



Marulan Gas-Fired Power Station - Modifications

Lapse Date Extensions

Critical State Significant Infrastructure Modification Assessment (MP
07_0174 MOD 1, MP 07_0175 MOD 1 & MP 07_0176 MOD 2)
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Executive Summary

The Marulan Gas-Fired Power Station (the Project) is located approximately 12 kilometres (km) north-east of Marulan within the Upper Lachlan and Goulburn-Mulwaree local government areas.

In 2008, the then Minister for Planning determined that the Project was essential for NSW for economic, social and environmental reasons, and declared the Project to be a critical infrastructure, as it was for the purpose of electricity generation with a minimum capacity of 250 megawatts and would secure ongoing economic electricity supply for NSW.

On 26 October 2009, the then Minister for Planning approved the Project through four separate approvals, including a concept plan approval, under Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act). Following reforms to the EP&A Act in March 2018, the project was transitioned from Part 3A to State significant infrastructure (SSI) by order on 20 November 2018, retaining its critical infrastructure status.

The Project was proposed as a joint venture between EnergyAustralia Development Pty Ltd (EnergyAustralia) and Delta Electricity (Delta) to construct and operate two gas-fired power stations and associated common infrastructure, including a site access road, a transmission line between the facilities and adjacent TransGrid switchyard, gas supply and storage pipelines and an option for a water supply pipeline. However, in 2010, EnergyAustralia acquired Delta's interest and is now the sole proponent for the Project.

In March 2018, the Project was transitioned from Part 3A to State Significant Infrastructure (SSI) by order on 20 November 2018 retaining its critical infrastructure status.

Modification Request

EnergyAustralia and Delta were given 10 years to commence the development of the Project, otherwise the approvals would lapse on 26 October 2019.

On 28 February 2019, amendments were made to the transitional arrangements for former Transitional Part 3A projects which are relevant to the determination of this modification request. These amendments prevent an approval for a Transitional Part 3A project that has been declared to be an SSI project from lapsing if a request to modify the relevant lapsing condition in the approval was duly made before the lapsing date. When this occurs, the approval lapses 12 months after the date on which the modification request was duly made unless the relevant modification is:

- refused or withdrawn, in which case the approval lapses on the day it was refused or withdrawn; or
- granted, in which case the approval lapses on the day specified in the modified approval.

On 11 October 2019, EnergyAustralia submitted requests to the Department to modify condition 1.5 of the existing approvals to extend the lapse dates for another five years to commence the Project, without changing any other aspects of the Project or conditions of the existing approvals.

The Department received advice from three Government agencies, including Goulburn-Mulwaree Council, which supported the applications. The Department received submissions from 66 separate submitters across all three applications. The issues raised in the public submissions were mainly related to the impacts associated with the original development applications, which were the subject of a comprehensive merit-based assessment, including potential impacts on the amenity of the local area and climate change impacts associated with the continuing use of fossil fuels.

As there were more than 25 submissions on the modification requests, the Minister for Planning and Public Spaces remains the approval authority for the modification requests under Section 5.25(4) of the EP&A Act.

Assessment

The Department has assessed the merits of the proposed modification requests, having regard to the existing conditions of approvals, all associated documents, and the issues raised in submissions and EnergyAustralia's formal response to these issues.

The Department considers that the key assessment issue concerning the proposed modifications is the justification for extending the Project's lapse date. The Department notes that the modification applications do not seek to change any other aspects of the Project, the strategic drivers that informed the original merit assessment and approvals remain unchanged, and there has not been any significant changes to the local land use around the site that would constrain development and operation of the Project.

Findings of more recent reviews and inquiries, such as Australian Energy Market Operator (AEMO)'s *Electricity Statement of Opportunities (2020)* and *2020 Integrated System Plan for the National Electricity Market (July 2020)*, *2019-20 National Electricity Market (NEM) Summer Operations Review Report*, and *Summer 2019-20 Readiness Plan (2019)*, and Australian Competition & Consumer Commission (ACCC)'s *Gas Inquiry 2017-2020 (2019)* support the need for dispatchable electricity which can be provided by gas-fired power stations.

The *NSW Electricity Strategy* released in November 2019 sets out a roadmap to secure sustainable and affordable electricity supply for NSW. As outlined in the strategy, peaking gas-fired power supply would provide new dispatchable generation capacity required to support renewable energy as the energy market transitions away from coal-fired power.

Based on this assessment, the Department is satisfied that the Project is still as critical for the NSW economy as when it was approved in 2009, as it would:

- *increase energy security and reliability in NSW* by diversifying the potential sources of electricity supply available to NSW, as closure of the existing aged and less reliable coal-fired power stations in NSW are scheduled over the next 20 years;
- *strengthen the NSW energy resilience* by diversifying the potential sources of electricity generation and improving its ability to withstand any shocks or disruptions to power supply, through provision of firming generation capacity;
- *put downward pressure on energy prices*, which have risen significantly in NSW, by supporting the development of new electricity generation; and
- *support industrial development in NSW* by facilitating a reliable source of dispatchable peaking power supply to supplement intermittent renewable energy sources.

The Department also acknowledges the uncertainty in the national and east coast gas and electricity markets over the last 10 years has been a major factor in delaying the development of the Project and that most of these impediments have been largely resolved, including:

- the need for additional electricity generation as a result of the progressive retirement of coal-fired power stations, including the scheduled closure of the Liddell coal-fired power station in 2022/2023;

- recent improvements in gas-fired turbine technologies; and
- recent developments in the east coast gas market including announcements by the Commonwealth government supporting gas developments to assist in the COVID recovery, along with the approval of the Port Kembla Gas Import Terminal and the Narrabri Gas Project.

