

18 February 2026



Modification Report - Dubbo Firming Power Station

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Executive Summary

Development Consent for the Dubbo Firming Power Station Project was provided through the State Significant Development (SSD) assessment pathway on 13 May 2024 (SSD-28088034), pursuant to Section 4.38 of the *Environmental Planning and Assessment Act 1979 (NSW)* (EP&A Act).

A modification to the Project – **Modification 1** – is being sought under Section 4.55(2) of the EP&A Act. The modification is required to:

- increase the generation capacity of the Project from 64MW to 180 MW;
- introduce an alternative power generation technology in the form of reciprocating engines; and
- incorporate the land proposed for the gas pipeline connection which was studied in the EIS and defined as Subject Land to form part of the Project Site.

Using a similar footprint as the existing approved Project, the modified Project will deliver more firming capacity at greater efficiency at a time when Australia has recognised the increasing importance of firming technologies such as gas-powered generation to help maintain grid stability and provide back-up supply during long periods of renewable droughts and times of extreme peak demand.

The environmental assessment of the modification determined that a number of environmental matters are expected to have nil or negligible impacts while residual impacts could be effectively mitigated by the environmental management measures set out in the assessments appended at Appendices B – E and by ensuring compliance with the existing conditions provided under the Development Consent in May 2024.

This Project is critical to ensuring urban and regional communities continue to have access to reliable sources of renewable energy, backed by the Dubbo Firming Power Station. The Project enables gas-powered electricity generation to firm up renewable energy generation and to assist in replacing generation currently obtained from retiring coal-powered electricity generators.

Contents

1	Introduction	1
1.1	The Proponent	1
1.2	Overview of the Approved Project	1
1.3	Overview of proposed modification	4
1.4	Key Aspects of Modification	7
1.5	Environmental Assessments for Modification	7
2	Strategic Context	9
2.1	Climate Change	9
2.2	Energy Security	10
2.3	Economic development	10
3	Description of Modification	12
3.1	Modified Layout	12
3.2	Proposed Modifications Analysis	12
3.3	Alternative Power Generation Technology	12
3.3.1	Gas Turbine Technology	12
3.3.2	Reciprocating Engine Technology	13
3.4	Conditions to be modified	20
4	Statutory context	21
4.1	Statutory criteria for modifications	23
4.2	Pre-conditions to consent	23
4.3	Mandatory matters for consideration	24
5	Engagement	27
5.1	Department of Planning, Housing and Infrastructure	27
5.2	Dubbo Regional Council	27
5.3	Essential Energy	27
5.4	Environment Protection Authority (NSW)	28
5.5	Landowner	28
5.6	Registered Aboriginal Parties	28
5.7	Community Stakeholders	28
6	Environmental Impact Assessment	29
6.1	Assessment	29
6.2	Mitigation Measures	37
7	Justification of Modified Project	38
7.1	Evaluation of Project Benefits	38
7.2	Evaluation of Project Impacts	38
7.2.1	Air Quality and Greenhouse Gas	38
7.2.2	Hazards	39
7.2.3	Noise and Vibration	39
8	Conclusion	40
9	Appendices	41
Appendix A	Updated Project Description	
Appendix B	Air Quality Impact Assessment	
Appendix C	Greenhouse Gas Assessment	
Appendix D	Preliminary Hazard Assessment	
Appendix E	Noise and Vibration Impact Assessment	
Appendix F	Cultural Heritage Update Letter	

Appendix G Revised Mitigation Measures
Appendix H - Biodiversity Assessment Update Letter

Figures

Figure 1.1	Approved Layout
Figure 1.2	Indicative Layout for Modified Project (non-specific technology)
Figure 1.3	Comparison Layout between Approved Layout and Modified Project Layout
Figure 3.1	Indicative Layout for Modified Project Option 1 (Gas turbines only)
Figure 3.2	Indicative Layout for Modified Project Option 2 (Gas turbines and reciprocating engines)
Figure 3.2	Indicative Layout for Modified Project Option 3 (Reciprocating engines only)

Tables

Table 1.1	Description of Modification Proposal
Table 3.1	Proposed Modifications Analysis
Table 3.2	Conditions to be Modified
Table 4.1	Statutory Context
Table 4.2	Pre-conditions to consent for the Project
Table 4.3	Mandatory matters for consideration for the Project
Table 6.1	Environmental Impact Assessment
Table 6.2	Effect on Biodiversity Values
Table 6.3	Mitigation Measures

1 Introduction

Development Consent for the Dubbo Firming Power Station (the Project) was provided through the State Significant Development (SSD) assessment pathway on 13 May 2024 (SSD-28088034), pursuant to Section 4.38 of the *Environmental Planning and Assessment Act 1979 (NSW)* (EP&A Act).

The Project will operate as a 'firming' electricity generation facility – the Project is able to supply electricity at short notice during periods of high demand and/or low renewable energy generation. As such, the Project helps to maintain electricity supply to the National Electricity Market (NEM) irrespective of weather conditions.

Dubbo Firming Nominees Pty Ltd (the Proponent) is now seeking to modify the Development Consent for the Project pursuant to Section 4.55(2) of the EP&A Act.

1.1 The Proponent

The Proponent is a wholly owned subsidiary within Squadron Energy which is part of the Tattarang group of companies. Squadron Energy is an Australian owned renewable energy company dedicated to accelerating the decarbonisation of Australia's economy.

With proven experience and expertise across the project lifecycle, Squadron Energy works with local communities and customers to lead the transition to Australia's clean energy future.

Squadron Energy has 2GW of renewable energy projects in construction and operation.

The Project is an integral part of Squadron Energy's vision as it supports Australia's energy transition and seeks to "firm" green power purchase agreement capabilities to satisfy changing customer needs.

Squadron Energy recognises that being able to sell renewable generation in the forward contract market by firming it with dispatchable generation is the critical next step as the Australian energy market transitions. Having recognised this, the Project forms part of a wider strategy which encompasses future firming power stations and batteries in Renewable Energy Zones across NSW, including co-location with other projects which are strategically located to take advantage of the existing and proposed critical infrastructure available to support firming projects.

1.2 Overview of the Approved Project

The Site (as defined in the Development Consent) consists of 13.95¹ hectares (ha) comprising the Project Site and Subject Land (as shown on the plan at Appendix 1 of the Development Consent). The Site is located 4 km north of the Dubbo town centre, on the traditional lands of the Tubbagah People of the Wiradjuri Nation. The Site is located within the Dubbo Regional local government area (LGA) and is subject to the *Dubbo Regional Local Environmental Plan 2022* (Dubbo LEP). The Project site is currently used for crop cultivation and grazing, with no existing dwellings or structures present.

Development Consent for the Project was provided through the State Significant Development (SSD 28088034) pathway on 13 May 2024 by the Independent Planning Commission (IPC). The Project was eligible for the SSD pathway as it met the Capital Investment Value and energy output criteria for electricity generating works, defined in Section 20, Schedule 1 of the State Environmental Planning Policy (Planning Systems) 2021 (Planning Systems SEPP).

The existing Development Consent permits the construction, operation and decommissioning of:

¹ It is noted that there was a change to the Subject Land from 14.1 ha to 13.95 ha to exclude the land associated with the electricity connection (Lot 2510 DP876959) per the Amendment Report dated 3 May 2024.

- a power generation facility with a nominal capacity of approximately 64 MW, comprising dual-fuel turbine generators capable of operating with gas/hydrogen blends or biofuels, alongside ancillary facilities.
- a hydrogen generation facility with a nominal capacity of up to 20 MW, along with hydrogen compression, storage, handling and blending facilities.
- a high-pressure gas pipeline connection between the Project site and the APA-operated Central West Pipeline (CWPL) Dubbo Scraper Station (located to the south of the Project site)
- a high-pressure gas pipeline within the Project site for balancing storage and supplying feedstock during periods of operation.
- an access point from Yarrandale Road.

Figure 1.1 below provides an overview of the Project as approved.

Construction of the Project has not yet commenced.

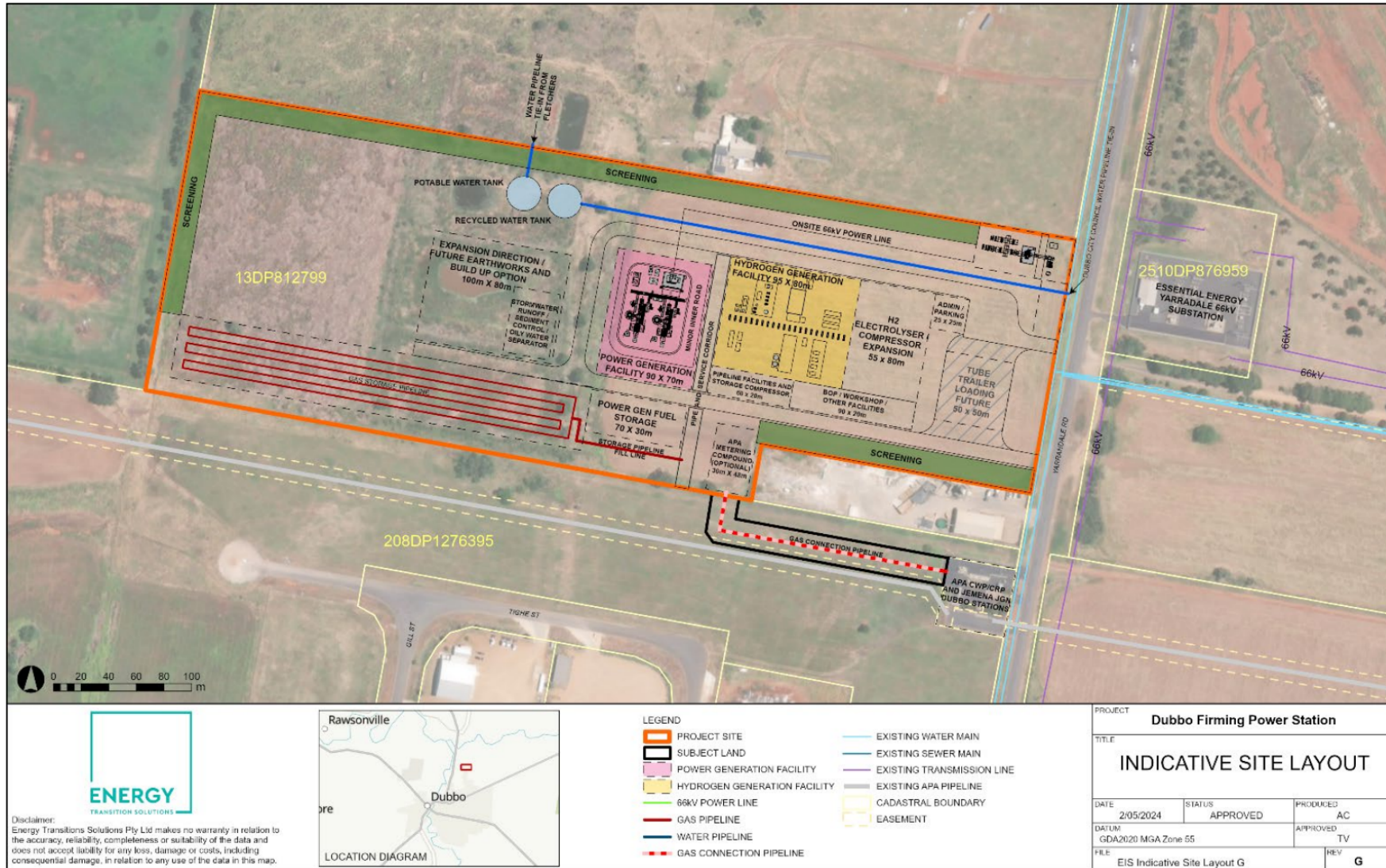


Figure 1.1 Approved Project Layout

1.3 Overview of proposed modification

A modification to the Project – **Modification 1** – is being sought under Section 4.55(2) of the EP&A Act. The modification of the Development Consent is required to:

- increase the generation capacity of the Project from 64MW to 180 MW.
- introduce an alternative power generation technology in the form of reciprocating engines; and
- incorporate the land proposed for the gas pipeline connection which was studied in the EIS and defined as Subject Land to form part of the Project Site.

Using a similar footprint as the existing approved Project, the modified Project will deliver more firming capacity at greater efficiency at a time when Australia has recognised the increasing importance of firming technologies such as gas-powered generation to help maintain grid stability and provide back-up supply during long periods of renewable droughts and times of extreme peak demand.

Increasing the capacity of the Project will enable it to provide greater and longer duration firming capabilities. The modification will also cater to future projections of market demands for firming technologies.

The introduction of alternative reciprocating engine technology as part of the Modification will also allow the Project to potentially use a combination of technologies to enhance efficiency, the performance of the power station and reduce start up times.

The Proponent considers that the Modification would result in 'substantially the same development as the development for which the consent has originally been granted'. The Modification will not change:

- the relevant land affected by the Project as referred to in Table 2.2 of the EIS
- the existing hours of operation
- the proposed operational activities on the Project site.

The Project footprint and the proposed disturbance will be similar to the approved Project, with a minor change associated with:

- the inclusion of the area associated with the gas connection pipeline.
- the avoidance of the area along the western boundary of the Project site to avoid impacts to existing easements.

Figure 1.2 provides an overview of the proposed modified layout of the Project under any of three options presented in this proposal.

Figure 1.3 provides a comparison of the approved layout of the Project against the proposed modified layout.

