature the	presence o	f powerlines ca	an therefore	spoil this experience for
resulting in	With	1	2	2	2	10	Low	-	Medium to high

Impact	Mitigation					ty Significance		Status	Confidence				
	(e) (d) (m) (p) (s=(e+d+m)*p)		(d)	(m)	(p)	(s=(e+	-d+m)*p)	(+ve or - ve)	Confidence				
	Without	3	4	6	3	39	Medium	-	Medium to high				
in turn impact	Degree to which impact can be reversed:		iase with visual impact specialist to get the best mitgation measures; other suggested measures yould be to use a tower type with the least adverse visual impact										
growth of the	Degree of impact on irreplaceable resources:	N/a											
	Nature of impact:								ado local municipality a				
	With	3	4	6		area and in turn an improv 52 Medium		+	Medium				
stability of the	Without	3	4	6	4	52	Medium	+	Medium				
existing	Degree to which impact can be reversed:	N/a	I										
such as lodges I and other C	Degree of impact on irreplaceable resources:	N/a											
No-go alternative	1												
Agricultural poter	ntial												
in the event that th	ne transmission lines	are not construc	ted, there will I	be no impact on	the agricultural	potential	, therefore the s	status quo will	remain.				
Flora													
	ne transmission lines	are not construc	ted, there will I	be no impact on	the flora, there	fore the s	tatus quo will re	emain.					
Fauna													
	ne transmission lines	are not construc	ted, there will I	be no impact on	the fauna, ther	efore the	status quo will ı	emain.					
Avifauna						<u> </u>							
n the event that th	ne transmission lines	are not construc	ted, there will I	be no impact on	the avifauna, th	herefore t	he status quo w	III remain.					

Potential		Extent	Duration	Magnitude	Probability	Significa	ance	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+c	d+m)*p)	(+ve or - ve)	Confidence
In the event that t	the transmission lines	are not construct	ted, there will b	e no impact on	heritage sites,	therefore tl	he status quo wi	ll remain.	
Visual									
In the event that t	the transmission lines	are not construct	ted, there will b	e no visual imp	act, therefore th	he status q	uo will remain.		
Social									
Powerlines linking the tabor substation to the new	Nature of impact:	weakest part of	the northern g rlines linking th	rid network du ne tabor substa	e to being oper ation to the ne	rated beyo w bokmaki	nd its reliability. irie (nzhelele) s	There is the ubstation in	d spencer power is the erefore a need for a new order to strengthen the astructure
bokmakirie	With	2	1	2	1	5	Low	-	Medium to high
(nzhelele) substation will	Without	4	5	8	3	51	Medium	-	Medium to high
not be constructed.	Degree to which impact can be reversed:	Construct the po	owerlines						
	Degree of impact on irreplaceable resources:	N/a							
No increase in	Nature of							nt being shu	t down leading to effects
the voltage stability	impact: With	such as loss of o	lata and the ina	bility to undert	<u>ake certain actv</u> 1 1	dities on far	ms etc.	_	Medium
Stubility	Without	3	5	8	3	48	Medium	-	Medium
	Degree to which impact can be reversed:	Ensure that the	•		3		Medium		
	Degree of impact on irreplaceable resources:	N/a							
No increase and assurance of electricity	Nature of impact:		and mining se	ectors. A lack					the agricultural, tourism, growth of the makhado
supply making it	With	1	1	2	1	4	Low	-	Medium
unavailable for agriculture,	Without	3	5	8	4	64	High	-	Medium
tourism and other industries	Degree to which impact can be reversed:	Increase electric and ensure that			such as the co	nstruction	of the proposed	l power line	

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence
as well as allowing for the undertaking of other activities that may not have been possible before. The absence of an increase in electricity may also hinder the undertaking of other activities that may only be possible with electricity supply	Degree of impact on irreplaceable resources:	N/a				<u>.</u>			
Continuation of backlogs in	Nature of impact:	The backlogs ar use of electricity					nortages. The re	endering of s	services that require the
electricity	With	2	1	4	2	14	Low	-	Medium to high
connections	Without	3	4	8	4	60	Medium	-	Medium to high
	Degree to which impact can be reversed: Degree of impact on irreplaceable resources:	The makhado lo increased budg adequate mater N/a	ets to allow for						
Continuation of the inadequate	Nature of impact:	In services such	as health facil	ities, lack of ele	ctricity can resu	ılt in losses	of lives		
provision of	With	1	1	0	2	4	Low	-	Medium
electricity to critical services	Without	3	5	10	4	72	High	-	Medium
such as health facilities	Degree to which impact can be reversed:	The necessity o that adverse im	•		is imperative ar	nd the prop	osed powerline	can ensure	

Potential		Extent	Duration	Magnitude	Probability	Significa	ince	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d+m)*p)		(+ve or - ve)	Confidence
	Degree of impact on irreplaceable resources:	N/a							
Continuation of the unavailability of	Nature of impact:		g and cooking.						utting of trees to use the ion and the possible loss
electricity in	With	1	1	2	2	8	Low	-	Medium
numerous rural settlements	Without	3	5	8	4	64	High	-	Medium
Sectionents	Degree to which impact can be reversed:	Provide electrici	ty to rural areas	5					
	Degree of impact on irreplaceable resources:	N/a							

Detential		Extent	Duration	Magnitude	Probability	Significa	ance	Status	
Potential impact	Mitigation	(e)	(d)	(m)	(p)		l+m)*p)	(+ve or - ve)	Confidence
Construction ph	ase								
Agricultural pote	ential								
Deterioration of soil resource	impact:	Loss of agricultu							
	With	1	4	2	2	14	Low	-	
	Without	1	4	4	3	27	Low	-	
	Degree to which impact can be reversed:	Reversal should	be straightforw	ard after remov	val of infrastruct	ture			
	Degree of impact on irreplaceable resources:	Low to none							
Deterioration of soil resource	Nature of impact:	Soil erosion haz	ard due to cons	truction activition					
	With	1	1	2	2	8	Low	-	
	Without	2	2	4	3	24	Low	-	
	Degree to which impact can be reversed:	If erosion is cau	sed, reversal is	often difficult a	nd time-consun	ning, espec	ially in steeper a	areas	
	Degree of impact on irreplaceable resources:	Moderate							
Flora									
Destruction of protected flora	Nature of impact:	High							
	With	1	5	8	5	70	High	-	High
	Without	1	5	8	5	70	High	-	High
	Degree to which impact can be reversed:	Existing/permitt	ed access roads	s must be used	and the all othe	er measures	s must be follow	ed	

Table 9.7: Detailed assessment of identified impacts for Alternative 5

Potential		Extent	Duration	Magnitude	Probability	Signific	cance	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	d+m)*p)	(+ve or - ve)	Confidence
	Degree of impact on irreplaceable resources:	Along this rout	e there is a lot	of protected plan	nt species				
Destruction of pristine habitat	Nature of impact:	Destruction an	d disturbance o	f a previously ur	ndisturbed veget	ation			
	With	1	5	8	5	70	High	-	High
	Without	2	5	8	5	75	High	-	High
	Degree to which impact can be reversed:	Existing/permi	tted access road	ls must be used	and the all othe	er measure	es must be follo	wed	
	Degree of impact on irreplaceable resources:	Pristine habita	ts are prone to i	nvasion/encroad	chment once dis	turbed			
Vegetation clearance	Nature of impact:	Removal of ve	getation due to	servitudes, acce	ss roads and er	ecting of t	he pylons		
	With	1	5	8	5	70	High	-	High
	Without	1	5	8	5	70	High	-	High
	Degree to which impact can be reversed:	Existing/permi	tted access road	ls must be used	and the all othe	er measure	es must be follo	wed	
	Degree of impact on irreplaceable resources:	-			nt species and th			vays clear	
Plant encroachment	Nature of impact:	Vegetation cle	aring or disturba	ance may and ha	ave been fond to	increase	encroachment		
	With	1	2	4	3	21	Low	-	High
	Without	1	3	6	4	<mark>40</mark>	Medium	-	High
	Degree to which impact can be reversed:	Existing/permi	tted access road	ls must be used	and the all othe	er measure	es must be follo	wed	
	Degree of impact on irreplaceable resources:	The area is vir prone to invas		ed and in pristir	ne condition and	has a lot	of protected pla	ants and very	
Threat to biodiversity	Nature of impact:	Disturbance of	an area with hi	gh biodiversity v	will increase the	probabilit	y of encroachm	ent and biodiv	ersity will be lost.