Evaluation

The Department is satisfied that extension of the Project lapse dates would not result in any additional impacts that have not already been considered and assessed in the original approvals, and considers that the recommended updates to the conditions of approval would ensure any likely residual impacts are managed and mitigated in accordance with current best practice.

There has been minimal land use change in the area around the site and air quality and noise levels at three new receivers in the area would be required to comply with the approved limits. The recommended conditions include updated references to contemporary air quality and noise guidelines.

Consequently, the Department considers that the proposals are in the public interest and recommends that EnergyAustralia be given an additional five years from the approved lapse date (until 26 October 2024) to physically commence development of the Project, subject to the recommended updates to the project approvals.

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1 Introduction

The Marulan Gas-Fired Power Station (the Project) was approved by the then Minister for Planning on 26 October 2009 through four separate approvals including:

- **Marulan Gas-Fired Power Stations Concept Approval** (MP 07_0174) – EnergyAustralia Development Pty Ltd (EnergyAustralia) and Delta Electricity (Delta) to develop two gas-fired power stations, and associated common infrastructure;
- **Marulan Gas-Fired Power Station 1** (MP 07_0175) **Project Approval** - EnergyAustralia to develop a 350 megawatt (MW) open cycle gas-fired power station;
- **Marulan Gas-Fired Power Station 2** (MP 07_0176) **Project Approval** – Delta to develop a 250 - 350 MW open cycle gas-fired power station or a 400 - 450 MW combined cycle gas-fired power station; and
- **Marulan Gas-Fired Power Stations - Common Infrastructure** (MP 07_0174) **Project Approval** – EnergyAustralia and Delta to develop common works associated with the Project, including a gas supply pipeline to connect into the existing Moomba to Sydney gas pipeline, transmission line to connect into the electricity grid and access roads.

The Project is located approximately 12 kilometres (km) north-east of Marulan and approximately 25 km east of Goulburn within the Upper Lachlan and Goulburn-Mulwaree local government areas (see **Figure 1**). The location of the Project provides access to the Moomba to Sydney high pressure gas pipeline (approximately 6 km to the south of the site), and is located adjacent to an existing electricity supply network through a TransGrid Switchyard. **Figure 2** shows the approved Project layout and key associated infrastructure.

The land use around the site is primarily rural residential, consistent with the identified land uses in 2009. Two residences were constructed after the Project was approved in 2009 and are located approximately 1.3 km and 2.5 km from the Project site. In addition, a bed and breakfast accommodation has been constructed approximately 1.6 km from the Project site.

The Project was proposed to be carried out as joint concept plan approval between EnergyAustralia and Delta with the two power station sites to be operated independently and the common infrastructure area to be jointly managed. However, in 2010, EnergyAustralia subsequently acquired Delta's interest and is now the sole proponent for the Project.

The Project has a total capital investment value of around \$809 million (estimated net present value of \$1.1 billion), and would generate up to 500 full time equivalent (FTE) jobs during construction and up to 38 FTE jobs during operation.

The Project has not yet commenced. EnergyAustralia contends that the delay in developing the Project has been due to the uncertainty in the energy market and demand over the last decade. This includes securing a reliable supply of gas at competitive prices, which has delayed the development of other gas fired power stations in NSW, including EnergyAustralia's Tallawarra B power station.

