## Koeberg substation - EIA

## Ecology

## Significance Rating Table

				Construction	on Phase					
				S Substati						
		Extent	Duration	Magnitude	Probability	Si	gnificance	Status		
Potential Impact	Mitigation	(E)	(D)	(M)	(P)		E+D+M)*P)	(+ve or -ve)	Confidence	
	Nature of impact:		ı				phase disturbance and	clearing	I	
	with	1	4	2	5	35	Medium	-	High	
	without	1	4	4	5	45	Medium	-	High	
npacts on vegetation and	degree to which	Low reversibil	ity as it is not lik	ely that the ori	ginal plant com	munities can he	reactablished after the	lifesnan of the		
protected plant species	impact can be	Low reversibility as it is not likely that the original plant communities can be reestablished after the lifespan of the development								
	reversed:	development								
	degree of impact on irreplaceable resources:	The site is already disturbed and as a result, the would be very little to no impact on irreplaceable resources								
	Nature of impact:			Neg	ative impacts or	fauna due to c	onstruction activities			
	with	1	1	4	3	18	Low			
	without	2	1	4	4	28	Low			
								rility the exten		
	degree to which	Although the development will result in some habitat loss wich will persist for the lifetime of the facility, the extent is small and is not considered significant. The majority of construction phase impacts on fauna will however be								
Direct Faunal Impacts	impact can be			_		•	which it is likely that fa			
	reversed:	, , , , ,			eir normal activ		, , , , , , , , , , , , , , , , , , , ,			
	degree of impact on									
	irreplaceable	There are no	highly threaten		•	•	nt and as a result, there	e would not be		
	resources:			any lo	ss of irreplacea	ble resources.				
	Nature of impact:		Const	ruction phase n	oise and disturb	ance will be de	trimental to sensitive b	irds in the area		
	with	1	2	4	5	35	Medium	-	Medium	
	without	2	2	6	5	50	Medium	-	Medium	
	degree to which	Medium- th	ne timing of con	struction activit	ties can be adju	sted to avoid pe	riods of high activity or	nesting, but		
Avifaunal Impacts	impact can be	construc	tion will inevitab	ole generate a l	ot of noise that	cannot be avoid	led. However after con	struction,		
	reversed:				disturbance wil	be low.				
	degree of impact on irreplaceable		With mitigation, impact on irreplaceable reources would be low							
	resources: Nature of impact:									
	with									
	without									
	degree to which				l					
	impact can be									
	IIIIpaci can be									
	reversed:									
	•									
	reversed:									
	reversed: degree of impact on									
	reversed: degree of impact on irreplaceable		Alter	native 4 A	IS substati	on				
Potential Impact	reversed: degree of impact on irreplaceable resources:	Extent	Alter Duration	native 4 A	IS substati		gnificance	Status	Confidence	
Potential Impact	reversed: degree of impact on irreplaceable	Extent (E)	Duration (D)	Magnitude (M)	Probability (P)	Si <sub>i</sub> (S=(	E+D+M)*P)	(+ve or -ve)	Confidence	
Potential Impact	reversed: degree of impact on irreplaceable resources: Mitigation Nature of impact:	(E)	Duration (D)	Magnitude (M) ss of near natu	Probability (P) ral vegetation d	Si <sub>i</sub> (S=(	E+D+M)*P) on phase disturbance a	(+ve or -ve)		
Potential Impact	reversed: degree of impact on irreplaceable resources:  Mitigation  Nature of impact: with	(E)	Duration (D) Lo	Magnitude (M) ss of near natu	Probability (P) ral vegetation d	Si <sub>i</sub> (S=( ue to constructi 35	E+D+M)*P) on phase disturbance a  Medium	(+ve or -ve)	High	
Potential Impact	reversed: degree of impact on irreplaceable resources:  Mitigation Nature of impact: with without	(E)	Duration (D)	Magnitude (M) ss of near natu	Probability (P) ral vegetation d	Si (S=( ue to constructi	E+D+M)*P) on phase disturbance a	(+ve or -ve)		
npacts on vegetation and	reversed: degree of impact on irreplaceable resources:  Mitigation Nature of impact: with without degree to which impact can be	(E) 1 2	Duration (D) Lo 4 4	Magnitude (M) ss of near nature 2 4 s not likely that	Probability (P) ral vegetation d 5 5	Si <sub>i</sub> (S=( ue to constructi 35 50  nt communities	E+D+M)*P) on phase disturbance a  Medium	(+ve or -ve) and clearing	High	
	reversed: degree of impact on irreplaceable resources:  Mitigation Nature of impact: with without degree to which impact can be reversed: degree of impact on	(E)  1 2  Moderate re	Duration (D)  Lo  4  4  versibility as it is	Magnitude (M) ss of near nature 2 4 s not likely that	Probability (P) ral vegetation d 5 5 the original pla espan of the de	Signature (S=1)  ue to construction (S=1)  35  50  Int communities (velopment)  es and as a resulting (S=1)	E+D+M)*P) on phase disturbance a Medium Medium	(+ve or -ve) and clearing - - - shed after the	High	
