

NT EPA Referral: Energy North “hyperscale” Data Centre

Introduction

The Arid Lands Environment Centre (**ALEC**) is Central Australia’s 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 and its communities. ALEC is based in Mparntwe Alice Springs and brings an environmental and climate justice lens to development proposals here in the Northern Territory.

The project has the potential to have significant impacts on water resources and threatened species. Additionally there are outstanding questions about the emissions generated by the project, which though not calculated by the proponent, are likely to overshoot the safeguard mechanism threshold.

ALEC’s Recommendations:

ALEC agrees with the proponent that Project Ares should be assessed by the NT EPA at the highest tier of environmental assessment, a Tier 3 Environment Impact Statement.

Our recommended terms of reference for the EIS:

1. Hydrological Impact assessments detailing the flow on effects of Project Ares’ proposal to extract 4 GL from the Wiso basin, impacts of drawdown, potential disruptions to groundwater and surface water, and assessments of the impacts to stygofauna.
2. Water Quality Assessment which accounts for hydrological salinity impacts;
3. Climate Impact Assessment to determine how the site may be impacted by current and future changes in temperature, rainfall, and extreme weather events that may impact the operations of the projects, and pre-existing static assumptions around energy and water use, as well as maintenance and management of the site, as well as Air Quality Assessment.
4. Emissions Assessment to outline the greenhouse gas emissions of the project, including if Energy North apply to upscale Project Ares to 5GW in the future (as per their website).
5. Project and site-specific surveys which assess the ecological values of the project area, taking into account the environmental variability between the wet and dry seasons in the region.
6. Impact assessment of the light, noise and vibrations from Project Ares on every species (both threatened and non-threatened) in the area;
7. Threatened Species Assessment including via site specific surveys, as well as impacts on threatened species as a result of landclearing fragmenting habitats
8. Weed Management Plans to ensure plans to manage and prevent weed species establishing including buffel grass (*Cenchrus ciliaris* & *C pennisetiformis*) and hairy flower lovegrass (*Eragrostis trichophora*).
9. Social Impact Assessments that include the Native Title Context, as well as the broader impacts to the community and economy
10. Cultural Impact Assessment
11. Cumulative Impact Assessment to understand the climate, nature, social and other cumulative impacts that are occurring across all other projects in the region.

Energy North ‘Hyperscale’ Ai Data Centre will have significant environmental impacts that are not adequately addressed in their referral. We agree with Energy North that Project Ares - Integrated Hyperscale Data Centre Campus (2026/10560) is a controlled action. A full Environmental Impact Statement for the project is warranted.

ALEC’s concerns about the project:

Use of fracked gas and associated emissions

ALEC strongly opposes the extraction of shale gas from the Beetaloo basin, including for use to fuel “hyperscale” data centres. ALEC does not support the deeply concerning increase in energy demand and consumption globally, powered by big tech and data centres, including the proposed construction of a massive gas-fired power station that is bigger than Australia’s largest currently operating gas-fired power stations. Global efforts to reduce greenhouse gas emissions cannot be thrown away due to speculative capital accumulation and the emergent data centre industry on this continent. We strongly reject the unplanned development frenzy led by big tech and data centres, which will add yet more pressure on our climate, water and nature, already in crisis.

The proponent states that Project Ares will be powered by an upstream gasfield, which given its location can be assumed to mean from the Beetaloo Basin. ALEC is firmly opposed to the development of a fracked gasfield in the Barkly and Gulf region, due to the unacceptable climate impacts of opening up a new gas basin, the risk of surface and groundwater contamination caused by fracking, and the concerns of Custodians and local communities about the impact fracking will have on cultural transmission, public health and social cohesion. Even if other environmental considerations were managed acceptably, we are opposed to Project Ares creating a market for the Beetaloo Basin gasfield.

Quantity of gas use and of greenhouse gas emissions emitted from gas fired power generation

The gas-fired power station proposed by Project Ares is larger than Australia’s biggest gas-fired power station at Torrens Island in South Australia, which has a current capacity of 800MW. To build what would be Australia’s largest gas-fired power station by capacity in 2026 or beyond, is deeply concerning and problematic, when we need to drastically reduce our greenhouse gas emissions.

Whilst, the referral doesn’t give a clear answer on what proportion of the project’s energy use will be gas, instead leaving this open by describing gas generation as providing both “firm power” and “independent backup.” However, given that they propose to construct 1,038 MW of gas-fired generation capacity and a gas supply spur pipeline to provide “firm power and independent backup” to Project Ares, we can assume the project will require a significant fracked gas input.

