

Submission on Project Ares Referral and Draft Terms of Reference

Project design remains preliminary

The Project Ares documents confirm that important parts of the project design have not been finalised. These include the energy generation mix, water demand, cooling configuration, borefield location, gas generation footprint, gas pipeline connection and other supporting infrastructure.

These are not minor design details. They determine the project's demands on water, energy and land and the extent of its environmental impacts.

The final Terms of Reference should require these matters to be resolved and assessed in the EIS before environmental approval is considered.

Water demand and groundwater sustainability

Project Ares proposes groundwater extraction of up to 2.5 GL a year during construction and 4 GL a year during operation. Energy North has lodged a draft groundwater extraction licence application for up to 4 GL a year for 25 years.

However, the project documents acknowledge that actual water demand and the final cooling configuration remain uncertain. They also acknowledge that further investigation is required to determine whether groundwater extraction from the Wiso Basin would be sustainable.

The site was selected partly because it was considered to have sufficient groundwater, yet the available groundwater data are limited. Recharge is episodic, rainfall is highly seasonal and evapotranspiration greatly exceeds rainfall.

The EIS should establish the minimum water requirement achievable through available cooling technologies before assessing whether the aquifer can supply the proposed amount. It should identify how much water would be used for cooling, workforce accommodation, solar-panel cleaning, water-treatment losses and other purposes.

The assessment should consider annual, seasonal and peak demand, cumulative extraction and climate-change effects over the full life of the project. It should also establish whether groundwater-dependent ecosystems exist and whether they could be affected by groundwater drawdown.

Cooling technology and chemicals

The Referral Report identifies closed-loop direct liquid cooling as the preferred cooling system. The EIS should establish the actual water requirement of this system rather than treating 4 GL as the amount to be accommodated.

The EIS should compare feasible cooling systems and quantify their water use, electricity requirements, chemical use and performance under normal and extreme Barkly conditions.

The Referral Form and Referral Report identify spent coolant from the closed-loop cooling system as an operational waste stream. The EIS should identify all coolants, refrigerants, biocides, corrosion inhibitors and other chemicals that would be used, including whether any contain PFAS or other persistent chemicals.

It should state the quantities involved, how frequently coolant would be replaced, how leaks would be detected and contained, and how spent coolant would be stored, transported and disposed of. Possible contamination pathways into groundwater should be specifically assessed.

Gas use and the proposed renewable transition

Project Ares includes up to 1,038 MW of gas-fired generation. Gas would provide firm power and backup generation and is not proposed solely for emergency use.

The documents repeatedly describe the project as transitioning towards renewable-powered operations. However, the initial generation mix has not been determined and there are no binding dates, minimum renewable percentages or maximum gas-use limits. The transition remains dependent on equipment procurement, battery economics and Tier III reliability requirements.

The Referral Report indicates that alternative technologies were rejected partly because they could not meet Energy North's proposed timetable for commencing Phase 1 power supply by June 2028. Commercial urgency should not determine the project's long-term environmental outcome.

The EIS should state the expected annual and lifetime gas consumption, the likely source of the gas and the proportion of electricity supplied by gas, solar and batteries during each stage of the project. Any proposed transition to renewable energy should include measurable targets and dates.

The assessment should include a delayed-transition or high-gas scenario if battery storage remains commercially unattractive, renewable development is delayed or reliability requirements continue to be used to justify substantial gas generation.

Electricity demand and data-centre efficiency

Project Ares is designed for a maximum IT capacity of 1 GW, but the project documents do not establish how quickly that capacity will be installed or how intensively it will be used.

The EIS should explain how the proposed electricity requirement was calculated and distinguish maximum designed capacity from expected utilisation over time. It should assess whether generation, water and other infrastructure will be constructed in stages according to actual demand or built in advance for the maximum theoretical load.

It should also assess how electricity demand could be reduced through more efficient servers, storage, cooling and other operational measures. Reducing electricity demand could also reduce the gas generation, solar infrastructure, battery capacity, land disturbance, water use and materials required by Project Ares.