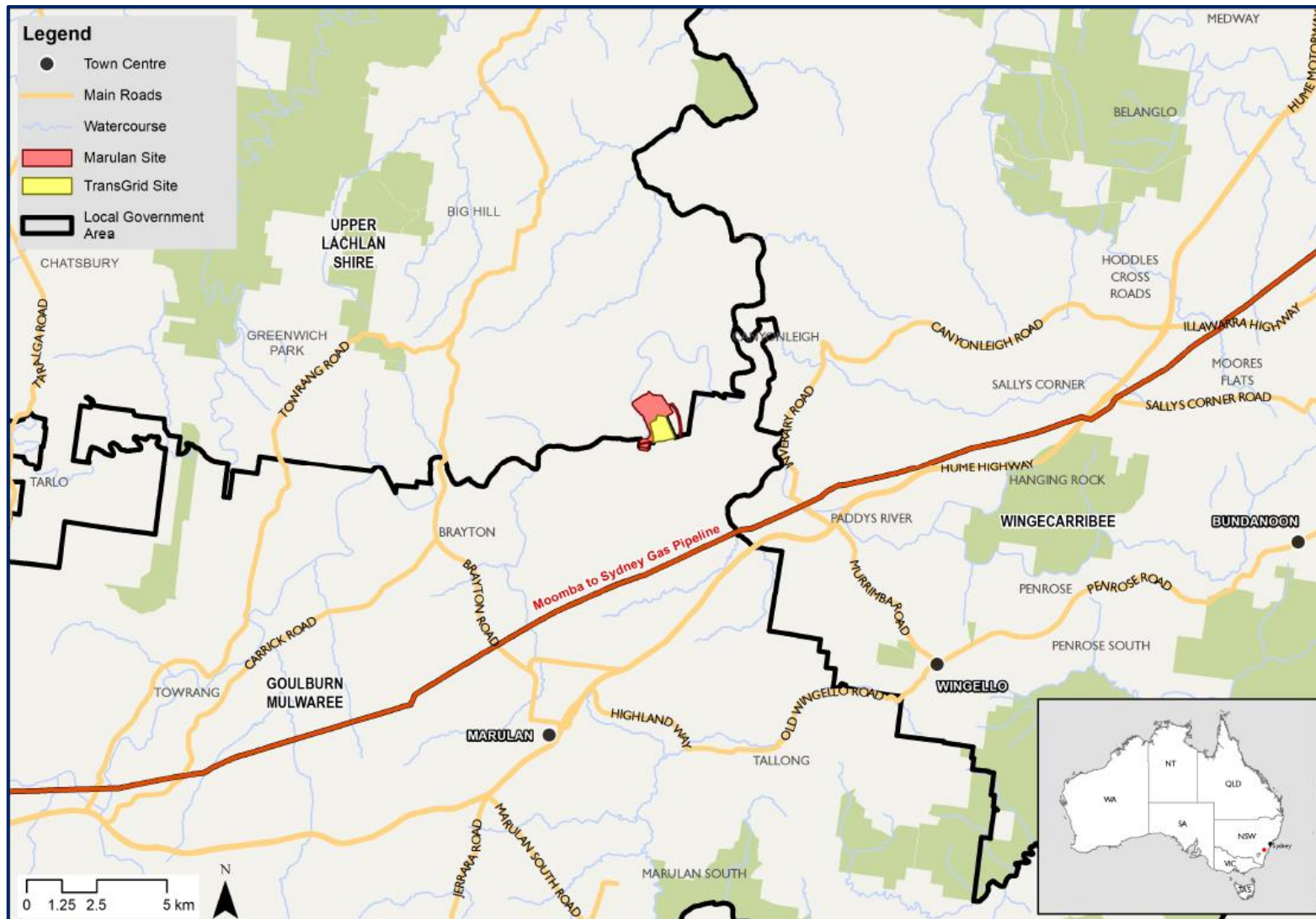


Figure 1 | Regional Context

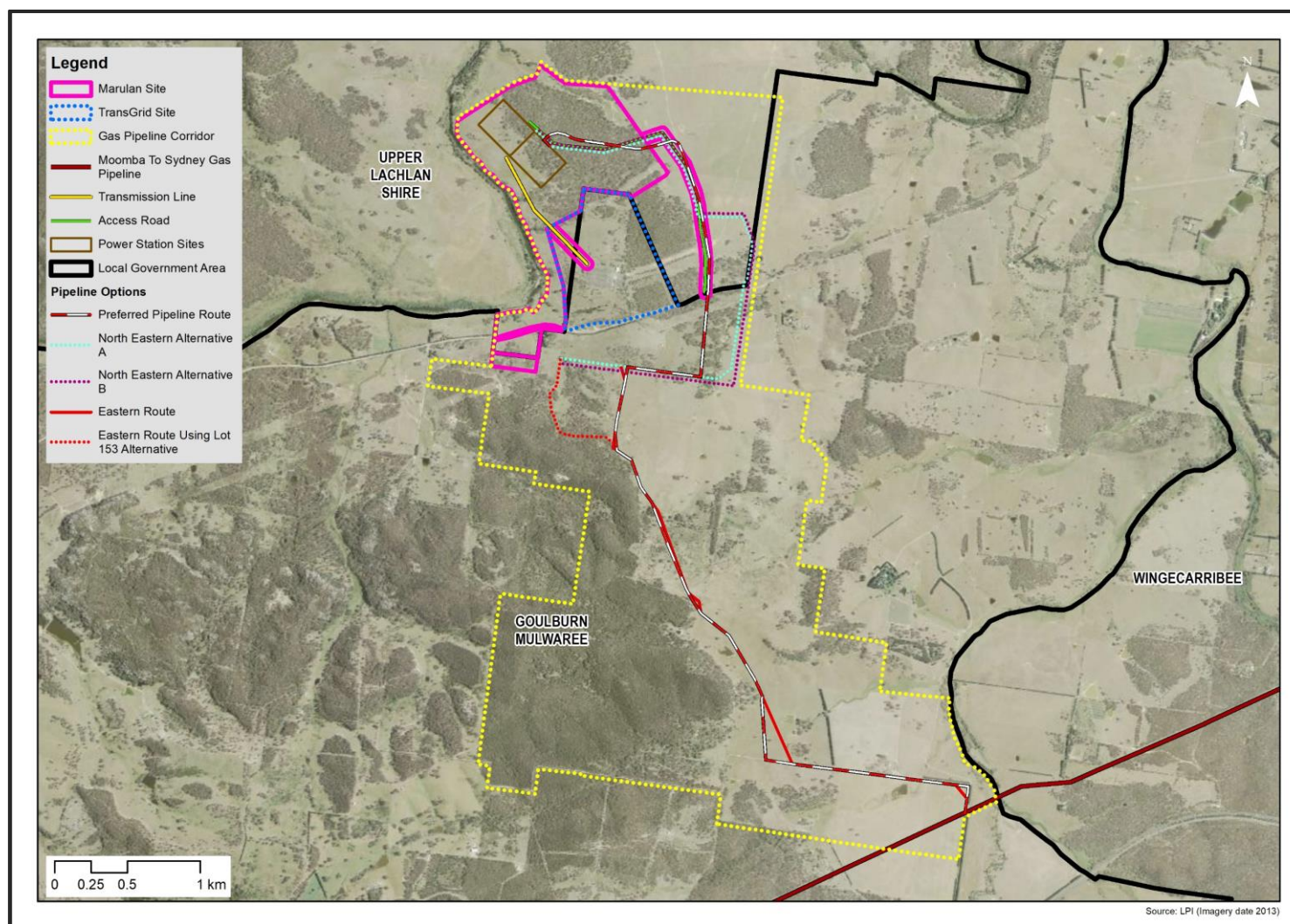


Figure 2 | Project Layout

2 Proposed Modifications

Condition 1.5 of the project approvals for the two power stations and common infrastructure (MP 07_0174, MP 07_0175, and MP 07_0176) require that the Project is physically commenced within 10 years of the date that approval was granted (26 October 2009), otherwise the approvals would lapse on 26 October 2019.