Potential gas use and emissions scenarios tabled below indicate that the generator need only run for 3% of the year in order to trigger the Safeguard Mechanism facility threshold which applies to Australia’s largest industrial emitters. Since the facility is intended to be a Tier 3 data centre, which “allows a maximum of 1.6 hours of downtime per year,”¹ It is expected the gas generators will run far more regularly than 3% of the year.

¹ <https://www.nextdc.com/blog/understanding-data-centre-tiers>

Table 1: Project Ares 1,038 MW gas generator: Gas consumption and emissions under different scenarios

Run time	Approximate gas use (PJ) ²	Scope 1 emissions (tCO ₂ -e)
100% of year	80	4,114,151
25% of year	20	1,028,538
5% of year	4	205,708
3% of year	2	123,425

Energy North has identified that greenhouse gases from the gas-fired power plant will be Project Ares' primary atmospheric emission source but they have failed to estimate how much greenhouse gas the proposed gas-fired power plant will release. Energy North also proposes that the gas-fired infrastructure will be designed to operate on hydrogen fuel blends to transition away from natural gas but they assess hydrogen as technically and commercially non-viable within the Project timeline.

Energy North should estimate the greenhouse gas emissions from the proposed gasfired power plant as well as greenhouse gases emissions generated in the construction and operational phases of Project Ares (such as greenhouse gases generated from road and rail transportation of construction materials and emissions from the planes transporting workers in and out) when calculating how much greenhouse gas will be released from Project Ares.

Water Consumption and aquifer depletion

We hold significant concerns regarding the extraction of four gigaliters per year from the Montejinni Limestone southern part of the Cambrian Limestone Aquifer proposed in this document. This is a significant quantity, more than what greater Darwin uses in a month, according to NT Power and Water Corporation data, and approximately 30% of the entire volume of water allocated for 'other consumptive uses' in the Wiso Basin in the Georgina Wiso Water Allocation Plan

If we accept the proponents' claim that there will be minimal ecological impacts to local groundwater drawdown due to the depth of the existing groundwater table being too deep to support local groundwater dependent ecosystems, questions about the wider impact of groundwater depletion remain.

The health and stability of the Cambrian Limestone Aquifer is far from certain, with widely differing views between academics and the Northern Territory government. Academics hold concerns that the aquifer is depleting more than expected with normal drought cycles and that there are significant knowledge gaps in understanding of the interconnectedness of aquifers. Additionally, unpredictable climate conditions make groundwater recharge modelling difficult, increasing uncertainty. There will likely be compounding pressure on this aquifer in coming decades due to increased extraction for proposed horticulture, mining and petroleum operations. In this context the use of such a significant amount of groundwater which feeds such important places requires the utmost scrutiny and needs to be significantly better understood.

² Assuming reciprocating engines

Land Clearing and Threatened Species

The project proposes significant land clearing that will impact eight threatened species, as listed in the referral, including the iconic but dwindling Greater Bilby. The referral accepts that the project will have a direct impact on these species. Such a proposal needs significant scrutiny to understand what the impacts will be and how, if at all, they can be mitigated.

Energy North state that Project Ares will occur within 186,000 ha yet only calculate the 'physical disturbance associated with the Project' as 19,150 ha. It is therefore unclear how much land Energy North propose to clear for Project Ares. It should be a requirement of the assessment that Energy North make clear to the public how much native vegetation is proposed to be cleared to facilitate all components of Project Ares.

The project's referral states that impacts on the threatened species on the site is not well understood and requires more research. The project assumes that land has been degraded based on desktop research relying on the Strategic Regional Environmental Baseline Assessment and due to it being a pastoral station, has not done on-site surveys.

The Project area is currently 'unused pastoral land'. Project Ares will introduce light, heat, noise and vibrations to the Project area 24 hours a day. Yet the referral fails to address how the light, heat, noise and vibrations will impact all species in the area (including nocturnal threatened species). Sensory pollutants alter how animals process information by masking, distracting and misleading them

The destruction of Greater Bilby and other fragile species habitat is an unacceptable risk for a project that will also deplete ground water, require fracked gas and with little returns of resources or prosperity to the community.

The unplanned and uncritical nature of the roll out of hyperscale data centres in the Northern Territory, ensures that the Northern Territory Environmental Protection Authority process is of the utmost importance. It must be comprehensive, robust and consultative.

Kind Regards,

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