Greenhouse gas emissions

The Referral Report and Draft Statement of Reasons acknowledge that there is insufficient information to assess the significance of the project's greenhouse impacts confidently.

The EIS should provide annual and lifetime Scope 1 and Scope 2 emissions under several realistic operating and energy scenarios. These should include a delayed renewable transition and continued high reliance on gas.

The assessment should also include material Scope 3 emissions, particularly emissions associated with gas production and transport.

It should determine whether Project Ares would create additional demand for fossil gas or associated gas infrastructure that would not otherwise be required and assess how this would affect the Territory's transition away from fossil fuels.

Associated infrastructure and fragmented assessment

Project Ares depends on infrastructure that has been excluded from the formal referral, including an off-site gas trunk pipeline and potentially new telecommunications infrastructure. Project Sol and other related developments would require their own referral or approval processes if they proceed.

The gas trunk pipeline should not be excluded from consideration merely because it would be constructed or owned by another proponent. The EIS should identify the likely gas source and assess the environmental and greenhouse consequences of producing and transporting the gas required by Ares.

The final Terms of Reference should prevent the project's environmental consequences from being fragmented across separate approvals. The EIS should assess the data centre, water extraction, gas supply, power generation, cooling system, workforce and supporting infrastructure as an integrated system, regardless of ownership or separate approval arrangements.

Cumulative impacts

The preliminary cumulative assessment is largely focused on developments in the Barkly region and infrastructure directly associated with Project Ares.

The EIS should also assess the cumulative demands of the existing and reasonably foreseeable NT data-centre industry for gas, renewable generation, groundwater, land, infrastructure, skilled labour and government support. It should include cumulative greenhouse emissions and the combined loss and fragmentation of habitat.

Assessing each data centre and its supporting infrastructure separately could substantially underestimate the consequences of establishing a much larger data-centre industry in the Territory.

Environmental information and project layout

The Referral Form, Referral Report, Terrestrial Ecology Report and Draft Statement of Reasons acknowledge gaps in information about vegetation, threatened species, hydrology, groundwater-dependent ecosystems, sacred sites and cultural landscape values.

The Terrestrial Ecology Report is a desktop assessment. It did not include new field surveys of the final Project Ares footprint and does not assess the project's actual ecological impacts.

The report confirms Greater Bilby records on Murrarji Station and identifies potential bilby habitat across the study area. It also identifies potential critical habitat for the Critically Endangered Northern Blue-tongued Skink, although no targeted surveys for this species have been undertaken within the study area. Potential habitat for the Yellow-spotted Monitor and possible significant wetlands and drainage features also require field investigation.

Adequate seasonal field surveys and ground-truthing should be completed before the final project layout is fixed. Avoidance should determine the design rather than surveys being used mainly to manage impacts after infrastructure locations have been selected.

The EIS should assess habitat fragmentation and connectivity across the entire disturbance footprint, not simply calculate the number of hectares removed. It should demonstrate why significant habitat cannot be avoided before mitigation or offsets are considered.

Surface water, erosion and extreme rainfall

The Draft Statement of Reasons acknowledges considerable uncertainty about how the extensive solar fields could alter drainage, infiltration and surface flows during heavy rainfall.

The EIS should model changes to runoff, infiltration, erosion and flooding across the solar fields and associated infrastructure. This should include extreme rainfall under future climate conditions and the possible effects on downstream environments and infrastructure.

Waste and decommissioning

Project Ares would generate substantial waste over its operating life, including electronic equipment,

batteries, solar panels, cooling equipment, spent coolant and other hazardous or difficult waste streams.

The EIS should quantify these waste streams, expected equipment-replacement cycles and realistic reuse, recycling, transport and disposal pathways. General commitments to apply the waste hierarchy are insufficient without evidence that appropriate facilities and arrangements exist.