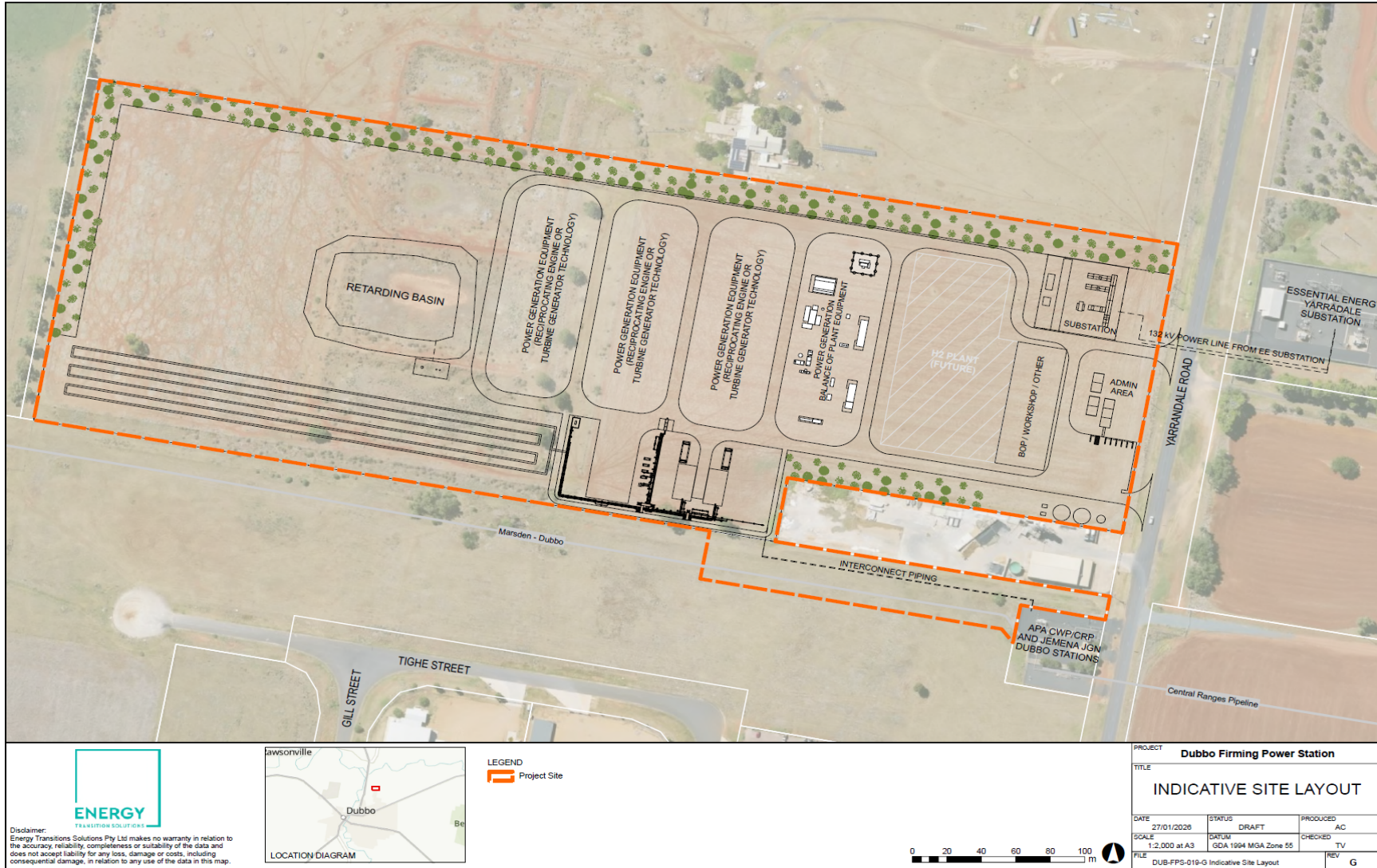


Figure 1.2 – Indicative Layout for Modified Project (non-specific technology)

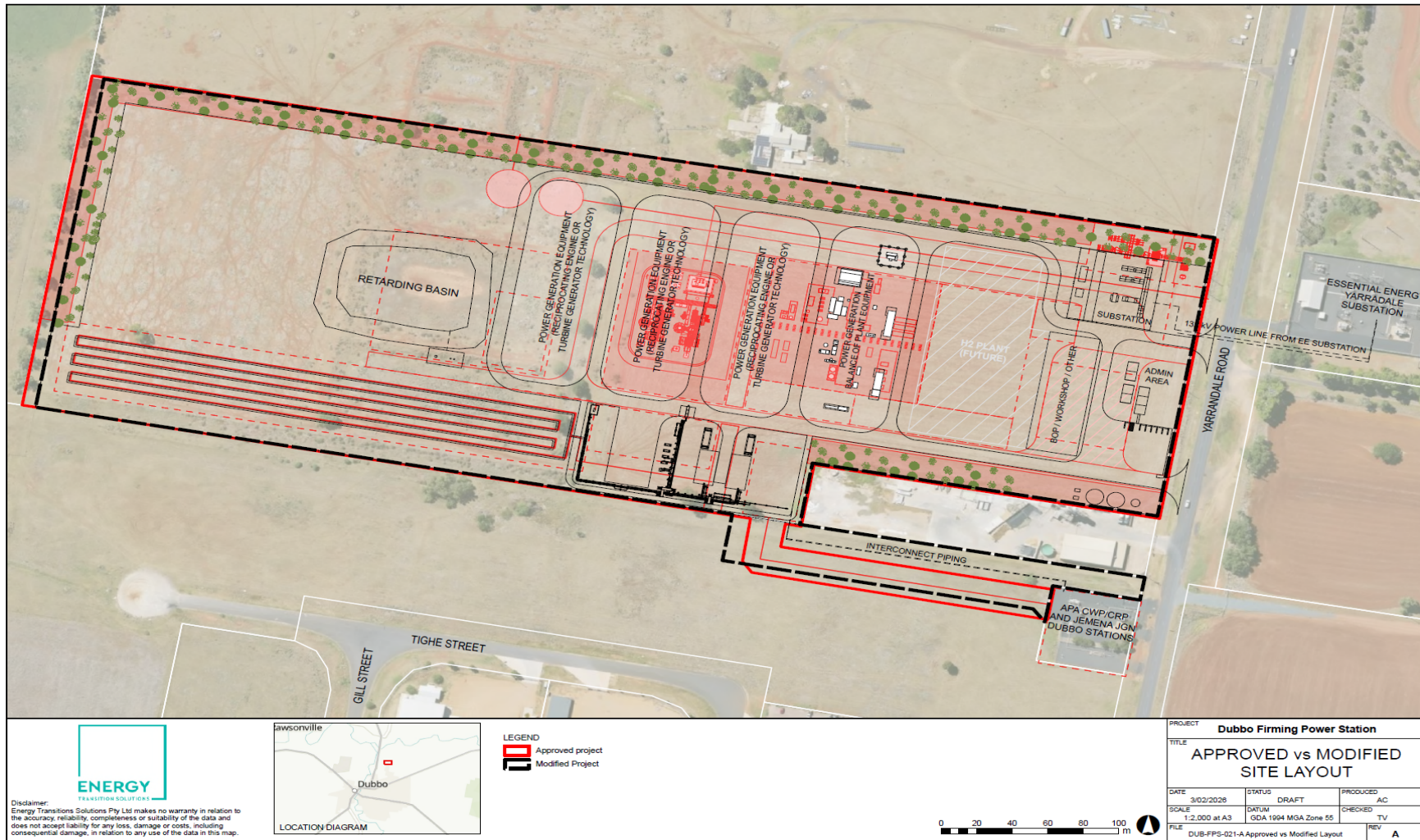


Figure 1.3 – Comparison of approved vs modified site layout

1.4 Key Aspects of Modification

The key aspects of the Modification are summarised in Table 1.1

Table 1.1 Description of Modification

Project element	Summary of approved project	Proposed Modification 1
Power generation units	Up to three open cycle gas turbine generators with a nominal total output of 64 MW	Power generation units with up to 180 MW of generation capacity. The units will either be composed of gas turbine units, reciprocating engines or a combination of both technologies.
On-site substation	66 kV	132 kV - noting Essential Energy will provide a 132 kV connection to the on-site substation.
Change to Boundaries of Project Site	<p>The Development Consent was granted in respect of the Project Site and the land under option for easement required for the gas connection pipeline on the land described as partial Lot 208 DP1276395.</p> <p>Subject Land was studied and defined in the EIS as the land comprising 13.95 hectares which included the Project Site at Lot 13 DP812799 together with a proposed 10 metre easement area either side of the proposed gas connection pipeline on an immediately adjacent land parcel (partial Lot 208 DP1276395).</p> <p>In addition to the Project Site and Subject Land, certain specialist impact assessments (biodiversity, land and water and cultural heritage assessments) also considered a broader project investigation area. This broader area is depicted in Figure 6.1 of the EIS.</p>	<p>The land to be used for the gas connection infrastructure will be slightly larger (approximately 30 metres wide x 150 metres long) (partial 208 DP1276395) and will be incorporated into the land that is the Project Site. The land tenure for this sliver of land will be under the same tenure arrangements as the existing Project Site.</p> <p>The change is required to:</p> <ul style="list-style-type: none"> • address an error recorded in the location of the existing APA gas pipeline easement on partial lot 208 DP1276395. • to enable the connection pipeline to be above ground piping infrastructure rather than an underground pipeline and to be included as part of the Project Site. <p>See Figures 3.1, 3.2 and 3.3 which show the Project Site (orange line) including the land to be used for gas connection.</p>

1.5 Environmental Assessments for Modification

In accordance with the approved scoping of the Modification Proposal, the key issues for further environmental assessment were identified and assessed as follows:

- the air quality assessment determined that NSW EPA assessment criteria will not be exceeded by operation of the Modification Proposal subject to the appropriate use of emissions reduction technology (see Appendix B).
- the greenhouse gas assessment determined that whilst the Project would result in emissions of greenhouse gas, it would support the avoidance of significantly greater volumes of greenhouse gas through the wider renewables network operated by Squadron Energy and other renewables project operators in the region (see Appendix C).
- the preliminary risk screening determined that the risks from the proposed Project comply with all quantitative and qualitative land use safety risk criteria in Hazard Industry Planning Advisory Paper No 4 (HIPAP No 4). No unusual risks were identified that cannot be mitigated through the application of good industry practice, safety in design processes and operating practices (see Appendix D).

- the noise and vibration assessment determined that noise levels generated from construction and operation of the Modification Proposal will not exceed the noise limits prescribed by the existing development consent (see Appendix E).

Biodiversity, cultural and historic heritage, traffic and transport, hydrology, visual and social are expected to have nil or negligible impacts in accordance with the approved scoping.

2 Strategic Context

The Modification will ensure the Project will meet its original aim of providing firming services to the NEM, thereby supporting reliability in the overall energy system.

The key operational, economic and functional objective of the Project is to supplement the Proponent's renewable energy generation portfolio with dispatchable capacity when the needs of its customers are highest. The key environmental objective of the Project is to provide firming capacity to support renewable generation projects in the areas where it is required, at a scale that is suitable to the region and that responds to future market demand. The Proponent considers that these objectives are best met with a modified Project.

The modified Project aligns with the current strategic context for energy generation in Australia and the continued recognition of the need for firming technologies as Australia transitions to a net zero economy.

Since the original Project Environmental Impact Statement (Squadron Energy 2023) (EIS) was exhibited in 2023, revisions have been made to some of the policy documents that underpinned the Project's strategic context. These revisions are discussed below.

The modified Project will continue to support the goals of the Australian and NSW governments on climate change, energy security and economic development.

2.1 Climate Change

The Australian and NSW governments have outlined commitments to reduce emissions and address the impacts of climate change.

Nationally, Australia is a party to the Paris Agreement, an international treaty with the goal of holding the increase in the global average temperature to well below 2°C above pre-industrial levels. The Paris Agreement also encourages efforts to limit global temperature increases to 1.5°C.

On a state level, the NSW Government has committed to net zero emissions by 2050 through the *Climate Change (Net Zero Future) Act 2023 (NSW)*. This is supported by additional emissions reduction targets of 50% of 2005 levels by 2030, and 70% of 2005 levels by 2035. The *Net Zero Future Act* also provides for the introduction of regulations to prescribe interim targets for 2040 and 2045.

The *NSW Net Zero Plan Stage 1: 2020-2030* (NSW DPIE, 2020) (Net Zero Plan) sets out the NSW Government's actions to achieve these emissions reduction targets, while also growing the economy and creating new job opportunities. The Net Zero Plan sets out four priorities:

- Drive the uptake of emissions reduction technologies that also support economic growth, or reduce cost of living or doing business
- Empower consumers and businesses to make sustainable choices
- Invest the next wave of emissions reduction innovation to ensure economic prosperity from decarbonisation beyond 2030
- Ensure the NSW Government leads by example.

The *NSW Electricity Strategy* also has actions to investigate the potential for substituting gas for other fuel sources (e.g. biomass and hydrogen) to reduce dependence on gas generation.

In its modified state, the Project will continue to help firm renewable energy generation within the region. This supports the uptake of renewable energy as a low-emission energy source, as well as the decarbonisation of the energy industry in NSW and Australia. The Project's ability to transition from using natural gas in the short to medium term to using other fuel sources (such as hydrogen), also

supports the Net Zero Plan's Priority 1 to deploy opportunities to reduce industrial emissions across NSW, all while ensuring energy security is maintained in Dubbo and NSW.

