



**EnergyAustralia**

11 October 2019

Mr Jim Betts, Secretary  
Department of Planning, Industry and Environment  
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**RE: Marulan Gas Fired Power Stations Project—Modification of Project Approvals (MP 07\_0174, MP 07\_0175 and MP 7\_0176)**

Dear Mr Betts,

The Marulan Power Stations Project (the Project) was approved as three separate approvals comprising two independent power station approvals (MP07-0175 and MP07-0176) and a shared common infrastructure approval (MP07-0174). All Project Approvals are due to lapse on the 26 October 2019.

EnergyAustralia (EA) seek to modify Condition of Approval 1.5 of the three Project Approvals under Section 5.25 of the *Environmental Planning and Assessment Act 1979*, to extend the lapse date of the project approvals by five (5) years to 2026.

EA has prepared this report to support the modification applications and to address the request for supporting information from the Department's letter dated 27 August 2019 titled *Marulan Power Station Projects—Modification to Extend Project Lapse date*, signed by Stephen O'Donoghue, Director Energy Assessments, Department of Planning, Industry and Environment (DPIE).

The structure of this report is as follows:

1. Introduction
2. Project summary
3. Updated statutory context
4. Updated project justification
5. Stakeholder consultation
6. Conclusion.

## 1 Introduction

The Project was planned and approved as two independent gas-fired power stations with shared infrastructure. The Project was granted concept plan approval by the then Minister for Planning, The Hon. Kristina Keneally MP, on the 26 October 2009 and comprises of three Major Project Approvals:

- MP07\_0174–Shared Common Infrastructure
- MP07\_0175–Delta Gas-Fired Power Station and Associated Infrastructure
- MP7\_0176–EnergyAustralia Gas-Fired Power Station and Associated Infrastructure.

The Project transitioned to critical State significant infrastructure (CSSI) in 2011 under Division 5.2 of the *Environmental Planning and Assessment Act 1979*.

The current lapse date for all Project Approvals is 26 October 2019. EA (the Proponent) seek to modify Condition of Approval 1.5 of the Project Approvals 07\_0174, 07\_0175 and 07\_0176, to extend the lapse date by five (5) years. No other modifications are proposed to the existing Project Approvals as part of this Modification.

EA is committed to our NSW customer base and to the generation of economic electricity to maintain supply security. To meet these commitments, subsequent to the approval of the Project in 2009, EA decided to prioritise the development of the Tallawarra B gas turbine project ahead of the Project. EA is currently progressing planning for the construction of the Tallawarra B gas turbine project. However, unforeseen approvals delays may now alter the development schedule which would make the Marulan site a higher priority for EA.

The Project would provide for a readily investable power generation site that can be developed within a relatively short time. The Project would support ongoing secure, economic electricity supply during a period of energy uncertainty. The additional time would allow for the outcomes of other energy generation projects being developed in NSW to be factored into the medium and long-term plans for the Project.

The Project was assessed and approved against a regime of no-harm and minimised cumulative impact from an emissions perspective, including emissions to air and water, noise, visual amenity and waste. The Project Approvals allow for these conditions to be met or improved upon and provides triggers and methodologies to rectify any non-conformances should they occur. Extending the Project Approvals lapse dates, would enable EA to undertake further strategic planning, stakeholder consultation, environmental investigations and options analysis for the Project.

As there are no changes proposed in this Modification to the Project scope, there would not be any additional negative impacts arising and no departures from those environmental and operational factors and impacts as assessed in 2009. An extension of time would potentially allow for improved environmental outcomes to be realised from the Project.

This modification application to extend the lapse date will relate to an extension of time only. All other aspects of the Project will remain consistent with the existing Project Approvals. Consequently, the application would not result in any additional impacts that have not already been considered and assessed in the original Project Approvals.



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## 2 Project summary

### 2.1 Project overview

The Project would be located on Canyonleigh Road, Brayton, approximately 12 kilometres northeast of the village of Marulan (Figure 1). The Project site forms part of Lot 18 DP1056592. At the time of Project approval, Delta Electricity and EnergyAustralia were to become the registered proprietors of the land on which their respective facilities would be located.

The Marulan site was selected for the Project owing to the strategic location close to existing gas and electrical infrastructure and the availability of the land for purchase. The Project is located adjacent to a TransGrid Switchyard, allowing the output to be easily and efficiently directed to the major energy load centres in NSW, without the need to provide for considerable strengthening of existing or investment in new transmission networks. The location is also close to gas and water infrastructure and provides economies of scale improving the site economics.

Key features of the Project include:

#### **EnergyAustralia Gas Turbine Power Facility (Power Station 1) – (MP 07\_0176)**

- Two gas turbine generators together with associated ancillary equipment and water, fuel and control systems
- Roads, drainage and a workshop, control and administration facilities
- External infrastructure connections associated with electricity import and export, gas supply, road access and telecommunications.

