

FORMAL SUBMISSION OPPOSING PROJECT ARES

Water Security, Fire Risk, Air Quality and Long-Term Cumulative Impacts

To: Northern Territory Environment Protection Authority (NT EPA)

Re: Project Ares – Energy North Pty Ltd – Proposed Hyperscale Data Centre, Wiso Basin

Submission: Objection to the proposed Project Ares in its current form

1. Introduction

I submit this objection to **Project Ares**, proposed by Energy North Pty Ltd, and request that the Northern Territory Environment Protection Authority require the highest level of environmental assessment before the project can proceed.

The scale of Project Ares is exceptional. The current referral proposes a **1 GW hyperscale data centre**, up to **4 GL/year of groundwater extraction from the Wiso Basin**, a **7,000-hectare solar farm**, up to **3,000 MWp of solar generation**, battery energy storage of up to **16 GWh**, gas-fired power generation and extensive supporting infrastructure.

The preliminary disturbance footprint is approximately **19,150 hectares within a project area of 186,000 hectares**, with the data facility expected to operate for at least **25 years** and the overall project exceeding **30 years**. ([NTEPA](#))

The proposal should therefore be assessed as a **large integrated industrial, energy, water and technology precinct**, rather than simply as a data centre.

2. Groundwater Demand – 4 GL per Year Is a Major Long-Term Issue

The proposed extraction of up to **4 GL/year represents up to 4 billion litres of groundwater every year**.

If that maximum extraction were maintained for 25 years, it would represent approximately **100 GL of groundwater extraction**. Over 30 years it would be approximately **120 GL**.

This is not a short-term construction requirement. It is potentially a decades-long withdrawal from a groundwater system.

The NT Government's Georgina Wiso Water Allocation Plan identifies the Wiso Basin as part of the Cambrian Limestone Aquifer system and establishes allocations and environmental objectives for the resource. The plan specifically aims to balance consumptive use with environmental values, Aboriginal water interests, rural stock and domestic requirements and other beneficial uses. ([NT Government](#))

The Wiso Basin is also part of the **Daly Roper Beetaloo Water Control District**, which the NT Government identifies as an area requiring increased management of water resources. ([NT Government](#))

Concern

The environmental assessment must demonstrate, with a high degree of confidence, that extracting up to 4 GL/year will not:

- lower groundwater levels;

- reduce groundwater availability to existing users;
- affect groundwater-dependent ecosystems;
- alter spring or river baseflows;
- affect Aboriginal cultural water values;
- affect pastoral or agricultural water security;
- cause unacceptable changes to groundwater quality; or
- compromise future generations' access to the resource.

The NT Government's water-allocation framework expressly recognises groundwater as a **shared public resource** that must be managed sustainably and fairly between consumptive and non-consumptive uses. ([NT Government](#))

Requested condition

No approval should be granted for the proposed 4 GL/year extraction until an independent, peer-reviewed groundwater model demonstrates that the proposed extraction is sustainable under drought, climate-change and cumulative-development scenarios.

The model should be independently audited and publicly released.

3. Water Security and Climate Change

A major concern is the assumption that groundwater availability can be considered principally on the basis of current resource estimates.

The project is expected to operate for **25–30+ years**. Climate conditions, rainfall, recharge rates, groundwater demand and competing land uses may change substantially over that period.

The NT's own water-allocation framework recognises the need to protect environmental and community water requirements and to adapt management where scientific information changes. ([NT Government](#))

Accordingly, Project Ares should not be approved on a static water-balance assessment.

The assessment should model at least:

1. Current groundwater conditions.
2. Extended drought.
3. Reduced groundwater recharge.
4. Climate-change scenarios.
5. Increased regional groundwater extraction.
6. Future agricultural and pastoral demand.
7. Aboriginal water requirements.
8. Environmental groundwater requirements.

9. Failure or under-performance of water recycling systems.

10. Maximum rather than average project water consumption.

4. Fire and Major-Accident Risk

Project Ares combines several forms of infrastructure that can create different fire and emergency hazards:

- gas-fired power generation;
- large-scale electrical infrastructure;
- up to **16 GWh of battery energy storage**;
- solar generation;
- high-voltage equipment;
- fuel and other potentially hazardous materials;
- extensive construction and access infrastructure.

The concern is not that a fire will necessarily occur. Rather, the project creates a **large concentration of critical infrastructure and stored energy in a remote area**, and the consequences of a major incident need to be demonstrated to be manageable.

The NT Government recognises bushfire as a serious risk capable of damaging property and threatening lives. Fire behaviour is strongly influenced by fuel loads, weather, wind, humidity and vegetation conditions. ([NT Government](#))

The Barkly region has also experienced significant wildfire events, including a 2023 wildfire affecting approximately **9,300 km²**. ([NT Police, Fire & Emergency Services](#))

The assessment should therefore examine both directions of risk:

Bushfire → Project Ares

and

Project Ares → surrounding environment and communities.