However, on 11 October 2019, EnergyAustralia submitted three requests to the Department to modify condition 1.5 of the project approvals for the two power stations and common infrastructure (MP 07_0174, MP 07_0175, and MP 07_0176) to extend the lapse dates for a further 5 years to commence the Project.

The modification requests propose to extend the lapse date only, without altering any other components of the Project or other project approval conditions. Full details of the proposed modifications are available in the Modification Report submitted with the modification applications (see **Appendix B**).

EnergyAustralia considers many of the impediments for investing in the Project no longer exist, and that it would be able to develop the Project within the next 5 years, given:

- the proposed retirement of coal-fired power stations, including the scheduled closure of the Liddell coal fired power station in 2022-23;
- recent improvements in gas-fired turbine technologies; and
- recent developments in the NSW gas market with potential to increase the gas supply and associated lower costs.

3 Statutory Context

3.1 Approval Authority

The Project was classified as a critical infrastructure project under section 75C of the *Environmental Planning and Assessment Act 1979* (EP&A Act) by the then Minister for Planning on 26 February 2008.

This was because the Project was considered to be essential for NSW as it would:

- secure ongoing economic electricity supply during a period of energy uncertainty;
- complement increasing renewable energy deployment over the coming decades; and
- provide for a readily investable power generation site that could be developed within a relatively short lead in time.

On 26 October 2009, the then Minister for Planning approved the Project under Part 3A of the EP&A Act. Following reforms to the EP&A Act in March 2018, the Project was transitioned from Part 3A to State Significant Infrastructure (SSI) by order on 20 November 2018 retaining its critical infrastructure status.

As there were more than 25 submissions on the modification requests, the Minister for Planning and Public Spaces remains the approval authority for the modification requests under Section 5.25(4) of the EP&A Act.

3.2 Scope of Modification

The modification requests are only seeking to extend the lapse dates of the existing approvals. All other aspects of the Project would remain the same and there would be no change to the approved impacts of the Project. Consequently, the Department is satisfied that the requests fit within the scope of Section 5.28(3) of the EP&A Act, and can be characterised as modifications to the existing approvals, and that the Minister for Planning and Public Spaces may determine the modification requests under Section 5.25(4) of the EP&A Act.

3.3 Transitional Arrangements

On 28 February 2019, amendments were made to the transitional arrangements for former Transitional Part 3A projects which are relevant to the determination of this modification request.

These amendments prevent an approval for a Transitional Part 3A project that has been declared to be an SSI project from lapsing if a request to modify the relevant lapsing condition in the approval was duly made before the lapsing date, and the request was not determined before the lapsing date.

When this occurs, the approval lapses 12 months after the date on which the modification request was duly made (i.e. 11 October 2020) unless the relevant modification is:

- refused or withdrawn, in which case the approval lapses on the day it was refused or withdrawn; or
- granted, in which case the approval lapses on the day specified in the modified approval.

3.4 Zoning and Permissibility

At the time of project approval in 2009, the land use zoning of the Project site was classified as Zone No 1 (a) - General Rural (rural zone) under the applicable *Mulwaree Local Environmental Plan 1995*. The Department notes the change in the zoning classification of the Project to RU2 - Rural Landscape, following the merger of Goulburn and Mulwaree Councils in 2004, when the new *Goulburn Mulwaree Local Environmental Plan 2009* was adopted, which replaced the *Mulwaree Local Environmental Plan 1995*.

Consistent with the provisions of the *State Environmental Planning Policy (Infrastructure) 2007* (Infrastructure SEPP), the update in the zoning of the Project site does not change the permissibility requirements and the Project is still permissible with consent. This is because clause 34(1) of the Infrastructure SEPP allows development 'for the purpose of electricity generating works on any land in a prescribed rural, industrial or special use zone', and clause 33 of the Infrastructure SEPP includes the RU2 – Rural Landscape zone under the definition of the prescribed rural zone.

It is also noted that since the project was approved, under Clause 16 of the *State Environmental Planning Policy (State and Regional Development) 2011* (SRD SEPP) that a critical SSI project may be carried out without development consent under Part 4 of the EP&A Act.

4 Engagement

4.1 Exhibition

The Department exhibited the three modification requests for two weeks in October/ November 2019. During the exhibition period, the Department received advice from three Government agencies, including Goulburn-Mulwaree Council (the Council) which supported the applications.

The Department received 57 submissions on the Common Infrastructure Project, 40 submissions on the Power Station 1 Project and 39 submissions on the Power Station 2 Project. Duplicate submissions were received across the 3 applications, with a total of 65 unique submissions were received across all three applications.

All the public submissions objected to the modification requests. The Department received one submission by way of objection from an organisation on the common infrastructure modification application. A detailed breakdown of the submissions is provided in Error! Reference source not found. and a full copy of the submissions is available in **Appendix C**.