#### **Delta Electricity Gas Turbine Power Facility (Power Station 2) – (MP 07\_1075)**

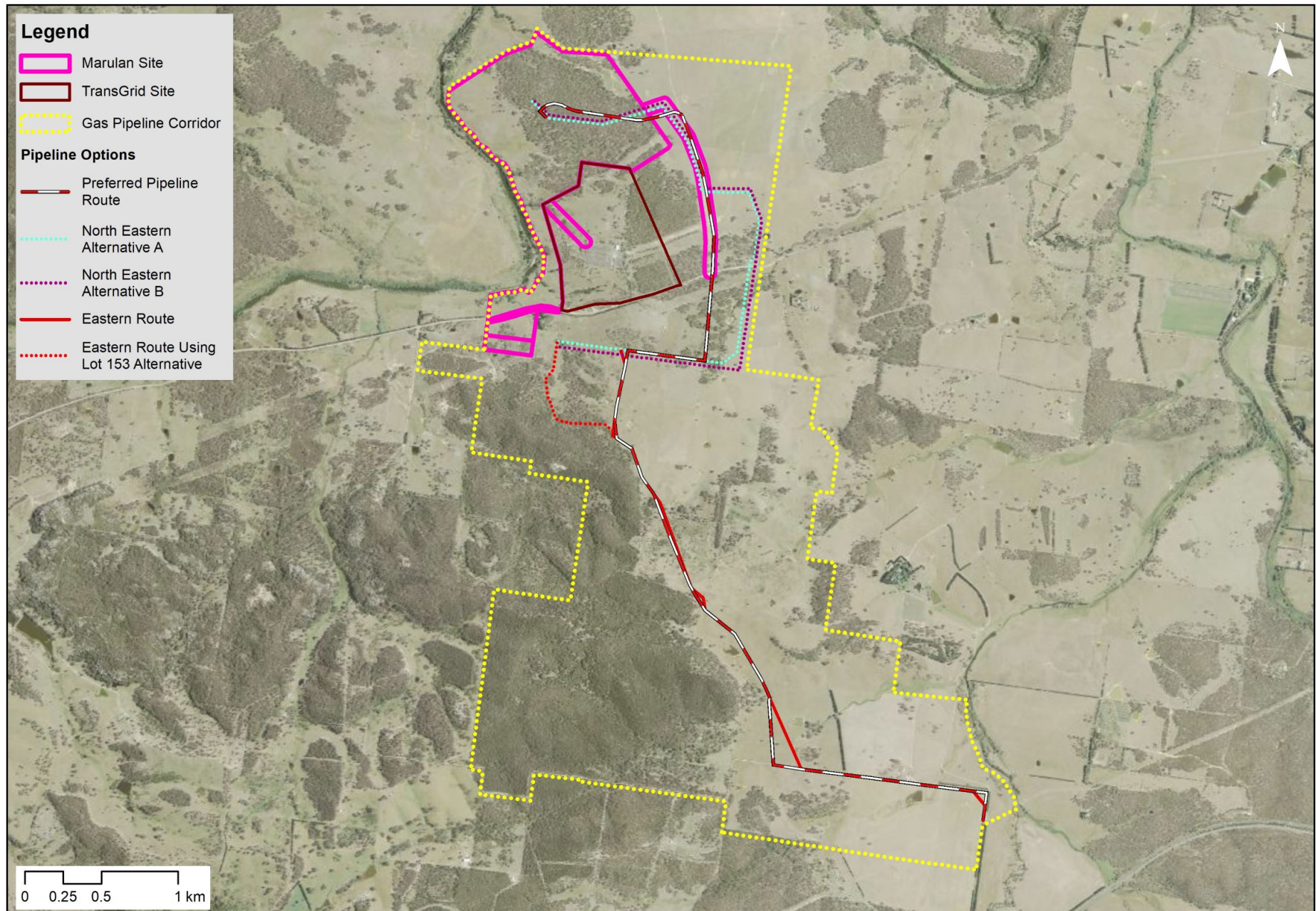
- Gas turbine facility including ancillary equipment, process control system, administration facilities implemented in two stages:
  - Stage 1—Two open cycle gas turbines with a total combined capacity in the range of 250-350 MW
  - Stage 2—Conversion to combined cycle facility to generate electricity for intermediate/base load electricity demand
- Associated infrastructure within the lot i.e. connection to the electricity transmission line, connection to the gas inlet receiver, internal roads and water storage.

#### **Common Infrastructure Area (gas pipeline) – (MP 07\_0174)**

- The Project would include the development of joint infrastructure for the proposed power stations including:
  - A transmission line between the facilities and the adjacent TransGrid switchyard
  - A site access between the facilities site and University Road
  - A gas pipeline route (to be determined) within the assessed gas pipeline corridor.



Figure 1 Proposal footprint



## 2.2 Project rationale

The Project will provide greater energy security in NSW as large thermal generation is scheduled to retire and complements increasing renewable energy deployment over the coming decades. New gas generation at Marulan supports EA's customers as we transition to a clean energy future through its ability to 'firm' variable renewables and reduce EA's and the National Electricity market (NEM) emissions intensity.

EA continues to view Marulan as an attractive and valuable future power station site. Given the rapidly transforming NEM and the likelihood of substantial coal power station retirements over the coming decade(s), EA believes the Marulan site is very important to household, business and industrial energy consumers in NSW.

Development of new thermal energy generation facilities typically occurs over an extended period. Energy planners within generation companies and regulatory bodies assess the need for additional energy or capacity and report annually to the Australian Energy Market Operator (AEMO). The projections which span up to a decade, aim to ensure a safe and reliable supply of energy is available for the various supply and demand side responses which make up the balanced grid.

The Marulan site is a typical example of the extended period over which energy generation projects evolve. Following its permitting in 2009 and purchase by EnergyAustralia in 2010 the Project has undergone two genuine attempts at development. The first in 2011/12 involved tender processes for either a four-unit E Frame or a three-unit F frame station. At this time, EA and their suppliers invested substantial capital to develop a workable concept layout for the site with appropriate road access for vehicles, further definition of utilities alignments, design of an emergency egress track, design of access to the Transgrid switchyard, clarification of the gas and water pipeline locations and their easements, commencement of road pavement works, civil engineering inspections, geotechnical drilling and analysis. These activities were undertaken at considerable expense to EA.

Additionally, constructive stakeholder consultation with the public, landholders, local shires and regulatory bodies was undertaken to move the Project toward physical commencement. Unfortunately, there was a significant shift in outlook for the energy market with a forecast reduction in demand for energy and consequential surplus supply curtailing further investment. Key factors contributing to this reduction in forecast energy demand growth were a lower economic growth outlook and allowances made for residential energy demand reduction measures, specifically, the phasing out of incandescent light bulbs, accelerated uptake of solar hot water systems and small-scale rooftop photovoltaics. Figure 2 below demonstrates the energy demand reduction through this period that led to a delay of further investment.

**Figure 2: NSW Energy Demand 2010 to 2014**



With the return of energy demand in 2013 as depicted in Figure 2 above, EA again attempted to commence the Project in unison with the development of the Tallawarra B power station project. Investigations were carried out to understand the optimal equipment for the site and its layout. Some of the earlier work was used to develop the site concept but it became obvious that an F Frame project was preferred over an E Frame. Given the very high cost to physically commence work on the Project at this point a decision was made to further delay investment.

Potential energy generation sites are carefully assessed against a range of technical and commercial criteria, with the optimum sites selected for future development. Whilst not an immaterial cost, proponents choose to enter the planning process early to mitigate long planning lead times and to secure an option to construct when the market fundamentals demonstrates the need for the additional generation.

With the increasing demand for flexible generation driven by a growing economy and the impending retirement of coal fired power stations, the potential for increased low carbon generation and intermittent generation resources such as wind and solar in planning and development, EA (previously TRUenergy) commenced the planning and proceeded towards the development of the Marulan Gas Turbine Power Station.