Potential	Mitigation	Extent	Duration	Magnitude	Probability	Significa	ance	Status				
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+o	l+m)*p)	(+ve or - ve)	Confidence			
	With	1	4	8	5	65	High	-	High			
	Without	1	4	8	5	65	High	-	High			
	Degree to which impact can be reversed:	Existing/permit	ted access road	s must be used	and the all othe	er measure	s must be follov	ved				
	Degree of impact on irreplaceable resources:	Biodiversity is h										
Soil erosion	Nature of impact:	Removal of veg preventing/min			-	will increas	e the soil erosi	on as vegetat	ion plays a major role in			
	With	1	1	2	2	8	Low	-	High			
	Without	2	1	2	3	15	Low	-	High			
	Degree to which	Existing/permit	12315Low-isting/permitted access roads must be used and the all other measures must be followed									
	impact can be reversed:											
		The area is vir erosion/ the are		ped and there	no access road	ls, to builc	l roads would i	increase soil				
Fauna	reversed: Degree of impact on irreplaceable			oed and there	no access road	ls, to builc	l roads would i	increase soil				
Fauna Loss of faunal habitat	reversed: Degree of impact on irreplaceable		ea is flat	oed and there	no access road	ls, to build	l roads would i	increase soil				
Loss of faunal	reversed: Degree of impact on irreplaceable resources:	erosion/ the are	ea is flat	oed and there	no access road	ls, to build	I roads would i	increase soil	High			
Loss of faunal	reversed: Degree of impact on irreplaceable resources: Nature of impact:	erosion/ the are Adverse impact	ea is flat					increase soil	High High			
Loss of faunal	reversed: Degree of impact on irreplaceable resources: Nature of impact: With	erosion/ the are Adverse impact 2 2 Realign preferr activities to the	ea is flat 4 4 ed alignment f 55m servitude.	6 6 to avoid sensi	4 5 tive habitats a	48 60 nd restrict	Medium Medium vegetation cle	earance and	-			
Loss of faunal	reversed: Degree of impact on irreplaceable resources: Nature of impact: With Without Degree to which impact can be	erosion/ the are Adverse impact 2 2 Realign preferr	ea is flat 4 4 ed alignment f 55m servitude. alternative ali rea, rivers (nor reral red listed	6 6 to avoid sensi gnment 5 bis p-perennial dra faunal specie	4 5 tive habitats a ects the north inage lines), ru s including gia	48 60 nd restrict picolous o nt bullfrog	Medium Medium vegetation cle dary of the s utcrops as well , southern afri	earance and outpansberg	-			
Loss of faunal	reversed: Degree of impact on irreplaceable resources: Nature of impact: With Without Degree to which impact can be reversed: Degree of impact on irreplaceable resources:	erosion/ the are Adverse impact 2 2 Realign preferr activities to the The proposed conservation an habitat for sev	4 4 55m servitude. alternative ali rea, rivers (nor reral red listed gecko, ground p	6 6 to avoid sensi gnment 5 bis p-perennial dra faunal specie	4 5 tive habitats a ects the north inage lines), ru s including gia	48 60 nd restrict picolous o nt bullfrog	Medium Medium vegetation cle dary of the s utcrops as well , southern afri	earance and outpansberg	-			
Loss of faunal habitat Direct impact on	reversed: Degree of impact on irreplaceable resources: Nature of impact: With Without Degree to which impact can be reversed: Degree of impact on irreplaceable resources: Nature of	erosion/ the are Adverse impact 2 2 Realign preferr activities to the The proposed conservation at habitat for sev mullers' velvet	4 4 55m servitude. alternative ali rea, rivers (nor reral red listed gecko, ground p	6 6 to avoid sensi gnment 5 bis p-perennial dra faunal specie	4 5 tive habitats a ects the north inage lines), ru s including gia	48 60 nd restrict picolous o nt bullfrog	Medium Medium vegetation cle dary of the s utcrops as well , southern afri	earance and outpansberg	-			

Potential		Extent	Duration	Magnitude	Probability	Significa	ince	Status			
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence		
structures and personnel	Degree to which impact can be reversed:	Restrict constru	ction activities t	to the 55m serv	itude. No intent	ional killing) of any faunal s	pecies.			
	Degree of impact on irreplaceable resources:	conservation ar habitat for sev	The proposed alternative alignment 5 bisects the northern boundary of the soutpansberg conservation area, rivers (non-perennial drainage lines), rupicolous outcrops as well as suitable nabitat for several red listed faunal species including giant bullfrog, southern african python nullers' velvet gecko, ground pangolin, brown hyaena, wild dog and cheetah.								
Avifauna											
Habitat destruction	Nature of impact:	Permanent rem	oval of habitat t	hat is used, or	may be used, b	y avifauna.					
	With	1	2	4	3	21	Low		Medium		
	Without	1	2	4	5	35	Medium		Medium		
	Degree to which impact can be reversed:	Partially reversi	ble				1				
	Degree of impact on irreplaceable resources:	Low									
Disturbance	Nature of impact:	Noise and move	ment, from stat	ff and machiner	y, may disturb a	avifauna, ai	nd nests may be	e disturbed.			
	With	1	1	4	3	18	Low		Medium		
	Without	2	1	6	5	45	Medium		Medium		
	Degree to which impact can be reversed:	Irreversible		-							
	Degree of impact on irreplaceable resources:	Medium									
Heritage											
Destruction of	Nature of impact:	Adverse impact	on a identified	heritage sites a	long alternative						
heritage sites	With mitigation	3	5	2	5	50	Medium	-	High		
and features	Without mitigation	3	5	10	5	90	High	-	High		

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status				
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence			
	Degree to which impact can be reversed:	Medium	Medium									
	Degree of impact on irreplaceable resources:	Not applicable							High			
Visual												
Transformation of the visual quality of the	Nature of impact:		ease the prese	nce and mover	ment of contract	tors and co	nstruction vehi	cles, which v	character. Construction vill create adverse visual			
landscape	With	3	2	6	5	55	Medium	-	High			
	Without	3	2	6	5	55	Medium	-	High			
	Degree to which impact can be reversed:	The impact car material. Active	e rehabilitation	of vegetation w	here it has been	cleared, is	also required.					
	Degree of impact on irreplaceable resources:	In areas of high private nature r					ch as the soupa	ansberg and				
Social												
Theft of material from camps and	Nature of impact:	Material can be stolen even alor				ong the rou	ite especially a	s material us	ed in powerlines is often			
along	With mitigation	1	1	0	1	2	Low	-	Medium			
construction sites	Without mitigation	2	1	8	4	44	Medium	-	Medium			
	Degree to which impact can be reversed:	High – with imp	lementation of	relevant mitigat	ion measures							
	Degree of impact on irreplaceable resources:											
Negative attitudes	Nature of impact:	It is possible t livelihoods will o			ners, game far	mers owne	rs for whom v	risual impact	s are important to their			
towards the	With mitigation	2	1	2	2	10	Low	-	Medium			
project and the formation of	Without mitigation	2	1	6	3	27	Low	-	Medium			

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status					
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence				
community groups, ngo's, in response to	Degree to which impact can be reversed:	High – with imp	lementation of r	elevant mitigat	ion measures								
the project;	Degree of impact on irreplaceable resources:	N/a											
Land owners denying	Nature of impact:	This would be e	xpected from la	ndowners who a	are opposed to t	the project							
contractors	With mitigation	1	1	2	2	8	Low	-	Medium				
access to their properties	Without mitigation	1	2	6	4	36	Medium	-	Medium				
	Degree to which impact can be reversed:	High – with imp	lementation of r	elevant mitigat	ion measures								
	Degree of impact on irreplaceable resources:	N/a											
Loss of crops leading to	Nature of impact:	Land and crops	d and crops can be lost during the clearing of the powerline corridor and during the construction of the powerline										
economic losses	With mitigation	1	1	2	2	8	Low	-	Medium to high				
	Without mitigation	1	3	6	4	40	Medium	-	Medium to high				
	Degree to which impact can be reversed:	High – with imp	High – with implementation of relevant mitigation measures										
	Degree of impact on irreplaceable resources:	N/a											
Loss of land Nature of leading to impact: of Grazing land area can be lost due to clearing of land for the corridor as well as during the co									n of access roads				
economic losses	With mitigation	1	1	2	2	8	Low	-	Medium to high				
	Without mitigation	1	3	6	4	40	Medium	-	Medium to high				
	Degree to which impact can be reversed:	High – with imp	igh – with implementation of relevant mitigation measures										

Potential		Extent	Duration	Magnitude	Probability	Significa	ance	Status				
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+o	d+m)*p)	(+ve or - ve)	Confidence			
	Degree of impact on irreplaceable resources:	• where the los	s of land is pern	nanent, eskom	should discuss o	compensati	on with landowr	ner				
Impacts on farming	Nature of impact:	Construction ca	n disturb activit	ies on farms								
activities such	With mitigation	1	1	2	2	8	Low	-	Medium to high			
as sowing, harvesting, and fire	Without mitigation	1	1	8	3	30	Low	-	Medium to high			
management programmes leading to	Degree to which impact can be reversed:	High – with imp	n – with implementation of relevant mitigation measures									
economic losses	Degree of impact on irreplaceable resources:	N/a	a									
Damage to farm infrastructure	Nature of impact:	This can lead to conflicts with community members and farmers 1 1 2 1 4 Low - Medium										
e.g. irrigation	With mitigation	1	1 1 2 1 4 Low -									
equipment, gates, fences	Without mitigation	1	1 1 6 3 24 Low -									
	Degree to which impact can be reversed:	High – with imp	High – with implementation of relevant mitigation measures									
	Degree of impact on irreplaceable resources:	N/a										
Security concerns as a	Nature of impact:	It is highly likel	y that theft of g	ame and stock	can occur. Thef	t of game o	an be higher on	farms where	e rhino is present			
result of	With mitigation	1	1	2	4	16	Low	-	Medium to high			
poaching of game, stock theft and crop	Without mitigation	1	1	10	4	48	Medium	-	Medium to high			
theft	Degree to which impact can be reversed:	High – with imp	lementation of	relevant mitigal	tion measures							
	Degree of impact on irreplaceable resources:	The impact can	be high where e	endangered spe	ecies such as rhi	no occur						

Potential		Extent	Duration	Magnitude	Probability	Significa	ance	Status				
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+e	d+m)*p)	(+ve or - ve)	Confidence			
Security as a result of the	Nature of impact:	The mere prese threatened	nce of construc	tion workers in	communities a	nd especia	lly on farms car	n lead to une	ase and people may feel			
presence of	With mitigation	1	1	2	2	8	Low	-	Medium to high			
workers on pfarms and communities	Without mitigation	2	1	8	3	33	Medium	-	Medium to high			
communities	Degree to which impact can be reversed:	High – with imp	lementation of I	elevant mitiga	tion measures							
	Degree of impact on irreplaceable resources:	N/a										
Safety of community	Nature of impact:	Construction sit	es are highly ha	zardous enviro	nments and the	safety of p	people and anim	als can be co	mpromised			
members/farm workers/animals	With mitigation	1	1	2	1	4	Low	-	Medium			
workers/ammais	Without mitigation	1	1	6	2	16	Low	-	Medium			
	Degree to which impact can be reversed:	High – with imp										
	Degree of impact on irreplaceable resources:	N/a										
Poor maintenance of	Nature of impact:	It is possible that	at access routes	can be of such	poor state that	: maintenai	nce of the power	line is not po	ssible			
the power line	With mitigation	1	1	2	2	8	Low	-	Medium to high			
access roads: conflict between	Without mitigation	1	4	8	4	52	Medium	-	Medium to high			
eskom and the landowners on whose responsibility it	Degree to which impact can be reversed:	High – with imp	lementation of I	relevant mitigat	tion measures							
is to do maintenance on these roads. Farmers use it more often but yet expect	Degree of impact on irreplaceable resources:	N/a										