Table 1 | Summary of Special Interest Group and Community Submissions

Submitter		Number	Position
Organisations			
HES Investments Pty Ltd		1	Object
Community Members			
Common Infrastructure	<5km	15	Object
	5-100km	20	
	>100km	22	
	TOTAL	57	
Power Station 1	<5km	8	Object
	5-100km	4	
	>100km	28	
	TOTAL	40	
Power Station 2	<5km	8	Object
	5-100km	4	
	>100km	27	
	TOTAL	39	
Submitters for all three projects ¹	<5km	15	Object
	5-100km	20	
	>100km	30	
	TOTAL	65	

Note 1: Replicate submissions across all three projects have been counted as one submission.

4.2 Submissions from Public Authorities

The Department received advice from 3 public authorities. A summary of these submissions are as follows.

Goulburn-Mulwaree Council supported the proposed modifications and requested that EnergyAustralia consult with the Upper Lachlan Shire Council. The Department notes the EnergyAustralia's Submissions Report provides details of consultation undertaken with the Upper Lachlan Shire Council in preparing the modification report.

The **Environment and Protection Authority (EPA)** noted that the proposal would trigger the need for an Environment Protection Licence (EPL), and that existing conditions of approval would need to be reviewed and updated to reference contemporary quality and noise guidelines, including the *Noise Policy for Industry 2017*. The Department has updated the conditions in accordance with the EPA's recommendations.

It also recommended EnergyAustralia make early and ongoing engagement with the EPA to ensure implementation of best practice standards, controls and management measures for the Project, if the modification requests are approved. The Department's consideration of these matters is discussed in **section 5.2** of this report.

WaterNSW did not object to the proposal but noted that due to the Project's proximity to the Wollondilly River, under the existing approval conditions, wastewater is required to be contained in structures with the same permeability as a landfill to prevent leaching into the surrounding environment. WaterNSW requested to be consulted on the relevant management plans. The Department has recommended revisions to the conditions to require consultation with WaterNSW on the relevant management plans.

4.3 Public Submissions

All the public submissions objected to the proposed modifications (see **Appendix C**). The Department received a submission from HES Investments which operates 'Tea Tree Hollow', a short-term holiday rental house and rural retreat located around 1.6 km from the power station site.

The key issues raised in the public submissions include:

- impacts on the rural landscape;
- visual amenity impacts from large stacks;
- impacts on the local traffic; and
- environmental impacts, including impacts on biodiversity, soil, waterways, noise, air pollution and climate change

The Department notes that the issues raised in the submissions largely relate to the impacts of the original Project, which was the subject of a comprehensive merit-based assessment, rather than the modification requests to extend the lapse dates.

4.4 Response to Submissions

Following the exhibition of the modification applications, the Department requested EnergyAustralia to provide a response to the issues raised in the submissions. EnergyAustralia's Submissions Report (see **Appendix D**) was made publicly available on the Department's website from 20 February 2020 and was referred to the public authorities who made submissions on the Project.

WaterNSW and the EPA advised that they were satisfied with the Submissions Report and both requested ongoing consultation with EnergyAustralia during the construction and operational stages to ensure that best practice standards, controls, management and mitigation measures would be incorporated, should the modification request be approved. The requirement for ongoing consultation with key agencies has been incorporated in the recommended conditions.

5 Assessment

The Department has assessed the modification applications and supporting information in accordance with the relevant requirements of the EP&A Act, having regard to the existing conditions of approvals, the modification requests, the issues raised in the submissions and EnergyAustralia's Submissions Report. A list of other key documents that informed the Department's assessment is provided in **Appendix A**.

The Department considers that the key assessment issue concerning the proposed modifications is the justification for extending the Project's lapse date. The Department notes that the modification applications do not seek to change any other aspects of the Project, the main strategic drivers that informed the original merit assessment and approvals remain unchanged, and there has not been any significant changes to the local land use around the site that would constrain development and operation of the Project.

The Department's consideration of these matters and other likely impacts of the project are discussed in the following sections (see **sections 5.1 to 5.4**).

5.1 Strategic Context

The strategic context for declaring the Project to be a critical infrastructure project in 2008 was dominated by the findings of the NSW Government's *Energy Directions Green Paper (2004)*, the *Owen Inquiry into Electricity Supply (2007)*, and the National Electricity Market Management Company's *2008 Statement of Opportunities*, which identified:

- the need for additional base load generation capacity by 2012/2013 and a deficit in NSW reserve peaking capacity of above 280 MW by 2014/2015;
- gas-fired power generation as a suitably efficient and less polluting transitional approach for rectifying this energy need in the medium term and to meet the base load and peaking electricity demand; and

additional gas pipeline capacity would be required to meet forecast demand for gas in NSW, particularly if there was an increase in gas-fired electricity generation.

Findings of more recent reviews and inquiries, such as Australian Energy Market Operator (AEMO)'s *Electricity Statement of Opportunities (2020)* and *2020 Integrated System Plan for the National Electricity Market (July 2020)*, *2019-20 National Electricity Market (NEM) Summer Operations Review Report* and *Summer 2019-20 Readiness Plan (2019)*, and Australian Competition & Consumer Commission (ACCC)'s *Gas Inquiry 2017-2020 (2019)* support the need for firming capacity (that is electricity supply that can be provided on demand).

The *NSW Electricity Strategy* released in November 2019 sets out a roadmap to secure sustainable and affordable electricity supply for NSW. As outlined in the strategy peaking gas-fired power supply

would provide new firm generation required to support renewable energy as the energy market transitions away from coal-fired power.

