Liddell Battery and Bayswater Ancillary Works

State Significant Development Assessment

SSD-8889679

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Cover image: View of Bayswater Power Station from Liddell Power Station

Glossary

Abbreviation	Definition
BCS	Biodiversity Conservation and Science Directorate within the Department
CIV	Capital Investment Value
Department	Department of Planning and Environment
DPE Water	Water Group within the Department
EIS	Environmental Impact Statement
EPA	Environment Protection Authority
EP&A Act	*Environmental Planning and Assessment Act 1979*
EP&A Regulation	*Environmental Planning and Assessment Regulation 2000*
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999*
EPI	Environmental Planning Instrument
EPL	Environment Protection Licence
ESD	Ecologically Sustainable Development
FRNSW	Fire and Rescue NSW
Heritage NSW ACH	Heritage NSW, Aboriginal Cultural Heritage
LEP	Local Environmental Plan
Minister	Minister for Planning
NRAR	Natural Resources Access Regulator
RMS	Roads and Maritime Services within TfNSW
SEARs	Planning Secretary's Environmental Assessment Requirements
Planning Secretary	Secretary of the Department of Planning and Environment
SEPP	State Environmental Planning Policy
SRD SEPP	State Environmental Planning Policy (State and Regional Development) 2011
SSD	State Significant Development
TfNSW	Transport for NSW

Executive Summary

AGL Macquarie Pty Limited (AGL) owns and operates Liddell Power Station (Liddell) and Bayswater Power Station (Bayswater), which are located around 15 kilometres south-east of Muswellbrook, in the Muswellbrook and Singleton Local Government Areas.

AGL is proposing to develop the Liddell Battery and Bayswater Ancillary Works Project (the project), to ensure ongoing dispatchable electricity to the National Energy Market (NEM) during the transition of the NEM towards renewable energy. The project's key components include:

- a **Battery Energy Storage System** – comprising a battery compound and ancillary infrastructure with a capacity of up to 500 megawatts (MW);
- **Decoupling Works** – comprising a transformer compound, ancillary infrastructure and connection to the Liddell switch yard to decouple Liddell from Bayswater; and
- **Bayswater Ancillary Works** – including a range of ancillary infrastructure works to upgrade, replace or maintain existing infrastructure and support ongoing site operations until planned closure.

The Department exhibited the Environmental Impact Statement (EIS) for the Project and received 2 public submissions, including 1 objection and 1 comment. The Department also received advice from 14 public authorities. All issues raised in submissions were carefully considered in the Department's assessment of the project.

The Department has assessed the merits of the Project in accordance with the requirements of the EP&A Act. The key impacts of the project relate to the proposed construction works, including the disturbance of Aboriginal sites, and clearing of up to 42.3 ha of native vegetation which includes potential habitat for the Southern Myotis and Striped Legless Lizard.

The project would potentially disturb 13 Aboriginal sites generally located around the footprint of the Bayswater ancillary works. AGL has also identified opportunity to minimise impacts on these sites during detailed design of the proposed pipeline repair works.

A Biodiversity Development Assessment Report (BDAR) prepared for the project assessed the greatest potential extent of biodiversity impacts, however AGL advised that there is opportunity to minimise impacts on native vegetation through detailed design of the Battery Energy Storage System.

The Department's assessment has concluded that impacts on biodiversity and Aboriginal cultural heritage could be appropriately managed and or offset and has recommended conditions of consent to, including ongoing review of impact avoidance through the detailed design phase.

Construction works would also have potential impacts on traffic, amenity and surface water. While there would be some incremental increases in traffic generation, dust and noise sources, there would be no noticeable deterioration of the project's road access interchange and no exceedances of relevant noise or air quality impact assessment criteria. Additionally, potential impacts on surface water could be suitably managed through appropriately installed and maintained sediment and erosion controls.

The operational impacts of the project primarily relate to hazards (e.g. potential fire ignition) and battery waste management associated with the Battery Energy Storage System and Decoupling Works.

The Department has recommended conditions of consent relating to both of these matters, including the preparation of a Fire Safety Study, Emergency Plan and managing waste in accordance with the Environment Protection Authority's (EPA) *Waste Classification Guidelines*.

Overall, the project would also support the ongoing operation of Bayswater to supply dispatchable power into the NEM until proposed decommissioning by 2033. These works would improve environmental performance and not change electricity generation, coal consumption, emissions, or ash generation of Bayswater.

The project would deliver economic benefits to the Hunter Region and NSW and is consistent with the *NSW Electricity Strategy 2019* and *Net Zero Plan Stage 1 2020-2030*, as it would support the transition of the energy sector to renewable power generation over the next 20 years.

The Department considers that the project would not result in any significant impacts on the local community or the environment, and any residual impacts could be managed through the implementation of the recommended conditions.

On balance, the Department considers that the benefits of the project to the State of NSW significantly outweigh any residual impacts, and is therefore in the public interest and should be approved, subject to strict conditions of consent.

Contents

1 Introduction

1.1 Background

AGL Macquarie Pty Limited (AGL), a subsidiary of AGL Energy Limited, owns and operates the Liddell Power Station (Liddell) and Bayswater Power Station (Bayswater). The stations are located around 15 kilometres (km) south-east of Muswellbrook, within the Muswellbrook and Singleton Local Government Areas (LGAs) (see **Figure 1**).

Liddell and Bayswater are approved to generate up to 2,000 Megawatts (MW) and 2,740 MW of electricity, respectively. Liddell was commissioned in 1971 and is scheduled for closure by April 2023. Bayswater was commissioned in 1985 and has a current operational life up to 2033, with AGL recently announcing it would bring forward the decommissioning of Bayswater by 2 years from the proposed closure by 2035. AGL acquired the stations from the NSW Government in 2014.