2.2 Energy Security

The Electricity Statement of Opportunities (ESOO), the Integrated System Plan (ISP) and the Energy Security Target Monitor Report (ESTM) have all been updated since the Project EIS was developed in 2023.

While these updated reports demonstrate an improvement to the NEM's reliability when compared to the 2023 ESOO, the reports also highlight the need for the on-time delivery of energy generation, storage and transmission projects to address increased energy demand. This additional generation is also crucial in replacing the capacity of aging coal-fired power stations such as Eraring, Vales Point and Bayswater.

The 2024 ESOO has ascertained that new renewable energy generation, firming by a variety of storage technologies is the most cost-effective way to generate electricity for the NEM. The ESOO also notes that dispatchable generation (e.g. gas generation) is also useful in maintaining the stability of the NEM. Electricity can be generated and dispatched at short notice to support the NEM during contingencies and peak demand periods.

The 2024 ISP provides that:

Renewable energy connected by transmission and distribution, formed with storage and backed up by gas powered generation is the lowest-cost way to supply electricity to homes and businesses as Australia transitions to a net zero economy.

And that:

Firming technologies...help maintain grid stability and inertia, smooth out volatile frequencies and balance out fast changes in supply and demand. Gas generation also provides back-up supply during long periods of 'dark and still' renewable droughts and times of extreme peak demand, particularly in winter.

Building on the findings of the 2022 ESTM Report and ISP, the *Electricity Infrastructure Roadmap* (the Roadmap) and the *NSW Electricity Strategy* outline the NSW Government's approach to maintaining energy security in NSW. The Roadmap enabled by the *Electricity Infrastructure Investment Act 2020 (NSW)* (EII Act), supports the development of Renewable Energy Zones (REZ). This includes the Central-West Orana REZ where the Project is located. Through the Roadmap and Electricity Strategy, the NSW Government is supporting private sector investment in gas firming generation through REZ access schemes and Long-Term Energy Security Agreements.

In its modified state, the Project will supply firming capacity to the Central-West Orana REZ during periods of low renewable energy generation. This guarantees sufficient electricity supply and grid stability for customers in the NEM.

2.3 Economic development

The objectives of the EII Act include:

- Encouraging and coordinating investment in new generation, storage network and related infrastructure
- Fostering local community support for investment in new generation, storage network and related infrastructure
- Creating employment and increasing opportunities for Aboriginal and Torres Strait Islander people
- Promoting consultation and negotiation with the traditional Aboriginal owners of land on which generation, storage and network infrastructure is proposed to be constructed.

The modified Project remains consistent with the objectives of the Act by progressing the development of renewable energy and hydrogen production, fostering community support, creating employment opportunities and promoting engagement with the Traditional Owners of the land.

On a regional level, the objectives of the EII Act are complemented by the updated *Central Orana Regional Economic Development Strategy – 2023 Update* (Central Orana REDS).

The Central Orana REDS notes that:

- energy generation is now an ‘engine industry’ for the region, contributing up to \$160 million in added goods and services in 2020
- the Central West-Orana REZ is projected to support more than \$5 billion of new investment into the regional economy
- the region has several major renewable energy facilities that are in operation or are about to commence construction including Squadron Energy’s Uungula Wind Farm; and
- a significant pipeline of future major renewable projects in the REZ is already forming, with no less than 9 major renewable energy projects currently at various stages of the planning approval process, with an estimated combined capital cost of over \$2.5 billion.

The Project will provide “firming support” to these major renewable energy facilities and help ensure that energy generation remains as an engine industry for the region.

3 Description of Modification

The request for modification is made under Section 4.55(2) of the EP&A Act. Correspondence with DPHI dated 8 July 2025 confirmed this is the appropriate pathway. The modification application may appropriately be dealt with under section 4.55(2).

The change in development will be substantially the same as the approved development for the following reasons:

- there are a number of environmental matters which are expected to have nil or negligible impacts while residual impacts can be effectively mitigated by the environmental management measures set out in the assessments appended at Appendices B – E and by ensuring compliance with the existing conditions provided under the Development Consent in May 2024
- the proposal would not significantly alter the shape, form, and general layout of the existing approval.
- setbacks from sensitive receivers remain the same, with no overall change in development footprint.
- the Project will remain constructed as one project by one Proponent.

For these reasons the powers conferred under 4.55(2) may be applied to the proposed modification. The extent of change and likely impacts is discussed further throughout this report.

3.1 Modified Layout

Figures 3.1, 3.2 and 3.3 provide alternative site plan overviews of the modification. Figures 3.1, 3.2 and 3.3 illustrate three alternative layouts for the modification based on whether one technology is used or a combination of both reciprocating engines and gas turbine units.

The decision to use one or a combination of both will be made as the power station design progresses. The Modification seeks flexibility to pursue any of the technology solutions within the proposed project layout set out in Figure 1.2 of this proposal.

3.2 Proposed Modifications Analysis

Table 3.1 below provides a comparative analysis between the approved development and the development in its proposed modified form.

3.3 Alternative Power Generation Technology

The Development Consent provides for the use of gas turbines. The Modification proposes to introduce an alternative power generation technology in the form of reciprocating engines. The introduction of alternative reciprocating engine technology as part of the modification will also enable the project to potentially use a combination of technologies to improve combustion efficiency, reduce start up times and reduce project delivery lead times.

The decision to install gas turbines and/or reciprocating technology will be made based on a range of environmental, social, engineering and economic factors that will be considered as the power station design progresses.

3.3.1 Gas Turbine Technology

Gas turbine units generally consist of a compressor, combustion chamber, turbine and generator. Air is compressed to a high pressure before being admitted into the combustion chamber. Fuel (natural gas, hydrogen or blend as required) is injected into the combustion chamber where combustion

occurs at very high temperatures and the gases expand. The resulting mixture of hot gas is admitted into the turbine causing the turbine to turn, generating power. In an open cycle configuration, hot exhaust gas is vented directly to the atmosphere through an exhaust stack, without heat recovery.

3.3.2 Reciprocating Engine Technology

Reciprocating engines used for power generation harness the controlled ignition of gas to drive a piston within a cylinder. Pistons move sequentially to rotate a crank shaft which turns the generator. Reciprocating engines are widely used in Australia, particularly across the mining industry and for utility-scale power generation.

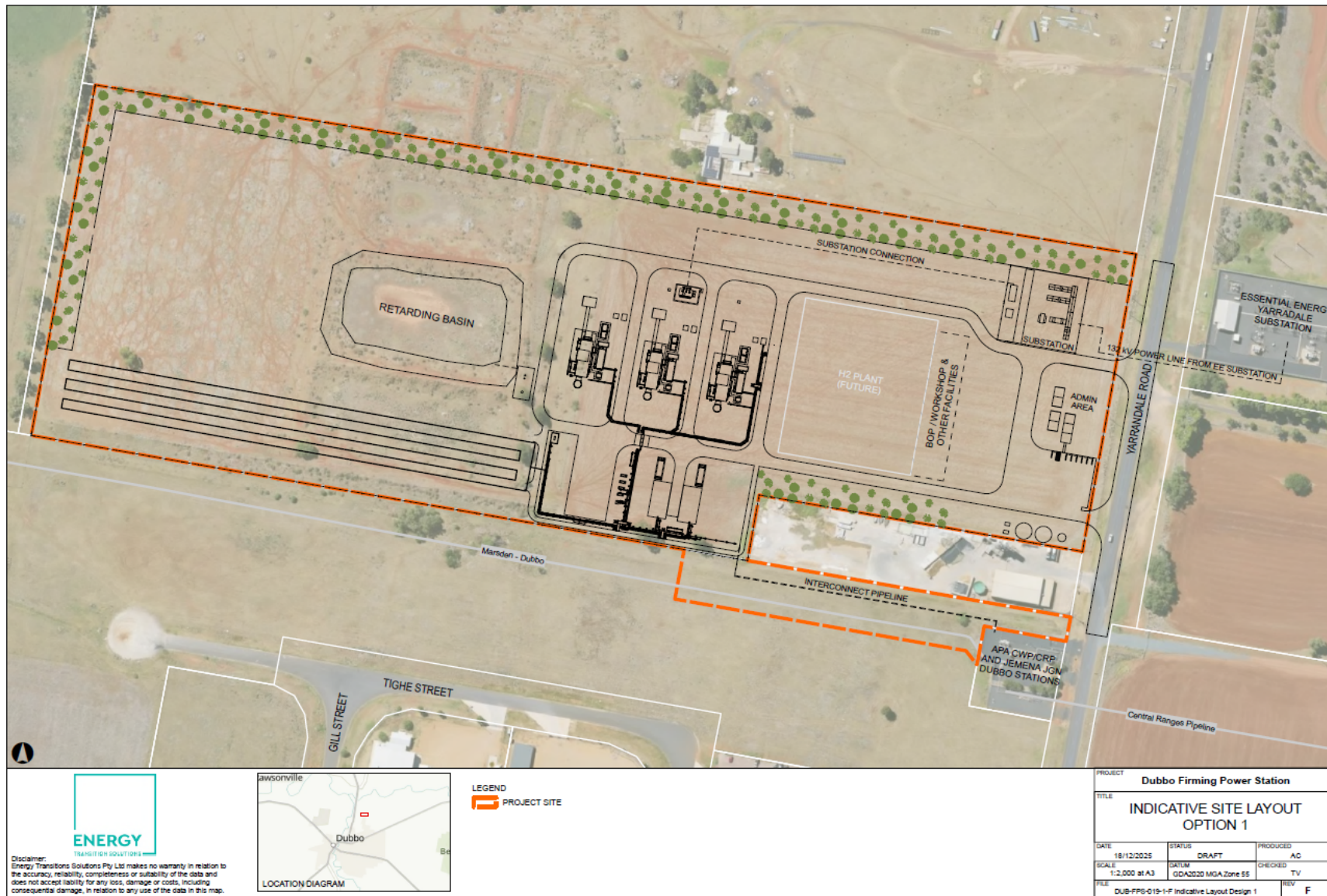


Figure 3.1 – Indicative Layout for Modified Project Option 1 (Gas Turbines Only)

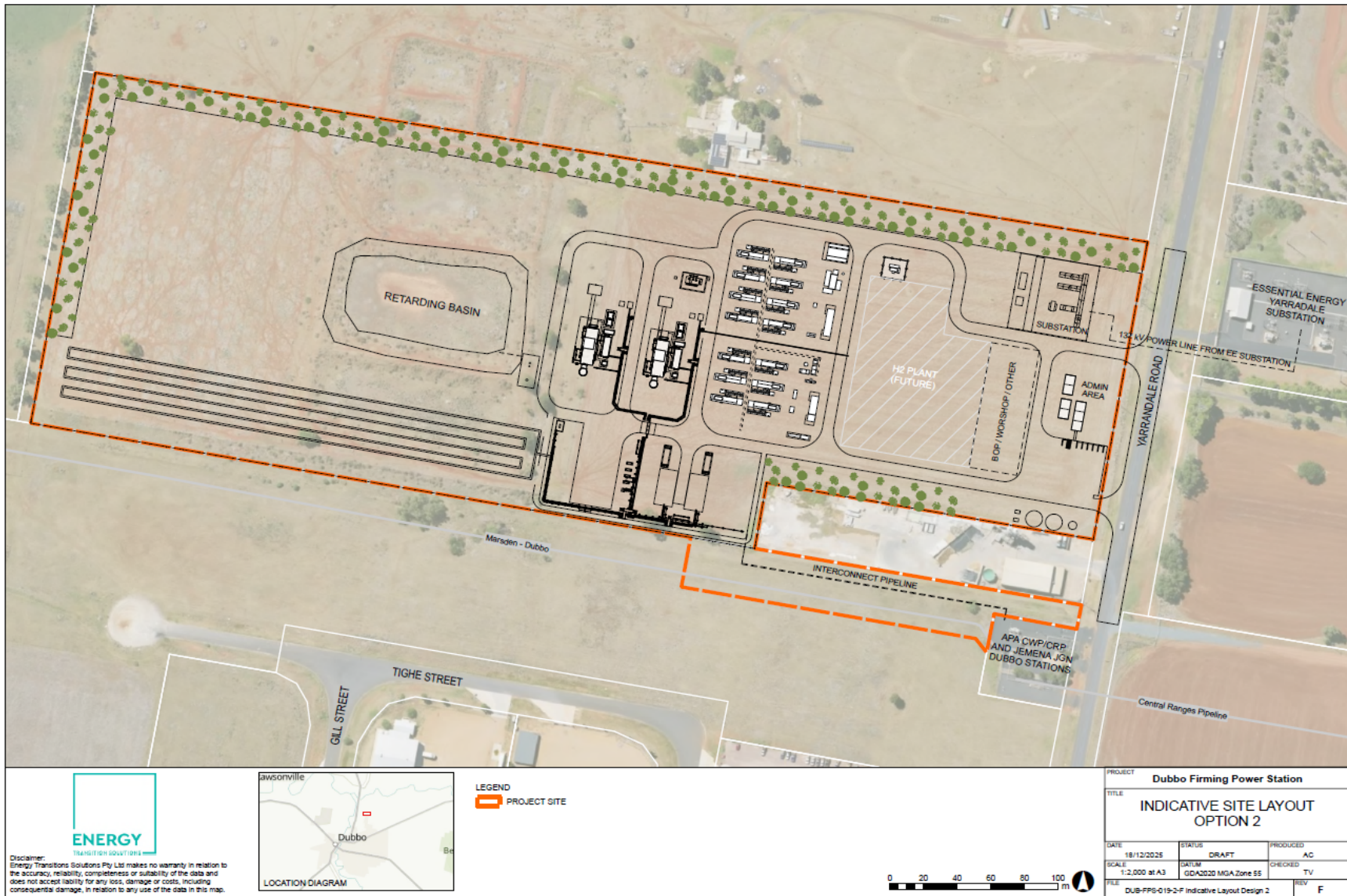


Figure 3.2 – Indicative Layout for Modified Project Option 2 (Gas turbines and reciprocating engines)