- increasing impacts of extreme climate events, including risks of high temperatures and fire periods on physical gas and electricity infrastructure, and higher electricity demand and extra load on both conventional and renewable generators;
- gas-fired power generation would be a reliable source of power supply to complement variable renewable electricity (VRE) and outages due to ageing coal-fired power stations in the medium to long-term; and
- announcement of gas market reforms by the governments to address supply tightness in the East Coast gas market, including a provision for giving the Australian Government a power to impose export controls when there is a shortfall of gas supply in the domestic market (Australian Domestic Gas Security Mechanism), following ACCC's inquiry into gas prices, transport and supply;

At the State level, NSW Government has introduced a range of policies and programs to enhance climate adaptation and resilience and transition to net zero emissions, including NSW Government *Electricity Strategy (2019)*, *Net Zero Plan Stage 1: 2020-2030*, and *Energy Efficiency Program*. This has been through commitments to:

- ensure consumers are provided with reliable and affordable electricity during the retirement of the existing power generation fleet (80% by the coal fired generators), and transition to the use of renewable technologies (currently only 1.9% of the NSW electricity is provided by the gas-fired generators); and
- support development of a regulatory framework, aimed at providing new, lower cost power supply into NSW to reduce electricity prices, increase the NSW energy resilience, and protect the environment.

On 31 January 2020, a memorandum of understanding (MoU) was made between the NSW and Commonwealth governments in energy and emissions reduction initiatives. This MoU sets out the actions and outputs for solving NSW's emerging reliable generation problems due to retiring the aged coal-fired power stations and ensuring a reliable and affordable energy system for NSW. The deliverable outputs include increasing gas and electricity supply in NSW and driving investments in transmission.

In addition, the Department notes the recent opportunities for more gas supply and connectivity in the east coast gas market and to various locations around NSW through the development of Queensland-Hunter Gas Pipeline project, the Port Kembla Gas Terminal, the Narrabri Gas Project which was approved by the Independent Planning Commission on 30 September, and other proposed gas development in NSW, such as the Newcastle Gas Terminal.

More recently, in September 2020, the Commonwealth government announced its commitment to a gas led recovery with commitments to increasing gas supply, improving gas transmission and looking to the gas industry to invest in provision of an additional 1,000 MW of dispatchable power generation prior to the 2023/24 summer peak, linked to the closure of the Liddell Power Station.

The Project retains its critical infrastructure status essentially for the same as the reasons that were used to originally declare the Project as critical, as supported by recent government policy and reports as outlined above. This is because it would:

- *save and increase energy supply to NSW* by filling in the gap in dispatchable energy required during peak periods and providing greater competition in the NSW electricity market, as closure of the

existing aged and less reliable coal-fired power stations in NSW are scheduled over the next 20 years, including the Liddell coal-fired power station in 2022/23;

- *provide firming supply*, as the energy mix transitions to increased use of VRE as identified in the *NSW Electricity Strategy* and AEMO's *2020 Integrated System Plan*;
- *strengthen the NSW energy resilience* by diversifying the potential sources of electricity generation and improving its ability to withstand any shocks or disruptions to power supply, such as natural disasters. The major NSW bushfire events in 2019-2020 posed significant risks to power supply and outages across NSW, including separation of the TransGrid transmission lines in the Victorian and NSW regions, and subsequent loss of generation capacity¹; and
- *support industrial development in NSW* by facilitating the provision of a reliable energy supply to existing commercial and industrial users to remain operational, but also by supporting the creation of new businesses and jobs. Additionally, a more reliable and affordable power prevents disruptions to industries operations.

5.2 Local Context

The local area surrounding the Project site is predominantly rural residential land use and has not significantly changed since the Project was approved in 2009, with around rural 25 residential receivers located within 3 km of the site.

The key new developments around the Project area over the past decade that would be potentially affected by the Project are new rural residents in the Brayton area. These include a rental house and rural retreat ('Tee Tree Hollow'), located 1.6 km from the Project site, and two private landholders located 1.3 km and 2.5 km from the Project site.

Importantly, the assessment demonstrates that the Project would comply with the approved EPA air and noise amenity criteria at these receivers. The Department notes that the project is predicted to comply with ambient air quality criteria at all receivers and that existing approval conditions require an air quality verification report to be prepared, including an updated air quality impact assessment to be prepared in consultation with the EPA.

The Department considers that potential impacts on these receivers relate to residential amenity, including visual and noise impacts. The Department notes that Goulburn-Mulwaree Council continues to support the project and that there are no known changes to land use around the site that would prevent that construction and operation of the project. These matters have been further discussed and assessed in **section 5.3**.

5.3 Impacts of the Project

The issues raised in the public submissions related to the impacts associated with the original development applications. The Department notes that the environmental, social and economic impacts of the Project were fully assessed in accordance with the EP&A Act, when it was approved by the then Minister for Planning in 2009 subject to strict conditions of approvals. The modification does not propose any changes to the project apart from extending the lapse date. However, the Department

¹ <https://www.essentialenergy.com.au/our-network/bushfires/bushfire-updates>

acknowledges there would be continuing uncertainty in the local community if the lapse date was extended for a further 5 years.

A summary of the requirements by the existing conditions of the three project approvals is presented in **Table 2**. The conditions require that the monitoring, management and reporting programs and plans must be prepared in consultation with the relevant agencies, as specified in the conditions of the project approvals, and to the satisfaction of the Secretary.