Potential		Extent	Duration	Magnitude	Probability	Signifi	cance	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e	+d+m)*p)	(+ve or - ve)	Confidence
eskom to pay for all maintenance									
Loss of a sense of place/income		The presence of be spoilt	f powerlines pa	rticularly in tour	rist attractions c	an result	in tourists no lo	nger visiting th	e area as their views will
on game farms		1	1	2	2	8	Low	-	Medium to high
 tourists want to see "africa"and the 	mitigation	1	1	8	4	40	Medium	-	Medium to high
"africa"and the power line can disturb the rustic african	impact can be reversed:	High – with im	plementation of	relevant mitiga	tion measures				
setting;	Degree of impact on irreplaceable resources:								
Operation phase	e								
Agricultural pot	ential								
It is anticipated t	hat the main impacts of	on agricultural po	otential will occu	Ir during the co	nstruction phase	9			
Flora									
Destruction of protected flora	Nature of impact:	Removal of pro	tected plant spe	ecies due to the	servitude				
	With	1	5	8	5	70	High	-	High
	Without	2	5	8	5	75	High	-	High
	Degree to which impact can be reversed:	Existing/permit	ted access road	ls must be used	and the all othe	er measu	res must be follo	wed	
	Degree of impact on irreplaceable	Along this rout	e there is a lot o	of protected plan	nt species				
	resources:					-			
Destruction of pristine habitat		Destruction and	d disturbance of	a previously ur	ndisturbed veget	tation			
	Nature of	Destruction and	d disturbance of	a previously ur	ndisturbed veget	tation 50	Medium	-	High

Potential		Extent	Duration	Magnitude	Probability	Significa	ance	Status					
impact	Mitigation	(e)	(d)	(m)	(p)		d+m)*p)	(+ve or - ve)	Confidence				
	Degree to which impact can be reversed:	Existing/permit	xisting/permitted access roads must be used and the all other measures must be followed										
	Degree of impact on irreplaceable resources:	Pristine habitats	istine habitats are prone to invasion/encroachment once disturbed										
Vegetation clearance	Nature of impact:	Removal of veg	etation due to s	ervitudes, acce	ss roads and ere	ecting of th	ne pylons						
	With	1	5	6	3	36	Medium	-	High				
	Without	2	5	8	3	45	Medium	-	High				
	Degree to which impact can be reversed:		sisting/permitted access roads must be used and the all other measures must be followed										
	Degree of impact on irreplaceable resources:	Along this route						ays clear					
Plant encroachment	Nature of impact:	Vegetation clea	Vegetation clearing or disturbance may and have been fond to increase encroachment										
	With	1	3	8	5	60	Medium	-	High				
	Without	2	4	8	5	70	High	-	High				
	Degree to which impact can be reversed:	Existing/permit											
	Degree of impact on irreplaceable resources:	The area is virt prone to invasio		ed and in pristi	ne condition and	d has a lot	of procted plan	nts and very					
Threat to biodiversity	Nature of impact:												
	With	1	2	8	5	55	Medium	-	High				
	Without	2	3	8	5	65	High	-	High				
	Degree to which impact can be reversed:	Existing/permit	ted access road	s must be used	and the all othe	er measure	s must be follov	ved					

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status				
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence			
	Degree of impact on irreplaceable resources:	Biodiversity is h	igh along this ro	oute and thus p	rone to invasior	1						
Soil erosion	Nature of impact:	Removal of veg preventing/mini				will increase	e the soil erosio	n as vegetat	ion plays a major role in			
	With	1	1	2	2	8	Low	-	High			
	Without	1	1	2	2	8	Low	-	High			
	Degree to which impact can be reversed:	Existing/permit	ed access roads	s must be used	and the all othe	r measures	must be follow	ed				
	Degree of impact on irreplaceable resources:		ne area is virtually undisturbed and there no access roads, to build roads would increase soil osion. The area is flat									
Fauna												
Loss of faunal habitat with	Nature of impact:	Adverse impact										
clearance of	With	1	4	4	5	45	Medium	-	High			
vegetation within the 55m	Without	2	4	6	5	60	Medium	-	High			
servitude	Degree to which impact can be reversed:	species impaction the servitude sl (especially arbo	The clearance of the vegetation should be restricted to the 55m servitude and only larger tree species impacting which could potential impact on the lines should be removed. The vegetation of the servitude should not be totally removed providing refuge habitat for remaining faunal species (especially arboreal species)									
	Degree of impact on irreplaceable resources:	The proposed conservation ar habitat for sev mullers' velvet g	ea, rivers (non eral red listed	-perennial drai faunal species	nage lines), ru s including giar	picolous ou nt bullfrog,	tcrops as well southern afric	as suitable				
Direct impact on associated	Nature of impact:	Adverse impact										
fauna and	With	1	4	4	4	36	Medium	-	High			
interactions with structures and	Without	2	4	6	5	60	Medium	-	High			
personnel	Degree to which impact can be reversed:	Medium-restrict any faunal spec				lo intention	al killing or dist	urbances of				

Potential		Extent	Duration	Magnitude	Probability	Signific	ance	Status			
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	d+m)*p)	(+ve or - ve)	Confidence		
	Degree of impact on irreplaceable resources:	conservation ar	ea, rivers (non eral red listed	-perennial drai faunal species	nage lines), ru s including giar	picolous a nt bullfrog	dary of the so outcrops as well g, southern afric eetah.	as suitable			
Avifauna											
Collision	Nature of impact:	Collision or red	data species wit								
	With	1	4	4	4	36	Medium		Medium		
	Without	1	4	4	5	45	Medium		Medium		
	Degree to which impact can be reversed:	Low									
	Degree of impact on irreplaceable resources:	Medium	edium								
Electrocution	Nature of impact:	Bird perches on pylon and causes an electrical short circuit by physically bridging the air gap between live components and/o live and earthed components, resulting in death or severe injury.									
	With	1	4	2	3	21	Low		Medium		
	Without	1	4	6	5	55	Medium		Medium		
	Degree to which impact can be reversed:	Low						•			
	Degree of impact on irreplaceable resources:	Medium									
Nesting of birds on tower	impact:	Routine mainter		and power line			ce of certain bird	species			
structures and	With	1	2	4	3	21	Low		Medium		
disturbance during routine	Without	2	2	4	4	32	Medium		Medium		
maintenance	Degree to which impact can be reversed:	High	·	·	·			·			
	Degree of impact on irreplaceable resources:	Medium									
				0.011							

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Potential		Extent	Duration	Magnitude	Probability	Significa	ince	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence
Heritage									
It is anticipated th	nat the main impacts o	on heritage will o	cur during the	construction ph	ase				
Visual									
Visual exposure to the powerline servitude,	impact:		nature reserves	s. Sensitive vie	ewer locations ir	n close prox	kimity (<500m)		mpacts, especially in and ulnerable to exposure of
conductor	With	3	5	6	5	70	High	-	High
cables and towers.	Without	3	4	6	5	65	High	-	High
	Degree to which impact can be reversed:	The impact car proximity to se option.	nsitive viewer l	ocations through	gh careful route	e planning,	or by selecting	g the no-go	
	Degree of impact on irreplaceable resources:	In areas of high private nature r					ich as the soupa	ansberg and	
Social	1	1							
Perceived electromagnetic	Nature of impact:	The presence of on some proper		orkers can resu	ult in the treat o	of safety an	d can possibly l	ead to actual	crimes being committed
fields impacts	With mitigation	1	3	2	1	6	Low	-	Medium
on humans and animals during	Without mitigation	1	5	4	2	20	Low	-	Medium
the operational phase	Degree to which impact can be reversed:	High – with imp	lementation of ı	relevant mitigal	tion measures				
	Degree of impact on irreplaceable resources:	N/a							
Loss of a sense of place/income	Nature of impact:	The presence of be spoilt	powerlines par	ticularly in tour	ist attractions ca	an result in	tourists no long	ger visiting th	e area as their views will
on game farms	With mitigation	1	1	2	3	12	Low	-	Medium
 tourists want to see "africa" and the neuron 	Without mitigation	3	4	8	4	60	Medium	-	High
and the power line can disturb the rustic	Degree to which impact can be reversed:	High – with imp	lementation of ı	relevant mitigal	tion measures				

Potential		Extent	Duration	Magnitude	Probability	Signific	ance	Status					
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	d+m)*p)	(+ve or - ve)	Confidence				
african setting;	Degree of impact on irreplaceable resources:	N/a											
Poor maintenance of	Nature of impact:	It is possible that	at access routes	can be of such	poor state that	: maintene	ce of the powerl	ine is not pos	sible				
the power line	With mitigation	1	1	2	2	8	Low	-	Medium to high				
access roads: conflict between eskom and the	Without mitigation	1	4 8 4 <mark>52 Medium</mark> -										
landowners on whose responsibility it	Degree to which impact can be reversed:	N/a											
is to do maintenance on these roads. Farmers use it more often but yet expect eskom to pay for all maintenance	Degree of impact on irreplaceable resources:	Put a firm nego	tiated contract i	n place during ⁻	the operational	phase							
Impact of the power lines on	Nature of impact:	Where powerlin	es are not visibl	e or known, pla	ane crashes can	result and	l in turn electrict	y outages ma	y occur				
aircraft as there	With mitigation	1	2	2	2	10	Low	-	Medium to high				
are airports within the study area; one is the	Without mitigation	4	5	6	4	60	Medium	-	Medium to high				
louis trichardt airport and the other is for light	Degree to which impact can be reversed:	High – with imp	lementation of I	relevant mitiga	tion measures								
aircraft on the road towards waterpoort from louis trichardt	Degree of impact on irreplaceable resources:	N/a											
decrease in property values	Nature of impact:	These can lead	to economic los	ses									

