Arid Lands Environment Centre

Office: 90 Gap Road Alice Springs NT
Mail: PO Box 2796 Alice Springs 0870 NT
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Mukaty Solar Precinct submission

The Arid Lands Environment Centre (**ALEC**) is Central Australia's peak community environmental organisation that has been advocating for the protection of nature and growing sustainable communities in the arid lands since 1980. ALEC is committed to confronting key threats to nature, water and climate which impact the ecological health of the arid and semi-arid lands.

Due to current capacity, ALEC's submission is high-level and brief in its nature.

1. ALEC's Recommendation

ALEC recommends that the Northern Territory Environment Protection Authority refer the Mukaty Solar Precinct for a Tier 3 Environment Impact Assessment.

2. The Mukaty Solar Project Proposal

Suncable's Mukaty Solar Precinct exists across a 105,000 hectare at Mukaty Station, which includes a 49,300 hectare disturbance footprint (land clearing).

Construction for each solar generation site takes five years, and the project would have a 70+ year operation life. Each solar field generates 325-megawatt peak capacity, and each capacity is made up of 56 solar blocks. The project can accommodate enough solar fields for approximately 20GW of peak electrical output. The project suggests that repowering will occur with the replacement of solar panels after 40 years, and replacement of the batteries after 15 years.

The project is working towards a Final Investment Decision towards the end of 2027. Power generation to customers in Darwin is proposed from 2032 onwards.

3. Concerns

This is a massive and complex project that will result in major disturbance and impacts to the environment across the project site.

Current process

The current process and consultation time frame is inadequate to ensure appropriate participation for stakeholders such as ALEC. We have not been able to go through the referral documents adequately in the time provided. As a result ALEC's submission is high-level as we did not have adequate capacity in the time provided.

Energy Use

ALEC is committed to climate justice and a world which urgently reduces greenhouse gas emissions. However, we have outstanding questions that require further and far greater explanation, such as who will use the electricity generated via the Suncable project and how it will reduce emissions. In particular ALEC seeks to better understand whether the generated electricity will displace fossil fuel generated electricity elsewhere and result in reducing greenhouse gas emissions (Singapore Proposal),

or whether it is predominately fuelling further energy demand for emergent industries domestically (data centres, critical minerals, green hydrogen).

Threatened Species

Thirty-one threatened species were assessed in the referral document. Three species were assessed to have a moderate or high likelihood of occurring within the project area: the Great Bilby (*Macrotis lagotis*), grey falcon (*Falco hypoleucos*) and Yellow-spotted Monitor (*Varanus panoptes*).

Large areas of the project area have been identified as suitable habitat for the Greater Bilby. Greater Bilby's have disappeared from at least 80 percent of their former range, and there are estimated to be fewer than 10,000 individuals left in their total population. There were 53 sightings of the Greater Bilby in the survey area, with 27 of the 53 showing evidence of Greater Bilby presence less than a week old at the time of survey, indicating active bilby populations, particularly in the south of the project site.

Further information is required to outline how the project will impact Threatened Species, particularly the Greater Bilby, and whether appropriate mitigation measures are available to reduce significant impacts.

Lake Effect Hypothesis

It is important that further research is conducted to investigate the potential impacts of the Lake Effect Hypothesis in relation to the Mukaty Solar Precinct. As the referral documents highlight, there is a distinct lack of collision mortality research associated with solar energy facilities in Australia, let alone large-scale facilities in semi-arid environments with high variability in the presence and availability of surface water.

Project Site

Further inquiry is required to better understand the ecologically and culturally sensitive nature of the site.

In addition, whether Traditional Owners, custodians and the affected community consent to the project and what community benefit is proposed. Is the proposed benefit commensurate to the proposed loss that is involved.