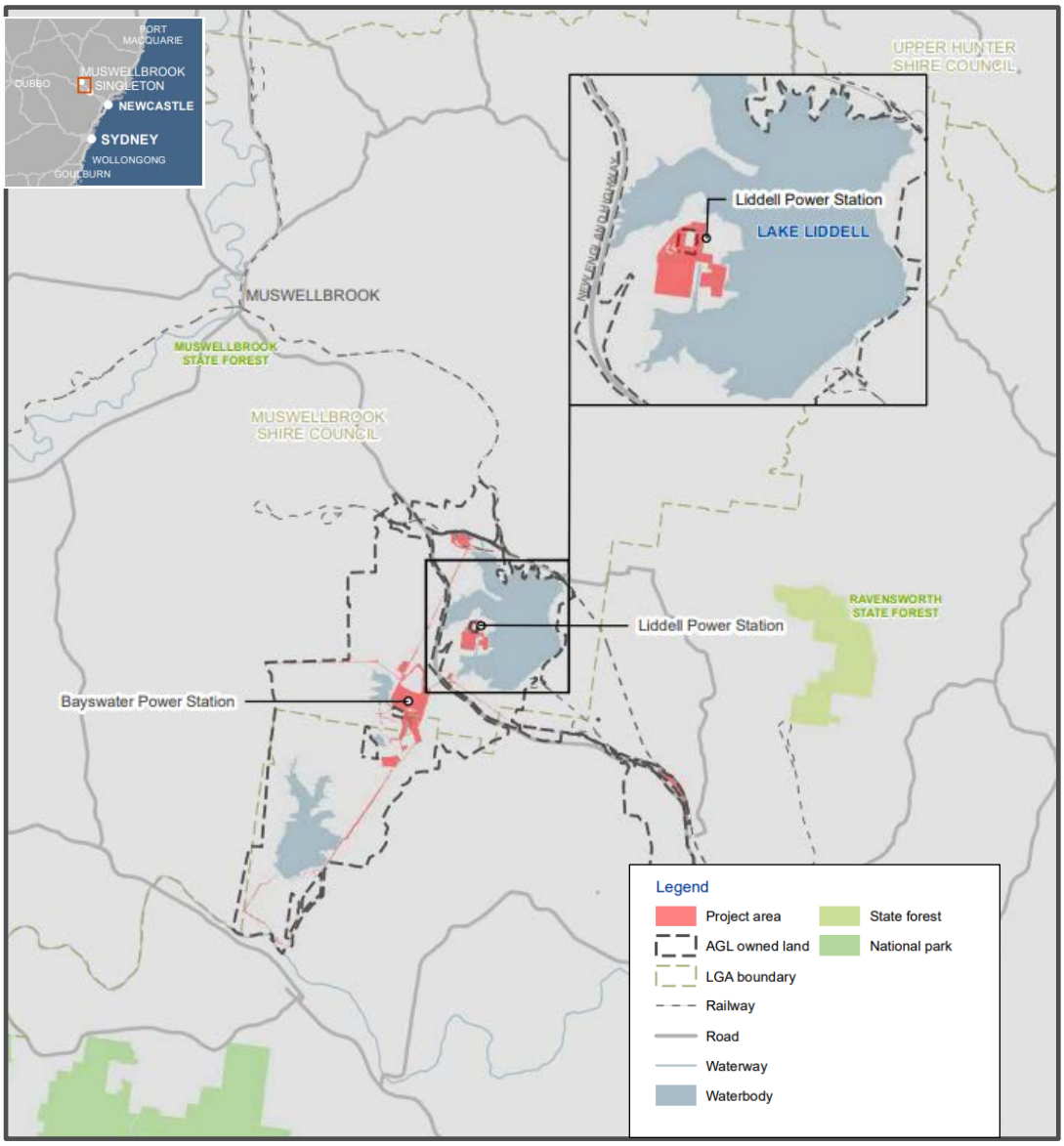

Figure 1 | Regional Context

1.2 Approval Framework

Liddell currently operates under existing use rights and several development consents. Bayswater operates primarily under development consent (DA 47209), which was granted by Muswellbrook Shire Council in 1980. Several other planning consents have been granted over the life of the stations, including consents issued by Muswellbrook Shire Council, Singleton Council and the Minister for Planning.

These consents are summarised in **Table 1**. AGL has requested to surrender a number of these consents if the project is approved. The consents relate primarily to infrastructure relevant to the ongoing operation of Bayswater. While Muswellbrook Shire Council and Singleton Council provided advice agreeing to the surrender of these consents.

The stations also operate under two respective Environment Protection Licences (EPLs) (EPL 2122 for Liddell and EPL 779 for Bayswater), issued by the Environment Protection Authority (EPA) under the *Protection of the Environment Operations Act, 1997* (POEO Act).

Table 1 | Consents applicable to the stations

Consent	Description	Proposed Approach
Muswellbrook Shire Council		
DA 8/2016	Construction of a new blast wall at Bayswater.	To be surrendered
DA 74/2018	Construction of office premises and car parking area ancillary to security and traffic control at Bayswater.	
DA 54_86	Construction and operation of gas turbines.	
DA 114_2016	Change of use from storage shed to operations centre.	
Singleton Council		
DA 8.2018.273.1 DA 8.2018.23.1 DA 8.2018.23.2 DA 8.2018.23.2	Water reticulation system (relocation of water pipeline) and associated modifications.	To be surrendered
DA 20_98	Develop a rail coal unloading facility.	
DA 114_2016	Change of use from storage shed to operations centre	
DA 223_2004	Construction of four rail sidings and associated facilities	
DA 401_2000	Coal/rail unloader augmentation	
DA 460_2001	Ravensworth rail unloader upgrade	
Department of Planning		
DA 50-3-2005	Construction and operation of a rail coal unloader and associated infrastructure (approximately 8 km south west of Muswellbrook at Antiene).	Not to be surrendered (Refer Section 2.2)

2 Project

2.1 Overview

AGL is seeking approval for the Liddell Battery and Bayswater Ancillary Works Project (the project) to ensure ongoing dispatchable electricity following the closure of Liddell.

The components of the project are summarised in **Table 2**, depicted in **Figures 2** to **3** and described in detail in the Environmental Impact Statement (EIS) and Submissions Report (see Appendix **A1** and **A3**).

Table 2 | Project summary

Aspect	Description
Battery energy storage system	• A battery compound of approximately 20 hectares (ha) located at Liddell, with an operational life of 20 years (with the potential to be extended) • Lithium-ion type batteries with a discharge capacity of up to 500 MW for up to four hours • Supporting infrastructure including inverters, transformers and other ancillary infrastructure
Decoupling works	• Establishment of a transformer compound adjacent to Liddell switchyard • Installation of up to six 330/33kV transformers and associated cables • Installation of new switch/control room buildings and equipment • Connection to Liddell switchyard
Bayswater ancillary works	• Refurbishment, improvement, replacement and maintenance of ancillary infrastructure • Environmental improvement projects including: o wastewater management upgrades o maintenance or replacement of water treatment infrastructure o establishment of formal waste storage area for liquid wastes o construction of a brine concentrator return water pipeline to improve salt management • Establishment of cultural heritage storage area
Access	• No change to access to Liddell and Bayswater which is provided from slip-lanes to site access roads via the New England Highway
Construction schedule	• Battery - undertaken in three or more 12-month stages commencing in 2022, 2023 and 2025 • Decoupling works - undertaken over 12 months prior to 2024 • Bayswater ancillary works - undertaken progressively but primarily concentrated between 2023-2028.
Employment	• Peak construction workforce of up to 250 per day and operational workforce of up to three people.
Capital investment value	• $763 million