Potential		Extent	Duration	Magnitude	Probability	Signific	ance	Status					
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	d+m)*p)	(+ve or - ve)	Confidence				
and number of	With mitigation	1	3	4	1	8	Low	-	Medium to high				
visitirs to lodges and other areas	Without mitigation	2	5	6	3	39	Medium	-	Medium to high				
that are popular with tourists due to the	Degree to which impact can be reversed:	High – with imp	lementation of	relevant mitiga	tion measures								
visual impacts of powerlines	Degree of impact on irreplaceable resources:	N/a											
Security issues as a result of	Nature of impact:												
the presence of	With mitigation	1	1	2	2	8	Low	-	Medium to high				
maintenance workers on	Without mitigation	1	1	4	4	24	Low	-	High				
properties	Degree to which impact can be reversed:	High – with imp	ligh – with implementation of relevant mitigation measures										
	Degree of impact on irreplaceable resources:	The impact can be high where endangered species such as rhino occur											
Land owners denying	Nature of impact:	This can result i	This can result in maintenance not occuring										
contractors	With mitigation	1	1	2	2	8	Low	-	Medium				
access to their properties	Without mitigation	1	1	8	4	40	Medium	-	High				
	Degree to which impact can be reversed:	High – with imp	High – with implementation of relevant mitigation measures										
	Degree of impact on irreplaceable resources:	N/a											
Poaching of game as well as	Nature of impact:	This is a high p	obability										
stock theft and	With mitigation	1	1	0	1	2	Low	-	Medium to high				
theft of crops	Without mitigation	1	1	2	2	8	Low	-	Medium to high				

Potential		Extent	Duration	Magnitude	Probability	Significar	ıce	Status					
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d-	⊦m)*p)	(+ve or - ve)	Confidence				
	Degree to which impact can be reversed:	High – with imp	lementation of	relevant mitigal	ion measures								
	Degree of impact on irreplaceable resources:	N/a											
Impact on farming	Nature of impact:	During the oper	ational phase, i	mpacts on farm	actvities are lik	kely to be ve	ry minimal						
activities such	With mitigation	1	1	0	1	2	Low	-	Medium to high				
as sowing, harvesting, and fire	Without mitigation	1	1 2 1 4 Low - Medium to high										
management programmes	Degree to which impact can be reversed:	High – with imp	High – with implementation of relevant mitigation measures										
leading to economic losses	Degree of impact on irreplaceable resources:	N/a	I/a										
Impact on farming	Nature of impact:	During the oper very minimal	uring the operational phase, impacts on activities and on guests to lodges and other tourist destinations are likely to ery minimal										
activities such	With mitigation	1	1	0	1	2	Low	-	Medium to high				
as hunting in game farms leading to	Without mitigation	1	1	2	1	4	Low	-	Medium to high				
leading to economic losses. Impacts can also be on	Degree to which impact can be reversed:	High – with imp	lementation of	relevant mitigal	tion measures								
guests in lodges leading to economic losses Degree of impact on irreplaceable resources:													
Increase in the voltage stability	Nature of impact:	An increased vo	ltage will ensur	e that activities	that were not a	able to take	place will be po	ossible					
	With mitigation												
	Without mitigation	3	5	8	5	80	High	+	Medium				

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status				
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence			
	Degree to which impact can be reversed:	N/a										
	Degree of impact on irreplaceable resources:											
An assurance of a reliable	Nature of impact:	Reliable electric	ado local municipality									
electricity	With mitigation	3	4	2	4	36	Medium	+	Medium			
supply	Without mitigation	2	1	6	4	36	Medium	+	Medium			
	Degree to which impact can be reversed:	N/a										
	Degree of impact on irreplaceable resources:	N/a	√/a									
Increase of electricity	Nature of impact:	In order to grow	n order to grow the economy of the makhado local municipality, electricity is vital									
supply making it	With mitigation											
available for agriculture,	Without mitigation	3	5	8	5	80	High	+	Medium			
tourism and other industries. The increase in electricity can	Degree to which impact can be reversed:	N/a	N/a									
also allow for the undertaking of other activities that may have been that may not have been possible prior to the improved electricity supply	Degree of impact on irreplaceable resources:	N/a										

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence
No more backlogs in	Nature of impact:	The absence of will be possible		tricity connection	ons can imply th	nat activitie	s that can only	take place w	here electricity is present
electricity	With mitigation								
connections	Without mitigation	3	5	8	5	80	High	+	Medium
	Degree to which impact can be reversed:	N/a							
	Degree of impact on irreplaceable resources:	N/a							
The inadequate provision of	Nature of impact:					1			
electricity to services such as	With mitigation								
health facilities will cease	Without mitigation	3	5	8	5	80	High	+	Medium
will cease	Degree to which impact can be reversed:	N/a							
	Degree of impact on irreplaceable resources:	N/a							
Electricity will be available to	Nature of impact:	The presence of	f electricity to ru	ıral areas will ir	nprove the lives	of many w	ho live in pover	ty	
numerous rural	With mitigation								
settlements that do not have this service	Without mitigation	3	5	8	5	80	High	+	Medium
Service	Degree to which impact can be reversed:	N/a							
	Degree of impact on irreplaceable resources:	N/a							

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status		
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d-	⊦m)*p)	(+ve or - ve)	Confidence	
Decommissionin	ng phase									
Agricultural pot	ential									
No decommission	ing impacts are anticip	oated								
Flora										
Destruction of protected flora	Nature of impact:	Removal of prot	tected plant spe	cies due to the	servitude					
	With	1	5	8	5	70	High	-	High	
	Without	1	5	8	5	70	High	-	High	
	Degree to which impact can be reversed:	Existing/permit	ted access road	s must be used	and the all othe	er measures	must be follow	ed		
	Degree of impact on irreplaceable resources:	Along this route	e there is a lot o	f protected plar	nt species					
Destruction of pristine habitat	Nature of impact:	Destruction and	disturbance of	a previously un	disturbed veget	ation				
	With	1	5	8	5	70	High		High	
	Without	2	5	8	5	75	High	-	High	
	Degree to which impact can be reversed:	Existing/permit	ted access road	s must be used	and the all othe	er measures	must be follow	ed		
	Degree of impact on irreplaceable resources:	Pristine habitats	s are prone to ir	vasion/encroac	hment once dis	turbed				
Vegetation Nature of Removal of vegetation due to servitudes, access roads and erecting of the pylons clearance impact:										
	With	1	5	8	5	70	High	-	High	
	Without	1	5	8	5	70	High	-	High	
	Degree to which impact can be reversed:	Existing/permit	ted access road	s must be used	and the all othe	er measures	must be follow	ed		

Potential		Extent	Duration	Magnitude	Probability	Signific	ance	Status			
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+	d+m)*p)	(+ve or - ve)	Confidence		
	Degree of impact on irreplaceable resources:	Along this route	there is a lot o	f protected plan	nt species and th	ne servituo	les needs to alw	vays clear			
Plant encroachment	Nature of impact:	Vegetation clea	ring or disturba	nce may and ha	ave been fond to) increase	encroachment				
	With	1	2	4	3	21	Low	-	High		
	Without	1	3	6	4	<mark>40</mark>	Medium	-	High		
	Degree to which impact can be reversed:		kisting/permitted access roads must be used and the all other measures must be followed ne area is virtually undisturbed and in pristine condition and has a lot of procted plants and very rone to invasion								
	Degree of impact on irreplaceable resources:	The area is virt prone to invasion									
Threat to biodiversity	Nature of impact:										
	With	1	4	8	5	65	High	-	High		
	Without	1	4	8	5	65	High	-	High		
	Degree to which impact can be reversed:	Existing/permitted access roads must be used and the all other measures must be followed									
	Degree of impact on irreplaceable resources:	Biodiversity is h	igh along this r	oute and thus p	prone to invasion	٦					
Soil erosion	Nature of impact:	Removal of veg preventing/min			and servitudes	will increa	se the soil erosi	on as vegetat	ion plays a major role ir		
	With	1	1	2	2	8	Low	-	High		
	Without	2	1	2	3	15	Low	-	High		
	Degree to which impact can be reversed:	Existing/permit	ted access road	s must be used	and the all othe	er measure	es must be follow	wed			
	Degree of impact on irreplaceable resources:	Thre area is vi erosion	increase soil								
Fauna											

Potential		Extent	Duration	Magnitude	Probability	Significa	ance	Status	
impact	Mitigation	(e)	(d)	(m)	(p)		l+m)*p)	(+ve or - ve)	Confidence
Direct impact on associated	Nature of impact:	Adverse impact		·		·		·	
fauna and	With	1	1	2	5	20	Low		High
interactions with structures and	Without	2	1	4	5	35	Medium		High
personnel	Degree to which impact can be reversed:		the tower pylor on within the cle		ust be restricted	l to the 55	m servitude. R	ehabilitation	
	Degree of impact on irreplaceable resources:	conservation and habitat for several s	alternative alig rea, rivers (non veral red listed gecko, ground p	- perennial dra faunal species	inage lines), ru s including gia	picolous o nt bullfrog	utcrops as well , southern afric	as suitable	
Avifauna									
No decommissioni	ng impacts are antici	pated							
Heritage									
No decommissioni	ng impacts are antici	pated							
Visual									
Visual exposure to operations to dismantle and	Nature of impact:	impacts. Perce		to the removal					ot have significant visual as visual impacts will be
remove of	With	3	1	2	3	18	Low	+	High
power line & substation	Without	3	1	2	3	18	Low	+	High
infrastructure	Degree to which impact can be reversed:	Avoid unnecess	ary disturbance	of the natural	environment du	iring decon	missioning ope	rations	
	Degree of impact on irreplaceable resources:	None							
Social									
Theft of material from camps and	Nature of impact:	Material can be targeted by crir		he sites where	decommission	ing is takir	ng place as ma	terial used ir	n electricity is often the
along	With mitigation	1	1	0	1	2	Low	-	Medium
construction sites	Without mitigation	2	1	8	4	44	Medium	-	Medium