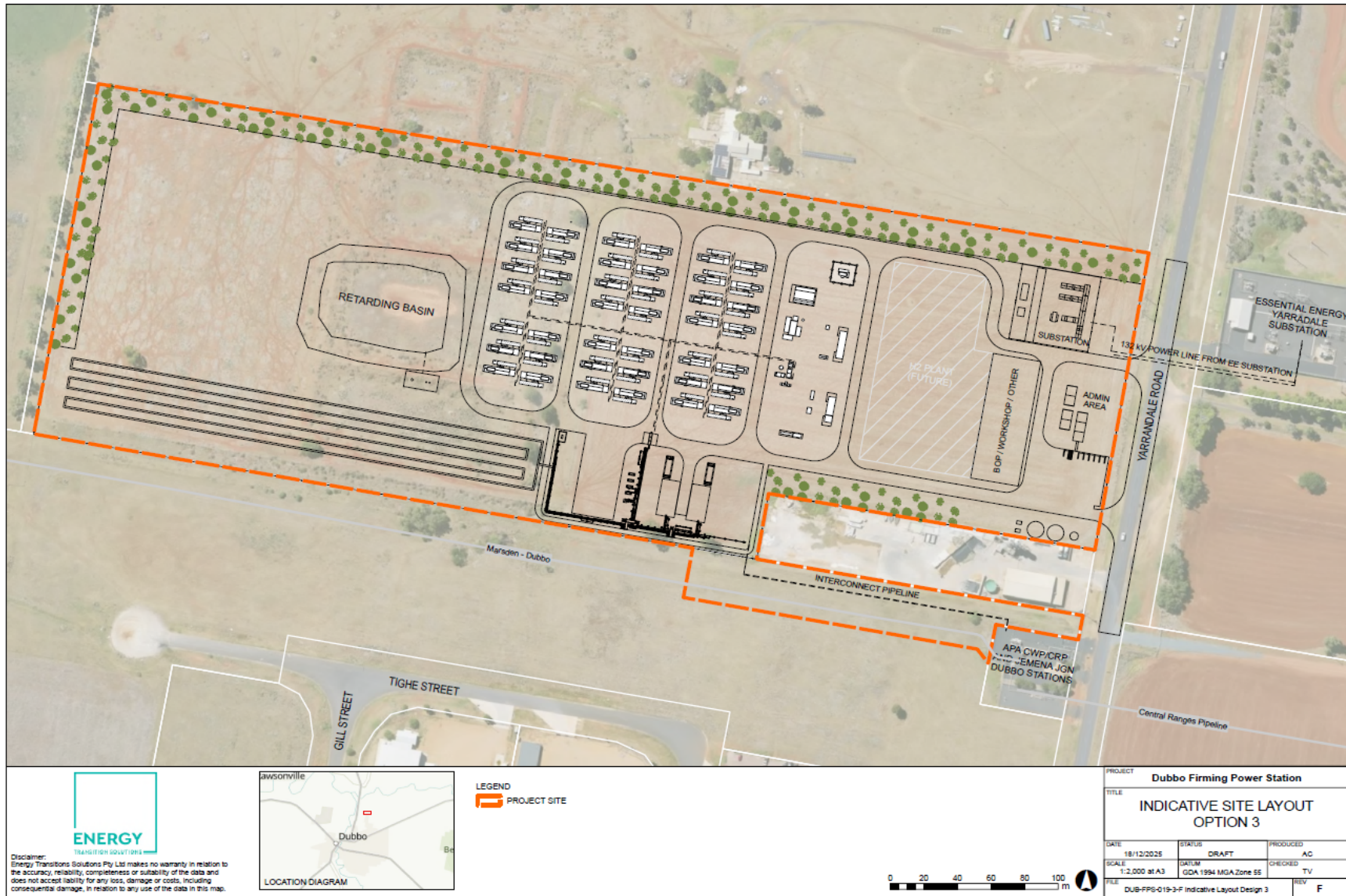


Figure 3.3 – Indicative Layout for Modified Project Option 3 (Reciprocating engines only)

Table 3.1 – Project Description with Proposed Modifications

Project Component	Approved Project	Proposed Modification
Development footprint	13.95 hectares	Minor increase to 13.99 hectares
Vegetation Clearance	13.95 hectares	Minor increase to 13.99 hectares.
Power Generation Facility	Open cycle gas turbine technology with a nominal capacity of up to 64 MW.	Addition of gas engine driven generator technology. This may include a combination of gas turbines and gas engine generators (Option 2) or only gas engine generator technology (Option 3) with a nominal capacity of up to 180 MW.
Ancillary infrastructure and works including roads, parking, laydown areas, perimeter fencing, vegetation screening	As shown on the approved layout plan and described in the development consent.	No change.
Gas Pipeline Connection	A high pressure gas pipeline connection (approximately 150m in length) between the Project site and the APA CWPL Dubbo Scraper Station I land subject to an easement.	Project Site boundary realignment to incorporate the land for gas connection pipeline infrastructure into the Project Site. Land to be fenced.
Gas Storage Pipeline	A high pressure gas pipeline up to 2.5km to be used for storage purposes.	No change.
Electricity Transmission Line	A 66kV electricity transmission line connection (approximately 100m in length) from the Project site to the existing 66kV Yarrandale Substation.	Essential Energy will provide a 132 kV connection to the on-site substation.
Dominant and ancillary use of the land	Power generation	No change.
Anticipated life of Project	40 years	No change.
Design life of mechanical and electrical plant	40 years	No change.
Design life of civil and structural plant	40 years	No change.
Construction duration	Approximately 12 months.	No change.
Construction hours	It is anticipated that works would be undertaken mostly during standard construction hours (7:00am to 6:00pm weekdays and 7:00am to 1:00pm on Saturdays). Out-of-hours construction activities would be required for some activities where the activity	No change.

Project Component	Approved Project	Proposed Modification
	<p>involves continuous work. These activities may include:</p> <ul style="list-style-type: none"> • Pipeline integrity testing which is a critical end of construction activity. Pressure strength testing of pipe strings, lasting four hours, would be conducted during the daytime, while leak testing of a complete pipeline is conducted over 48-72 hrs period (test hold period 24 hrs). Since hydrostatic testing is integral to the safety of the pipeline, these works are considered unavoidable. • Commissioning testing for the introduction of gas may require continuous and/or 24 hour operation to be successfully completed. 	
Construction workforce	Expected peak construction workforce of approximately 150 full time equivalent.	No change.
Project life and hours of operation	40 year life span available to operate for a continuous 24 hours on any given day.	No change.
Operation workforce	<p>Permanent site staff numbers are not expected to exceed an average of 5-6 full time equivalent persons. Some additional support staff and deliveries of consumables, waste disposal, sanitary services and specialist maintenance staff may also be required on a weekly basis. Local contractor workforce will be used (where practicable) during infrequent maintenance events, outages etc.</p>	No change.
Capacity factor	It is anticipated that the Project would operate up to approximately 12 per cent of the year at 100 percent plant load.	No change.
Decommissioning	<p>Decommissioning would be undertaken in line with current standards (however this may be subject to change given the passage of time) and would include the following activities:</p> <ul style="list-style-type: none"> • provided that the pipeline/s did not pose an environmental or safety risk, they would likely be left in situ in the ground. This process could involve stabilisation and plugging where there is risk of subsidence or erosion. If the pipeline 	No change.

Project Component	Approved Project	Proposed Modification
	<p>was to be removed, it would be excavated, cut in sections and disposed of</p> <ul style="list-style-type: none"> • removal of the above-ground facilities would involve removal and disposal of all above-ground infrastructure such as turbines, electrolysers, compressors, skids, and fencing • all above-ground signs and markers above the pipeline would also be removed, including disconnection of the cathodic protection system from the pipeline and removal of test posts; and • in consultation with the landowner, consideration would be given to whether hardstands, access tracks and paved areas would be retained, or the site rehabilitated to pre-existing conditions. 	

3.4 Conditions to be modified

Table 3.2 below outlines the conditions of the Development Consent that are required to be modified under the proposal.

Table 3.2 – Conditions to be Modified	Condition	Modification required
Schedule 2, Part A, condition A2(d) Terms of Consent		Amend development layout in Appendix 1
Schedule 2		References to turbines in Part A, Part B and Part C should be references to turbines and/or engines.

The Proponent does not propose any further amendments or additions to the existing conditions issued in May 2024.

4 Statutory context

The EP&A Act and the EP&A Regulation are the primary legislative instruments regulating land use planning and development assessment in NSW. Subordinate to this primary legislation are several other statutory instruments including State environmental planning policies and local environmental plans.

The EIS was prepared under Part 4 of the EP&A Act in accordance with the SEARs dated 21 November 2022 and the requirements of Part 8 of the EP&A Regulation.

This Modification has been prepared under Division 4.9 of Part 4 of the EP&A Act.

The statutory context remains generally as set out in the EIS.

Table 4.1 – Statutory context

Statutory Relevance	Project Relevance
New South Wales	
Power to grant approval	<p>The Project requires development consent under the Environmental Planning and Assessment Act 1979 (EP&A Act).</p> <p>The Project would have a capital investment cost of more than \$30 million (approximately \$420 million). Therefore, the Project is State Significant Development (SSD) according to section 20 Schedule 1 of the State Environmental Planning Policy (Planning Systems) 2021 (Planning Systems SEPP).</p> <p>Pursuant to section 4.5 of the EP&A Act, the Minister for Planning is the consent authority for this Project.</p>
Permissibility	<p>The Dubbo LEP does not prohibit energy generating facilities under Item 4 of the Land Use Table for the E5 – Heavy Industrial zone. Accordingly the Project is a development permitted with consent pursuant to Item 3 of the Land Use Table.</p> <p>Development for the purposes of electricity generating works, such as the Project, is permissible with development consent on land zoned E5 under clause 2.36 of the T&I SEPP.</p>
Other approvals	<p>Pipelines Act 1967</p> <p>With the proposed modification to the Project Site boundaries to include the land associated with the gas connection piping infrastructure, it is anticipated that the gas connection infrastructure would be wholly within the boundaries of the Project site and as a result no licence would be required under the Pipelines Act for the construction and operation of this infrastructure.</p> <p>The gas storage pipeline is also situated within the boundaries of the Project site and as a result no licence would be required under the Pipelines Act for the construction and operation of this infrastructure (as previously stated in the EIS and approved as part of the Development consent).</p> <p>Roads Act 1993</p> <p>Under section 138 of the Roads Act, the consent of the appropriate road authority is required before a person can erect a structure, carry out work in, on or over a public road or dig up or disturb the surface of a public road. Construction of the site access, water supply pipeline and electricity transmission routes will likely require works within public roads. Under section 4.42(1)(f) of the EP&A Act, any permit required under section 138 of the Roads Act from the appropriate roads' authority cannot be refused if</p>

Statutory Relevance	Project Relevance
	<p>it is necessary for carrying out approved SSD and is to be substantially consistent with the consent.</p> <p>Protection of the Environment Operations Act 1997</p> <p>An EPL would be required for the Project as electricity generation is a scheduled activity listed in Schedule 1 of the POEO Act. The Project meets the criteria set out in Column 2 of clause 17(2) of Schedule 1 being general electricity works with the capacity to generate more than 30MW of electrical power. 'General electricity works' is defined as the generation of electricity by means of electricity plant that, wherever situated, is based on, or uses, any energy source other than wind power or solar power.</p> <p>Section 4.42(1)(e) of the EP&A Act provides that the application for grant of an EPL under Chapter 3 of the POEO Act cannot be refused if it is necessary for carrying out SSD and is to be substantially consistent with the consent under Division 4 of the EP&A Act.</p>
<p>Other approvals <u>not</u> required for SSD projects</p>	<p>An Aboriginal Heritage Impact Permit (AHIP) under section 90 of the <i>National Parks and Wildlife Act 1974</i>.</p> <p>Controlled activity approval under sections 89, 90 and 91 of the <i>Water Management Act 2000</i></p> <p>Application for permits under sections 201, 205 and 219 of the <i>Fisheries Management Act 1994</i>.</p> <p>An excavation permit under section 139 of the <i>Heritage Act 1977</i>.</p> <p>A bush fire safety authority under section 100B of the <i>Rural Fires Act 1997</i>.</p>
Commonwealth	
<p>Other approval</p>	<p>The Project was referred to DCCEEW under the EPBC Act and a no controlled action letter was issued by DCCEEW on 15 August 2023. As the modification is unlikely to have a significant impact to any of the MNES listed under the EPBC Act, no further referral or variation to the existing referral is required.</p>
<p>Considerations under other legislation</p>	<p>Civil Aviation Safety Regulation 1998</p> <p>Section 139.165(2) of the CAS Regulations require a proponent to notify the Civil Aviation Safety Authority (CASA) if they propose the construction of a structure that will generate an exhaust plume which may create a risk to the safety of aircraft operations.</p> <p>As part of the original Project, a notification was submitted to CASA on 14 December 2022. This notification was made as the Project will generate an exhaust plume which may pose a risk to the safety of aircraft operations at Dubbo Airport, located approximately 4.5 km east of the Project site. CASA determined on 18 January 2024 that the Project exhaust plume will not pose a risk to aircraft operations at Dubbo Airport.</p> <p>The Notification submitted to CASA on 14 December 2022 included a conservative case for three turbines with similar exhaust parameters as proposed in the modification.</p> <p>Notification to CASA in accordance with condition B17 will be undertaken for the Project.</p> <p>Native Title Act 1993</p> <p>A review of the Native Title Vision (NTV) portal of the area in June 2022 did not identify any Native Title claims or determinations for the proposed site of the Project. All works and infrastructure are proposed on freehold land or designated roads and will not affect any Native Title rights or interests.</p>

4.1 Statutory criteria for modifications

Section 4.55(2) provides criteria that must be satisfied for the consent authority to modify the Project's Development Consent, which are:

- The proposed modification is of minimal environmental impact.
- The development which to which the consent as modified relates is substantially the same development as the development for which the consent was originally granted.
- The consent authority has notified the application in accordance with the EP&A Regulations (if required).
- The consent authority has considered any submissions made concerning the modification within any period prescribed by the EP&A Regulations (15 days).