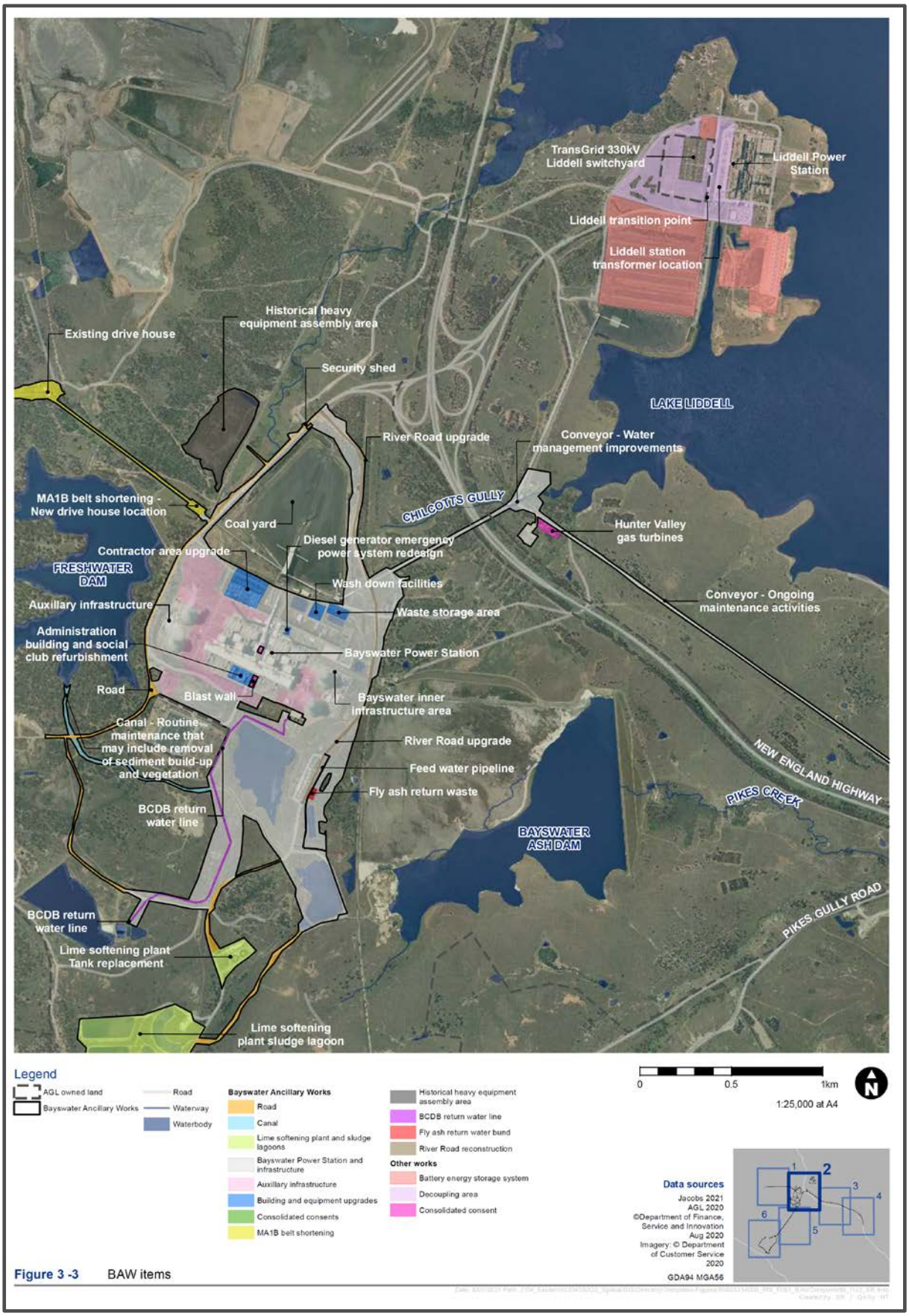

Figure 2 | Project overview

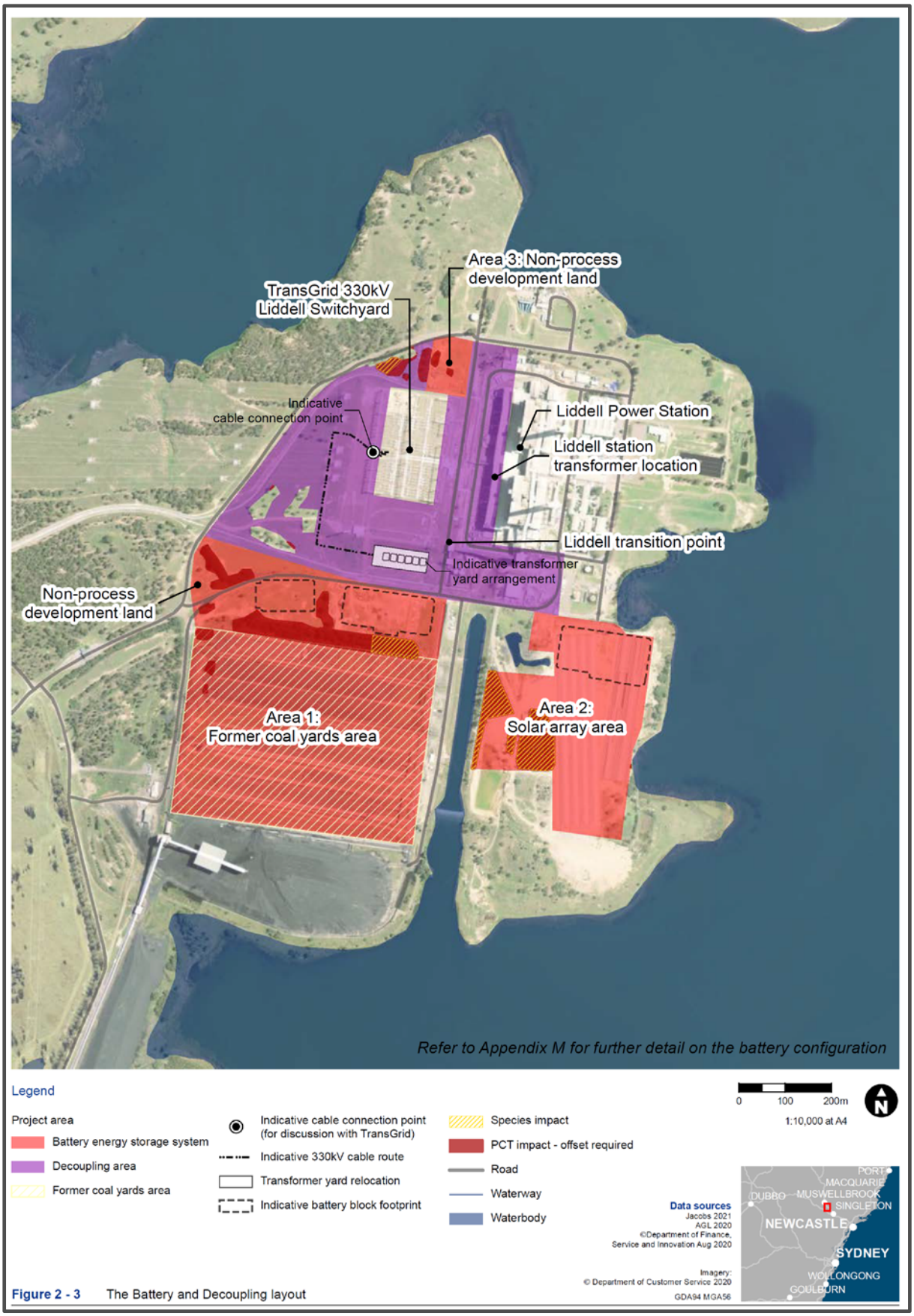

Figure 1 | The Project (battery energy storage areas and decoupling works)

2.2 Amended Project

AGL submitted a request to the Department in August 2021, seeking to amend the project to remove DA 50-3-2005 from the list of development consents to be surrendered and consolidated under a new project approval. This consent is already regulated by the Department.

The Department accepted AGL's request to amend the project in accordance with clause 192(2) of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation). AGL provided an Amendment Report (see **Appendix A4**) noting additional environmental assessment was not required given the administrative nature of the amendment.

2.3 Energy Context

The project aims to respond to the Australian Energy Market Operator's (AEMO) *2020 Integrated System Plan* which forecasts a need for up to 19 gigawatts (GW) of new, dispatchable resources to support the NEM over the next 20 years. The NEM is undergoing a complex and accelerating transition period with 15 GW (63%) of Australia's traditional coal-fired generators set to retire by 2040 and the development of renewable energy sources, like wind, solar and pumped hydro, experiencing rapid growth.

The *NSW Electricity Strategy (2019)* reports that firmed renewables are the lowest cost option to replace aging coal power stations and for the NSW to meet energy security targets following the planned closure of the Liddell Power Station in 2023.

AEMO's most recent *Electricity Statement of Opportunities* (ESO 2021) identifies Bayswater as a committed dispatchable power supply until its then planned closure in 2035, now brought forward to 2033, along with other new generation and transmission projects, to fill an energy gap following the closure of Liddell.