Since the Project was approved, AGL have publicly announced that the Liddell coal fired power station will retire in early 2022 with a loss of 2000 MW of dispatchable NSW electricity supply. EA are actively progressing with and investing significantly to support the NEM grid, including the development of Tallawarra B Power Station with construction anticipated to commence mid-2020 to ensure the facility is operational prior to Liddell's closure and to ensure sufficient electricity supply is available to the NEM grid.

Given the evolving market dynamics, EA considers there is likely to be enough demand for new gas generation to justify the development of the Marulan Project in the next five years.

Should the Project Approvals lapse, development of the Project would be set back. A new project development and approval process would be time consuming and costly. This could also threaten energy supply, if the demand is unable to be fulfilled by new generation investment.



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If the approval lapse date for the Project is extended, EA would commit to the further development of the Project. Ultimate construction of the Project would be subject to ongoing consideration of a range of factors.

## **2.3 Approval requirements**

The Project Approval requirements are issued across the two separate power station applications and the shared infrastructure application. A full copy of the approval and is available on the DPIE Major Projects website:

- [http://www.majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=10053](http://www.majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=10053)
- [http://www.majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=2181](http://www.majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=2181)
- [http://www.majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=2182](http://www.majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=2182)

Table 1 provides a summary of some of the key requirements of the three approvals.





**Table 1 Summary of key conditions of approval**

| Timing                  | Conditions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Pre-construction</b> | <p>Prior to construction, the Proponent will:</p> <ul style="list-style-type: none"> <li>■ Level, grade and apply a single coat seal onto the portion of Canyonleigh Road between the Brayton Road Intersection and the power station site access</li> <li>■ Commission an independent qualified person to undertake consultation with Council and the RTA (RMS) and submit a report documenting how issues have been addressed</li> <li>■ Consult with CASA and AirServices Australia in relation to the management of aviation hazards associated with the Project</li> <li>■ Submit to the DPIE details of urban design and landscaping measures to be implemented onsite and landscaping measures implemented offsite to minimise visual impact of the project</li> <li>■ Ensure that contact details are available for community complaints and record all complaints received</li> <li>■ Establish a dedicated website or maintain dedicated pages within its existing website for the provision of electronic information</li> <li>■ Nominate a suitably qualified independent environmental representative for construction and operation of the Project</li> <li>■ Submit to the DPIE a Construction Environment Management Plan (CEMP), including a Flora and Fauna Management Plan, Aboriginal Cultural Heritage Management Plan, Construction Noise and Vibration Management Plan</li> </ul> |
| <b>Construction</b>     | <ul style="list-style-type: none"> <li>■ Construction will be undertaken in a manner that minimises impacts to the receiving environment including, air quality, vibration, noise, contamination (spills management), traffic, visual amenity, water quality, waste</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Operation</b>        | <ul style="list-style-type: none"> <li>■ Operation will include monitoring for impacts to air quality and noise and include the development of: <ul style="list-style-type: none"> <li>– Safety Management System</li> <li>– Operation Environmental Management Plan (OEMP), including Air Quality Management Plan and Noise Management Plan</li> </ul> </li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

## **2.4 Progress toward Commercialisation**

As discussed above much of the previous work completed will support the eventual commercialisation of the Project. This is particularly true for the stakeholder and local government work with respect to roadworks and connections as noted in Table 1. With respect to the construction, EA has determined the range of machines suitable for the site but continues to assess optimal requirements with respect to further development and changes in the energy market and in response to various new technologies that may be applied.





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EA are seeking an additional 5 years to the lapse dates of the Project Approvals. EA envisage this period will allow the necessary additional time needed to assess market conditions. The additional time would allow for the outcomes of other energy generation projects being developed in NSW to be factored into the medium and long-term plans for the Project. An anticipated timeline to commercial operation of the Project is provided in Table below.

**Table 2 – Indicative timeline to commercialisation**

| Project Aspect                                                                                                                                                                                                                                | Timeline                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| Continue to assess market conditions considering influx of renewables, expected coal asset retirements, decision on Snowy 2.0, transmission upgrades and FID on Tallawarra B. Carry out feasibility assessment of current technology options. | 30 Months (by April 2022)            |
| Achieve FID - Preparation of Owners Technical Requirements, Bidding and Contract negotiation period.                                                                                                                                          | 18 Months (by October 2023)          |
| Construction Commence -Achieve physical and substantial commencement status prior to proposed Project Approval lapse date.                                                                                                                    | 12 months post FID (by October 2024) |
| Commercial Operation                                                                                                                                                                                                                          | 24 months post FID (by October 2025) |

## 3 Updated statutory context

### 3.1 Critical State Significant Infrastructure

In 2011, the NSW Government repealed Part 3A of the *Environmental Planning and Assessment Act 1979*. Major projects determined under Part 3A subsequently transitioned to either State significant development (SSD) or State significant infrastructure (SSI).

Critical State significant infrastructure projects (CSSI) are projects declared by the Minister for Planning to be of high priority and essential to NSW for economic, social or environmental reasons. Energy security is a recognised critical issue for the State.

The Project retained its critical infrastructure status when it transitioned to SSI in November 2018 in accordance with Schedule 2 clause 5(7) of the *Environmental Planning and Assessment (Savings, Transitional and Other Provisions) Regulation 2017*.

In accordance with Schedule 2 clause 5B(2) of the *Environmental Planning and Assessment (Savings, Transitional and Other Provisions) Regulation 2017*, a Project Approval will not lapse where a request has been made to the Minister to modify the approval to specify a later day. Therefore, the Project will lapse 12 months after this modification request was made, or the day the modification request is refused or withdrawn, in which case the approval lapses on the day on which the refusal or withdrawal occurs. Should this Modification request be granted, the Project Approval will lapse on the day specified in the modified approval.