npacts on vegetation and	reversed: degree of impact on irreplaceable resources:  Mitigation  Nature of impact: with without degree to which impact can be reversed: degree of impact on irreplaceable	(E)  1 2  Moderate re	Duration (D)  Lo  4  4  versibility as it is	Magnitude (M) ss of near nature 2 4 s not likely that	Probability (P) ral vegetation d 5 5 the original plaespan of the december 1	Signature (S=1)  ue to construction (S=1)  35  50  Int communities (velopment)  es and as a resulting (S=1)	E+D+M)*P) on phase disturbance a  Medium  Medium  Medium  can be easily reestabli	(+ve or -ve) and clearing - - - shed after the	High	
npacts on vegetation and	reversed: degree of impact on irreplaceable resources:  Mitigation  Nature of impact: with without degree to which impact can be reversed: degree of impact on irreplaceable resources:	(E)  1 2  Moderate re	Duration (D)  Lo  4  4  versibility as it is	Magnitude (M) ss of near natu 2 4 s not likely that life	Probability (P) ral vegetation d 5 5 the original pla espan of the det d by alien specie irreplaceable re	Signature Signat	E+D+M)*P) on phase disturbance a  Medium  Medium  can be easily reestablis  t, the would be very lit	(+ve or -ve) and clearing - - - shed after the	High	
pacts on vegetation and	reversed: degree of impact on irreplaceable resources:  Mitigation  Nature of impact: with without degree to which impact can be reversed: degree of impact on irreplaceable	(E)  1 2  Moderate re	Duration (D)  Lo  4  4  versibility as it is	Magnitude (M) ss of near natu 2 4 s not likely that life	Probability (P) ral vegetation d 5 5 the original pla espan of the det d by alien specie irreplaceable re	Signature Signat	E+D+M)*P) on phase disturbance a  Medium  Medium  Medium  can be easily reestabli	(+ve or -ve) and clearing - - - shed after the	High	
npacts on vegetation and	reversed: degree of impact on irreplaceable resources:  Mitigation Nature of impact: with without degree to which impact can be reversed: degree of impact on irreplaceable resources: Nature of impact:	(E)  1 2  Moderate re	Duration (D)  Lo 4 4 versibility as it i	Magnitude (M) ss of near natu 2 4 s not likely that life	Probability (P) ral vegetation d 5 5 the original pla espan of the der d by alien specie irreplaceable re ative impacts or	Signature Signat	E+D+M)*P) on phase disturbance a  Medium  Medium  can be easily reestablis t, the would be very lit	(+ve or -ve) and clearing shed after the	High High	
pacts on vegetation and	reversed: degree of impact on irreplaceable resources:  Mitigation  Nature of impact: with without degree to which impact can be reversed: degree of impact on irreplaceable resources: Nature of impact: with without	(E)  1 2  Moderate re  The site is a  1 2	Duration (D)  Lo 4 4 4 versibility as it is  ready disturbed	Magnitude (M) ss of near natu 2 4 s not likely that lift and dominate  Neg 4 4	Probability (P) ral vegetation d 5 5 the original pla espan of the de d by alien specie irreplaceable re ative impacts or 4 5	Signature 15 Signa	E+D+M)*P) on phase disturbance a  Medium  Medium  can be easily reestablis t, the would be very lit onstruction activities  Low  Medium	(+ve or -ve) and clearing shed after the ttle impact on	High High Medium	
npacts on vegetation and	reversed: degree of impact on irreplaceable resources:  Mitigation Nature of impact: with without degree to which impact can be reversed: degree of impact on irreplaceable resources: Nature of impact: with	(E)  1 2  Moderate re  The site is a  1 2  Although t affected are.	Duration (D)  Lo 4 4 versibility as it is  ready disturbed	Magnitude (M) ss of near natur 2 4 s not likely that life and dominate  Neg 4 4 s will result in so	Probability (P) ral vegetation d 5 5 the original pla espan of the der d by alien specie irreplaceable re- ative impacts on 4 5 ome habitat loss he majority of c	Signature 1 Signature 1 Signature 2 Signat	E+D+M)*P) on phase disturbance a  Medium  Medium  can be easily reestablis t, the would be very lit onstruction activities  Low	the or -ve) and clearing	High High Medium Medium	
npacts on vegetation and protected plant species	reversed: degree of impact on irreplaceable resources:  Mitigation  Nature of impact: with without 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: with without degree to which impact can be reversed: degree of impact on irreplaceable	(E)  1 2 Moderate re The site is a  1 2 Although t affected are temporary an	Duration (D)  Lo 4 4 versibility as it is  ready disturbed  1 1 ne development a is already high d restricted to t	Magnitude (M) ss of near nature 2 4 s not likely that life and dominate Neg 4 4 : will result in so ly degraded. The duration of to the	Probability (P) ral vegetation d 5 5 the original pla espan of the der d by alien specie irreplaceable re ative impacts or 4 5 ome habitat loss he majority of c the construction leir normal activ	Signature 1 Signature 1 Signature 2 Signat	E+D+M)*P) on phase disturbance a  Medium  Medium  can be easily reestablis  it, the would be very lit  onstruction activities  Low  Medium  at for the lifetime of the se impacts on fauna wi	the or -ve) and clearing shed after the tle impact on e facility, the Il however be	High High Medium Medium	