3 Strategic context

3.1 Greenhouse Gas and Climate Change

The strategic policy context for the national and NSW response to addressing climate change is captured in the Paris Agreement, *Australia's Long-Term Emissions Reduction Plan* (Australian Government, 2021) and Net Zero Plan Stage 1 2020-2030 (NSW Government, 2020). Australia is one of 187 countries that have committed to keeping global temperature rises to well below 2°C under the Paris Agreement.

The NSW Government's objective is to achieve net zero emissions by 2050. The Net Zero Plan Stage 1: 2020–2030 sets out how the NSW Government will deliver on this objective over the next decade. In the *Net Zero: Stage 1 Implementation Update (2021)* the NSW Government committed to halving emissions by 2030 compared to 2005 levels.

The *NSW Electricity Infrastructure Roadmap* provides an outline of how the State's electricity infrastructure will transition to cleaner, cheaper and more reliable energy sources. The road map identifies the progressive retirement of coal-fired power stations alongside investment in renewable energy zones, battery storage and firming technology over the next 15 years.

The project would not change the approved operating life, power generation capacity or greenhouse gas emissions (other than minor emissions during construction) of the stations.

3.2 Site Context

AGL owns around 10,000 hectares (ha) of land around Liddell and Bayswater which includes operational land for both stations, the Ravensworth rehabilitation area, Lake Liddell and surrounding buffer lands. The buffer lands have been established to minimise amenity impacts associated with the operation of the power station. The stations are in close proximity to open-cut mining operations, including the Ravensworth Mine Complex, Mount Arthur Coal Complex, Hunter Valley Operations, Liddell Coal Mine and the Maxwell Project.

The New England Highway runs between the two stations and the Northern Railway Line runs to the east of Lake Liddell (see **Figures 1** and **2**). The closest residential receivers are approximately 2 km north of Liddell and 700 m south of Bayswater.

4 Statutory Context

4.1 State Significant Development

Under the *State Environmental Planning Policy (State and Regional Development) 2011* (SRD SEPP), the project is classified as State significant development (SSD), as it constitutes development for the purpose of electricity generating works with a capital investment value of more than $30 million.

The Minister for Planning is the consent authority for the application, however, under the Minister's delegation of 26 April 2021, the Director - Resource Assessments may determine the application as Singleton and Muswellbrook Council did not object, there were less than 15 unique submissions by way of objection, and AGL did not make any political donations.

4.2 Permissibility

The project is located on land within the Muswellbrook and Singleton LGAs and is subject to the respective local environmental planning instruments (LEP).

The project is located within land zoned SP2 Infrastructure and/or RU1 Primary Production under the *Singleton LEP 2013* and *Muswellbrook LEP 2009*

Under the *State Environmental Planning Policy (Infrastructure) 2007* (Infrastructure SEPP), electricity generating works are permissible on any land in a prescribed rural, industrial or special use zone. Consequently, the project is permissible with development consent.

4.3 Other approvals

Under Section 4.41 of the EP&A Act, several approvals are integrated into the SSD approval process and consequently are not required to be separately obtained for the proposal. These include:

- approvals relating to heritage required under the *National Parks and Wildlife Act 1974* and the *Heritage Act 1977*; and
- certain water approvals under the *Water Management Act 2000* (WM Act).

Under Section 4.42 of the EP&A Act, several other approvals are required but must be substantially consistent with any consent granted for the project. These include:

- approval under the *Coal Mine Subsidence Compensation Act 2017*;
- consents under the *Roads Act 1993*;
- an EPL under the *Protection of the Environment Operations Act 1997*; and
- water access licences under the *Water Act 1912* and/or the WM Act.

AGL currently holds relevant leases and licences under these Acts and can obtain any other licences required for the project where required. The Department has consulted with the relevant government authorities responsible for these other approvals (see **Section 5**), and considered the relevant issues relating to these approvals in its assessment of the project (see **Section 6**).

4.4 Mandatory Matters for Consideration

The Department's assessment of the project has given careful consideration to all necessary statutory requirements. These include the:

- objects of the EP&A Act, set out in section 1.3 of the Act; and
- matters listed under section 4.15(1) of the EP&A Act, including applicable environmental planning instruments (EPIs) and regulations.

Apart from considering the statutory requirements in their own right, the Department has considered Section 3 of the EIS, where AGL has considered applicable legislation and environmental planning instruments in detail.

The Department has considered all statutory requirements in its assessment of the project and has provided a summary of this consideration in respect of the objects of the EP&A Act and a general overview of the applicable EPIs below. Further consideration of particular provisions of applicable EPIs can be found in **Appendix C**.

Objects of the Act

The objects of the EP&A Act are the underpinning principles for all decision making under the Act. They must be considered by the consent authority when determining a development application under the Act. The Department has assessed the project against the objects found in section 1.3 of the EP&A Act. **Appendix C** provides a summary of how these objects have been considered.

Environmental Planning Instruments

The consent authority must take into consideration the provisions of EPIs (including draft instruments) when determining a development application. A number of EPIs apply to the project, including the:

- *State Environmental Planning Policy No 33 - Hazardous and Offensive Development* (SEPP 33): the project is a potentially hazardous industry. AGL has prepared a Preliminary Hazard Analysis (PHA) in accordance with Clause 12 of the SEPP.
- *State Environmental Planning Policy No 55 - Remediation of Land* (SEPP 55): AGL has provided details of the contamination assessments undertaken for the project. The Department is satisfied that the affected areas would be suitable for the intended uses.
- *State Environmental Planning Policy (Infrastructure) 2007* (ISEPP): The Infrastructure SEPP requires the consent authority to notify relevant public authorities about the development that may

affect public infrastructure or land. In accordance with the Infrastructure SEPP, the Department confirms that it notified all relevant public infrastructure providers about the project and has carefully considered the advice from these authorities in its assessment of this application.

The Department has considered the project against the relevant provisions of these instruments (see **Appendix C**). Based on this assessment, the Department considers that the project can be carried out in a manner that is consistent with the aims, objectives and provisions of these instruments.

4.5 Biodiversity Development Assessment Report

Section 7.9(2) of the *Biodiversity Conservation Act 2016* (BC Act) requires all applications for SSD to be accompanied by a Biodiversity Development Assessment Report (BDAR). Section 6.12 of the BC Act also requires that the BDAR be completed in accordance with the Biodiversity Assessment Method (BAM) and specify the class of biodiversity credits required to offset the residual impacts on biodiversity values.

A BDAR was provided in the EIS and subsequently updated as part of the Submissions Report to address comments from the Department's Biodiversity Conservation and Science Division (BCS). These matters are discussed in **Sections 5** and **6**.

5 Engagement

5.1 Department's engagement

The Department publicly exhibited the EIS from 15 April to 14 May 2021, advertised the exhibition in the *Sydney Morning Herald*, *Daily Telegraph, Singleton Argus* and *Hunter and Valley & North Coast Town & Country Leader,* and notified landowners adjacent to the project area.

The Department consulted with Singleton and Muswellbrook Shire Council and relevant government agencies and infrastructure providers during its assessment of the Project. The Department visited the site on 9 June 2021.

An error on the Department's Major Projects website resulted in the EIS not being visible to the public for two days at the commencement of the exhibition. The exhibition period was extended by two days to be meet the minimum public exhibition requirements of the EP&A Act.

5.2 Submissions and Submissions Report

During the exhibition period, the Department received two public submissions, of which one objected to the project.

The Department received advice from 15 government agencies and public authorities, including Muswellbrook Shire Council and Transgrid. Copies of all submissions are available on the Department's website (see **Appendix A2**), and the key issues raised are summarised below.