The Applicant is satisfied a Modification is required due to the following:

- the Modification Application is required to effect a change to the development as approved; and
- the conditions relevant to the changes proposed have not already been met; and
- the modified development is substantially the same development as the development for which development consent was originally granted.

See further *Ku-Ring-Gai Council v Buyozo Pty Ltd* [2021] NSWCA 177.

Specifically:

- an increased electricity generation capacity from 64 MW to 180 MW is sought, affecting the approved project description
- the project has not commenced.
- the increased capacity will result in no change to the relevant land and only a minor change to the development footprint. Upgraded components will not significantly change the overall form of the approved project.

It is submitted that the modification is substantially the same development as the development for which the consent was originally granted and the application for modification can be made under Section 4.55(2) of the EP&A Act.

4.2 Pre-conditions to consent

Pre-conditions that must be satisfied before the consent authority can approve the Project modification are listed in 4.2.

Table 4.2 Pre-conditions to consent for the Project

Statutory reference	Pre-condition	Comment
Biodiversity Conservation Act 2016 (NSW) (BC Act)		
Section 7.17	A modification application must be accompanied by a Biodiversity Development Assessment Report (BDAR), even if a BDAR has been submitted as part of an original development application. However, a consent authority may waive this requirement if they are satisfied that the	The BDAR has assessed all relevant areas of the modified Project and the modification will not increase impacts to biodiversity values.

Statutory reference	Pre-condition	Comment
	modification will not increase impacts to biodiversity values.	Refer to Table 6.2 below, Appendix H of this Modification and to Appendix B of the EIS.
Resilience and Hazards SEPP		
Section 3.11	A Preliminary Hazard Assessment (PHA) must be prepared for any potentially hazardous or offensive industrial development.	As the Project may constitute a potentially hazardous industry, a PHA has been prepared for the Project. As part of the modification, a revised PHA has been developed, incorporating the modifications for the Project.
Section 4.6	A consent authority must not consent to development on land unless it has considered whether the land is contaminated. If the land is contaminated, the consent authority must be satisfied that the land is suitable in its contaminated state (or will be, after remediation).	The Project site is not listed on the NSW Environmental Protection Authority (EPA)'s Contaminated Land Record of Notices. An infield site investigation undertaken as part of the Project EIS noted that concentrations of Contaminates of Potential Concern were below the guideline criteria for industrial land uses. As such, the land is not considered to be contaminated or require further assessment as part of this modification.
Dubbo LEP		
Clause 6.10 Essential Services	Development consent must not be granted to development unless the consent authority is satisfied that the development has, or will arrange: <ul style="list-style-type: none"> water and electricity supply disposal and management of sewerage stormwater drainage suitable vehicular access. 	Essential services will be provided for the Project, per the Project EIS: <ul style="list-style-type: none"> Water will be sourced from the mains system on Yarrandale Road. Domestic sewage will be directed into the Dubbo pressure sewer system. Stormwater will be managed through an on-site stormwater management system, with a level spreader discharge within the site boundary. Two new access points off Yarrandale Road will be constructed.

4.3 Mandatory matters for consideration

Table 4.3 Mandatory matters for consideration for the Project

Statutory reference	Pre-condition	Comment
EP&A Act		
Section 1.3	Relevant objects of the Act ² : <ul style="list-style-type: none"> promote the social and economic welfare of the community and a better environment by the proper management, development 	The key benefits of the Project remain as stated in Chapter 17 of the EIS. The modification will support the additional objects (where relevant)

² These have been updated to reflect the amendments made pursuant to *Environmental Planning and Assessment Amendment (Planning System Reforms) Act 2025*.

Statutory reference	Pre-condition	Comment
	<p>and conservation of the State’s natural and other resources</p> <ul style="list-style-type: none"> • promote the supply, delivery and maintenance of housing, including affordable housing • promote productivity through the development and management of the State and its resources • protect the environment, including the conservation of threatened species of native animals and plants, ecological communities and their habitats • promote resilience to climate change and natural disasters through adaption, mitigation, preparedness and prevention • promote the sustainable management of built and cultural heritage including Aboriginal cultural heritage • promote good design, amenity and the proper construction and maintenance of built environments including the protection of the health and safety of the occupants of buildings • provide opportunities for participation in environmental planning and assessment • facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment • promote a proportionate and risk based approach to environmental planning and assessment; and • promote the orderly and economic use and development of land. 	<p>included in section 1.3 of the EP&A Act since the EIS as follows. In its modified state:</p> <ul style="list-style-type: none"> • the Project’s ability to transition from using natural gas in the short to medium term to using other fuel sources (such as hydrogen), supports the Net Zero Plan’s Priority 1 to deploy opportunities to reduce industrial emissions across NSW, ensuring energy security is maintained in Dubbo and NSW and promoting resilience to climate change by ensuring that alternative fuel sources are available to power the station. • the Project will be constructed and maintained in accordance with applicable standards and the revised PHA has confirmed that the protection of the health and safety of the occupants of the building has been appropriately considered in the design. • the Project will continue to help firm renewable energy generation within the region. This supports the uptake of renewable energy as a low-emission energy source, as well as the decarbonisation of the energy industry in NSW and Australia. This will assist in promoting productivity through the development and management of the State and its resources. • the Project has at all times through the EIS process and this modification process adopted a proportionate and risk based approach to environmental matters related to the Project.
<p>Section 4.15</p>	<p>Relevant environmental planning instruments:</p> <ul style="list-style-type: none"> • Planning Systems SEPP • Resilience and Hazards SEPP • Transport and Infrastructure SEPP • Dubbo LEP. 	<p>These are addressed in Appendix E, Appendix J and Appendix M of the Project EIS together with the Resilience and Hazards SEPP being addressed in the revised PHA at Appendix D of this modification.</p>
	<p>Likely impact of the development, including:</p> <ul style="list-style-type: none"> • Environmental impacts on both the natural and built environments. • Social and economic impacts in the locality. 	<p>Appendices B – E of this modification proposal and Chapters 7 – 16 of the Project EIS</p>

Statutory reference	Pre-condition	Comment
	Suitability of the site for the development.	The suitability of the site is not affected by this modification. Please refer to Chapter 2 of the EIS.
	The public interest.	Chapter 17 of the EIS has considered the public interest in the Project which remains the same in its modified state.
Section 4.55(3)	<p>The consent authority must consider the matters referred to in Section 4.15(1), where relevant to the modified development being assessed.</p> <p>The consent authority must also consider the reasons given by the consent authority at the time when consent was granted for a development.</p>	Project EIS and Development Conditions and Statement of Reasons for Decision dated 13 May 2024
Resilience and Hazards SEPP		
Section 3.11	Developments that are classified as potentially hazardous under the Resilience and Hazards SEPP are required to have a preliminary hazard analysis (PHA) prepared to determine the risk to people, property and the biophysical environment at the proposed location and in the presence of controls.	Chapter 9 (Hazards and Risks) and Appendix E of the Project EIS together with the revised PHA for the proposed modification attached to this modification as Appendix D.
Dubbo LEP		
Land use table	<p>Objectives of the E5 zone:</p> <ul style="list-style-type: none"> • Provide areas for industries that need to be separated from other land uses. • Ensure the efficient and viable use of land for industrial uses. • Minimise any adverse effect of industry on other land uses. • Encourage employment opportunities. 	The objectives of the E5 zone continue to be met for the reasons stated in Chapter 2 and Chapters 7 – 16 of the Project EIS in its modified state.

5 Engagement

The Proponent remains committed to establishing and maintaining a meaningful and positive engagement with all relevant stakeholders including the Dubbo community.

Community awareness and community input are fundamental to responsible and sustainable development. The Proponent understands the importance of (and is committed to) effective and genuine engagement with all stakeholders interested in or impacted by the Project. The Proponent is committed to growing a presence in Dubbo and gaining opportunities to interact with the Dubbo community including opening a new office in Dubbo in February 2023 and is implementing several sponsorship and community benefit programs in the Dubbo region, including ongoing sponsorship of the Dubbo Stampede since 2023.

There are also wider employment and procurement strategies being implemented by the Proponent across all its projects in the Dubbo and wider Central West region in consultation with local stakeholders.

Engagement has occurred to support this modification application having regard to the *Undertaking Engagement Guidelines for State Significant Projects* (March 2024 NSW DPPI).

5.1 Department of Planning, Housing and Infrastructure

As part of the preparation of this modification application, DPPI was consulted including:

- a preapplication meeting
- submission of a modification scoping letter to DPPI
- confirmation from DPPI that the modification report can be prepared on the basis set out in the scoping letter
- receipt of initial feedback on the Modification proposal.

5.2 Dubbo Regional Council

The Proponent met with Dubbo Regional Council on 4 June 2025 to discuss, amongst other things, this modification application. No concerns were raised from Council. During this meeting, Council recognised the significant and diverse contributions that the Proponent had made to the region as part of the Project and other projects of the Proponent in the region including investment by way of water infrastructure and road infrastructure upgrades, to the arts through funding of an art project and to social and temporary housing.

The Proponent met with Council on 29 January 2026 to discuss whether any change was required to the Voluntary Planning Agreement agreed with Council as part of the EIS and which form part of Appendix 2 of the Development Conditions. These discussions are ongoing.

5.3 Essential Energy

Essential Energy has been consulted throughout the development process in accordance with its connection guidelines and enquiry/application process.

5.4 Environment Protection Authority (NSW)

EPA was consulted throughout the initial development process. A formal memorandum setting out the revised Air Quality Impact assessment process was provided to DPHI on 7 November 2025 and to the EPA for its consideration on 27 November 2025. EPA provides its preliminary feedback on 5 and 9 December 2025. Final drafts of the revised Air Quality Impact Assessment (Northstar 2025) and Greenhouse Gas Assessment (Northstar 2025) were provided to EPA on 19 December 2025 prior to submission of this modification.

5.5 Landowner

Engagement with the landowner of the Site, neighbour and key stakeholder, Fletchers International Exports has been ongoing during all stages of development of the Project. Project representatives have met with FIE on several occasions and have been engaging with them about the boundary realignment associated with the gas connection piping infrastructure to include this land as part of the Project Site and associated land agreements.

5.6 Registered Aboriginal Parties

The Project's cultural heritage adviser undertook a due diligence of the existing ACHAR which confirmed no change to the ACHAR was required as part of the Modification. Confirmation of this is attached at Appendix G.

The outcomes of this due diligence and a project update were circulated to the Registered Aboriginal Parties on 17 December 2025 which provided an overview of the proposed modification and contact details to discuss any concerns.

No responses have been received from Registered Aboriginal Parties.

5.7 Community Stakeholders

Squadron Energy is committed to creating lasting, positive impact for the communities we operate in. Recent examples of our investment in the Dubbo region include:

- Upgrading infrastructure through our partnership with Dubbo Regional Council to support a new advanced wastewater treatment facility at Dubbo Sewerage Treatment Plant;
- Annual sponsorship of the Dubbo Stampede; and
- Supporting Macquarie Home Stay, providing essential accommodation for patients undergoing treatment at the Western Cancer Centre and those in need across the region.

A project update was circulated to registered contacts on 23 September 2025 which provided an overview of the proposed modification and contact details to discuss any concerns. No responses in respect of the proposed Modification have been received from community stakeholders to date.

In accordance with the Guidelines for Undertaking Engagement for State Significant Projects, consideration was given to the level of potential impacts proposed in this modification and the level of interest by the community in the project to date, a further community session was not proportionate to the scale and impact of the proposed modification. It is noted that 12 submissions were received during the exhibition period of the EIS.

6 Environmental Impact Assessment

6.1 Assessment

An updated Environmental Impact Assessment for the proposed Modification is provided in Table 6.1 below.

The key areas of air quality and greenhouse gas, hazards and noise and vibration were investigated with input from specialists (appended at Appendices B - E). In addition, confirmation was sought from the biodiversity and cultural heritage specialists that the modification would not result in increased impacts to biodiversity and cultural heritage (confirmation appended at Appendices F and H).