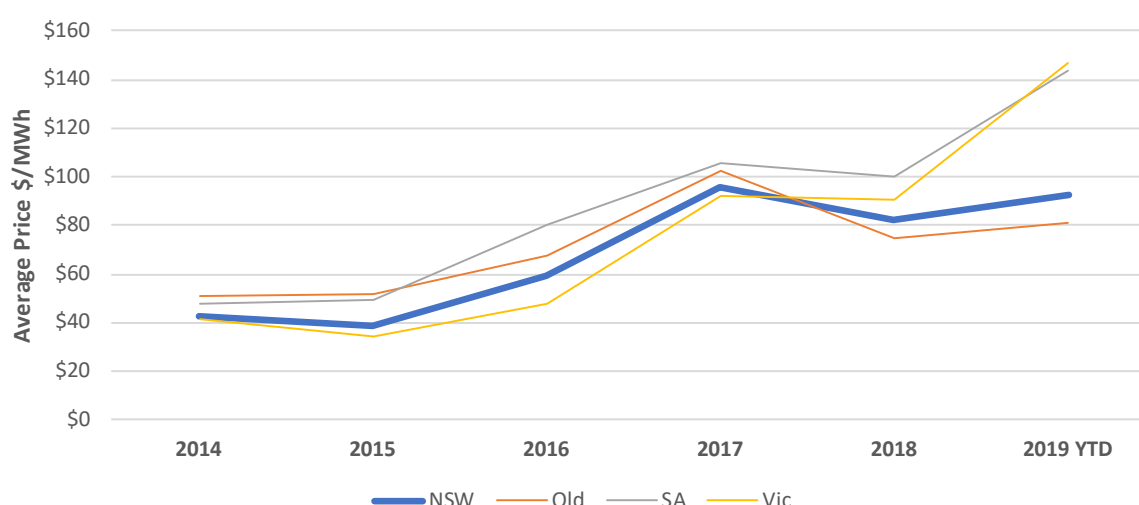
Clause 5.25 of the *Environmental Planning and Assessment Act 1979* makes provision for the Modification of a Minister's Approval (Project Approval) with any request for modification to be lodged with the Planning Secretary. EA has prepared this report to support the modification applications and to address the request for supporting information from the Department's letter dated 27 August 2019 titled *Marulan Power Station Projects—Modification to Extend Project Lapse date*, signed by Stephen O'Donoghue, Director Energy Assessments, Department of Planning, Industry and Environment (DPIE).

## 4 Updated Project justification

### 4.1 Strategic context

The NEM is the wholesale market for electricity supply. Electricity generators and retailers trade electricity in a mandatory gross pool where generators offer their output into the pool at the prices they are willing to sell. Electricity supply and demand are instantaneously matched in real time in the spot market through a centrally coordinated process run by AEMO. Generators and retailers contract with each other to manage the volatility in demand and price. In the NEM, forecast demand and supply for electricity, and longer-term average wholesale prices are used to develop forward signals which incentivise the investment in new generation.

In recent years, electricity prices and security of supply have become significant issues as some of the older coal generators have exited the NEM and variable renewables have gained market share. Whilst there have been several coal retirements in the last decade, the closure of the 540 MW Northern power station in South Australia in May 2016 and the 1600 MW Hazelwood power station in Victoria in March 2017 has led to significant increase in prices across the NEM, including NSW (Figure 3). Victoria also saw blackouts and load shedding in January 2019 when the combination of extreme weather conditions and generation outages led to a supply shortfall.



**Figure 3 NEM regional reference node price**

**Source:** NEM Sight data, EnergyAustralia internal analysis

AGL's planned 2022 retirement of the Liddell power station is the next expected coal power station retirement in the NEM. In the 2018 Electricity Statement of Opportunities, AEMO is forecasting a Reliability Gap supply shortfall in NSW post the Liddell closure. Based on maintaining supply reliability for a 10% Probability of Exceedance (1 in 10-year extreme demand) as highlighted in the table, supply shortfall grows year on year from 2022-23 onwards (Table 3).



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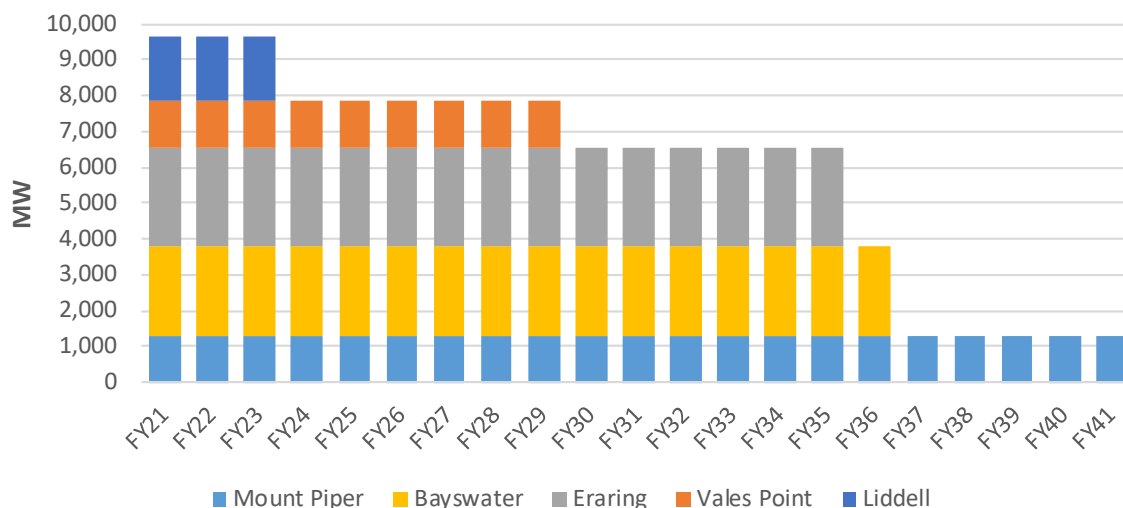
**Table 3 Reliability gap – capacity required to meet reliability standard under different demand conditions**

|         | Weighted USE $\leq 0.002\%$ (MW) |                 | 10% POE USE $\leq 0.002\%$ (MW) |                 |
|---------|----------------------------------|-----------------|---------------------------------|-----------------|
|         | South Australia/Victoria         | New South Wales | South Australia/Victoria        | New South Wales |
| 2018-19 | 0                                | 0               | 380                             | 0               |
| 2019-20 | 0                                | 0               | 130                             | 0               |
| 2020-21 | 0                                | 0               | 190                             | 0               |
| 2021-22 | 40                               | 0               | 483                             | 0               |
| 2022-23 | 40                               | 0               | 460                             | 380             |
| 2023-24 | 200                              | 150             | 650                             | 640             |
| 2024-25 | 340                              | 310             | 790                             | 810             |
| 2025-26 | 330                              | 380             | 835                             | 885             |
| 2026-27 | 260                              | 620             | 755                             | 1,130           |
| 2027-28 | 460                              | 700             | 985                             | 1,220           |

**Source: AEMO 2018 Electricity Statement of Opportunities**

If it is constructed, EA's planned Tallawarra B Project would help to address this reliability gap shortfall. However, there would remain residual risk of supply shortfalls for NSW. The proposed Snowy 2.0 project would likely help to meet the supply shortfall if the project is operational as planned in 2025. There remains significant technical, timeline and financial risk around this project ahead of the completion of exploratory works, which are expected to take between 18 and 34 months to complete. Extending the Marulan Project Approvals would help to de-risk the state of NSW against any potential delays or abandonment of the Snowy 2.0 project.