Following the exhibition of the EIS, the Department requested AGL provide a response to the issues raised in submissions. In August 2021, AGL provided a Submissions Report to the Department (see

Appendix A3). The Department made the Submissions Report publicly available on its website and referred it to relevant government agencies.

Following review of the Submissions Report, residual issues were raised by Muswellbrook Shire Council and BCS which were subsequently resolved following additional information presented by AGL (see **Table 3** and **Appendix A5**).

Key issues – Community

Key issues raised in the two public submission related to waste streams and potential contamination associated with the battery energy storage system. Submissions drew attention to the short-life span of batteries, issues of spontaneous combustion and the broader use of batteries in a transitioning energy market. The Department has considered the waste impacts of the project in **Section 6** and the strategic context of the project is discussed in **Section 3.1** and **Section 6.1**.

Key issues – Agency

None of the government agencies objected to the project. However, they provided comments on the key aspects of the project and recommended conditions of consent. A summary of the key matters raised in the government agency submissions and subsequent advice is provided in **Table 3**.

The Department's considerations of the matters raised is provided in **Section 6** of this report.

Table 3 | Summary of Government Agency and Local Council Advice

Government Agency	Key Issues	Consideration
Muswellbrook Shire Council	• Noted support regarding the consolidation of consents as part of the project • Requested further information and recommended conditions for the management of stormwater for the battery storage area • Noted support for proposed measures to mitigate visual impacts and recommended that screen planting should be further considered • Requested development contributions for the project.	• AGL responded to Council's concerns in the Submissions Report. Residual concerns noted by Council were limited to sediment and erosion impacts, visual impacts and rehabilitation requirements. The Department has recommended conditions to address these residual concerns. • AGL and Muswellbrook Shire Council subsequently entered into negotiations and have entered into a Memorandum of Understanding regarding funding arrangements for this project and other AGL projects at Liddell and Bayswater, separate to this project approval.
BCS	• Requested updates to the BDAR, further information regarding species habitat, survey efforts and the exclusion of particular species from the assessment. • Requested additional targeted survey of *Diuris tricolor*, *Pterostylis chaetophora* and *Prasophyllum petilum.*	• Following updates to the BDAR completed by AGL and the provision of further information BCS advised it was satisfied with the assessment of potential impacts to biodiversity.

Government Agency	Key Issues	Consideration
Mineral Exploration and Geoscience (MEG)	• Noted that biodiversity offsetting will be required for the Project	• Noted
Heritage NSW	• Requested the Aboriginal Cultural Heritage Assessment Report (ACHAR) be updated to include further detail regarding specific social or cultural values to the project site and specific archaeological sites, further detail regarding the link between impacts and further consultation to inform the updates if required.	• Following updated to the ACHAR, Heritage NSW advised it was satisfied with the assessment of potential impacts Aboriginal heritage.
EPA	• Noted that the existing statutory requirements under the *Protection of the Environment Operations Act 1997* and the respective environment protection licences issued to AGL for Bayswater and Liddell power stations are appropriate for setting environmental performance standards for the project to manage potential air, noise, waste and water impacts.	• Noted
Water Group	• Recommended conditions for the management of works on waterfront land	• AGL committed to carrying out works on waterfront land in accordance with relevant guidelines.
Subsidence Advisory NSW (SA NSW)	• Noted that elements of the Bayswater ancillary works are located in a Mine Subsidence District and would require approval from SA NSW in order to be eligible for compensation under the *Coal Mine Subsidence Compensation Act 2017*.	• Noted
Hazards Group	• Noted the Preliminary Hazards Analysis (PHA) was completed in accordance with relevant guidelines.	• Noted
Fire & Rescue NSW (FRNSW) and Rural Fire Service (RFS)	• Requested a Fire Safety Study be completed for the project.	• AGL committed to preparing a Fire Safety Study during detailed design

Singleton Council, Crown Lands Group, Department of Primary Industries – Agriculture, Transport for NSW and the Heritage Council of NSW were consulted but no issues were raised and/ or provided no comments. **Transgrid** did not raise any concerns but provided information on the network connection process.

6 Assessment

The Department has assessed the merits of the project in accordance with the requirements of the EP&A Act and applicable NSW policies and guidelines.

The Department considers that the key impacts of the project relate to the proposed construction works, including the disturbance of Aboriginal sites, and clearing of up to 42.3 ha of native vegetation which includes potential habitat for the Southern Myotis and Striped Legless Lizard. The Department considers that the contribution of the project to energy security is also a key consideration for its assessment.

The Department's assessment of the key potential impacts and considerations for the project is provided Section 6.1 to Section 6.3. The Department's assessment of other issues is provided in **Table 4**

6.1 Energy security

The project would provide dispatchable power supply and support the transition of the energy sector as coal fired power stations retire over the next two decades and supply for renewable energy sources increases.

AEMO's 2020 *Integrated System Plan* states that 'shallow storage batteries' (1- to 2-hour storage), are required initially, in order to provide firming capacity and to support intra-day energy shifting. It also notes that as more coal-fired generation retires, medium 4- to 12-hour storage will be required to shift energy over longer time periods.

The project is consistent with the *Integrated System Plan* as it would be developed in stages initially providing shallow supply and building to up 500 MW of dispatchable energy over a four-hour duration.

The Department therefore considers that the project is consistent with the strategic policy context for energy security outlined in **Section 3.1**.

6.2 Aboriginal heritage

Previous archaeological assessments have identified Aboriginal heritage sites including artefact scatters and potential archaeological deposits in the vicinity of the project site. The EIS therefore included an Aboriginal Cultural Heritage Assessment Report (ACHAR), which was updated as part of the Submissions Report to address issues raised by Heritage NSW. The ACHAR included consultation with Registered Aboriginal Parties (RAPs) and an archaeological survey.

Consultation with RAPs identified that the landscape is significant as a point of connection between Aboriginal people and their ancestors. However, the RAPs identified that this point of connection is strained given substantial changes to the landscape in the project site and Aboriginal objects therefore have an increased cultural significance as a tangible link to the past.

The ACHAR identified 14 Aboriginal sites within the study area, consisting of isolated finds and artefact scatters. The sites are generally located around the footprint of the Bayswater ancillary works where pipeline repair works may be required. All sites were assessed as having a low overall significance comprising a moderate social significance and low historic, scientific and aesthetic significance.

The ACHAR identified that the project would result in the total removal and loss of value of 12 sites, partial loss of value of one site and no impact to one site.

The ACHARD noted that majority of the impacts would only occur if repair works are required to the Jerrys Plains High Pressure Pipeline in certain locations and there is the potential for detailed design to avoid two sites located near the proposed brine pipeline. AGL advised that if repair works are required or the detailed design cannot avoid impacts, the sites would be salvaged through surface collection.

AGL committed to the preparation of a Cultural Heritage Management Plan (CHMP) in consultation with RAPs to manage potential impacts to Aboriginal heritage.

The Department considers that any opportunities to avoid impacts on Aboriginal sites should be prioritised and has recommended design opportunities be explored in the CHMP.

The Department has recommended conditions to manage potential impacts to Aboriginal heritage including:

- avoid impacts where possible during detailed design;
- prepare and implement a Cultural Heritage Management Plan; and
- conditions to manage unknown finds if discovered during construction.

The Department and Heritage NSW agree with the findings of the ACHAR and consider that potential impacts to Aboriginal heritage can be avoided or mitigated through the recommended conditions of consent.