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status			
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence		
	Degree to which impact can be reversed:	High – with imp	lementation of r	elevant mitigat	ion measures						
	Degree of impact on irreplaceable resources:										
Loss of crops leading to	Nature of impact:	Crops can be los	st during this ph	ase as the actv	ities are almost	as intense	as those during	the construe	ction phase		
economic losses	With mitigation	1	1	2	2	8	Low	-	Medium to high		
	Without mitigation	1	3	6	4	40	Medium	-	Medium to high		
	Degree to which impact can be reversed:	High – with imp	lementation of r	elevant mitigat	ion measures						
	Degree of impact on irreplaceable resources:	N/a									
Impacts on farming	Nature of impact:	Decommissioning can disturb activities on farms									
activities such	With mitigation	1	1	2	2	8	Low	-	Medium to high		
as sowing, harvesting, and fire	Without mitigation	1	1	8	3	30	Low	-	Medium to high		
management programmes	Degree to which impact can be reversed:	High – with imp	High – with implementation of relevant mitigation measures								
leading to economic losses	Degree of impact on irreplaceable resources:	N/a	V/a								
Damage to farm infrastructure	Nature of impact:	This can lead to	conflicts with c	ommunity mem	bers and farme	rs					
e.g. irrigation	With mitigation	1	1	2	1	4	Low	-	Medium to high		
equipment, gates, fences	Without mitigation	1	1	6	3	24	Low	-	Medium to high		
	Degree to which High – with implementation of relevant mitigation measures reversed: Implementation										

Potential		Extent	Duration	Magnitude	Probability	Significa	ance	Status					
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+e	d+m)*p)	(+ve or - ve)	Confidence				
	Degree of impact on irreplaceable resources:	N/a											
Security concerns as a	Nature of impact:	It is highly likely	y that theft of g	ame and stock	can occur. Theft	: of game o	an be higher or	farms where	e rhino is present				
result of	With mitigation	1	1	2	4	16	Low	-	Medium to high				
poaching of game, stock theft and crop	Without mitigation	1	1	10	4	48	Medium	-	Medium to high				
theft and crop theft	Degree to which impact can be reversed:	High – with imp	h – with implementation of relevant mitigation measures e impact can be high where endangered species such as rhino occur										
	Degree of impact on irreplaceable resources:	The impact can											
Security as a result of the	Nature of impact:	The mere prese threatened	ne mere presence of construction workers in communities and especially on farms can lead to unease and people may feel reatened										
presence of	With mitigation	1	1	2	2	8	Low	-	Medium to high				
workers on pfarms and communities	Without mitigation	2	Medium to high										
communities	Degree to which impact can be reversed:	High – with imp	High – with implementation of relevant mitigation measures										
	Degree of impact on irreplaceable resources:	N/a	N/a										
Safety of community	Nature of impact:	As decommissio	oning involves th	ne dismantling o	of structures, the	e safety of	people and anim	mals can be c	ompromised				
members/farm	With mitigation	1	1	2	1	4	Low	-	Medium				
workers/animals	Without mitigation	1	1	6	2	16	Low	-	Medium				
	Degree to which impact can be reversed:	High – with imp	lementation of	relevant mitigal	tion measures								
	Degree of impact on irreplaceable resources:	N/a											

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence
Cumulative imp	acts								
Agricultural pot	ential								
No cumulative im	pacts are anticipated								
Flora									
Plant encroachment	Nature of impact:	Vegetation clea	ring or disturba	nce may and ha	ive been fond to	o increase e	ncroachment		
	With	1	5	6	5	60	Medium	-	Hi
	Without	2	5	6	5	65	High	-	Hi
	Degree to which impact can be reversed:	Existing/permit	ted access road	s must be used	and the all othe	er measures	must be follow	ved	
	Degree of impact on irreplaceable resources:	The area is virt prone to invasio		ed and in pristin	e condition and	has a lot o	f protected plai	nts and very	
Soil erosion	Nature of impact:	Removal of veg preventing/min		sion			e the soil erosio	on as vegetat	ion plays a major role in
	With	1	1	2	2	8	Low	-	Hi
	Without	1	1	2	2	8	Low	-	Hi
	Degree to which impact can be reversed:	Existing/permit	ted access road	s must be used	and the all othe	er measures	must be follow	ved	
	Degree of impact on irreplaceable resources:	The area is vir erosion. The are		bed and there	no access road	ls, to build	roads would i	ncrease soil	
Fauna									
Loss of faunal habitat	Nature of impact:	Adverse impact							
	With	1	4	6	5	55	Medium		High
	Without	2	4	6	5	60	Medium		High
	Degree to which impact can be reversed:	Low- realign pr activities to the			nsitive habitats	and restric	t vegetation cl	earance and	

Potential		Extent	Duration	Magnitude	Probability	Significa	nce	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d	+m)*p)	(+ve or - ve)	Confidence
	Degree of impact on irreplaceable resources:	The proposed conservation ar habitat for sev mullers' velvet o	ea, rivers (non eral red listed	-perennial drai faunal species	inage lines), ru s including giaı	picolous ou nt bullfrog,	tcrops as well southern afric	as suitable	
Direct impact on associated	Nature of impact:	Adverse impact							
fauna and	With	1	4	4	4	36	Medium		High
interactions with structures and	Without	2	4	6	5	60	Medium		High
personnel	Degree to which impact can be reversed:	Medium-restrict species.					_		
	Degree of impact on irreplaceable resources:	The proposed conservation ar habitat for sev mullers' velvet o	ea, rivers (non eral red listed	-perennial drai faunal species	inage lines), ru s including giaı	picolous ou nt bullfrog,	tcrops as well southern afric	as suitable	
Avifauna									
No cumulative imp	pacts are anticipated								
Heritage									
No cumulative imp	pacts are anticipated								
Visual									
Increased visual exposure to power line infrastructure.	Nature of impact:	intensified impre lines are observ Lastly cumulativ	ession of a pre- ed from location e impacts arise of images and	existing power ns from which r through an inc impressions o	line in the lands nore than one p rrease in the inc	scape. It wi oower line w idence of se	Il also occur as yould now be se equential percep	an increased en in differer ptions of diffe	e to an extended and/or perception where power at parts of the landscape. erent power lines through which are continuously
	With	3	5	0	3	24	Low	-	High
	Without	3	5	6	5	70	High	-	High
	Degree to which impact can be reversed:	The impact can material. Active	rehabilitation o	of vegetation w	here it has beer	n cleared, is	also required.		
	Degree of impact on irreplaceable resources:	In areas of high private nature re					ch as the soupa	ansberg and	

Potential		Extent	Duration	Magnitude	Probability	Significa	ance	Status	
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+e	d+m)*p)	(+ve or - ve)	Confidence
Social									
Poaching of game impacting		It is highly likel	y that theft of g	ame and stock	can occur. Thef	t of game o	can be higher or	n farms where	rhino is present
on the loss of	With	2	3	4	3	27	Low	-	Medium to high
game and in turn affecting	Without	5	5	8	4	72	High	-	High
the tourism industry of the municipality and	reversed:	Where possible, the construction operational pha	n and decommis se	ssioning phases	s as well as dur	ring mainte			
that of the country at large	Degree of impact on irreplaceable resources:	The impact will	5	5 1					
Loss of a sense of place	impact:	Tourists visit pl for them				•	ence of powerlin	es can theref	ore spoil this experience
resulting in	With	1	2	2	2	10	Low	-	Medium to high
economic losses especially for	Without	3	4	6	3	39	Medium	-	Medium to high
tourism sector in turn impact on the economic	Degree to which impact can be reversed:	Liaise with visu would be to use					other suggeste	ed measures	
growth of the makhado local municipality	Degree of impact on irreplaceable resources:								
Increase in	Nature of								ado local municipality as
power supply and in the	impact: With	electricity is on	<u>e of the hindrar</u> 4	6	4	area and I	Medium	ved economy	Medium
stability of the	Without	3	4	6	4	52	Medium	+	Medium
network. In turn numerous existing developments	Degree to which impact can be reversed:								
such as lodges and other tourist attractions can	Degree of impact on irreplaceable resources:	N/a							
be improved.									