This should include:

- bushfire entering the solar precinct;
- fire affecting battery systems;
- gas-generation incidents;
- transformer/electrical fires;
- fire spreading between infrastructure;
- smoke impacts;
- evacuation;

- emergency access;
- firefighting water availability;
- loss of electricity or communications;
- simultaneous bushfire and industrial emergency;
- emergency-service response times.

The NT's bushfire-management system itself recognises that regional planning must consider risk, available resources, mitigation and suppression capability. ([NT Government](#))

Requested condition

An independent **Major Hazard, Fire and Emergency Response Assessment** should be completed before approval.

It should demonstrate that NT emergency services have the personnel, equipment, water supplies, access and specialist capability required to respond to a worst-case incident.

5. Air Quality and Gas-Fired Generation

Project Ares includes gas-fired power generation infrastructure.

This introduces an important air-quality issue that should not be obscured by the project's large renewable-energy component.

The relevant question is not simply how much electricity is generated from solar.

The question is:

What pollutants will be emitted from the gas-fired generation during normal operation, start-up, shut-down, testing and abnormal conditions, and what will their cumulative effect be over 25–30+ years?

The assessment should include, at minimum:

- nitrogen oxides (NO_x);
- carbon monoxide;
- particulate matter;
- volatile organic compounds;
- other combustion pollutants;
- greenhouse-gas emissions; and
- emissions associated with gas supply and supporting infrastructure.

Ground-level concentrations should be modelled at sensitive receptors and under adverse meteorological conditions.

Cumulative air quality

The project should not be assessed in isolation.

The NT EPA's environmental assessment process expressly considers **direct, indirect and cumulative impacts**. The NT EPA has also identified air quality as an important environmental issue in other major NT developments. ([NTEPA](#))

The assessment should therefore consider cumulative emissions from:

- Project Ares;
 - existing gas generation;
 - proposed gas developments;
 - mining and petroleum activities;
 - transport;
 - future industrial developments; and
 - any foreseeable expansion of Project Ares.
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6. Cumulative Impacts – The Central Concern

The most significant concern is that Project Ares should not be assessed as a collection of separate components.

The proposal combines:

1 GW data centre

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4 GL/year groundwater extraction

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7,000 ha solar farm

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3,000 MWp solar generation

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16 GWh battery storage

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gas-fired generation

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19,150 ha preliminary disturbance footprint

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roads, airstrip, accommodation, workshops, rail siding and waste infrastructure.

([NTEPA](#))

Each component has its own environmental consequences, but the **combined effect** may be substantially different from the impact of any individual component.

The NT EPA's own assessment framework recognises cumulative impacts and considers environmental factors including hydrological processes, inland-water quality, terrestrial ecosystems and community/economic impacts. ([NTEPA](#))

7. Long-Term Environmental Risk

The proposed operating period makes the project's long-term consequences particularly important.

The data facility is proposed to operate for at least **25 years**, while the overall project is expected to exceed **30 years**. ([NTEPA](#))

An approval therefore needs to account for conditions that may exist decades from now rather than simply demonstrating that impacts are acceptable during the first few years.

The assessment should address:

1. Long-term groundwater drawdown.
 2. Climate-change effects on groundwater recharge.
 3. Long-term water competition.
 4. Expansion beyond the initial proposal.
 5. Increasing electricity and cooling requirements.
 6. Replacement and disposal of batteries.
 7. Decommissioning of solar infrastructure.
 8. Decommissioning of gas-generation infrastructure.
 9. Rehabilitation of disturbed land.
 10. Long-term contamination risks.
 11. Cumulative effects of other regional developments.
 12. Financial security for rehabilitation and closure.
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8. Precautionary Principle

The NT environmental assessment framework requires consideration of the principles of ecologically sustainable development, the environmental decision-making hierarchy and the impacts of a changing climate. ([NTEPA](#))

Where a project proposes a major, long-term withdrawal of groundwater and introduces large-scale energy infrastructure, decisions should not depend on assumptions that cannot yet be demonstrated with adequate scientific confidence.

In particular, the absence of demonstrated harm should not automatically be treated as proof of long-term sustainability.

