

**Koeberg - EIA process**

**Ecology**

**Significance Rating Table**

**Operational Phase**

**Alternative 1**

| Potential Impact                                      | Mitigation  | Extent (E)   | Duration (D) | Magnitude (M) | Probability (P) | Significance (S=(E+D+M)*P) | Status (+ve or -ve) | Confidence |
|---|---|--|--------------|---------------|-----------------|----------------------------|---------------------|------------|
| Soil erosion and associated degradation of ecosystems | <b>Nature of impact:</b>                            | Bare and disturbed areas will be highly vulnerable to wind erosion due to the strong winds the area experiences  |              |               |                 |                            |                     |            |
|   | with  | 1  | 2            | 2             | 3               | 15                         | Low                 | Medium     |
|   | without   | 1  | 3            | 4             | 4               | 32                         | Medium              | Medium     |
|   | <b>degree to which impact can be reversed:</b>      | Moderate - Provided that large amounts of wind erosion does not occur, this impact can be arrested and reversed. |              |               |                 |                            |                     |            |
|   | <b>degree of impact on irreplaceable resources:</b> | Low - As the extent of the development is low, significant loss of irreplaceable resources is unlikely           |              |               |                 |                            |                     |            |
| Alien Plant Invasion                                  | <b>Nature of impact:</b>                            | Alien plant species are likely to dominate disturbed areas following construction                                |              |               |                 |                            |                     |            |
|   | with  | 1  | 2            | 2             | 3               | 15                         | Low                 | High       |
|   | without   | 1  | 4            | 4             | 4               | 36                         | Medium              | High       |
|   | <b>degree to which impact can be reversed:</b>      | Moderate to High depending on the severity of invasion   |              |               |                 |                            |                     |            |
|   | <b>degree of impact on irreplaceable resources:</b> | Low as the affected area is already disturbed  |              |               |                 |                            |                     |            |
|   | <b>Nature of impact:</b>                            |  |              |               |                 |                            |                     |            |
|   | with  |  |              |               |                 |                            |                     |            |
|   | without   |  |              |               |                 |                            |                     |            |
|   | <b>degree to which impact can be reversed:</b>      |  |              |               |                 |                            |                     |            |
|   | <b>degree of impact on irreplaceable resources:</b> |  |              |               |                 |                            |                     |            |

**Alternative 4**

| Potential Impact                                      | Mitigation  | Extent (E)  | Duration (D) | Magnitude (M) | Probability (P) | Significance (S=(E+D+M)*P) | Status (+ve or -ve) | Confidence |
|---|---|---|--------------|---------------|-----------------|----------------------------|---------------------|------------|
| Soil erosion and associated degradation of ecosystems | <b>Nature of impact:</b>                            | Bare and disturbed areas will be highly vulnerable to wind erosion due to the strong winds the area experiences |              |               |                 |                            |                     |            |
|   | with  | 1   | 2            | 2             | 3               | 15                         | Low                 | Medium     |
|   | without   | 1   | 3            | 4             | 4               | 32                         | Medium              | Medium     |
|   | <b>degree to which impact can be reversed:</b>      | Moderate - Provided that large amounts of erosion does not occur, this impact can be arrested and reversed.     |              |               |                 |                            |                     |            |
|   | <b>degree of impact on irreplaceable resources:</b> | Low - As the site is already degraded significant loss of irreplaceable resources is unlikely                   |              |               |                 |                            |                     |            |
| Alien Plant Invasion                                  | <b>Nature of impact:</b>                            | Alien plant species are highly likely to dominate disturbed areas following construction                        |              |               |                 |                            |                     |            |
|   | with  | 1   | 2            | 2             | 3               | 15                         | Low                 | High       |
|   | without   | 1   | 4            | 4             | 4               | 36                         | Medium              | High       |
|   | <b>degree to which impact can be reversed:</b>      | Moderate to High depending on the severity of invasion  |              |               |                 |                            |                     |            |
|   | <b>degree of impact on irreplaceable resources:</b> | Low as the affected area is already disturbed   |              |               |                 |                            |                     |            |
|   | <b>Nature of impact:</b>                            |   |              |               |                 |                            |                     |            |
|   | with  |   |              |               |                 |                            |                     |            |
|   | without   |   |              |               |                 |                            |                     |            |
|   | <b>degree to which impact can be reversed:</b>      |   |              |               |                 |                            |                     |            |
|   | <b>degree of impact on irreplaceable resources:</b> |   |              |               |                 |                            |                     |            |

**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 |
|------------------|--------------------------|---|--------------|---------------|-----------------|----------------------------|---------------------|------------|
|                  | <b>Nature of impact:</b> | Avifaunal impacts due to operation and presence of the power line |              |               |                 |                            |                     |            |
|                  | with                     | 1   | 5            | 2             | 3               | 24                         | Low                 | Medium     |
|                  | without                  | 2   | 5            | 6             | 4               | 52                         | Medium              | Medium     |

|   |  |   |  |  |  |  |  |  |
|---|--|---|--|--|--|--|--|--|
| Avifaunal Impacts related to power line operation & maintenance | degree to which impact can be reversed:      | Medium- with mitigation irreversible changes are unlikely       |  |  |  |  |  |  |
|   | 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: |   |  |  |  |  |  |  |