Table 2 | Summary of the existing conditions

Matter	Conditions
Biodiversity	<p>EnergyAustralia must:</p> <ul style="list-style-type: none"> • avoid all native vegetation and endangered ecological communities during construction phase of the Project, and may only disturb canopy trees associated with these communities for the purpose of the Project's gas pipeline construction, provided that it can demonstrate that there would be minimal impacts on these communities; • minimise the impacts of the Project on fauna and threatened species and their habitat during construction; • offset any residual impacts of the Project and provide details of the offset requirements to the Secretary prior to commencing constructions; and • provide details of the rehabilitation measured to the Secretary prior to commencement of the Project and implement rehabilitation measures within six months of the completion of Project construction, unless otherwise agreed by the Secretary.
Air Quality and Greenhouse Gas Emissions	<p>Energy Australia must:</p> <ul style="list-style-type: none"> • minimise the dust emissions of the Project during construction; • comply with operational air quality discharge limits for nitrogen oxides; • undertake an air quality performance verification program including monitoring and updated air quality impact assessment; • not generate any offensive odour; and • prepare and implement a detailed operational air quality management plan, including and not limited to the following measures: <ul style="list-style-type: none"> ○ identification of all major sources of particles and gaseous air pollutants from both point source and diffuse emissions associated with operation of the Project, their major components and quantities of the emissions; ○ detailed programs for air quality monitoring and performance verification of the air quality modelling and predictions for the turbine stack discharge points; ○ to minimise and prevent potential elevated air quality impacts on surrounding land uses at all weather conditions or mode of operation at all times; ○ minimise greenhouse gas emissions per unit of electricity generated; and ○ provide detailed remedial measures and a timetable for implementing the measures to reduce the air quality impacts of the Project, if ground level concentrations exceed the limits of the approvals.
Noise and Vibration	<p>Energy Australia must:</p> <ul style="list-style-type: none"> • construct the project during regular construction hours; • ensure the operational noise do not exceed the limits of the project approvals; and • prepare and implement a detailed noise management plan for construction phase, and a noise and vibration management plan for the operational phase of the Project, including and not limited to the following measures: <ul style="list-style-type: none"> ○ detailed programs for noise monitoring and reporting;

Matter	Conditions
	<ul style="list-style-type: none"> ○ detailed remedial measures to minimise noise impacts of the Project, if under normal operating conditions, the noise levels at the relevant receivers exceed the limits of the project approvals; and ○ to minimise and prevent potential elevated noise levels on surrounding land uses at all weather conditions or mode of operation at all times.
Soil and Water	<p>Energy Australia must:</p> <ul style="list-style-type: none"> • ensure no water pollution occurs; • prepare and implement a detailed soil and water monitoring and management plans prior to construction, outlining measures relating to waterway crossings and groundwater interception, and maintenance of landform stability during construction; • prepare and implement soil and water management controls to minimise soil erosion and discharge of sediment and other pollutants to lands and/or waters during construction; • ensure the Project remains a nil discharge site; • prepare and implement an operational water management plan and, including remediation and monitoring measures for accidental discharge to surface or groundwater; and • not establish any new water storage structures or utilise any existing water storage structures on site for the purpose of stormwater capture during construction or operation.
Traffic and Transport	<p>Energy Australia must:</p> <ul style="list-style-type: none"> • minimise the traffic impacts of the Project; and • prepare and implement monitoring and management programs for traffic and access in the construction and operation environmental management plans, including measures to: <ul style="list-style-type: none"> ○ minimise traffic flow along Brayton Road through the village of Marulan and cumulative impacts from traffic generated by surrounding developments; ○ minimise operational traffic noise; and ○ ensure that all vehicles associated with the Project enter and exit the Hume Highway via the north Marulan Interchange, unless otherwise agreed by the Transport for NSW.
Aviation Safety	<p>Energy Australia must:</p> <ul style="list-style-type: none"> • provide written evidence to the Secretary that the following matters have been addressed to the satisfaction of the CASA and AirServices Australia: <ul style="list-style-type: none"> ○ updates to navigational aids, including flight plans, maps and other relevant documentation; ○ aviation hazard lighting requirements; and ○ any other matters identified by the relevant agencies.
Aboriginal and Cultural Heritage	<p>Energy Australia must:</p> <ul style="list-style-type: none"> • avoid disturbance of Aboriginal object(s) and potential archeological deposit sites and any potential disturbances are subject to additional areological studies prior to commencing construction and in consultation with registered Aboriginal stakeholders; and • implement standard chance find procedures if any previously identified significant Aboriginal heritage items are identified during construction.

Matter	Conditions
Hazards, Risk, and Waste	<p>Energy Australia must:</p> <ul style="list-style-type: none"> • develop and implement a Safety Management System; • prepare and implement measures for emergency management and to monitor and manage hazards and risk, including bushfire risk; • store and handle all dangerous goods, as defined by the Australian Dangerous Goods Code; • ensure that no waste generated outside the Project site is received on site; and • maximise the reuse and/or recycling of waste generated on-site and minimise the need for their off-site treatment or disposal.
Visual	<p>Energy Australia must:</p> <ul style="list-style-type: none"> • minimise the use of reflective building elements and maximise the use of building materials which visually complement the surrounding bushland; and • minimise the visual impact of the Project at relevant local and regional receptors and from Canyonleigh Road, through implementation of on-site and off-site urban design and landscaping measures.