9. Requested Outcome

I respectfully request that the NT EPA **not support approval of Project Ares in its current form.**

At minimum, I request that:

- 1.** The project undergo the most rigorous appropriate environmental impact assessment.
- 2.** The proposed 4 GL/year groundwater extraction be independently assessed and peer reviewed.
- 3.** A 25–30+ year groundwater sustainability model be publicly released.
- 4.** Climate-change and severe-drought scenarios be incorporated into the water assessment.
- 5.** A cumulative regional water assessment be undertaken.
- 6.** An independent major-hazard and fire-risk assessment be completed.
- 7.** Battery energy-storage fire scenarios be independently assessed.
- 8.** Gas-generation emissions be comprehensively modelled.
- 9.** Cumulative air-quality impacts be assessed.
- 10.** The full project, including associated energy, transport, water and support infrastructure, be assessed as one integrated development.
- 11.** Future expansion scenarios be assessed rather than allowing incremental expansion to escape cumulative assessment.
- 12.** Long-term rehabilitation and decommissioning obligations be fully costed and financially secured.
- 13.** Groundwater, air-quality and other environmental monitoring data be publicly available throughout the project's life.
- 14.** Approval should not be granted unless the NT EPA can demonstrate that the project's long-term residual impacts are environmentally acceptable.

10. Conclusion

Project Ares represents a fundamentally different scale of development from a conventional data centre.

It combines a **1 GW hyperscale computing facility with major groundwater extraction, large-scale solar generation, 16 GWh of battery storage, gas-fired generation and extensive supporting infrastructure** across a very large project area. ([NTEPA](#))

The most serious concern is therefore not one isolated environmental impact.

It is the possibility that **water extraction, fire risk, air emissions, land disturbance, energy infrastructure and cumulative development will interact over several decades.**

The proposed **4 GL/year groundwater extraction** is particularly significant. At the maximum proposed rate, this represents 4 billion litres every year and potentially around 100 billion litres over 25 years. The NT's water-management framework requires water resources to be shared sustainably between environmental, cultural, domestic, agricultural and industrial needs. ([NT Government](#))

In my view, the scale and duration of Project Ares justify a highly precautionary approach. **The project should not proceed to approval until the long-term water, fire, air-quality and cumulative risks have been independently demonstrated to be acceptable.**

BIBLIOGRAPHY AND REFERENCES

1. Northern Territory Environment Protection Authority (NT EPA), Project Ares – Public Consultation, 8 July 2026.

Official project overview, proposed 1 GW data centre, 4 GL/year groundwater extraction, 7,000 ha solar farm, 3,000 MWp solar, 16 GWh battery storage, gas generation, 19,150 ha preliminary disturbance footprint and project duration. ([NTEPA](#))

[NT EPA – Project Ares consultation page](#)

2. Northern Territory Environment Protection Authority, Project Ares – Environmental Impact Assessment Register.

Confirms Energy North Pty Ltd as proponent and that the proposal has been accepted for standard assessment. ([NTEPA](#))

[NT EPA – Project Ares assessment register](#)

3. Northern Territory Government, Georgina Wiso Water Allocation Plan 2023–2031.

Sets out groundwater management, estimated sustainable yields, beneficial uses, Aboriginal water reserves and environmental objectives for the Georgina and Wiso basins. ([NT Government](#))

[Georgina Wiso Water Allocation Plan](#)

4. Northern Territory Government, Daly Roper Beetaloo Water Control District.

Identifies the Wiso Basin as part of the Cambrian Limestone Aquifer and explains the increased water-resource management requirements applying to the district. ([NT Government](#))

[Daly Roper Beetaloo Water Control District](#)

5. Northern Territory Government, Water Allocation Framework.

Describes water as a shared public resource and the framework for balancing consumptive and non-consumptive uses. ([NT Government](#))

[NT Water Allocation Framework](#)

6. Northern Territory Government, Water Allocation Plans.

Explains the purpose of water allocation plans, sustainable yields, environmental protection and community consultation. ([NT Government](#))

[NT Government – Water Allocation Plans](#)

7. Northern Territory Government, Factors That Create Bushfire Risk.

Identifies fuel, weather, humidity, wind, vegetation and other factors influencing bushfire intensity and spread. ([NT Government](#))

[NT Government – Factors that create bushfire risk](#)

8. Northern Territory Government, Managing Bushfire in the NT.

Describes regional fire-management zones, risk management and emergency arrangements. ([NT Government](#))

[NT Government – Managing bushfire in the NT](#)

9. NT Police, Fire and Emergency Services, Barkly Wildfire Response, September 2023.

Documents the response to a significant approximately 9,300 km² wildfire in the Barkly region.

([NT Police, Fire & Emergency Services](#))

[NT PFES – Barkly Wildfire Response](#)

10. Northern Territory Environment Protection Authority, Assessment Report 109 – Darwin Energy Hub, October 2025.

Demonstrates the NT EPA's consideration of direct, indirect and cumulative impacts, hydrological processes, inland-water quality, terrestrial ecosystems and community/economic factors in a major NT energy assessment. ([NTEPA](#))

[NT EPA – Assessment Report 109, Darwin Energy Hub](#)

11. Northern Territory Environment Protection Authority, Project Ares statutory consultation notice.

Public submissions on the current referral close **20 August 2026**. ([NTEPA](#))

[NT EPA – Submit comments on Project Ares](#)