6.3 Biodiversity

The project site is in a predominately cleared and highly modified landscape. However, the project would require clearing of up to 42.3 ha of native vegetation with 21.6 ha identified as low condition regrowth which does not require offsetting under the provisions of the BC Act.

Most of the native vegetation clearing would occur for the Bayswater ancillary works with limited opportunities to avoid this vegetation due to the location of existing infrastructure.

AGL has identified three potential locations for the Battery Energy Storage System across a footprint of 56 ha. AGL have advised that only approximately 20 ha of this area would be disturbed, but detailed design of the area has not been completed.

The EIS included a BDAR, which was updated as part of the Submissions Report to address issues raised by BCS. The BDAR included assessment of all disturbance areas of the project including the entire Battery Energy Storage System footprint to provide a worst-case indication of impacts.

The BDAR identified four plant community types (PCTs) that would be disturbed by the project, including:

- PCT 1691: Narrow leaved Ironbark – Grey Box grassy woodland of the central and upper Hunter (37.3 ha - varying condition);
- PCT 1692: Bull Oak grassy woodland of the central Hunter Valley (1.2 ha);
- PCT 1731: Swamp Oak – Weeping Grass riparian forest of the Hunter Valley (0.9 ha); and
- PCT 1071: Phragmites australis coastal freshwater wetlands of the Sydney Basin (3 ha)

Vegetation within the study area is likely to provide foraging habitat for a range of mobile threatened fauna species including the Grey-headed Flying Fox, and a number of woodland birds and insectivorous bat species.

The BDAR also identified the potential disturbance of habitat for the Southern Myotis (10 ha) and Striped Legless Lizard (38.5 ha), most of which is regrowth vegetation in poor condition.

Total disturbance of the native vegetation assessed in the BDAR would require the retirement of 354 ecosystem credits and 475 species credit in accordance with the BC Act. However, the Department notes that there is the opportunity to further minimise impacts and credit liability following detailed design of the Battery Energy Storage System. The Department considers that a design principle of avoidance should be prioritised and has permitted the recalculation of credit requirements following the detailed design phase.

The final credit requirement would be retired in accordance with the NSW Biodiversity Offset Scheme which may include acquiring or retiring biodiversity credits, making payments in an offset fund or funding a biodiversity conservation action.

AGL requested to stage the retirement of credits across four stages reflecting the progression of surface disturbance activities in different areas of the project.

The Department has recommended conditions to manage residual impacts to biodiversity including:

- avoid vegetation clearance during detailed design where practicable;
- prepare and implement a Biodiversity Management Plan for the development prior to the commencement of clearing native vegetation;
- review and update credit requirements to reflect the final construction footprint; and
- retire the applicable biodiversity offset credits in stages in accordance with the Biodiversity Offset Scheme.

With the recommended conditions, both BCS and the Department considers that the project's impacts on biodiversity is acceptable and is unlikely to result in a significant impact on the biodiversity values of the locality.

6.4 Other issues

Table 4 | Assessment of other issues

Issue	Findings	Recommendation
Hazards and risk	• The EIS included a Preliminary Hazard Analysis (PHA) which was prepared in accordance with relevant guidelines. The PHA was reviewed by experts from the Department's Hazards Group. • Key potential hazards associated with the project are primarily associated with fires within the proposed battery storage system and decoupling works. The PHA identified that fires could result in: o generation of heat and toxic gas; and o propagation of a bushfire. • The PHA identified the risk profile for the project is moderate to low and that potential risks could be minimised through control measures, including: o the implementation of an asset protection zone (APZ) around the Battery Energy Storage System and decoupling works; o adherence to standards related to separation distances and setback for nearby infrastructure and staff; and o inclusion of measures to prevent leaks and secondary containment for the brine pipeline during detailed design. • FRNSW and the RFS requested a Fire Safety Study be completed to ensure suitable fire prevention, detection and protection measures are identified and implemented prior to construction. • The Department's Hazard Group also recommended conditions relating to emergency management and the storage and handling of dangerous goods. • Subject to the recommended conditions, the Department considers that the hazards and risk of the project can be appropriately managed and minimised.	• Prepare a Fire Safety Study and Emergency Plan. • Conditions included for the storage and handling of dangerous goods.
Traffic and transport	• Access to the project site would be via an existing interchange at the New England Highway which provides direct access to Liddell to the east and Bayswater to the west. • Anticipated peak construction traffic movements across the project components would be 200 light vehicles and 100 heavy vehicles.	• Prepare an Environmental Management Strategy (EMS) incorporating a traffic subplan including measures to manage traffic during the construction and decommissioning stages of the development.

Issue	Findings	Recommendation
	• Operational traffic movements for the project would be minimal. • Traffic (SIDRA) modelling has been completed as part of a Traffic and Transport Assessment for the project, which included an assessment against current and future traffic volumes. • Modelling was based on a conservative scenario that assumed peak daily movements for the three project components would occur concurrently. This is unlikely to occur. • The traffic assessment concluded that the existing road network has adequate capacity to accommodate peak construction traffic movements. Modelling indicated that all components of the interchange would continue to operate at Level of Service A. • The project would also require the use of oversize overmass vehicles to transport transformer components to and from the site. AGL estimate up to 32 deliveries over the project life. • To manage traffic impacts, AGL have committed to preparing a management plan for oversized overmass vehicles, obtaining the relevant vehicle permits and informing staff of on-site road safety practices. • Transport for NSW did not raise concern regarding the traffic impacts for the project. • The Department considers the existing road network has adequate capacity for the increased traffic movements during construction and has recommended conditions for traffic management measures be included in a Construction Environment Management Plan.	
Waste	• The issue of waste and contamination associated with the disposal of batteries was raised in community submissions. • The Battery Energy Storage System is expected to operate for 20 years and this may be extended subject to the replacement of components. • AGL are investigating options for the recycling of batteries, noting the technology is in the early stages of deployment and recycling options are currently being developed in the industry. • Notwithstanding, AGL is required to classify, store and handle all waste in accordance with the EPA's Waste Classification Guidelines 2014 (or its latest version) and recycle or dispose of waste at a licensed facility.	• Classify, store and handle waste in accordance with EPA guidelines. • Ensure waste is recycled or sent to a licensed facility. • Manage waste in accordance with an Environmental Management Strategy (EMS) incorporating a waste management sub-

Issue	Findings	Recommendation
	• The Bayswater ancillary works include works to improve the management of wastewater and other liquid wastes at Bayswater.	plan, to the satisfaction of the Planning Secretary.
Amenity	• There are limited residential receivers in the vicinity of the project site. The nearest residential receiver from the Battery Energy and Storage System is located two kilometres to the north. AGL maintains buffer lands to minimise amenity impacts to surrounding residences • The EIS included an Air Quality Impact Assessment, Noise and Vibration Assessment and Visual Impact Assessment. • The air and noise assessments identified that construction and operational air quality and noise impacts would not exceed relevant impact assessment criteria at sensitive receivers. • AGL have developed measures to minimise potential impacts including the preparation of controls to avoid, minimise and mitigate noise impacts in the CEMP, and measures to manage potential dust generation during earthworks and haulage • The visual assessment identified that the operation of the project would introduce new minor visual elements (battery and decoupling infrastructure) to views from some publicly accessible locations. However, the impact would be negligible given the infrastructure would be viewed in the context of the existing station and ancillary infrastructure. • The NSW EPA did not raise concern regarding potential noise or air quality impacts. • The Department considers that amenity impacts for the project would be minor and has recommended contemporary operating conditions to minimise impacts of the project.	• Minimise the noise, dust and off-site visual impacts of the development. • Prepare and implement an EMS incorporating an air quality and noise sub-plans to manage and mitigate amenity impacts, to the satisfaction of the Planning Secretary.
Water Resources	• Potential impacts to water resources during construction are primarily related to erosion and sedimentation associated with the establishment of new permanent impervious surfaces, removal of vegetation, earthworks and stockpiling. • Construction works would primarily occur on the surface and there would be limited potential for the interception of groundwater. • The construction and operation of the project would not require additional water above existing water licence entitlements. • The operation of the project would not change the water use and the site water management system or require any new water discharge points under the EPLs held for the sites.	• Prepare and implement an EMS incorporating a subplan for management of sediment erosion, to the satisfaction of the Planning Secretary. • Condition requiring that AGL has sufficient licensed water for all stages of the development. • Condition requiring that AGL ensures water discharges comply with