Table 6.1 Key planning and environmental considerations

Aspect	Summary of Proposed Modification	Proposed Modification Impact
Biodiversity	The proposed modification will result in a slight reduction in the area of native vegetation to be cleared (0.07 ha). The proposed Modification will result in the avoidance of 0.08 ha of Derived Native Grassland of PCT 267 and the loss of 0.01 ha of Planted Native Trees of PCT 78.	No increased impact and no updates have been made to the BDAR as the impacts to biodiversity remain the same or less. Indirect and prescribed impacts were assessed in the BDAR (Premise, 2023) and the Modification will not influence the findings that there are unlikely to be impacts. This position has been confirmed by Premise and is appended at Appendix H. Please also refer to Table 6.2 below.
Cultural Heritage	There will be no change to impacts on heritage values or heritage sites that were identified in the Environment Impact Statement for the Project as the proposed area for disturbance in respect of the modification has been assessed as part of the original EIS.	No increased impact. The proposed modification would not harm any additional known Aboriginal cultural heritage sites nor alter the likelihood of harming any previously unidentified Aboriginal cultural heritage sites. A letter of advice confirming this position from Landskape dated 16 February 2026 is appended to the Modification Report at Appendix F.
Historical Heritage	Whilst there is a minor change in the area proposed in the Modification for disturbance, this does not result in any increased impact to historical heritage.	No increased impact.
Hazards	A revised Preliminary Hazard Analysis has been prepared by Arriscar and is included at Appendix D. The analysis assesses the hazards and risks of the proposed Modification using the criteria and approach as previously approved. The assessment has concluded that the consequence ranking and likelihood ranking of the risk analysis would remain unchanged by the proposed modification.	The revised PHA is attached at Appendix D to this Modification Report. The study concluded that there should be no reason to restrict the operation of the Project based on hazards and risk. No increased impact.

Aspect	Summary of Proposed Modification	Proposed Modification Impact
Bushfire	The proposed modification will maintain the APZs and all requirements from the Bushfire Assessment Report (Bushfire Consulting Services, February 2023).	<p>No increased impact.</p> <p>It is noted that Conditions B8 and B11 of the Development Consent conditions require the following to be prepared prior to construction:</p> <ul style="list-style-type: none"> • FSS • Bushfire and Emergency Management Plan
Aviation	<p>The Modification may alter the Project's stack profile and emission plume velocity. Any alterations to the Project's stack profile and plume velocity may pose a risk to aircraft operations.</p> <p>Exhaust parameters provided in the CASA notification on 14 December 2022 are consistent with the most conservative 3 turbine scenario of the modification.</p>	<p>No increased impact.</p> <p>It is noted that Condition B17 will require notification prior to commencement of construction.</p>
Noise and Vibration	<p>A noise and Vibration Impact Assessment has been prepared by JTA Health, Safety and Noise Specialists (October 2025) and is included at Appendix E.</p> <p>The report functions as an addendum to the original Noise Impact Assessment undertaken by Benbow as part of the original EIS for the Project.</p> <p>The results of the assessment demonstrate no increased impact from the modification.</p> <p>The results are summarised below:</p> <ul style="list-style-type: none"> - the noise propagation modelling indicates that the construction noise emissions are compliant with the noise emission requirements, provided the noise control measures of the report are complied with. - When construction noise levels exceed the Project's noise criteria, management controls should be considered for residents. The noise propagation modelling indicates that the operational noise emissions are compliant with the noise emission requirements provided: <ul style="list-style-type: none"> • A 3dB(A) reduction in overall emissions from the power station generators for option 1 with priority given to noise 	<p>No increased impact subject to noise measures set out in the report being complied with.</p> <p>The modification will comply with existing noise condition B21 in the Development Consent.</p>

Aspect	Summary of Proposed Modification	Proposed Modification Impact
	<p>control treatments to the exhaust stack, air intake and generator enclosure</p> <ul style="list-style-type: none"> A 6dB(A) reduction in the reciprocating generator exhaust stack is achieved through noise control measures such as stack attenuators for options 2 and 3 <p>- due to the distance from the nearest residential NSRs, it is unlikely the vibration levels from construction and operation are likely to be significant. Any residual vibration can be moderated with standard vibration control measures such as anti-vibration mounts and flexible couplings.</p> <p>It is also noted that the road traffic assessment from the original approved assessment was conducted as per the as per the NSW Road Noise Policy. This assessment remains valid as the modified designs will not significantly impact the traffic flows generated compared with the original proposal.</p>	
Land and Water	<p>The proposed modification is not expected to interfere or disturb any groundwater or aquifer systems.</p> <p>The inclusion of reciprocating engine generators does not increase the operational water consumption. These engines have a closed loop cooling system.</p> <p>The previous submission of the EIS considered up to three turbines. Turbines use evaporative cooling systems, which consume water as part of operation.</p>	No increased impact.
Air Quality	<p>An air quality impact assessment has been prepared by Northstar (December 2025) and is included at Appendix A.</p> <p>An increase in capacity from 64 MW to 180 MW and a change in technology to reciprocating engines will likely result in the predicted emissions arising from the proposed modification to exceed current modelled scenarios under the approved Project but not conditions of consent.</p>	<p>The assessment confirms that air quality impacts have been minimised using modern combustion technology, operational controls, and mitigation measures. Criteria pollutant emissions including nitrogen dioxide, carbon dioxide and sulphur dioxide comply with the regulatory criteria, and formaldehyde impacts can be effectively controlled using an oxidation catalyst.</p> <p>Revised air quality impact assessment for the final plant design must be prepared in accordance with existing condition B4 of the Development Conditions.</p>

Aspect	Summary of Proposed Modification	Proposed Modification Impact
Greenhouse Gases	<p>A greenhouse gas impact assessment has been prepared by Northstar (December 2025) and is included at Appendix B.</p> <p>An increase in capacity from 64 MW to 180 MW and a change in technology to reciprocating engines will likely result in an increase to the predicted GHG emissions arising from the proposed modification.</p> <p>Greenhouse gas emissions for the 44 years of the Project lifetime have been calculated, which indicate that the maximum Scope 1 and Scope 2 emissions in any one year would be 83 266 tonnes of carbon dioxide equivalent assuming 'normal' operations (12 % utilisation), and operating on 100 % natural gas.</p>	<p>The greenhouse gas assessment presents an assessment of the impacts of activities associated with the construction, operational, and decommissioning phases of the Project.</p> <p>The greenhouse gas assessment has been performed in general accordance with the NSW Environment Protection Authority 'NSW Guide for Large Emitters'.</p> <p>Whilst the Project would result in emissions of greenhouse gas, it would support the avoidance of significantly greater volumes of greenhouse gas through the wider renewables network operated by Squadron Energy and other renewables project operators in the region.</p> <p>The climate change adaptation plan provides an assessment of the climate change risks faced by the Project, and the mitigation measures which would be implemented to address those risks. Residual risks are considered to be 'low'.</p>
Socio-economic	The proposed modification does not result in any change to socio-economic conditions or values.	No increased impact.
Waste	There are no relevant changes to wastes resulting from the proposal.	No increased impact.
Traffic and Transport	There will be no change to traffic impacts from the modification. Traffic numbers will remain the same or decrease, and the different components will not provide any difference in impact on road infrastructure.	<p>No increased impact.</p> <p>Traffic Management Plan to be developed prior to construction as set out in EIS.</p>
Visual	There will be negligible Visual impacts from new power generation design as there is no change in the height of the Project or to the site extent previously assessed in the EIS.	No increased impact
Consultation	<p>Increase to generation capacity.</p> <p>No significant change to Project footprint or visual amenity.</p>	No increased impact.

Table 6.2 Effect on Biodiversity Values

Biodiversity Values	Meaning	Relevant?	Modification interaction with biodiversity values
Vegetation Integrity	Degree to which the composition, structure and function of vegetation at a particular site and the surrounding landscape has been altered from a near natural state	No	<p>The impacts of the Project on the vegetation integrity and biodiversity value of the area were assessed in the original EIS. The proposed Modification will result in the avoidance of 0.08 ha of Derived Native Grassland of PCT 267 and the loss of 0.01 ha of Planted Native Trees of PCT 78.</p> <p>The proposed modification does not increase nor reduce these assessed potential impacts. Indirect and prescribed impacts were assessed in the BDAR (Premise, 2023) and the Modification will not influence the findings that there are unlikely to be impacts.</p>
Vegetation Abundance	Occurrence and abundance of vegetation at a particular site	No	<p>The proposed Modification will result in the avoidance of 0.08 ha of Derived Native Grassland of PCT 267 and the loss of 0.01 ha of Planted Native Trees of PCT 78. The impacts of the Project on the vegetation abundance of the area were assessed in the original EIS.</p> <p>The Modification will result in a slight reduction in the area of native vegetation to be cleared (0.07 ha) as set out in Table 1 of Appendix H of this Modification.</p> <p>The proposed modification does not increase nor reduce these assessed potential impacts. Indirect and</p>

Biodiversity Values	Meaning	Relevant?	Modification interaction with biodiversity values
			prescribed impacts were assessed in the BDAR (Premise, 2023) and the Modification will not influence the findings that there are unlikely to be impacts.
Habitat Suitability	Degree to which the habitat needs of threatened species are present at a particular site	No	<p>The proposed Project area does not result in the disturbance of any additional vegetation and land clearance. The impacts on suitable habitat of threatened species was assessed in the original BDAR.</p> <p>The proposed modification would neither increase nor reduce the assessed potential impacts. Indirect and prescribed impacts were assessed in the BDAR (Premise, 2023) and the Modification will not influence the findings that there are unlikely to be impacts.</p>
Threatened species abundance	Occurrence and abundance of threatened species or threatened ecological communities, or their habitat, at a particular site	No	The proposed modification would not directly disturb threatened fauna or flora species. As a result, the Proposed Modification would neither increase nor reduce impacts on threatened species or threatened ecological community abundance.
Habitat connectivity	Degree to which a particular site connects different areas of habitat of threatened species to facilitate the movement of those species across their range	No	<p>The proposed modification would not disturb native vegetation or habitat of threatened species.</p> <p>Habitat connectivity would neither increase nor reduce because of the proposed modification and there would be no impact on movement of species across their range.</p>
Threatened species movement	Degree to which a particular site contributes to the movement of	No	The proposed area of disturbance within an industrial estate is devoid of native vegetation and does not

Biodiversity Values	Meaning	Relevant?	Modification interaction with biodiversity values
	threatened species to maintain their lifecycle		<p>contribute to the movement of threatened species.</p> <p>The modification would neither increase nor reduce impacts on threatened species movement that maintains the species' lifecycle compared to the approved impacts.</p>
Flight path integrity	Degree to which the flight paths of protected animals over a particular site are free from interference	No	<p>The proposed modification does not result in any change of height to the existing approved infrastructure.</p> <p>The proposed modification would neither increase nor reduce the ability of threatened animals to use particular flight paths.</p>
Water sustainability	Degree to which water quality, water bodies and hydrological processes sustain threatened species and threatened ecological communities at a particular site	No	<p>The proposed modification does not result in any change to water quality, water bodies or hydrological processes.</p> <p>The proposed modification would neither increase nor reduce impacts on water sustainability.</p>

6.2 Mitigation Measures

Subject to some additional measures which have been proposed in the air quality impact assessment and greenhouse gas assessment³, no changes are proposed to any other mitigation measures listed under the existing approval.

Appendix G sets out all of the Project's mitigation measures with the additional measures recommended as part of this modification proposal being shaded in blue.

Table 6.3 Mitigation Measures

Issue	Mitigation Response
Biodiversity	No change
Cultural Heritage	No change
Hazards and Risk	No change
Land and Water	No change
Air Quality	Additional mitigations as follows: Key recommended mitigation measures include: <ul style="list-style-type: none"> Limiting generator operation to periods necessary to support grid firming and system reliability, thereby minimising overall annual emissions. electing generation units with modern, low-NOX combustion technology and emissions specifications to comply with regulatory requirements, as demonstrated in the updated AQIA. Incorporating stack designs with adequate release height and orientation to optimise dispersion of combustion products. Allowing for potential retrofit of additional emission controls in design, so that if future regulatory changes tighten emission limits, upgrades are feasible without major redesign.
Greenhouse Gas	Additional mitigations as follows: <ul style="list-style-type: none"> The Project would only generate electricity when required; The use of H2 would be maximised to reduce the emissions intensity of the Project (refer Section 4.7); and Biofuels would be investigated for use in all operational and construction vehicles.
Noise and Vibration	No change
Traffic and Transport	No change
Visual Amenity	No change
Socio Economic	No change
Waste	No change

³ It is noted that some of the mitigation measures recommended in the AQIA and GHGA for this modification proposal are existing commitments previously made and forming part of the existing conditions under the Development Consent and are not repeated here.

7 Justification of Modified Project

7.1 Evaluation of Project Benefits

The key benefits of the Project remain as stated in Chapter 17 of the EIS.

The Project will also provide socio-economic benefits by generating up to 150 construction jobs during peak construction periods and will support up to 6 operational jobs during the 40 year life of the Project. It will encourage regional development through expenditure by personnel in the Dubbo region during construction.

