

Koeberg substation - EIA

Ecology

Significance Rating Table

Construction Phase

GIS Substation - Site 1

Potential Impact	Mitigation	Extent (E)	Duration (D)	Magnitude (M)	Probability (P)	Significance (S=(E+D+M)*P)	Status (+ve or -ve)	Confidence
Impacts on vegetation and protected plant species	Nature of impact:	Loss of intact vegetation due to construction phase disturbance and clearing						
	with	1	4	2	5	35	Medium	High
	without	1	4	4	5	45	Medium	High
	degree to which impact can be reversed:	Low reversibility as it is not likely that the original plant communities can be reestablished after the lifespan of the development						
	degree of impact on irreplaceable resources:	The site is already disturbed and as a result, there would be very little to no impact on irreplaceable resources						
Direct Faunal Impacts	Nature of impact:	Negative impacts on fauna due to construction activities						
	with	1	1	4	3	18	Low	
	without	2	1	4	4	28	Low	
	degree to which impact can be reversed:	Although the development will result in some habitat loss which 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 temporary and restricted to the duration of the construction activities after which it is likely that fauna will revert to their normal activity patterns.						
	degree of impact on irreplaceable resources:	There are no highly threatened fauna or habitats present within the footprint and as a result, there would not be any loss of irreplaceable resources.						
Avifaunal Impacts	Nature of impact:	Construction phase noise and disturbance will be detrimental to sensitive birds in the area						
	with	1	2	4	5	35	Medium	Medium
	without	2	2	6	5	50	Medium	Medium
	degree to which impact can be reversed:	Medium- the timing of construction activities can be adjusted to avoid periods of high activity or nesting, but construction will inevitably generate a lot of noise that cannot be avoided. However after construction, disturbance will be low.						
	degree of impact on irreplaceable resources:	With mitigation, impact on irreplaceable resources would be low						
Alternative 4 AIS substation	Nature of impact:	Loss of near natural vegetation due to construction phase disturbance and clearing						
	with	1	4	2	5	35	Medium	High
	without	2	4	4	5	50	Medium	High
	degree to which impact can be reversed:	Moderate reversibility as it is not likely that the original plant communities can be easily reestablished after the lifespan of the development						
	degree of impact on irreplaceable resources:	The site is already disturbed and dominated by alien species and as a result, there would be very little impact on irreplaceable resources						
Direct Faunal Impacts	Nature of impact:	Negative impacts on fauna due to construction activities						
	with	1	1	4	4	24	Low	Medium
	without	2	1	4	5	35	Medium	Medium
	degree to which impact can be reversed:	Although the development will result in some habitat loss which will persist for the lifetime of the facility, the affected area is already highly degraded. The majority of construction phase impacts on fauna will however be temporary and restricted to the duration of the construction activities after which it is likely that fauna will revert to their normal activity patterns.						
	degree of impact on irreplaceable resources:	There are no highly threatened fauna or habitats present within the footprint and as a result, there would not be any loss of irreplaceable resources.						
	Nature of impact:	Disturbance and habitat loss for avifauna due to construction activities						
	with	1	1	4	4	24	Low	Medium
	without	2	2	6	5	50	Medium	Medium

Avifaunal Impacts	degree to which impact can be reversed:	Medium- The affected habitat is degraded with low importance for avifauna but the extent is fairly large.							
	degree of impact on irreplaceable resources:	With mitigation, impact on irreplaceable resources would be low							
	Nature of impact:								
	with								
	without								
	degree to which impact can be reversed:								
	degree of impact on irreplaceable resources:								
Transmission Line - Alternative 4									
Potential Impact	Mitigation	Extent (E)	Duration (D)	Magnitude (M)	Probability (P)	Significance (S=(E+D+M)*P)		Status (+ve or -ve)	Confidence
Impacts on vegetation and protected plant species	Nature of impact:	Loss of near natural vegetation due to construction phase disturbance and clearing for the power lines							
	with	1	4	2	3	21	Low	-	High
	without	1	4	4	4	36	Medium	-	High
	degree to which impact can be reversed:	High- The footprint is low and with regulat alien clearing the power line corridor could generate neutral or positive impact							
	degree of impact on irreplaceable resources:	Low as the affected area is already highly degraded as a result of woody aliens							
Direct Faunal Impacts	Nature of impact:	Negative impacts on fauna due to construction activities							
	with	1	1	2	4	16	Low	-	Medium
	without	1	1	4	4	24	Low	-	Medium
	degree to which impact can be reversed:	The footprint of the power line can be kept to a low level with little long-term impact on terrestrial fauna.							
	degree of impact on irreplaceable resources:	There are no highly threatened fauna or habitats present within the footprint and as a result, there would not be any loss of irreplaceable resources.							
Avifaunal Impacts	Nature of impact:	Avifaunal impacts due to construction activities associated with the power lines							
	with	1	1	4	4	24	Low	-	Medium
	without	1	1	6	5	40	Medium	-	Medium
	degree to which impact can be reversed:	Medium- The affected habitat is degraded with low importance for avifauna but the extent is fairly large.							
	degree of impact on irreplaceable resources:	With mitigation, impact on irreplaceable resources would be low							
	Nature of impact:								
	with								
	without								
	degree to which impact can be reversed:								
	degree of impact on irreplaceable resources:								