Issue	Findings	Recommendation
	• AGL have committed to design new infrastructure to ensure there is no risk of changes to flood behaviour. • Issues raised by Department's Water Group were limited to a request that works located on waterfront land are completed in accordance with relevant guidelines. The Department has incorporated this feedback into the recommended conditions. • The Department considers that the water-related impacts of the project are minor and can be managed through existing site management systems and the recommended conditions.	the requirements of the EPA through an EPL.
Soils and contamination	• There is potential for contamination in the project site given impacts from historic and current power station activities. • A contamination assessment was completed for the project, which included targeted investigations across key areas of concern. • Investigations identified some localised areas of elevated levels of contaminants, including asbestos. However, the investigations concluded that widespread contamination across all components of the project site is unlikely. • The EPA advised and the Department notes that contamination impacts would be managed by the EPA through requirements of the POEO Act.	• Prepare and implement an EMS to manage contamination, including an unexpected finds protocol. • Classify and dispose of contaminated material in accordance with relevant EPA guidelines. • Manage asbestos-contaminated materials in accordance with the *Protection of the Environment Operations (Waste) Regulation 2014.*
Greenhouse gas	• The battery component of the project would contribute to the firming of renewables and reduction of emissions associated with the transition of the energy sector to lower emissions from power generation. • The Bayswater ancillary works would not involve any increase in the production of electricity at the power station or extend the operational life of the Bayswater beyond 2035. The project would therefore would not result in the generation of additional greenhouse gas emissions from the station. • Minor quantities of greenhouse gases would be generated during construction from the operation of construction equipment.	• None required.
Rehabilitation	• Built infrastructure associated with the project would be removed and the site would be rehabilitated to a safe, sustainable and non-polluting landform. • Closure and rehabilitation of the broader Liddell and Bayswater sites would be subject to future separate	• Rehabilitation must meet the objectives of safe, stable and non-polluting.

Issue	Findings	Recommendation
	approvals, including the Liddell Future Land Use and Enabling Works Project. • Notwithstanding, the Department has recommended a requirement for AGL to rehabilitate areas disturbed by the project, including rehabilitation objectives.	
Social and economic	• The construction of the project would provide employment for up to 250 people and would result in indirect benefits to local business. • Amenity impacts associated with the project would be minor (refer above). • The project would contribute to the reliability of the NEM through facilitating the ongoing operation of Bayswater and providing energy storage. The project would require two to three ongoing jobs for the operation of the battery.	• None required.
Cumulative impacts	• There is the potential for cumulative impacts associated with the other projects at Liddell and Bayswater, as well as other transport, mining, energy and industrial projects in the region. • The traffic assessment considered cumulative traffic impacts from approved projects in the vicinity of the project site. Cumulative traffic impacts would result in negligible to minor impacts to the operation of the New England Highway and dedicated site interchange. • Given the buffer lands owned by AGL, cumulative amenity impacts would be minor. • The project would result in the disturbance of land that is generally highly modified and disturbed and therefore Aboriginal heritage and biodiversity values are low and would not contribute to substantial cumulative impacts.	• Refer above.

7 Evaluation

AGL seeks approval to undertake the Liddell Battery and Bayswater Ancillary Works Project to ensure ongoing dispatchable electricity during the transition of the NEM towards renewable energy. The project has been classified as SSD under the EP&A Act and the Minister for Planning is the consent authority.

The Department has undertaken a comprehensive assessment of the merits of the project in accordance with the relevant requirements of the EP&A Act and has considered all information provided by AGL, government agencies and the members of the public.

The site is well suited for battery storage and the other elements of the project due to the current land use and infrastructure already involving power generation with supporting infrastructure already available including transmission lines, along with significant buffer to surrounding sensitive receivers. The project would not change the approved operating life or power generation capacity of Liddell and Bayswater.

The Department notes that only one public objection was received for the project relating to energy security which has been carefully considered in the Department's assessment.

The key impacts of the project primarily relate to construction activities, including clearing native vegetation and disturbing Aboriginal heritage sites. These impacts would be mitigated or offset subject to the conditions recommended by the Department. Areas identified for potential disturbance would be subject to detail design with opportunity to further minimise impacts on biodiversity and Aboriginal cultural heritage. Ecosystem and species credits would be retired in accordance with the BC Act to offset residual impacts on biodiversity. Aboriginal sites identified for disturbance would be managed in accordance with a Cultural Heritage Management Plan, to be prepared in consultation with RAPs and Heritage NSW.

Potential amenity impacts during construction would be short term and noting the large buffer area around the power stations, incremental noise and air impacts would comply with amenity criteria and would be minor in the context of the approved project.

Key potential operational impacts include fire hazards and battery waste management during the operation of the Battery Energy Storage System and Decoupling Works which would be managed through strict conditions, including the preparation of a Fire Safety Study and Emergency Plan.

The Department has consulted closely with key NSW government agencies, local council and the Department's hazards experts to ensure that impacts can be appropriately avoided, mitigated and/or offset to an acceptable level, consistent with NSW government policy and statutory requirements.

The project would result in a number of social, economic and environmental benefits. Through the Battery Energy Storage System, the project would provide additional dispatchable energy to support the NEM during the transition from coal-fired power to renewable energy over the next 20 years consistent with the objectives of relevant NSW Government policy around greenhouse gas and climate change, including the *NSW Electricity Strategy 2019* and *Net Zero Plan Stage 1 2020-2030* .

Through the Bayswater Ancillary Works, the project would also support the ongoing operation of Bayswater to supply dispatchable power into the NEM until proposed decommissioning by 2030-2033. These works would improve environmental performance of the site. The Decoupling Works component

of the project would facilitate the separation of Liddell and Bayswater to ensure the sites can be managed separately.

The consolidation of local development approvals would contemporise the environmental conditions relevant to this ancillary infrastructure and provide a more consistent approach to the regulation of planning approvals across the two power stations.

The project would also generate up to 250 jobs during construction and deliver economic benefits to the Hunter Region and NSW associated with the $763 million capital investment for the project.

On balance, the Department believes that the project's benefits outweigh its residual impacts and it is in the public interest and approvable, subject to strict conditions (see **Appendix D**).

8 Recommendation

It is recommended that the Director Resource Assessments, as delegate of the Minister for Planning:

- **considers** the findings and recommendations of this report
- **accepts and adopts** all of the findings and recommendations in this report as the reasons for making the decision to grant consent to the application
- **grants consent** for the application in respect of SSD 8889679, subject to the conditions in the attached development consent
- **signs** the attached development consent and recommended conditions of consent (see **Appendix D**).