The Department has recommended the following changes to the existing conditions of approvals to contemporise administration and reporting requirements including:

- inclusion of the modification proposal in the Project description in each of the three approvals;
- updates to government agencies, legislation, policies, guidelines and definitions;
- administrative changes to reflect the Department's standard approach for incident and non-compliance notification and reporting; and
- updating the Department's standard conditions for:
 - keeping the community informed about the progress of the Project and handling complaints, including requiring EnergyAustralia to make all relevant information about the Project publicly available on its website;
 - managing compliance, which include requiring EnergyAustralia to notify the Department of the commencement of key stages in the Project and to submit compliance reports in conjunction with these notifications;
 - managing and reporting on any incidents; and
 - providing regular updates.

The Department noted that the EPA would undertake monitoring and evaluations under its regulatory responsibilities and would require an EPL and operating conditions for the Project and take regulatory actions if required.

The Department considers that the recommended changes to the conditions of approvals would ensure a robust framework for developing the Project and subsequently managing and mitigating the likely residual impacts in accordance with the current best practice.

6 Evaluation

The Department has assessed the modification applications and supporting documents in accordance with the relevant requirements of the EP&A Act.

EnergyAustralia is seeking to modify condition 1.5 of the project approvals to extend the Project's lapse date by a further five (5) years from the current lapse date. All other aspects associated with the Project would remain the same.

The community concerns objecting to the modification applications were mostly around amenity and environmental impacts of the Project, including impacts on the local landscape and nearby land uses, and climate change risks posed by continuing use of fossil fuels. The Project went through a comprehensive assessment of the potential impacts when it was approved in 2009, subject to a strict set of conditions to ensure minimising and managing the Project's impacts in consultation with the relevant agencies, local community and key stakeholders, including avoiding and offsetting any likely biodiversity impacts of the Project.

Nevertheless, the Department has recommended changes to the existing conditions of approvals, including updates to relevant references, and several standard conditions.

The Department acknowledges the considerable uncertainty in the east coast gas and electricity markets over the last 10 years and accepts that this uncertainty has been a major factor in delaying the development of the Project. Much of the uncertainty has now been resolved, and the Department considers there is a reasonable prospect of EnergyAustralia to be in a position to commence the development of the Project within the next five years.

The extension of the lapse date would enable the Project to deliver economic, social and environmental benefits by providing a firming electricity generation to supplement the increase in variable renewable energy as the energy market transitions away from coal-fired power generation. The project would also deliver local and regional economic stimulus during construction and operations.

Based on this assessment, the Department is satisfied that the Project is as critical now for NSW as when it was originally approved, and that the benefits continue to outweigh any residual impacts.

The Department considers that the lapse date extension would not result in any additional impacts that have not already been considered and assessed through the original assessment process in 2009, and the recommended updates to the conditions of approvals would ensure any likely residual impacts are managed and mitigated in accordance with the current best practice.


Consequently, the Department considers that the proposals are in the public interest and recommends that EnergyAustralia be given an additional five years (until 26 October 2024) to physically commence development of the Project, subject to the recommended updates to the project approvals.

7 Recommendation

It is recommended that the Minister for Planning and Public Spaces:

- **considers** the findings and recommendations of this report;
- **determines** that the request for the Marulan Gas-Fired Power Station modification applications (MP07_0174-Mod-1, MP07_0175-Mod-1 and MP07_0176-Mod-2) fall within the scope of section 5.25 of the EP&A Act;
- **accepts and adopts** all of the findings and recommendations in this report as the reasons for making the decision to approve the modification;
- **agrees** with the key reasons for approval listed in the draft notices of decisions;
- **modifies** the approvals MP07_0174-Mod-1, MP07_0175-Mod-1 and MP07_0176-Mod-2. (**Appendix E**); and
- **signs** the attached Recommended Notices of Modifications (**Appendix F**).

Recommended by:



6/10/2020

Mandana Mazaheri
Team Leader
Resource Assessments

Recommended by:



6/10/2020

Stephen O'Donoghue
Director
Resource Assessments

Recommended by:



7/10/2020

Mike Young
Executive Director
Energy, Industry and Compliance

Appendices

Appendix A – List of Documents

Marulan Gas Fired Power Stations Project – Director-General Assessment Report, August 2009.

Marulan Gas Fired Power Station 1 – Project Approval, October 2009.

Marulan Gas Fired Power Station 2 – Project Approval, October 2009.

Marulan Gas Fired Power Stations Common Infrastructure – Project Approval, October 2009.

Memorandum of Understanding – NSW Energy Package (dated 31 January 2020).

NSW Government Electricity Strategy, November 2019.

Australian Energy Market Operator, 2019-20 NEM Summer Operations Review Report, June 2020.

Australian Energy Market Operator, Gas Statement of Opportunities for eastern and south-eastern Australia, March 2020.

Australian Energy Market Operator, Summer 2019-20 Readiness Plan, December 2019.

Australian Competition & Consumer Commission, Gas Inquiry 2017-2020, July 2019.

Independent Review into the Future Security of the National Electricity Market: Blueprint for the Future, Commonwealth of Australia 2017.

NSW Government's Gas Plan, November 2014:
http://www.resourcesandenergy.nsw.gov.au/_data/assets/pdf_file/0005/534830/NSW-Gas-Plan.pdf.

Appendix B – Modification Report

Appendix C – Submissions

Appendix D – Submissions Report

Appendix E – Consolidated Approvals

Appendix F – Notices of Modifications

MP07_0174-Mod-1: <https://www.planningportal.nsw.gov.au/major-projects/project/25026>

MP07_0175-Mod-1: <https://www.planningportal.nsw.gov.au/major-projects/project/25016>

MP07_0176-Mod-2: <https://www.planningportal.nsw.gov.au/major-projects/project/25021>