In the longer-term, most of NSW's existing thermal coal generators are expected to retire by the mid-2030s. Figure 4 is based upon AEMO's 2018 Integrated System Plan (ISP) and shows AEMO's forecast for the retirement of the existing coal generators, based upon the earlier announced retirement date or 50-year technical life.



**Figure 4 NSW coal generation capacity (AEMO ISP)**

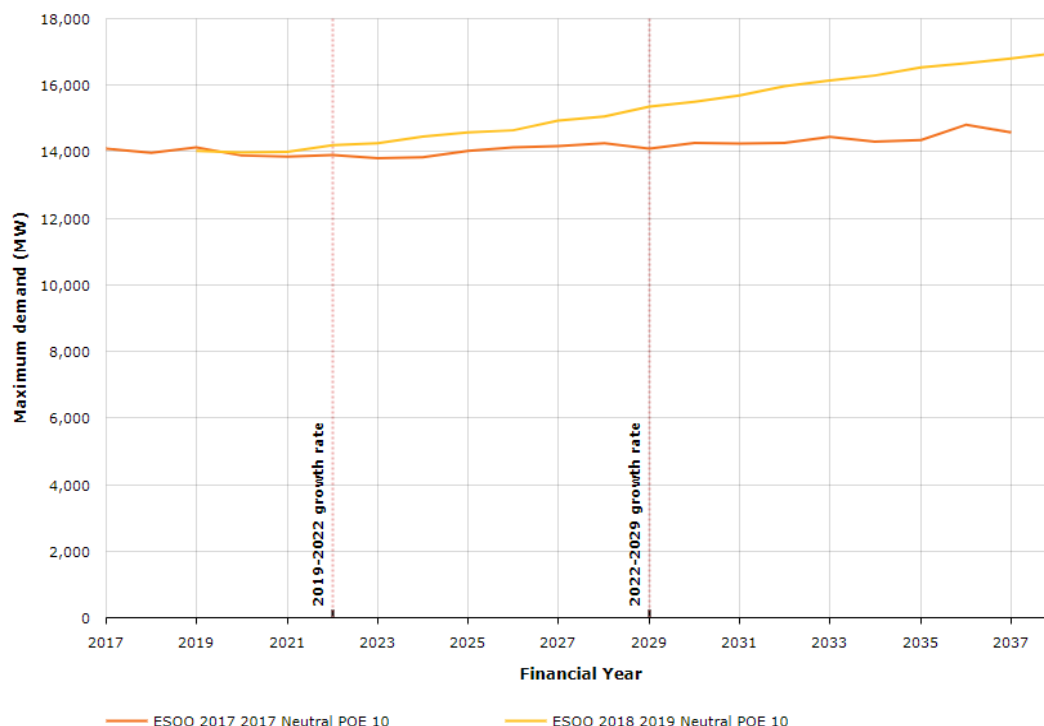
**Source: AEMO 2019 Inputs and Assumptions Worksheet, EnergyAustralia internal analysis**

Today, it is generally recognised that variable renewable generation is the lowest cost form of new replacement energy, and it is expected that most of the annual energy historically provided by coal generators will be replaced by renewable generation. Stronger renewable energy targets with consequential increase in renewable energy generation, may also bring forward the economic closure of coal generators.

Whilst renewables provide low cost energy, ‘firming’ capacity is still required to maintain system security when renewables are not generating (i.e. dark hours, still hours or other intermittencies). The two main options for firming capacity are gas fired generation and pumped hydro. The Marulan Project currently remains one of the most credible sources of new gas fired generation to help NSW transition from an electricity system dominated by coal generation to a high renewables / low emission future state system.

In the 2018 ES00, AEMO have increased their demand projections for the NEM in general, and in NSW in particular (Figure 5). This increased demand is principally driven by a combination of lower expected rooftop solar PV uptake, and higher projections for Electric Vehicle (EV) uptake.





**Figure 5 AEMO NSW neutral max demand forecast – 2018 ESOO vs 2017 ESOO**

Source: AEMO National Electricity and Gas Forecasting Portal (<http://forecasting.aemo.com.au/>)

The combination of a stronger demand outlook and the expected progressive retirement of the NSW thermal coal fleet creates a significant risk of long-term electricity supply shortfalls in NSW. Whilst pumped hydro projects may provide credible long-term supply options for NSW, these projects have long lead-in times and high development risks. Maintaining options for more modular gas fired generation with shorter lead times is therefore important to preserving ongoing supply security for NSW.

The Marulan Power Station Project is therefore of critical importance to secure NSWs' energy supplies in the medium and longer term and to avoid energy shortfalls. EA estimate that with approvals in place, it could take a further 3.5 - 4 years to complete the tendering, contracting, design, construction and commissioning of this Project.

## 4.2 Changes to energy policy

Developments in Australian energy policy and market over the past decade have been characterised by continued uncertainty and market volatility. This is in part due to the lack of a clear agreed National energy policy and is also due to the broader global transition to a carbon constrained economy. Industry, government, experts, peak bodies and other stakeholders have responded in various ways to the transition and fragmentation of the energy market. Policy and legislative reforms have been made in response to rising energy costs, the decreased reliability and security of the network and the impact of changing technology on the energy market.

In NSW, the *Final Report from the Energy Security Taskforce* prepared by the NSW Chief Scientist and Engineer released on 19 December 2017 (Chief Scientist & Engineer 2017) states that 'the electricity system is in a period of transition, innovation and reform'. It identified a series of risks and emerging



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issues for the NSW electricity system to maintain a reliable electricity supply. While instances of unserved energy have been rare, there are indicators that the electricity supply and demand balance in NSW is tightening and new risks are emerging, particularly with the failure of large generation plant or extreme weather events. The report recommends Government ‘be alive to the short-term risks’ and ‘manage risks proactively when needed.’