7.2 Evaluation of Project Impacts

This report has considered all relevant potential impacts for the proposed modification of the Project with specialist consideration for the following key areas of potential impact:

7.2.1 Air Quality and Greenhouse Gas

An updated Air Quality Assessment (December 2025) has been prepared by Northstar and is included as Appendix B. A Greenhouse Gas Assessment (December 2025) has been prepared by Northstar and is included as Appendix C.

The results of the Air Quality Assessment demonstrate compliance and are summarised below:

- The assessment confirms that air quality impacts have been minimised using modern combustion technology, operational controls, and mitigation measures. Criteria pollutant emissions including nitrogen dioxide, carbon dioxide and sulphur dioxide comply with the regulatory criteria, and formaldehyde impacts can be effectively controlled using an oxidation catalyst.
- For the gas turbine only option (Scenario 1), predicted air pollutant concentrations comply with all relevant NSW Environment Protection Authority short-term and long-term assessment criteria at nearby sensitive receptors.
- For the blended technology option (Scenario 2), all assessed pollutants comply with the applicable criteria, with the exception of formaldehyde, for which exceedances of the one hour criterion are predicted under conservative assumptions.
- For the reciprocating engine only option (Scenario 3), minor PM_{2.5} exceedances are predicted at two locations, comprising a single 24 hour exceedance at one receptor and a single annual average exceedance at another receptor. In addition, exceedances of the one hour formaldehyde criterion are predicted at several receptors and at the Project site boundary. The predicted PM_{2.5} exceedances are largely driven by elevated background concentrations and conservative modelling assumptions, including continuous operation. In practice, the Project is expected to operate as a firming power generation facility for a limited portion of the year, and actual particulate matter impacts are anticipated to be lower than those modelled.
- In line with the existing Development Consent, a final air quality verification assessment is recommended once the plant design is finalised to confirm compliance with all regulatory requirements.

The results of the Greenhouse Gas Assessment are summarised below:

- Greenhouse gas emissions for the 40 years of the Project lifetime have been calculated, which indicate that the maximum Scope 1 and Scope 2 emissions in any one year would be 83 266 tonnes of carbon dioxide equivalent assuming 'normal' operations (12 % utilisation), and operating on 100 % natural gas.
- Emissions would be reduced using hydrogen gas, generated at the Project site, and emissions calculations indicate that emissions reductions of approximately 9 % would be realised through the supplementation of natural gas with hydrogen of 25 % (by volume).

- Whilst the Project would result in emissions of greenhouse gas, it would support the avoidance of significantly greater volumes of greenhouse gas through the wider renewables network operated by Squadron Energy and other renewable project providers in the region.
- The climate change adaptation plan provides an assessment of the climate change risks faced by the Project, and the mitigation measures which would be implemented to address those risks. Residual risks are considered to be 'low'.

7.2.2 Hazards

A revised preliminary hazard analysis has been prepared by Arriscar (January 2026) and is included as Appendix D.

The PHA has demonstrated the Project complies with all quantitative and qualitative risk criteria documented in HIPAP 4. The basis of the analysis has been extremely conservative, considering a range of operations simultaneously with different fuels, some of which are mutually exclusive. The range of operations considered include all aspects of:

- Hydrogen generation and storage
- Storage of natural gas on-site
- Gas turbine generators and/or reciprocating engines with natural gas only, a blend of natural gas with 30% hydrogen
- Liquid Biofuels Storage (up to the volumes approved under the existing Development Consent).

The study concluded that there should be no reason to restrict the operation of the Project based on hazards and risk.

7.2.3 Noise and Vibration

A Noise and Vibration Assessment (October 2025) has been prepared by JTA Health, Safety and Noise Specialists and is included as Appendix E.

The results of the assessment demonstrate no increased impact and are summarised below:

- the noise propagation modelling indicates that the construction noise emissions are compliant with the noise emission requirements, provided the noise control measures of the report are complied with.
- When construction noise levels exceed the Project's noise criteria, management controls should be considered for residents.
- The noise propagation modelling indicates that the operational noise emissions are compliant with the noise emission requirements provided:
 - a 3dB(A) reduction in overall emissions from the power station generators for option 1 with priority given to noise control treatments to the exhaust stack, air intake and generator enclosure
 - a 6dB(A) reduction in the reciprocating generator exhaust stack is achieved through noise control measures such as stack attenuators for options 2 and 3
 - The remaining equipment design levels of the report are complied with.
- Due to the distance from the nearest residential NSRs, it is unlikely the vibration levels from construction and operation are likely to be significant. Any residual vibration can be moderated with standard vibration control measures such as anti-vibration mounts and flexible couplings.
- The road traffic assessment from the original approved assessment was conducted as per the NSW Road Noise Policy. This assessment remains valid as the modified designs will not significantly impact the traffic flows generated compared with the original proposal.

8 Conclusion

This report concludes that the proposed Modification will not cause a significant increase in any impacts and is substantially the same development for which consent was granted under the original EIS.

The modified Project remains consistent with the principles of ecologically sustainable development and the objectives of a number of NSW Government policies and plans regarding the generation of energy.

The proposed modification is made under section 4.55(2) of the EP&A Act and meets all preconditions to granting of development consent. This application addresses all matters to be considered by the consent authority.

The environmental assessment of the modification determined that a number of environmental matters are expected to have nil or negligible impacts while residual impacts could be effectively mitigated by the environmental management measures set out in the assessments appended at Appendices B – E and by ensuring compliance with the existing conditions provided under the Development Consent in May 2024.

This Project is critical to ensuring urban and regional communities continue to have access to reliable sources of renewable energy, backed by the Dubbo Firming Power Station. The Project enables gas-powered electricity generation to firm up renewable energy generation and to assist in replacing generation currently obtained from retiring coal-powered electricity generators.

9 Appendices

Appendix number	Subject Matter
Appendix A	Updated project description
Appendix B	Air Quality Impact Assessment (Northstar 2025)
Appendix C	Greenhouse Gas Assessment (Northstar 2025)
Appendix D	Preliminary Hazard Analysis (Arriscar 2026)
Appendix E	Noise and Vibration Impact Assessment (JTA 2025)
Appendix F	Letter from Landskape (Landskape 2026)
Appendix G	Revised Mitigation Measures
Appendix H	Letter from Premise (Premise 2026)

Appendix A Updated Project Description

Project Component	As Modified Project
Project Address	28L Yarrandale Road Dubbo NSW 2830
Project Site	The proposed site of the firming power station comprises approximately 13.9 hectares on the land described as Lot 13 of DP812799.
Zoning	The site is centrally located within the Heavy Industrial Zoning (E5) of the Dubbo Local Environmental Plan 2022.
Development footprint	13.99 hectares
Vegetation Clearance	13.99 hectares
Power Generation Facility	Open cycle gas turbine technology and/or gas engine driven technology with a nominal capacity of up to 180 MW.
Hydrogen Generation Facility	Hydrogen electrolyser with a nominal capacity of up to 20MW, along with hydrogen compression, storage, handling and blending facilities.
Ancillary infrastructure and works including roads, parking, laydown areas, perimeter fencing, vegetation screening	As shown on the approved layout plan and described in the development consent.
Gas Pipeline Connection	<p>A high pressure above ground piping connection (approximately 150m in length) between the Project site and the APA CWPL Dubbo Scrapper Station land subject to an easement.</p> <p>Boundary realignment to be undertaken by landowner to incorporate the land for gas connection pipeline infrastructure (which will be above ground piping) to be incorporated into the Project Site.</p>
Gas Storage Pipeline	A high pressure gas pipeline up to 2.5km to be used for storage purposes onsite.
Electricity Transmission Line	Essential Energy will provide a 132 kV connection to the on-site substation.
Dominant and ancillary use of the land	Power generation
Anticipated life of Project	40 years
Design life of mechanical and electrical plant	40 years
Design life of civil and structural plant	40 years
Construction duration	Approximately 12 months.
Construction hours	<p>It is anticipated that works would be undertaken mostly during standard construction hours (7:00am to 6:00pm weekdays and 7:00am to 1:00pm on Saturdays).</p> <p>Out-of-hours construction activities would be required for some activities where the activity involves continuous work. These activities may include:</p> <ul style="list-style-type: none"> • Pipeline integrity testing which is a critical end of construction activity. Pressure strength testing of pipe strings, lasting four hours, would be conducted during the daytime, while leak testing of a complete pipeline is conducted over 48-72 hrs period (test hold period 24 hrs). Since hydrostatic testing is integral to the safety of the pipeline, these works are considered unavoidable. • Commissioning testing for the introduction of gas may require continuous and/or 24 hour operation to be successfully completed.
Construction workforce	Expected peak construction workforce of approximately 150 full time equivalent.

Project Component	As Modified Project
Project life and hours of operation	40 year life span available to operate for a continuous 24 hours on any given day.
Operation workforce	Permanent site staff numbers are not expected to exceed an average of 5-6 full time equivalent persons. Some additional support staff and deliveries of consumables, waste disposal, sanitary services and specialist maintenance staff may also be required on a weekly basis. Local contractor workforce will be used (where practicable) during infrequent maintenance events, outages etc.
Capacity factor	It is anticipated that the Project would operate up to approximately 12 per cent of the year at 100 percent plant load.
Decommissioning	<p>Decommissioning would be undertaken in line with current standards (however this may be subject to change given the passage of time) and would include the following activities:</p> <ul style="list-style-type: none"> • provided that the pipeline/s did not pose an environmental or safety risk, they would likely be left in situ in the ground. This process could involve stabilisation and plugging where there is risk of subsidence or erosion. If the pipeline was to be removed, it would be excavated, cut in sections and disposed of • removal of the above-ground facilities would involve removal and disposal of all above-ground infrastructure such as turbines, electrolysers, compressors, skids, and fencing • all above-ground signs and markers above the pipeline would also be removed, including disconnection of the cathodic protection system from the pipeline and removal of test posts; and • in consultation with the landowner, consideration would be given to whether hardstands, access tracks and paved areas would be retained, or the site rehabilitated to pre-existing conditions.
Capital expenditure	Approximately \$420 million

Appendix B Air Quality Impact Assessment

Appendix C Greenhouse Gas Assessment

Appendix D Preliminary Hazard Assessment

Appendix E Noise and Vibration Impact Assessment

Appendix F Cultural Heritage Update Letter

Appendix G Revised Mitigation Measures

Reference	Mitigation Measure	Timing
BIODIVERSITY		
BD1	Dust suppression – use of dust barriers around construction area and using dust suppression techniques outlined in the mitigation measures for Air Quality (Chapter 11) and Land and Water (Chapter 10).	Construction
BD2	Noise management – construction to be restricted to recommended standard hours as per EPA Draft Construction Noise Guidelines (NSW EPA 2020).	Construction
BD3	Light spill management – keep lights close to the ground, directed and shielded to avoid light spill.	Construction and Operation
CULTURAL HERITAGE		
CH1	A Heritage Management Plan (to include cultural heritage and historical heritage) to be prepared for the Project to: <ul style="list-style-type: none"> define the tasks, scope and conduct of all cultural heritage management activities cover all relevant actions and requirements to be conducted during construction and operation of the Project in respect of cultural and historical heritage include ongoing consultation with the Aboriginal community; and remain active for the Project life. 	Construction and Operation
CH2	A suitably qualified archaeologist is engaged to collect all surface stone artefacts at AHIMS site numbers 36-1-0288 and 36-1-0788 as necessary to avoid harm with the objects to be appropriately recorded, curated and stored at a Keeping Place.	Construction
CH3	In the unlikely event that human skeletal remains are encountered during construction, all work with the potential to impact the remains must cease. Remains must not be handled or otherwise disturbed except to prevent further disturbance. If the remains are thought to be less than 100 years old the Police or the State Coroner's Office (tel: 02 9552 4066) must be notified. If there is reason to suspect that the skeletal remains are more than 100 years old and Aboriginal, Dubbo Firming Nominees Pty Ltd should contact the Environmental Line (tel: 131 555) for advice. In the unlikely event that an Aboriginal burial is encountered, strategies for its management would need to be developed with the involvement of the local Aboriginal community.	Construction
CH4	If any previously unidentified Aboriginal or historical cultural heritage places or objects are encountered during construction of the works all activities likely to affect the places or objects must cease immediately and Heritage NSW and the registered Aboriginal parties consulted about an appropriate course of action prior to recommencement of work.	Construction
CH5	The proponent to provide training to all on-site personnel regarding the historical and Aboriginal cultural heritage management strategies relevant to their employment tasks.	Construction and Operation
HAZARDS AND RISKS		
PHA1	The location and design of the administration building will be in accordance with the PHA guidelines.	Design
PHA2	The PHA will be used as a reference document for design specification and future risk analysis relating to equipment selection and site layout during detailed design. This will include Hazard Identification, Hazard and Operability Workshop(s) and Failure Modes and Effects Criticality Analysis.	Design Construction Operation