The assessment should cover the complete project life cycle, including construction, operation, equipment replacement, decommissioning and rehabilitation.

Consultation began after major project decisions

The Referral Form, Referral Report, Stakeholder Engagement Plan and Draft Statement of Reasons acknowledge that broader engagement with Traditional Owners, Elliott residents and other community stakeholders had not been completed when the referral was lodged.

At the same time, Energy North had already spent several years engaging with government agencies involved in project facilitation, infrastructure planning and investment.

Major decisions had already been made about the project's location, scale and general energy model before broader community consultation began.

The EIS should identify which project elements remain genuinely open to change and which Energy North regards as fixed. It should document when each stakeholder entered the process, what decisions had already been made and what changes resulted from consultation.

Energy North should provide a public record identifying the issues raised, the changes made in response and, where no change was made, the reasons the concern was rejected.

Free, Prior and Informed Consent

Energy North commits to Free, Prior and Informed Consent, but formal on-country engagement and an Indigenous Land Use Agreement were not in place when the project was referred.

The project area is subject to a non-exclusive native title determination, and important information about sacred sites, cultural landscapes, water and customary land use remains incomplete.

The EIS should explain what will happen if affected Traditional Owners do not consent to particular infrastructure, groundwater extraction, cultural impacts or other parts of the project.

Free, Prior and Informed Consent should operate as a genuine decision-making constraint rather than simply a consultation principle. Traditional Owner knowledge and decisions should influence the project layout before infrastructure locations are finalised.

Economic benefits and public benefit

The project documents refer to approximately 4,300 jobs during peak construction and 350 to 500 ongoing positions. However, the Territory Benefit Plan has not been developed and there are no enforceable commitments concerning NT employment, Aboriginal employment or local procurement.

The EIS should distinguish temporary construction employment from permanent employment and identify how many ongoing positions are expected to be held by NT residents. It should identify how many workers would be FIFO or accommodated in the project's self-contained workforce camps and how much expenditure would remain in Elliott, Tennant Creek and the wider Barkly economy.

The assessment should identify local procurement, government revenue, public expenditure, subsidies, concessions and other measurable benefits and costs to Territorians.

The size of the private investment should not itself be treated as evidence of public benefit.

Infrastructure costs and government support

The project requires extensive supporting infrastructure, but the full cost, ownership and funding arrangements remain unclear.

The EIS should identify all roads, water systems, gas infrastructure, telecommunications, rail facilities, airstrip works, emergency services and other infrastructure required because of Project Ares. It should state who will construct and own each component, who will pay for it and who will bear the financial risk if the project does not reach its expected utilisation or closes early.

It should also disclose government assistance, facilitation, financing support, subsidies and infrastructure commitments.

Infrastructure built primarily for a private development should not automatically be counted as a public benefit, particularly where costs or financial risks are borne by governments, utilities, taxpayers or other users.

Monitoring and public reporting

The final Terms of Reference should require specific environmental limits and regular public reporting throughout the project's operation.

Reporting should cover groundwater extraction, groundwater levels, water quality, electricity consumption, gas consumption, renewable-energy contribution, greenhouse emissions, cooling efficiency, chemical use and major waste streams.

Monitoring requirements should include measurable commitments, indicators, trigger values and limits.

The EIS should state what action will be taken when a trigger or limit is reached rather than leaving this to later management plans.

Conclusion

The same uncertainties appear repeatedly across the Project Ares documents. The design is unfinished, water requirements remain unresolved, groundwater sustainability has not been established, the renewable transition has no timetable, greenhouse impacts cannot yet be assessed confidently, environmental and cultural information is incomplete, and broader community consultation began after major decisions had already been made.

The final Terms of Reference should require these uncertainties to be resolved in the EIS before environmental approval is considered. They should not be carried forward into later design, management and approval processes.

The EIS should establish whether this scale of demand on water, energy, land and infrastructure is necessary, whether substantially less damaging alternatives are available and what measurable long-term benefit would remain with Territorians.