Amendments recently made to the NSW *Electricity Supply Act 1995* by the *Electricity Supply Amendment (Emergency Management) Act 2017* make it clear that ‘energy security is a high priority for the New South Wales Government’ and it is strongly committed to preventing electricity shortages (Second reading speech for the Electricity Supply Amendment (Emergency Management) Bill 2017). The *Independent review into the future security of the NEM 2017* (the Finkel Review) found the closure of coal fired plants may pose risks to power system reliability and security, in part because the variable renewable energy sources replacing them has not yet been well integrated into the system. Elsewhere, recurrent reports from the Australian Energy Regulator (AER) and the Australian Energy Market Operator (AEMO) generally reinforce the need for greater energy security through the delivery of fast-start, flexible capacity into the grid.

In the *NER 2018 State of the Energy Market* report trends undertaken by Government to intervene in the energy market are identified, including:

- Major investments in publicly owned generation and storage
- Pricing direction to state owned generators
- A threat of compulsory divestment of private generation assets
- National and state level renewable energy targets
- Programs offering financial assistance for grid scale renewable projects or residential solar and battery systems
- An increase in reporting, researching and publications in the field owing to public and media scrutiny of the market.

### **4.3 Gas-fired power generation in NSW**

Gas-fired generation has an important role to play in a new, modern energy system and complements the ever-increasing renewable energy deployment over the coming decades. Natural gas is one of the cleanest fossil fuels when it burns.

The Marulan Project could respond quickly to fluctuations in electricity supply and demand, providing security in supply for large numbers of households and businesses across the state, and nationally. The Marulan Project would also support EA’s commitment to transition to a clean energy future.

### **4.4 Updated land use and zoning**

#### **Zoning**

At the time of Project Approval, the site was zoned 1(a) General Rural under the Mulwaree Local Environmental Plan 1995. Following the merger of Goulburn and Mulwaree Councils in 2004 a new Local Environmental Plan was adopted in February 2009, the Goulburn Mulwaree Local Environmental Plan 2009 (GMLEP 2009). Under the GMLEP 2009, the site is zoned RU2 Rural Landscape. The objectives



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of each zone are largely consistent with the zoning provisions that existed when the Project Approvals were obtained.

### **Land use**

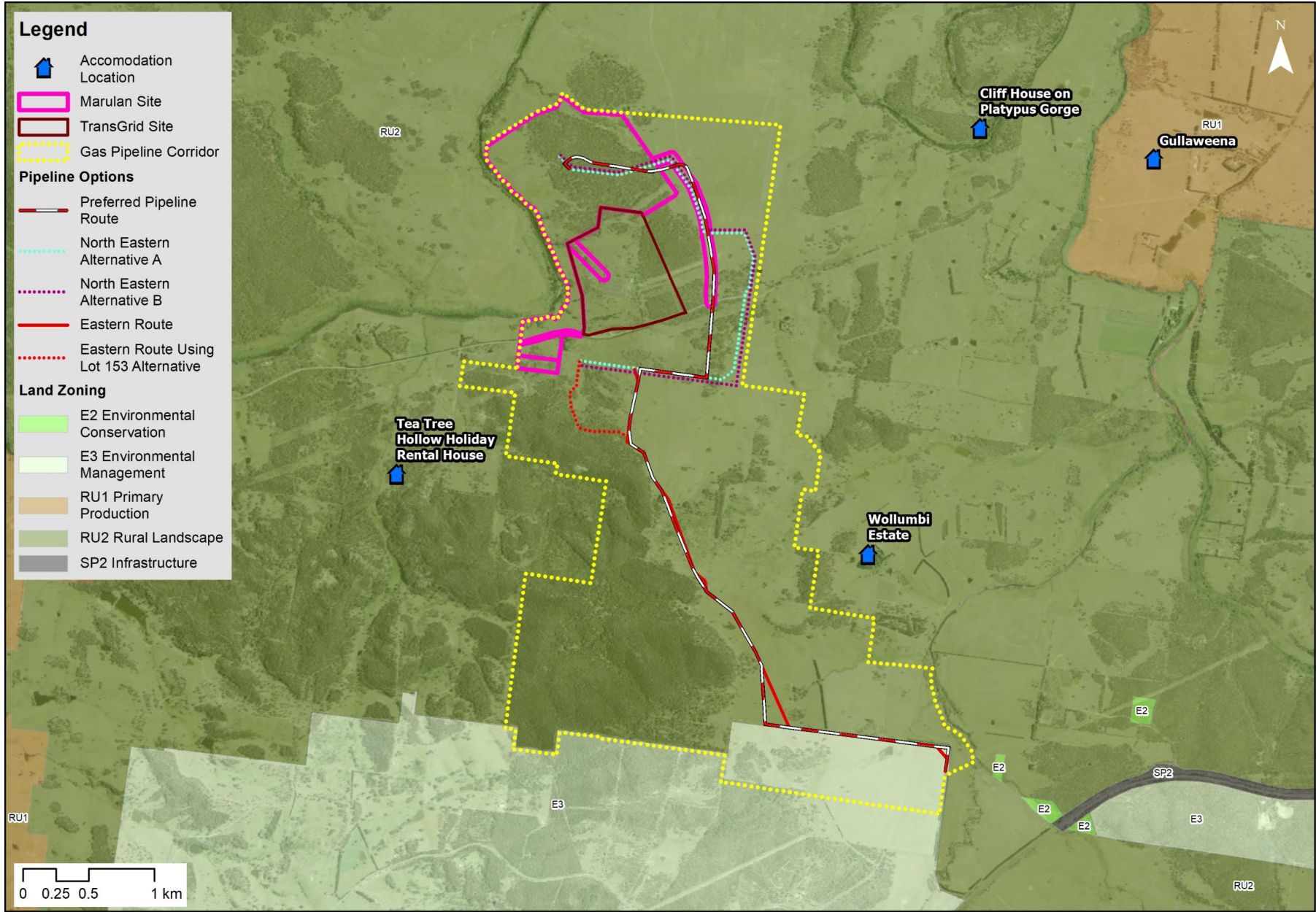
In the Environmental Impact Statements (EISs), the land use of the Project area is described as historically being used for rural farming, with an increase in rural residential development and other commercial operations evident.

A review of current land use of the area identified that the trend of increasing rural residential development continued with at least one new rental accommodation present in proximity to the Project (Tea Tree Hollow Holiday Rental House). The other accommodation developments in proximity to the Project (Figure 6), are not newly built. It is considered that the current land use is consistent with the land use assessed in the EIS.

No accommodation developments were identified within the gas pipeline corridor boundary.

Several privately-owned landholdings in the vicinity of the Project were identified as being potentially affected by the Project. EA has undertaken new title searches and identified the current owners of these landholdings. EA's Community Engagement Strategy for the Marulan Project has outlined the approach for communications about the Project with potentially affected landowners.