Potential		Extent	Duration	Magnitude	Probability	Significance		Status					
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d+m)*p	p)	(+ve or - ve)	Confidence				
No-go alternativ	ve												
Agricultural pot	ential												
In the event that	the transmission lines	are not construct	ted, there will b	e no impact on	the agricultural	potential, therefor	re the sta	tus quo will	remain.				
Flora													
In the event that	the transmission lines	are not construct	ted, there will b	e no impact on	the flora, there	fore the status quo	o will rema	ain.					
Fauna													
In the event that	the transmission lines	the transmission lines are not constructed, there will be no impact on the fauna, therefore the status quo will remain.											
Avifauna													
In the event that	the transmission lines	are not construct	ted, there will b	e no impact on	the avifauna, th	nerefore the status	s quo will	remain.					
Heritage													
In the event that	the transmission lines	are not construct	ted, there will b	e no impact on	heritage sites,	therefore the statu	ıs quo will	l remain.					
Visual													
In the event that	the transmission lines	are not construct	ted, there will b	e no visual imp	act, therefore th	ne status quo will r	remain.						
Social													
Powerlines linking the tabor substation to the new	Nature of impact:	weakest part of powerline powe	the northern g rlines linking tl	grid network du he tabor substa	e to being oper ation to the ne	ated beyond its re	eliability. helele) su	There is the ubstation in	d spencer power is the refore a need for a new order to strengthen the astructure				
bokmakirie	With	2	1	2	1	5 Low		-	Medium to high				
(nzhelele) substation will	Without	4	5	8	3	51 Medi	um	-	Medium to high				
not be constructed.	Degree to which impact can be reversed: Degree of impact on irreplaceable	Construct the po N/a	owerlines										
	resources:												
stability	With	1	1	2	1	4 Low		-	Medium				
	Without	3	5	8	3	48 Medi	um	-	Medium				

Potential		Extent	Duration	Magnitude	Probability	Significance	Status					
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d+m)*p)	(+ve or - ve)	Confidence				
	Degree to which impact can be reversed:	Ensure that the	e voltage is stab	ilised								
	Degree of impact on irreplaceable resources:											
No increase and assurance of electricity	Nature of impact:	manufacturing,	unreliable electricity supply can result in some activities not being undertaken. These can be in unufacturing, and mining sectors. A lack of electricity therefore means that the economic unicipality may be compromised.									
supply making it	With	1	1	2	1	4 Low	-	Medium				
unavailable for agriculture,	Without	3	5	8	4	64 High	-	Medium				
tourism and other industries as well as	Degree to which impact can be reversed:		icity supply thread the thread the second seco		such as the co	nstruction of the propose	d power line					
allowing for the undertaking of other activities that may not have been possible before. The absence of an increase in electricity may also hinder the undertaking of other activities that may only be possible with electricity supply	Degree of impact on irreplaceable resources:	N/a										
Continuation of backlogs in		use of electricit	y is impossible	when there is n	o electricity ava		-					
electricity connections	With	2	1	4	2	14 Low	-	Medium to high				
connections	Without	3	4	8	4	60 Medium	-	Medium to high				

Potential		Extent	Duration	Magnitude	Probability	Significan	ice	Status				
impact	Mitigation	(e)	(d)	(m)	(p)	(s=(e+d+	·m)*p)	(+ve or - ve)	Confidence			
	Degree to which impact can be reversed:	can include nd to have										
	Degree of impact N/a on irreplaceable resources:											
Continuation of the inadequate	Nature of impact:	In services such	as health facil	ities, lack of ele	ectricity can resu	It in losses o	of lives					
provision of	With	1	1	0	2	4	Low	-	Medium			
electricity to critical services	Without	3	5	10	4	72	High	-	Medium			
such as health facilities	Degree to which impact can be reversed:		he necessity of electricity to critical services is imperative and the proposed powerline can ensure nat adverse impacts are avoided									
	Degree of impact on irreplaceable resources:	N/a										
Continuation of the unavailability of	Nature of impact:	A lack of electri wood for heatir loss of protected	ng and cooking.	the lifestyles w The cutting of	ithin this rural a trees has nume	areas will con erous adeve	ntinue. These i rse impacts su	include the c uch as defore	utting of trees to use the estation and the possible			
electricity in	With	1	1	2	2	8	Low	-	Medium			
numerous rural settlements	Without	3	5	8	4	64	High	-	Medium			
Settlements	Degree to which impact can be reversed:	Provide electrici	ty to rural areas	5								
	Degree of impact on irreplaceable resources:	N/a										

9.3 Impact Assessment Conclusions

9.3.1 Alternative 1

During the **construction phase**, the majority of impacts identified were considered to be of low to medium significance in the event that the appropriate mitigation measures are implemented.

The following **negative** impacts were assessed to be of High significance in the event that mitigation measures are not implemented as required:

- Heritage
 - Destruction of Heritage sites and features

After the implementation of mitigation measures the intensity levels of all impacts reduced.

The majority of the impacts identified, associated with the **operational phase** were considered to be of low to medium significance in the event that the appropriate mitigation measures are implemented.

The following **negative** impacts were assessed to be of high significance in the event that mitigation measures are not implemented as required:

- Visual
 - Visual exposure to the Powerline Servitude, Conductor Cables and Towers, as well as the Nzhelele Substation

After the implementation of mitigation measures the intensity levels of all impacts reduced.

The following **positive** impacts were assessed to be of high significance:

- Social
 - Increase in the voltage stability
 - Increase of electricity supply making it available for agriculture, tourism and other industries. The increase in electricity can also allow for the undertaking of other activities that may have been that may not have been possible prior to the improved electricity supply
 - No more backlogs in electricity Connections
 - $_{\odot}$ The inadequate provision of electricity to services such as health facilities will cease
 - Electricity will be available to numerous rural settlements that do not have this service

The majority of impacts identified associated with the **de-commissioning phase** were considered to be of low to medium significance in the event that the appropriate mitigation measures are implemented. No impacts were assessed as having a high significance before the implementation of mitigation measures.

9.3.2 Alternative 1a

During the **construction phase**, the majority of impacts identified were considered to be of low to medium significance in the event that the appropriate mitigation measures are implemented. The following **negative** impacts were assessed to be of High significance in the event that mitigation measures are not implemented as required:

- Heritage
 - Destruction of Heritage sites and features

After the implementation of mitigation measures the intensity levels of all impacts reduced.

The majority of the impacts identified, associated with the **operational phase** were considered to be of low to medium significance in the event that the appropriate mitigation measures are implemented. The following **negative** impacts were assessed to be of high significance in the event that mitigation measures are not implemented as required:

- Visual
 - Visual exposure to the Powerline Servitude, Conductor Cables and Towers, as well as the Nzhelele Substation

After the implementation of mitigation measures the intensity levels of all impacts reduced.

The following **positive** impacts were assessed to be of high significance:

- Social
 - Increase in the voltage stability
 - Increase of electricity supply making it available for agriculture, tourism and other industries. The increase in electricity can also allow for the undertaking of other activities that may have been that may not have been possible prior to the improved electricity supply
 - No more backlogs in electricity Connections
 - $_{\odot}$ The inadequate provision of electricity to services such as health facilities will cease
 - Electricity will be available to numerous rural settlements that do not have this service

The majority of impacts identified associated with the **de-commissioning phase** were considered to be of low to medium significance in the event that the appropriate mitigation

measures are implemented. No impacts were assessed as having a high significance before the implementation of mitigation measures.

9.3.3 Alternative 1b

During the **construction phase**, the majority of impacts identified were considered to be of low to medium significance in the event that the appropriate mitigation measures are implemented. The following **negative** impacts were assessed to be of High significance in the event that mitigation measures are not implemented as required:

- Heritage
 - Destruction of Heritage sites and features

After the implementation of mitigation measures the intensity levels of all impacts reduced.

The majority of the impacts identified, associated with the **operational phase** were considered to be of low to medium significance in the event that the appropriate mitigation measures are implemented. The following **negative** impacts were assessed to be of high significance in the event that mitigation measures are not implemented as required:

- Visual
 - Visual exposure to the Powerline Servitude, Conductor Cables and Towers, as well as the Nzhelele Substation

After the implementation of mitigation measures the intensity levels of all impacts reduced.

The following **positive** impacts were assessed to be of high significance:

- Social
 - Increase in the voltage stability
 - Increase of electricity supply making it available for agriculture, tourism and other industries. The increase in electricity can also allow for the undertaking of other activities that may have been that may not have been possible prior to the improved electricity supply
 - No more backlogs in electricity Connections
 - $_{\odot}$ The inadequate provision of electricity to services such as health facilities will cease
 - Electricity will be available to numerous rural settlements that do not have this service

The majority of impacts identified associated with the **de-commissioning phase** were considered to be of low to medium significance in the event that the appropriate mitigation measures are implemented. No impacts were assessed as having a high significance before the implementation of mitigation measures.

9.3.4 Alternative 2

During the **construction phase**, the majority of impacts identified were considered to be of low to medium significance in the event that the appropriate mitigation measures are implemented. The following **negative** impacts were assessed to be of High significance in the event that mitigation measures are not implemented as required:

- Heritage
 - $_{\odot}$ $\,$ Destruction of Heritage sites and features

After the implementation of mitigation measures the intensity levels of all impacts reduced.

The majority of the impacts identified, associated with the **operational phase** were considered to be of low to medium significance in the event that the appropriate mitigation measures are implemented. The following **negative** impacts were assessed to be of high significance in the event that mitigation measures are not implemented as required:

- Visual
 - Visual exposure to the Powerline Servitude, Conductor Cables and Towers, as well as the Nzhelele Substation

After the implementation of mitigation measures the intensity levels of all impacts reduced.

The following **positive** impacts were assessed to be of high significance:

- Social
 - Increase in the voltage stability
 - Increase of electricity supply making it available for agriculture, tourism and other industries. The increase in electricity can also allow for the undertaking of other activities that may have been that may not have been possible prior to the improved electricity supply
 - No more backlogs in electricity Connections
 - The inadequate provision of electricity to services such as health facilities will cease
 - Electricity will be available to numerous rural settlements that do not have this service

The majority of impacts identified associated with the **de-commissioning phase** were considered to be of low to medium significance in the event that the appropriate mitigation measures are implemented. No impacts were assessed as having a high significance before the implementation of mitigation measures.

9.3.5 Alternative 3

During the **construction phase**, the majority of impacts identified were considered to be of low to medium significance in the event that the appropriate mitigation measures are implemented. The following **negative** impacts were assessed to be of High significance in the event that mitigation measures are not implemented as required:

- Flora
 - Destruction of pristine habitat
- Heritage
 - Destruction of Heritage sites and features

After the implementation of mitigation measures the intensity levels of all impacts reduced.