Reference	Mitigation Measure	Timing
PLU1	The installation and continued operation of a low intensity steady red obstacle light on the central or single exhaust stack in accordance with Australian Standards.	Construction and Operation
BF1	Asset Protection Zones – at the commencement of the Project and in perpetuity an Inner Protection Area Asset Protection Zone is provided between the buildings and any storage of hazardous materials and the boundary to the north, east and south and for 50m to the west as outlined in PBP 2019 Appendix 4.	Design, Construction and Operation
BF2	A 20,000L static water supply is to be available for firefighting purposes and suitable fittings to enable firefighting and to be marked accordingly in a prominent position.	Construction Operation
BF3	Formulate an emergency response plan in accordance with NSW RFS guidelines.	Construction Operation
BF4	Comply with sections 3 and 5 of AS3959-2018 'Construction of buildings in bush fire-prone areas'	Construction
BF5	Where applicable, reticulated or bottled gas to be installed and maintained in accordance with AS/NZS 1596:2014 and the requirements of the relevant authorities and metal piping is used. All fixed gas cylinders are kept clear of all flammable materials to 19 metres and shielded on the hazard side, connections to and from gas cylinders are metal. Polymer-sheathed flexible gas supply lines are not used and above ground gas service pipes are metal including and up to any outlets.	Construction Operation
LAND AND WATER		
SW1 and S1	A construction SWMP will be required and prepared as part of a CEMP to manage potential risks to soils and downstream water quality. The construction SWMP is to be prepared with reference to relevant development controls within the Dubbo DCP. Recommended measures for the construction SWMP include but are not limited to: <ul style="list-style-type: none"> Measures to minimise and manage the potential for erosion and sediment transport within and from the project area. Measures to manage accidental spills and waste storage Measures to manage stormwater and the potential for contaminated runoff from the Project site. Measures to ensure that excavation activities and any stockpiling are managed to minimise the potential for downstream contamination. Measures to ensure that areas of exposed soil and the time in which they are exposed are minimised as far as practicable 	Construction and operation
SW2 and S2	An ESCP will be required and prepared with reference to the principles and requirements of Managing Urban Stormwater – Soils and Construction Volume 1 (Landcom, 2004) to detail erosion and sediment control measures during construction.	Construction and operation
SW3 and S3	The construction of the development shall be managed in compliance with measures specified within the construction SWMP and ESCP to ensure impacts to water quality are appropriately managed. Measures shall be implemented to ensure that areas of exposed soil and the time in which they are exposed, are minimised as far as practicable during construction.	Construction and operation
SW4	Stockpiling of excavated material shall be managed to minimise the mobilisation and transport of dust, sediment and leachate into downstream environments. Recommended measures to manage stockpiling include but are not limited to: <ul style="list-style-type: none"> Ensuring stockpiles are located away from drainage lines, waterways, and areas susceptible to erosion. 	Construction and operation

Reference	Mitigation Measure	Timing
	<ul style="list-style-type: none"> Minimising the number, size and duration of stockpiles used. Ensuring Stockpiles are stabilised and implementing dust suppression methods as required. Ongoing review and inspection of the use of heavy vehicles and/or machinery, including transport tracks used, for erosion risk. <p>Ensuring that vehicles transporting waste and/or excavated material are appropriately covered to reduce the potential for dust.</p>	
SW5	The construction SWMP prepared as part of the CEMP shall contain procedures to ensure that any waste from concreting activities is captured, contained and appropriately disposed.	Construction and operation
SW6 and S4	<p>The construction SWMP shall include procedures to reduce and manage the risk of emergency events and the potential for wastes and spills to contaminate soil. Recommended measures to manage the potential for contaminated discharge include:</p> <ul style="list-style-type: none"> The storage of all fuel chemicals and liquids in sealed bunded areas on level ground away from stormwater drainage lines and waterways Ensuring refuelling and maintenance activities are restricted to designated areas with appropriate bunding and spill capture controls Implementing controls as part of the construction SWMP that provide procedures to respond to emergencies and spills. Ensuring visual inspections of drainage lines and disturbed areas are undertaken during construction to assess any potential soil or surface water issues. The installation and maintenance of stormwater control measures including drainage networks that segregate stormwater runoff according to its contamination. 	Construction
	<p>During operation procedures shall be developed to reduce the potential contamination of soil and surface water resulting from wastes, spills and/or emergency incidents. Suggested measures to control the potential for contamination during operation include:</p> <ul style="list-style-type: none"> The appropriate storage of equipment and hazardous substances during operation. Ensuring that plant and stormwater control measures are maintained to prevent contamination of soil. Preparation of appropriate procedures to response to emergency incidents, spills and leaks from the Project site, including operational equipment and maintenance activities. 	Operation
SW7	<p>The increase in stormwater runoff resulting from additional impervious areas shall be managed through:</p> <ul style="list-style-type: none"> Designing and implementing a permanent drainage and water management network that adequately controls and minimises the potential for downstream surface water contamination. Inspection and maintenance of stormwater control measures, including drainage networks that segregate stormwater runoff according to its contamination 	Operation
HF1	Ensure compliance with the SWMP and ESCP to manage potential risks to soils and downstream water quality.	Construction
	Ensure compliance and maintenance of the stormwater drainage network as detailed in the drainage philosophy	Operation
GW1	Ensure compliance with the SWMP and the ESCP to manage potential risks to groundwater resources	Construction
	Ensure compliance and maintenance of the stormwater drainage network as detailed in the drainage philosophy	Operation

Reference	Mitigation Measure	Timing
S5	<p>As part of the SWMP for the Project, soil management measures should include:</p> <ul style="list-style-type: none"> • Assessment of topsoil depth prior to stripping to minimise mixing of topsoil and subsoil • Topsoil and subsoil should be stripped and stockpiled separately for rehabilitation works following excavation • Avoid stripping and stockpiling soil following heavy rain periods • Avoid compaction of topsoil during stripping and stockpiling operations • If required, amelioration of topsoil and/or subsoil during stripping in accordance with a soil scientist's recommendations. • Prevent erosion of stockpiles using soil stabilising biopolymers, cover crops or other forms of stabilisation • Test stockpiled soils to determine amelioration requirements prior to reinstatement 	Construction and operation
S6	<p>As part of the SWMP for the Project, soil compaction management measures should include:</p> <ul style="list-style-type: none"> • Development of controlled traffic practices for plant machinery movements • Avoid excavation and plant machinery movements on wet soils following heavy rain periods • Prevent long term storage of plant machinery on clay or wet soils • Avoid long term exposure of subsoils which are more susceptible to compaction • Progressively stabilise and rehabilitate soil as soon as practically possible after excavation • Ensure soil is replaced in correct subsoil/topsoil orders • Ensure vegetative cover is re-established after soil rehabilitation 	Construction and operation
CL1	Any land disturbance that identifies the presence of building rubble should be assessed for the presence of asbestos in accordance with applicable SafeWork NSW guidelines and codes of practice and managed accordingly.	Construction
CL2	Avoiding skin contact with soil that is discoloured, malodourous, containing foreign matter and/or generally inconsistent with virgin soil.	Construction and operation
CL3	No unauthorised entry into the Project site, including confined spaces and excavations is permitted.	Construction and operation
AIR QUALITY		
AQ1	<p>Construction Environmental Management Plan be prepared which includes an Air Quality Control Procedure to manage and monitor air emissions during construction and will include the following control measures:</p> <ul style="list-style-type: none"> • Monitor local weather conditions and cease dust generating operations when conditions result in visible dust emissions, and implement mitigation measures or until weather conditions improve; • Daily dust inspection on-site and off-site. • Erection of wind breaks such as fences at the site boundary; • Locate stockpiled materials away from drainage paths, easement, kerb, or road surface, and near existing wind breaks such as trees and fences; • Dust suppression/wind breaks on stockpiles; • Limit stockpile height to 5m (maximum); 	Construction

Reference	Mitigation Measure	Timing
	<ul style="list-style-type: none"> Vehicles leaving the site to be cleaned of dirt and other materials to avoid tracking onto public roads; Enforce appropriate speed limits for vehicle on site. Recommended speed limit is <15km/hr; and Cover all loads entering and leaving the site. 	
AQ2	Provision in design for future NO ₂ emission control technology in the event that there is non-compliance with limits prescribed by the NSW EPA and subject to detailed assessment.	Design, construction and operation
AQ3	Limiting generator operation to periods necessary to support grid firming and system reliability, thereby minimising overall annual emissions.	Operation
AQ4	Incorporating stack designs with adequate release height and orientation to optimise dispersion of combustion products.	Design and construction
AQ5	Selecting generation units with modern, low-NOX combustion technology and emissions specifications to comply with regulatory requirements, as demonstrated in the updated AQIA.	Design
AQ6	Allowing for potential retrofit of additional emission controls in design, so that if future regulatory changes tighten emission limits, upgrades are feasible without major redesign.	Design , construction and operation
GG1	Environmental Standards and performance will be included in the selection criteria (and cost benefit analysis) for the tendering and award of key packages associated with equipment, plant and machinery to reduce greenhouse gas emissions in construction and operation.	Construction and operation
GG2	The Project would only generate electricity when required.	Operation
GG3	The use of H ₂ would be maximised to reduce the emissions intensity of the Project.	Operation
GG4	Biofuels would be investigated for use in all operational and construction vehicles.	Construction and Operation
NOISE AND VIBRATION		
NV1	Noise Compliance Assessment once in operation to verify the predicted noise levels at the relevant receivers and to confirm the noise attenuation achieves compliance.	Operation
TRAFFIC, ROADS AND TRANSPORT		
TRT1	<p>A Construction Traffic Management Plan (CTMP) will be prepared and implemented by the construction contractor and will include:</p> <ul style="list-style-type: none"> the workforce be advised of the crash history at the intersection of Boohenba Road and Newell Highway and advised to use Purvis Lane to access the site neighbours of the Project be consulted and notified regarding the timing of major deliveries which may require additional traffic control and disrupt access loading and unloading is proposed to occur within the work area. No street or roads would be used for material storage at any time all vehicles would enter and exit the site in a forward direction management of vehicular access to and from the site is essential in order to maintain the safety of the general public as well as the labour force. <p>The following code is to be implemented as a measure to maintain safety within the site once the Project is operational:</p>	Construction and Operation

Reference	Mitigation Measure	Timing
	<ul style="list-style-type: none"> • utilisation of only the designated transport routes. • construction vehicle movements are to abide by finalised schedules as agreed by the relevant authorities. • implementation of a site drainage plan for on-site roads, hardstands and laydown area • installation of signage for entry and exit points from site to warn of cyclists • all permits for working within the road reserve must be received from the relevant authority prior to works commencing. • a map of the primary haulage routes highlighting critical locations prone to a higher risk of accident • an induction process for vehicle operators and regular toolbox meetings • preparation of a complaints management process for construction and operation of the Project • inclusion of provision for inclement weather in safety procedure for driving and operation of machinery 	
TRT3	An Operational Traffic Management Plan be implemented to include driver code of conduct.	Operation
VISUAL		
LV1	Landscape screening be extended, where possible and subject to maintaining a safe line of sight for traffic in accordance with the Traffic Impact Assessment, to the frontage of Yarrandale Road to provide additional screening.	Construction
LV2	Landscape screening should be at least two rows of vegetation, the species of which should be appropriate to local climate and require minimal maintenance with a mature vegetation height of 15 metres. Planting should commence prior to commencement of construction.	Construction
LV3	Use of warm-coloured light bulbs, directional lighting below the horizontal plane, shielding of lights, sealing of dust-emitting surfaces during construction and operation use of low-reflective materials throughout the development.	Construction and Operation
LV4	Dust will be managed during the construction and operational phases as per the requirements set out in the associated Air Quality Assessment	Construction and Operation
SOCIO-ECONOMIC		
SE1	Identify opportunities to maximise the use of local suppliers, workforce, and businesses in the provision of goods and services to the Project and implement a local procurement policy for the Project prioritising local employment, services and materials where practicable.	Construction
SE2	Consult and liaise with the local accommodation providers, large employers in the region and Dubbo Regional Council to minimise impacts to short term rental and tourist accommodation having regard to a broader Workforce Accommodation Strategy across CWP Renewables Projects in the Central West Orana REZ.	Construction
SE3	Consult and liaise with large employers in the region and Dubbo Regional Council to minimise impacts to labour force shortages.	Construction
SE4	Implement the recommendations put forward in the impact assessments in respect of visual, air quality and noise.	Construction and Operation
SE5	The Project's CEMP will include a framework for consultation with stakeholders during construction and a complaints handling process.	Construction
SE6	The Project's OEMP will include a framework for consultation with stakeholders during operation and a complaints handling process.	Operation

Reference	Mitigation Measure	Timing
WASTE		
W1	<p>A Construction Waste Management Plan will be prepared prior to commencement of construction that will include:</p> <ul style="list-style-type: none"> • Consideration of the waste hierarchy, providing transparency on how it will be incorporated into project delivery. • Definition of waste streams and estimated quantities of produced material in each waste category. • Inclusion of a site plan that includes detail on waste segregation and storage location on site. • Description of how waste generation and disposal will be managed on site. 	Construction
W2	<p>An Operational Waste Management Plan will be prepared prior to the commencement of operation that will include:</p> <ul style="list-style-type: none"> • Consideration of the waste hierarchy, providing transparency on how it will be incorporated into operation of the Project. • Definition of waste streams and estimates quantities of produced material in each waste category. • Inclusion of a site plan that includes detail on waste segregation and storage location on site. • Description of how waste generation and disposal will be managed on site. 	Construction

Appendix H Biodiversity Assessment Update Letter

Squadron Energy is Australia's leading renewable energy company. Proudly Australian owned, our mission is to be a driving force in Australia's transition to a clean energy future by providing green power to our customers.

We develop, operate and own renewable energy assets in Australia, with 1.1 gigawatts (GW) of renewable energy in operation.

With proven experience and expertise across the project lifecycle, we work with local communities and our customers to lead the transition to Australia's clean energy future.

Squadron Energy acknowledges the Traditional Owners of Country throughout Australia. We pay our respects to Elders past, present, and emerging.