Figure 6 Land use



Source: LPI (Imagery date 2013), DPE



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#### **4.5 Implications of the Project Approvals lapsing**

If the Project Approvals lapse, potential consequences are likely to include:

- Delays in Project delivery or non-delivery, potentially contributing to an anticipated shortfall in NSW electricity generation, with consequences such as increased NEM prices and insufficient or interrupted electricity supply for NSW residents, businesses and the community
- Decreased reliability of electricity supply during peak demand periods and decreased security of electrical supply during system emergencies
- A slower transition to a low emissions market as gas-fired facilities would take longer to come online
- Increased social and economic impacts associated with undermining the ability of the NSW supply network to meet peak energy demands in the short term and base load demands in the medium term
- A decrease in the number of readily available sites that EA has in hand and can develop in response to changes or risks that may stall the delivery of other energy generation assets, such as Snowy 2.0 and Tallawarra B
- A decreased likelihood that community benefits of the Project identified in the EIS documentation, such as upgrades to local road and wastewater infrastructure would be realised.



## **5 Stakeholder consultation**

### **5.1 EnergyAustralia engagement principles**

EnergyAustralia implements the following, specific principles to stakeholder and community engagement across all its operations and projects:

- What is promised is delivered—EA is accountable for the delivery of all commitments made to the community.
- Spend time talking with people—EA initiates engagement with key stakeholders early in its project and gives priority to meaningful face to face engagement.
- Reduce the ‘don’t know’—EA works to actively build community awareness and trust in its operations, its approach and its people.

These engagement principles would be applied to the further development of the Project.

### **5.2 Desired consultation outcomes**

Community and stakeholders have been and will continue to be proactively engaged and consulted with throughout the Project. The principal desired outcome from consultation activities is to make sure stakeholders feel appropriately informed of plans and actions prior to them occurring and to promote confidence in EA’s management approach.

Further outcomes of EA’s community engagement are to ensure:

- Our engagement moves to a model of proactive, well planned and timely consultation.
- Time is spent building awareness of the context for EA’s approach and intent for future operations within the region – with the view to providing greater community certainty.
- Early engagement on key milestones via existing channels educates stakeholders on key aspects of major projects in addition to informing them of progress.
- A core group of advocates is established to provide public support for EA’s approach.
- EA’s approach to environmental management is transparent and clearly communicated.
- Stronger brand presence is achieved as an additional outcome of community engagement.

### **5.3 Community engagement plan**

EA is committed to undertaking ongoing community and stakeholder consultation on the Project. Following its purchase of the project from NSW Government (Delta Energy & EnergyAustralia) and subsequent development work EA discussed with residents, landowners and local councils, the benefits and any concerns of having the Project in the region. Some concerns were raised, however during these discussions EA was able to obtain a greater understanding of stakeholder thoughts regarding the Project. In many cases EA was able to allay many of the concerns raised and initiate potential improvements to the project as permitted. For example:

- noise and visual impacts can be overcome through design, number and size of buildings, positioning on site, exhaust height, materials, colour, construction and building techniques;





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- traffic and transport through workforce road access management plans, heavy transport requirements and new paving;
- fire risk through access to permanent water and local fire cart;
- farm land sterilisation and environmental concerns through pipeline re alignment
- vegetation preservation through transmission alignment and reducing plant footprint.

Table 4 outlines the engagement activities completed previously and as included in the updated community engagement plan to address ongoing communications with project stakeholders about the development of the Project and about this proposed modification to extend the Project Approvals lapse date.

**Table 4 Summary of community engagement activities**

| Consultation activity                                               | Status      | Timing                       |
|---------------------------------------------------------------------|-------------|------------------------------|
| CLG's in Marulan                                                    | Complete    | June 2011 – June 2012        |
| Landholder negotiations                                             | Pending     | TBC                          |
| Local Residents re view and noise                                   | Complete    | June 2011 – June 2012        |
| Shire discussions re road and water                                 | Pending     | TBC                          |
| Community Information Letter–Submission of Modification Application | Complete    | Letter issued September 2019 |
| Prepare (Update) Draft Stakeholder Consultation Plan                | In progress | Late 2019                    |
| Community Update Letter–Outcome of Modification Application         | TBC         | Early 2020                   |
| Finalise Stakeholder Consultation Plan                              | In progress | Early 2020                   |
| Community Forum–Detailed Design and Next Steps                      | In progress | Early 2020                   |
| Targeted Consultation–Land owners and environmental groups          | Ongoing     | 2020-2021                    |
| Targeted Consultation–DPIE and relevant State Agencies              | Ongoing     | 2020-2021                    |

## 5.4 Community relations lead

Strong community relations have been a feature of EA's development programs. EA has appointed a dedicated Community Relations Lead (CRL) located at Tallawarra Power Station who will also manage the community and stakeholder engagement of the Project. The CRL is committed to open and honest communication with stakeholders. Respect and consideration for the community and stakeholders is EA's priority for all aspects of its operations.

The CRL is committed to:

- Engaging stakeholders early in the process

- Ensuring stakeholders have easy access to information
- Responding to all stakeholder contact in a timely manner
- Being sensitive to the needs of the community
- Honouring commitments made by the project team
- Making every effort to minimise the impact of work on the local community.
- Being consistent in word and action
- Collaborating with stakeholders
- Engage stakeholders affected by EA's activities in an effective and meaningful way
- Ensuring stakeholders are satisfied they have had the opportunity to provide information on activities on their property (where applicable) that may impact the project or their property.

EA's CRL will make sure best practice standards for stakeholder engagement across day to day activities of Tallawarra Power station and any proposed future projects.

## **5.5 Outcome of Recent Community Consultation**

As part of EA's commitment to proactive community engagement, EA provided a community information letter to affected stakeholders and landowners via mail out in September 2019. The notification clarified EA's intentions regarding the development at Marulan and EA's commitment to the Project and seeking an extension to the Project Approvals lapse date. A copy of the letter is provided as attachment 1.

One submission to date has been received via email to EA's CRL. The respondent raised concerns relating to climate change and expressed disappointment that EA are still pursuing gas and carbon emitting electricity generation, which the respondent considers to be a well-documented cause of climate change and local pollution through its carbon dioxide emission. The respondent also expressed their disbelief that EA would pursue a renewable or battery component should the Project receive an extension. The respondent encouraged EA to act now to address climate change and hoped EA would become a leader among energy companies by saying no to building new fossil fuel plants and instead embrace renewable energy.