The majority of the impacts identified, associated with the **operational phase** were considered to be of low to medium significance in the event that the appropriate mitigation measures are implemented. The following **negative** impacts were assessed to be of high significance in the event that mitigation measures are not implemented as required:

- Flora
 - Destruction of protected flora
 - Destruction of pristine habitat
 - Vegetation clearance
- Visual
 - Visual exposure to the Powerline Servitude, Conductor Cables and Towers, as well as the Nzhelele Substation

After the implementation of mitigation measures the intensity levels of all impacts reduced.

The following **positive** impacts were assessed to be of high significance:

- Social
 - Increase in the voltage stability
 - Increase of electricity supply making it available for agriculture, tourism and other industries. The increase in electricity can also allow for the undertaking of other activities that may have been that may not have been possible prior to the improved electricity supply
 - \circ $\;$ No more backlogs in electricity Connections
 - The inadequate provision of electricity to services such as health facilities will cease
 - Electricity will be available to numerous rural settlements that do not have this service

The majority of impacts identified associated with the **de-commissioning phase** were considered to be of low to medium significance in the event that the appropriate mitigation

measures are implemented. The following **negative** impacts were assessed to be of high significance in the event that mitigation measures are not implemented as required:

- Flora
 - Destruction of pristine habitat

9.3.6 Alternative 4

During the **construction phase**, the majority of impacts identified were considered to be of low to medium significance in the event that the appropriate mitigation measures are implemented. The following **negative** impacts were assessed to be of High significance in the event that mitigation measures are not implemented as required:

- Flora
 - Destruction of protected flora
 - Destruction of pristine habitat
 - Vegetation clearance
 - Treat to biodiversity
- Heritage
 - Destruction of Heritage sites and features

After the implementation of mitigation measures the intensity levels of all impacts reduced.

The majority of the impacts identified, associated with the **operational phase** were considered to be of low to medium significance in the event that the appropriate mitigation measures are implemented. The following **negative** impacts were assessed to be of high significance in the event that mitigation measures are not implemented as required:

- Flora
 - Destruction of protected flora
 - Destruction of pristine habitat
 - Vegetation clearance
 - Threat to biodiversity
 - Soil erosion
- Visual
 - $_{\odot}$ $\,$ Visual exposure to the Powerline Servitude, Conductor Cables and Towers, as well as the Nzhelele Substation

After the implementation of mitigation measures the intensity levels of all impacts reduced.

The following **positive** impacts were assessed to be of high significance:

- Social
 - Increase in the voltage stability

- Increase of electricity supply making it available for agriculture, tourism and other industries. The increase in electricity can also allow for the undertaking of other activities that may have been that may not have been possible prior to the improved electricity supply
- No more backlogs in electricity Connections
- The inadequate provision of electricity to services such as health facilities will cease
- Electricity will be available to numerous rural settlements that do not have this service

The majority of impacts identified associated with the **de-commissioning phase** were considered to be of low to medium significance in the event that the appropriate mitigation measures are implemented. The following **negative** impacts were assessed to be of high significance in the event that mitigation measures are not implemented as required:

- Flora
 - Destruction of protected flora
 - Destruction of pristine habitat
 - Vegetation clearance
 - Threat to biodiversity

9.3.7 Alternative 5

During the **construction phase**, the majority of impacts identified were considered to be of low to medium significance in the event that the appropriate mitigation measures are implemented. The following **negative** impacts were assessed to be of High significance in the event that mitigation measures are not implemented as required:

- Flora
 - Destruction of protected flora
 - Destruction of pristine habitat
 - Vegetation clearance
 - Treat to biodiversity
- Heritage
 - Destruction of Heritage sites and features

After the implementation of mitigation measures the intensity levels of all impacts reduced.

The majority of the impacts identified, associated with the **operational phase** were considered to be of low to medium significance in the event that the appropriate mitigation measures are implemented. The following **negative** impacts were assessed to be of high significance in the event that mitigation measures are not implemented as required:

- Flora
 - Destruction of protected flora

- Plant encroachment
- Threat to biodiversity
- Visual
 - Visual exposure to the Powerline Servitude, Conductor Cables and Towers, as well as the Nzhelele Substation

After the implementation of mitigation measures the intensity levels of all impacts reduced.

The following **positive** impacts were assessed to be of high significance:

- Social
 - Increase in the voltage stability
 - Increase of electricity supply making it available for agriculture, tourism and other industries. The increase in electricity can also allow for the undertaking of other activities that may have been that may not have been possible prior to the improved electricity supply
 - No more backlogs in electricity Connections
 - $_{\odot}$ The inadequate provision of electricity to services such as health facilities will cease
 - Electricity will be available to numerous rural settlements that do not have this service

The majority of impacts identified associated with the **de-commissioning phase** were considered to be of low to medium significance in the event that the appropriate mitigation measures are implemented. The following **negative** impacts were assessed to be of high significance in the event that mitigation measures are not implemented as required:

- Flora
 - Destruction of protected flora
 - Destruction of pristine habitat
 - Vegetation clearance
 - Threat to biodiversity

9.3.8 No-Go Alternative

In general, no impacts were identified to be associated with the No-Go Alternative, due to the fact that in the event that the transmission line is not constructed, no impacts will occur as the status quo will remain.

However, a number of **negative** impacts were identified to be of High significance from a social point of view in the event that the powerline is not constructed:

- Social
 - No increase and assurance of electricity supply making it unavailable for agriculture, tourism and other industries as well as allowing for the undertaking

of other activities that may not have been possible before. The absence of an increase in electricity may also hinder the undertaking of other activities that may only be possible with electricity supply

- Continuation of the inadequate provision of electricity to critical services such as health facilities
- \circ $\;$ Continuation of the unavailability of electricity in numerous rural settlements
- \circ $\;$ Continuation of backlogs in electricity connections
- \circ No increase in the voltage stability

9.3.9 Cumulative Impacts

The majority of **cumulative impacts** identified and associated with the project were considered to be of low to medium significance in the event that the appropriate mitigation measures are implemented.

The following **negative** impacts were assessed to be of High significance in the event that mitigation measures are not implemented as required:

- Flora
 - Plant encroachment
 - Soil erosion
- Fauna
 - Loss of faunal habitat
- Visual
 - $_{\odot}$ $\,$ Increased visual exposure to Power Line Infrastructure
- Social
 - Poaching of game impacting on the loss of game and in turn affecting the tourism industry of the Municipality and that of the country at large

With regards to the proposed new powerline a total of two (2) cumulative impacts were assessed as having a high significance before the implementation of mitigation measures. After the implementation of mitigation measures the intensity levels of all impacts were reduced.

9.4 Route Preference Rating

In order to identify which of the alternative routes is deemed preferred, the specialists were requested to rank the alternatives routes according to a route ranking methodology.

The evaluation and nomination of a preferred route involves a highly interdisciplinary approach. The approach undertaken has involved a number of specialist studies which examine a number of different issues. In order to evaluate routes and determine a preferred route, the studies need to be comparative and therefore a route rating matrix was developed. The site preference rating system is applied to each discipline, and the rating of each site was conducted according to the following system:

- 1 = Not suitable for development / No-Go (impact of very high significance negative)
- 2 = not preferred (impact of high significance negative)
- 3 = acceptable (impact of moderate significance negative)
- 4 = Preferred (impact of low or negligible significance negative)

While each specialist study was required to have the Route Preference as an outcome, how they evaluated each route varied from discipline to discipline and the description of their specific approaches are outlined in each specialist report (refer **Appendix J to P**).

The route preference results for each route from each specialist study were entered into a matrix and added together. The route with the highest value is then considered the most preferable.

Table 9.8 outlines each specialist studies criteria for each of the route preference ratings.

Table 9.8: Specialist Criteria for Route Preference Rating	Table 9.8:	Specialist	Criteria f	for Route	Preference Ra	atings
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Site preference Rating	Criteria		
Flora			
	A preferred route will be in an area where:		
Preferred (4)	There is limited or no vegetation clearance required;		
	• There is limited or no pristine habitats and areas of high biodiversity;		
	No red data or protected species;		
	High encroachment of species		
	An acceptable route will an area where:		
Acceptable (3)	There is limited vegetation clearance required;		
	• There is limited or less pristine habitat and areas of high biodiversity;		
	No red data or protected species;		
	High encroachment of species.		
	A route is not preferred if :		
	• There will be high vegetation clearance required(no pre-existing		
Not Preferred (2)	servitudes and or access roads);		
	There is pristine habitats and areas of high biodiversity;		
	There is red data or protected species;		
	There is less or no encroachment of species.		
	A no go route will be an area where:		
	Extensive vegetation clearance will be required		
No-Go (1)	There is a lot of pristine habitats and areas of high biodiversity,		
	• There is an occurrence of red data or protected species more than one		
	species		
	And there is no encroachment of species		
Fauna			
	A totally degraded and transformed area with a low habitat diversity and		
Preferred (4)	ecosystem functioning; no viable populations of natural plants and the		
	faunal composition has already been altered. Development could be		
	supported with low impact on the natural vegetation and associated fauna.		
	Areas with relatively natural vegetation, though a common vegetation		
Acceptable (3)	type. Could be developed with mitigation and expected medium impact on		
	ecosystem as well as associated fauna.		