npacts on vegetation and protected plant species	reversed: degree of impact on irreplaceable resources:  Mitigation  Nature of impact: with without 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 resources:	(E)  1 2 Moderate re The site is a  1 2 Although t affected are temporary an	Duration (D)  Lo 4 4 versibility as it is  ready disturbed  1 1 ne development a is already high d restricted to t	Magnitude (M) ss of near natu 2 4 s not likely that lift l and dominate  Neg 4 4 : will result in so ly degraded. Ti he duration of it to the	Probability (P) ral vegetation d 5 5 the original pla espan of the der d by alien specie irreplaceable re ative impacts or 4 5 ome habitat loss he majority of c the construction leir normal activ itats present wiss of irreplacea	signature of the state of the s	E+D+M)*P) on phase disturbance a  Medium  Medium  can be easily reestablis  it, the would be very lit onstruction activities  Low  Medium  it for the lifetime of the se impacts on fauna wi which it is likely that fa	the or -ve) and clearing shed after the tle impact on e facility, the Il however be auna will revert	High High Medium Medium	
mpacts on vegetation and protected plant species	reversed: degree of impact on irreplaceable resources:  Mitigation  Nature of impact: with without 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: with without degree to which impact can be reversed: degree of impact on irreplaceable	(E)  1 2 Moderate re The site is a  1 2 Although t affected are temporary an	Duration (D)  Lo 4 4 versibility as it is  ready disturbed  1 1 ne development a is already high d restricted to t	Magnitude (M) ss of near natu 2 4 s not likely that lift l and dominate  Neg 4 4 : will result in so ly degraded. Ti he duration of it to the	Probability (P) ral vegetation d 5 5 the original pla espan of the der d by alien specie irreplaceable re ative impacts or 4 5 ome habitat loss he majority of c the construction leir normal activ itats present wiss of irreplacea	signature of the state of the s	E+D+M)*P) on phase disturbance a  Medium  Medium  can be easily reestablis  tt, the would be very lit onstruction activities  Low  Medium  st for the lifetime of the se impacts on fauna wi which it is likely that fa	the or -ve) and clearing shed after the tle impact on e facility, the Il however be auna will revert	High High Medium Medium	

1		1							1
	degree to which								
Avifaunal Impacts	impact can be	Medium-							
	reversed:								
	degree of impact on	With mitigation, impact on irreplaceable reources would be low							
	irreplaceable								
	resources:								
	Nature of impact:			1	ı		•		1
	with								
	without								
	degree to which								
	impact can be								
	reversed:								
	degree of impact on								
	irreplaceable								
	resources:								
			Transm	nission Line	- Alterna	tive 4			
Patant'allone :		Extent	Duration	Magnitude	Probability		gnificance	Status	Confidence
Potential Impact	Mitigation	(E)	(D)	(M)	(P)	(S=	(E+D+M)*P)	(+ve or -ve)	Confidence
	Nature of impact:		Loss of near	r natural vegeta	tion due to con	struction phase	disturbance and clear	ing for the powe	r lines
Impacts on vegetation and protected plant species	with	1	4	2	3	21	Low	-	High
	without	1	4	4	4	36	Medium	-	High
	degree to which	Direct The A		and otherwise to	e altan alamatan	steen a service Breez			
	impact can be	High- The 1	rootprint is low	and with regula			corridor could general	te neautral or	
	reversed:				positive im	pact			
	degree of impact on								
	irreplaceable		Low as the	affected area is	already highly o	degraded as a re	esult of woody aliens		
	resources:								
	Nature of impact:			Neg	ative impacts o	n fauna due to d	construction activities		•
	with	1	1	2	4	16	Low	-	Medium
	without	1	1	4	4	24	Low	-	Medium
	degree to which								
Direct Faunal Impacts	impact can be	The footp	rint of the power	er line can be ke	pt to a low leve	el with little long	g-term impact on terre	estrial fauna.	
	reversed:								
	degree of impact on	Th	h:ablth.aasta.a			:			
	irreplaceable	There are no	nigniy threaten		ss of irreplacea	•	int and as a result, the	re would not be	
	resources:			any io	ss or irreplacea	Die resources.			
	Nature of impact:			Avifaunal impac	ts due to const	ruction activitie	s associated with the	power lines	
	with	1	1	4	4	24	Low	-	Medium
Avifaunal Impacts	without	1	1	6	5	40	Medium	-	Medium
	degree to which								
	impact can be	Medium-	The affected ha	abitat is degrade	ed with low imp	ortance for avit	auna but the extent is	fairly large.	
	reversed:								
	degree of impact on								
	irreplaceable	With mitigation, impact on irreplaceable reources would be low							
	resources:								
	Nature of impact:								
	with								
	without								
	degree to which								
	impact can be								
	reversed:								
	degree of impact on								
	irreplaceable								
	resources:								