EA's response to the submission is that a gas peaker power stations primary function is to provide reserve capacity to the grid, by starting up quickly when demand peaks. Gas peakers are particularly useful in complementing renewable energys intermittency, such as when cloud cover reduces solar electricity production or when there is no wind. As renewable generation increases, volatility of supply also increases, and raises the demand for peaking capacity.

EA are committed to a clean energy future. EA has more than 5,000 MW in its generation portfolio, including rights to more than 1,000 MW of renewable energy including wind and solar. EA are also actively developing alternative energy storage facilities such as pumped hydro and have recently invested in large utility scale battery storage. With the rapid developments in battery technology, EA envisage that this may provide a realistic opportunity for energy storage in the future and a potential alternative to gas peakers.

## 6 Conclusion

EA is seeking to modify the existing Project Approvals for the Marulan Gas Fired Power Station Project to extend the lapse date by five years. This will enable construction to commence by 2026.

As the NEM continues to transition, the Project remains of critical importance to the energy future of NSW. Marulan is an important option for new gas generation in NSW to secure electricity supplies and to complement new renewable generation in the NSW wholesale market.

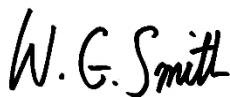
EA is a prudent and committed participant in the NSW electricity market. We are actively progressing with planning for construction of the Tallawarra B gas turbine project. Given the unforeseen approvals delays at Tallawarra B, development of the Marulan Project is an increasingly high priority for EA.

In conclusion, EnergyAustralia request extension of the Project Approvals for the following reasons:

- It is in the interest of NSW to extend the Marulan Project Approvals lapse date to ensure the state of NSW has a number of readily investable power generation sites that can be developed with relatively short lead times, supporting ongoing supply security for NSW during a period of unprecedented energy uncertainty.
- In the context of AEMO's identification of supply shortfalls and potential breach of reliability standards once Liddell exits the market in 2022, and the time for new project approvals, it is considered the extension of the Marulan Project Approvals lapse date is justified in the current energy market environment.
- The Project remains the same development as approved, and no additional environmental impacts have been identified outside those assessed in the original proposal. In fact, any potential changes to the Project will minimise environmental impacts.
- EnergyAustralia has a strong commitment to the ongoing consultation of Project stakeholders and the community.
- EnergyAustralia are committed to a clean energy future. This Project supports and complements the rapid renewables development.

If you have any questions regarding this application, please do not hesitate to contact the undersigned.

Yours sincerely,



**William (Bill) Smith**

Thermal Generation Leader

EnergyAustralia



**EnergyAustralia**

## Attachment 1



EnergyAustralia Marulan Pty Ltd  
ABN 52 120 513 322

L33, 385 Bourke Street  
Melbourne, VIC 3000

[www.energyaustralia.com.au](http://www.energyaustralia.com.au)

6 September 2019

Dear Resident/Business owner

**Re: Marulan Gas Fired Power Stations Project- Time Extension Proposal**

I am writing to update you on EnergyAustralia's proposed plans in Marulan.

As you may know, the Marulan Gas Fired Power Stations Project (the Project) was approved as three separate approvals comprising two independent power station approvals (MP07-0175 and MP07-0176) and a shared common infrastructure approval (MP07-0174).

The Project was granted by the then Minister for Planning, The Hon. Kristina Keneally MP, on the 26 October 2009. The Project has been designated as Critical State Significant Infrastructure by the NSW Department of Planning, Industry and Environment. The current lapse date for all Project Approvals is 26 October 2019.

As part of our commitment to proactively engage and consult with stakeholders and the communities in which we live and operate, I wanted to ensure you are kept up to date with our activities.

We are in the process of seeking an extension of the lapse date of this Project by five (5) years. This extension will provide us an opportunity to consider a range of potential options (including incorporating renewables and battery storage) and move to a new way of strategically thinking and planning to meet our future energy needs.

I have been appointed as your direct contact for our proposed work at Marulan and any future updates. I am based at EnergyAustralia's Tallawarra Power Station, located in Yallah.

Once we receive further information on our permit extension request with the NSW Department of Planning, Industry and Environment, I will update you accordingly.

In the meantime, should you have any questions I can be contacted on 0466 698 306.

I look forward to working with you in future.

Kind regards

Sarah Hafez  
Community Relations Lead – EnergyAustralia

## **Attachment: Supplementary information**

### **Tallawarra B Project under development**

EnergyAustralia have several approved development sites for energy generation in NSW. Subsequent to approval of the Marulan site in 2009, EnergyAustralia made a strategic decision to prioritise the Tallawarra B gas turbine project ahead of progressing with development the Marulan site. Economic and environmental factors informed this decision. This has resulted in the Marulan project not commencing to date.

EnergyAustralia is currently progressing with planning for construction of Tallawarra B gas turbine project which is anticipated to commence mid-2020. Unforeseen approvals delays may alter this schedule and may make the Marulan development site a higher priority for EnergyAustralia.

### **Extension of the approved Marulan Project**

The Marulan project would be developed on a greenfield site within a rural setting. The Project would require detailed design, substantial site establishment works and careful consideration of environmental and operational factors. EnergyAustralia are seeking to extend the approval lapse date from 26 October 2019 for a further five years.

The Marulan site will provide for a readily investable power generation site that can be developed with a relatively short lead time. This would support ongoing electricity supply security during a period of energy uncertainty. The additional time being sought to develop the Project will also enable EnergyAustralia to undertake further strategic planning, stakeholder consultation and options analysis for the Marulan site.

Since approval was issued for the Project in 2009, the Australian energy market has undergone a prolonged period of change. The National Energy Market (NEM) remains in transition, with Government policy reform focusing on energy security, reliability and affordability. Due to the high investment, long lead times and substantial development risks involved in designing and constructing new energy generation facilities, EnergyAustralia require an approvals timeframe for the Marulan site extended to 2026.

The modification application to extend the lapse period will relate to an extension of time only. All other aspects of the Project will remain consistent with the existing Project Approvals. Consequently, the application does not result in any additional impacts that have not already been considered and assessed in the original Marulan Project Approvals.

We want to ensure that the outcomes of other energy generation projects can be factored into the medium and long-term plans for the Marulan development site. Additional time in the detailed design stage will allow us to investigate the environmental effects of the project in more detail including potentially improving environmental and community outcomes from the Project.

The modification application will be available for viewing on the Department of Planning, Industry and Environment Major Projects website.