Not Preferred (2)	Areas with high species richness and habitat diversity comprising natural faunal species. These areas are ecologically valuable and important for ecosystem functioning. An area with a relatively natural faunal species composition; not a highly threatened or unique ecosystem; extremely high faunal species and habitat diversity. Development could be considered under exceptional conditions with medium-high impact on the fauna as well as vegetation / ecosystem.				
No-Go (1)	Areas of atypical habitat, conservation areas, riparian and wetland habitats, rocky ridges and hills with the known presence of faunal species of conservation concern (Red Data Species), not regarded suitable for proposed development, expected impacts likely to be unacceptable on a local or regional scale, adverse impact on the fauna and not possible to mitigate				
Avifauna					
Preferred (4)	Shortest Length, least sensitive habitats passed, follows existing infrastructure for the majority, highly unlikely to impact on red-listed species, high levels of anthropogenic disturbance.				
Acceptable (3)	Short Length, few sensitive habitats passed, follows some infrastructure, unlikely to impact on red listed species, medium levels of anthropogenic disturbance.				
Not Preferred (2)	Long Length, Some sensitive habitats, follows some infrastructure, Likely to impact on red-listed species, low levels of anthropogenic disturbance.				
No-Go (1)	Longest Length, Extensive sensitive habitats, Follows little or no linear infrastructure, Highly Likely to impact on red-listed species, very low levels of anthropogenic disturbance.				
Social					
Preferred (4)	 Route follows an existing line to a some degree Route follows existing linear structures e.g. roads, railway tracks Through areas far from existing settlements Through fewer settlements than other routes Through areas with low population density Through areas not currently occupied by infrastructure or settlements Through grazing lands 				
Acceptable (3)	 Through agricultural lands with low vegetation On the borders of sparsely populated areas Through stock farming areas 				
Not Preferred (2)	 Through orchards and plantations Through areas earmarked for future developments On the borders of game farms On the borders of Nature Reserves and protected areas, lodges and other areas that attract tourists On the borders of densely populated areas 				
No-Go (1)	 Dense populations where relocation may be necessary Through game farms Through Nature Reserves and protected areas, lodges and other areas that attract tourists 				
Visual					

	specifically lodges, hunting camps and nature reserves.				
	Any route that follows existing power line corridors, with minimum				
	removal of vegetation to widen the servitude.				
	• Any route with a very high visual absorption capacity of the receiving				
	environment, to the extent that very little of the power line, or the				
	servitude can be seen.				
Acceptable (3)	• Any route with a comparative exposure rating of >25% and <= 50 %				
	(calculated from the viewshed analysis database).				
	• Any route that will be no closer than 1 km from sensitive receptors,				
	specifically lodges, hunting camps and nature reserves.				
	Any route that follows existing power line corridors, with minimum				
	removal of vegetation to widen the servitude.				
	• Any route with a high visual absorption capacity of the receiving				
	environment.				
	• Any route with a comparative exposure rating of > 50 % (calculated				
	from the viewshed analysis database).				
	• Any route that will closer than 1 km from sensitive receptors,				
	specifically lodges, hunting camps and nature reserves, and closer than				
Not Preferred (2)	500m from residential areas and farmsteads.				
	Any route that requires the establishment of a new servitude where all				
	vegetation need to be removed for a 55m span along the route.				
	• Any route with a low visual absorption capacity of the receiving				
	environment, where the power line and the servitude is highly visible.				
No-Go (1)	Any route where an acceptable or preferred rating is not achieved.				
Heritage					
Acceptable (3)	Routes where numerous known sites exist and the area is well researched				
Not Preferred (2)	Routes where known site exist but where the area is largely under				

Table 9.9: Final Route Ranking Matrix

Study	Alt 1	Alt 1a	Alt 1b	Alt 2	Alt3	Alt 4	Alt 5
Fauna	3	3	4	4	3	2	3
Avifauna	3	3	3	4	2	1	1
Flora	4	4	4	4	1	2	1
Soils and						2	3
Agricultural	4	3	4	3	3		
Potential							
Social	4	3	1	3	3	2	3
Visual	3	3	3	3	2	2	2
Heritage	3	3	3	3	3	2	2
Total	24	22	22	24	17	13	15

From the above route raking assessment, it is clear that the preferred <u>corridor</u> would involve a combination of Alternatives 1, 1a, 1b and 2. <u>Alternatives</u> 3, 4 and 5 are not deemed to be acceptable. It can be noted that Alternative 1 and 2 have the same final value, however, Alternative 2 was identified as the more preferred route in the south due to the fact that the individual scores for biodiversity issues (i.e. flora, fauna and avifauna) were higher for Alternative 2 than for Alternative 1. Alternative 2 also does not cut through the Ben Lavin Nature Reserve.

Alternative 2 is approximately 10km from the eastern boundary of the Makhado Air Force Base with the line running more or less perpendicular to the extended centre line of the Makhado Air Force Base runway (see **Figure 9.1**).

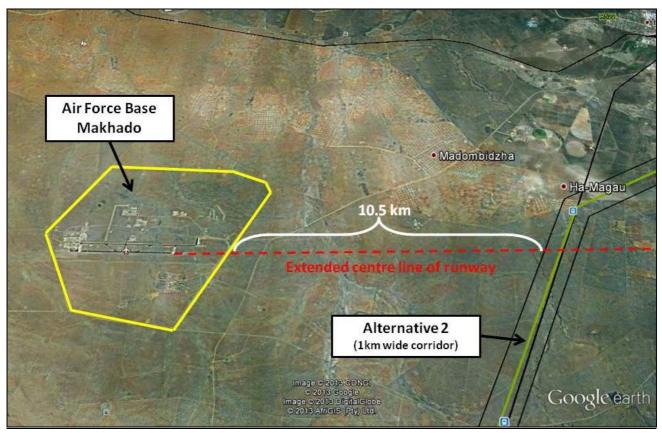


Figure 9.1: Position of Alternative 2 in relation to the extended centreline of the Air Force Base Runway

According to Part 139 of the Civil Aviation Regulations, 2011 the following 2 items are of specific relevance:

- <u>All objects, whether temporary or permanent, which project above the horizontal surface</u> within a specified radius of 8 kilometres as measured from the aerodrome reference point should be marked as specified in Document SA-CATS 139
- <u>No buildings or objects higher than 45 metres above the mean level of the landing area, or,</u> in the case of a water aerodrome or heliport, the normal level of the water, must without the approval of the Director be erected within a distance of 8 kilometre measured from the nearest point on the boundary of an aerodrome or heliport

Due to the fact that the preferred corridor is situated more than 10 km from the end of the runway and that the towers will be less than 45 m metres in height there should be no reason why the powerline can not be built within the preferred corridor.

However, due to the fact that powerlines do constitute a hazard to aircraft and the associated pilots and passengers it is recommended that the following is undertaken by Eskom in terms of mitigation:

- Eskom must inform the Commissioner about the plans for the proposed powerline as per the <u>Civil Aviation Regulations</u>
- It is recommended that the section of the powerline that runs perpendicular to the air force runway (as agreed with the Air Force) is constructed utilising the shortest tower available i.e. self supporting towers (30m in height)
- It is also recommended that the section of the powerline that runs perpendicular to the air force runway (as agreed with the Air Force) is marked as required by the commissioner which could include the relevant aviation marker spheres as well as the marker lights (either red or strobes as required).
- Due to the fact that the Makhado Air force base specialises in low level flight manoeuvres and that the powerline corridor falls within the Makhado Air force Control Zone (CTR¹), it is recommended that Eskom also consult the Air force with regards to suitable and appropriate marking requirements and tower heights.

In addition to the above aviation requirements, the corridor was requested to be widened in along two sections, namely:

- Just north of the mountains to accommodate the proposed mining infrastructure of Coal of Africa. The preferred corridor currently follows a route that traverses over one of the planned open cast pits as well as a railway line. Therefore, the corridor has been widened in this area to accommodate these future developments, in order to avoid having to move the powerline at a later stage (red circled area on Figure 9.2).
- Just south of Louis Trichart along a section of Alternative 1b, a landowner is a private aviator and has requested that the final alignment of the new powerline be investigated to north of the existing powerline. Therefore, the corridor has been widened slightly to accommodate this northern area (Yellow circled area on Figure 9.2).

Lastly, in terms of design alternative, landowners on the farms Clydesdale and Vlakfontein made the following suggestions:

- Use the existing servitude, or
- Build the new 400kV powerline next to the existing servitude and then later when the network is stable remove one of the two 132kV powerlines and rehabilitate the servitude

It is recommended that the merits of these suggestions are considered during the design phase of the project.

The final preferred <u>corridor</u> is shown in **Figure 9.2** below.

¹ CTR – Control Tower Region – an area of controlled air space extending upwards from ground level to specified upper limit (in this case 8000 feet) 9-242

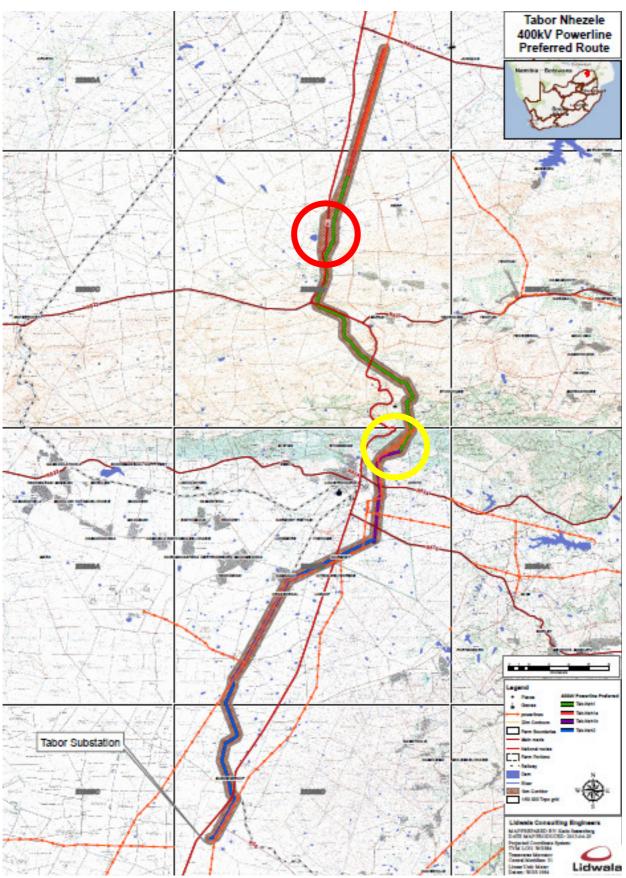


Figure 9.1: Final Preferred Corridor