Recommended by:

Jack Turner
Senior Environmental Assessment Officer
Resource Assessments

Gen Lucas
Team Leader
Resource Assessments Determination

9 Determination

The recommendation is **Adopted / ~~Not adopted~~ by**:

8/3/2022

Steve O'Donoghue
Director
Resource Assessments

Appendices

Appendix A – List of key documents

A1 – Environmental Impact Statement (EIS): Refer to folder “EIS” on the Department’s website at: https://pp.planningportal.nsw.gov.au/major-projects/projects/liddell-battery-and-bayswater-ancillary-works

A2 – Submissions and Agency Advice: Refer to folder “Submissions” on the Department’s website at: https://pp.planningportal.nsw.gov.au/major-projects/projects/liddell-battery-and-bayswater-ancillary-works

A3 – Submissions Report: Refer to folder “Response to Submission” on the Department’s website at: https://pp.planningportal.nsw.gov.au/major-projects/projects/liddell-battery-and-bayswater-ancillary-works

A4 – Amendment Report: Refer to folder “Amendments” on the Department’s website at: https://pp.planningportal.nsw.gov.au/major-projects/projects/liddell-battery-and-bayswater-ancillary-works

A5 – Additional Information: Refer to folder “Additional Information” on the Department’s website at: https://pp.planningportal.nsw.gov.au/major-projects/projects/liddell-battery-and-bayswater-ancillary-works

Appendix B – Community Views

Issue	Consideration
Potential impacts associated with contamination and waste from batteries	AGL are investigating options for the recycling of batteries, noting the technology is in the early stages of deployment and recycling options are currently being developed in the industry. Notwithstanding AGL is required to classify, store and handle all waste in accordance with the EPA's Waste Classification Guidelines 2014 (or its latest version) and recycle or dispose of waste at a licensed facility. The Department has recommended conditions that waste be classified, stored and handled in accordance with EPA guidelines and ensure waste is recycled or sent to a licensed facility.
Hazards associated with batteries, including combustion	Key potential hazards and risks include fires associated with electrical and flammable material and the risk of a fire propagating to result in a bushfire. The risks are primarily associated with the battery and decoupling components. A Preliminary Hazard Analysis has been prepared for the Project in accordance with relevant guidelines. The assessment was reviewed by the DPIE Hazards Group The PHA identified that potential hazards and risks can be adequately maintained with the implementation of an asset protection zone and other standard controls and the implementation of applicable standards related to separation distances and setback for nearby infrastructure and staff. FRNSW and the RFS requested a Fire Safety Study be completed for the Project which the Department has incorporated into the recommended conditions of consent.
Ability of battery technology to contribute to energy security	Battery technology is a tested technology capable of providing dispatchable energy to the National Energy Market No conditions are required

Appendix C – Statutory Considerations

The Department's assessment of the project has given detailed consideration to a number of statutory requirements (see **Section 4** - Statutory Context and **Section 6** – Assessment). These include:

- the objects found in Section 1.3 of the EP&A Act; and
- the matters listed under Section 4.15(1) of the EP&A Act, including applicable environmental planning instruments and regulations.

The Department has considered all of these matters in its assessment of the Project. A summary of these considerations is provided below. Reference should also be made to Section 3 of the EIS, where the Applicant has also considered applicable legislation and environmental planning instruments in detail.

C1 Objects of the EP&A Act

A summary of the Department's assessment against the current relevant objects (found in section 1.3 of the EP&A Act) are provided in **Table C1** (below).

Table C1 | Objects of the EP&A Act

Objects	Consideration
(a) to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources; (c) to promote the orderly and economic use and development of land;	• The project involves a permissible land use on the subject land, primarily being for the purpose of energy generation. • The project would provide ongoing socio-economic benefits to the people of NSW through ongoing employment opportunities during construction and operations. • The project would mostly be located within the existing disturbance footprint of the two power station sites and existing land uses, hence providing an efficient use of land. • Consideration has also been given to local endangered species and communities with appropriate conditioning of the Project to avoid, minimise and offset impacts.

Objects	Consideration
(b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment;	• The Department considers that the project can be carried out in a manner that is consistent with the principles of ecologically sustainable development (ESD). The Department's assessment has sought to integrate all significant environmental, social and economic considerations. Consideration of the key principles and programs of ESD is detailed below. ***Precautionary Principle*** • The Department has assessed the project's threat of serious or irreversible environmental damage and considers that there is sufficient scientific certainty regarding environmental impacts and residual risks to enable determination of the application. • The EIS contains a number of specialist environmental impact assessments and a number of design, construction and operation measures to mitigate, remediate or offset potential impacts. • The Department has also recommended conditions of approval that further mitigate potential residual impacts of the project such as requiring AGL to retire biodiversity offsets. • The Department considers that the recommended conditions can provide an appropriate level of protection to environmental values in the region. ***Inter-generational equity*** • The Department recognises that the NSW energy market is in a state of transition from one dominated by coal-fired power stations to a renewable energy mix. The Project is consistent with this transition as it would provide a battery storage system to provide dispatchable generation to firm renewables, facilitate the planned exit of the Liddell Power Station and ensure the ongoing operation of Bayswater Power Station to meet the State's electricity supply demands. ***Conservation of biological diversity and ecological integrity*** • The project's potential impacts on biodiversity were an important consideration of the Department's assessment of the project. As described in **Section 6.1**, the Department considers that direct and indirect impacts on biodiversity can be minimised through proposed mitigation measures and offsets. ***Improved valuation, pricing and incentive*** • This ESD principle emphasises the internalisation of environmental costs in the pricing of assets and services. • The Department's assessment has sought to apply the 'polluter pays principle', insofar as AGL would be required to offset potential environmental impacts. As such, the Department has conditioned that biodiversity impacts be offset and that the project would operate under the existing Environment Protection Licences that cover the two power station sites that are issued by the EPA.

Objects	Consideration
(e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats;	• The Department considers that the project has been designed to minimise environmental and biodiversity impacts as much as practicable. • Detailed design of the project components would seek to further minimise impacts to the environment and biodiversity by reducing the amount of land and vegetation disturbed by the Project, where possible. • The Department has recommended a condition requiring AGL to prepare and implement a Biodiversity Management Plan that incorporates these avoidance and mitigation measures, as well as other contemporary biodiversity management practices. • Although some clearing of threatened ecological communities would be required, the Department accepts the residual impacts on biodiversity values would be suitably managed, mitigated and/or offset under the recommended conditions of consent. • In regard to the AGL's proposed offset strategy, the Department considers that the required ecosystem and species credits can be obtained and that the retirement of these credits would sufficiently compensate for residual biodiversity impacts in accordance with the BC Act. The biodiversity assessment concluded that potential impacts to threatened species and habitats, including MNES, are acceptable. • Both the *precautionary principle* and the *conservation of biological diversity and ecological integrity* have been applied in the assessment to avoid serious or irreversible damage to the environment wherever possible.
(f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage);	• The Department has assessed the project's impacts on built and cultural heritage (see Section 6.3) and concluded that the project would not significantly impact on either the built or cultural heritage of the site. • The proposed mitigation and management measures and recommended conditions would ensure the project would avoid impacts on Aboriginal heritage items in the event of unexpected finds during construction or maintenance operations.
(g) to promote good design and amenity of the built environment;	• The majority of the project would occur within the existing footprint of the two power stations. • Proposed mitigation measures and conditions would minimise off-site visual impacts.
(h) to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants;	• A hazard assessment was completed in accordance with the requirements of *Hazardous and Offensive Development Application Guidelines – Applying SEPP 33* and SEPP 33 and reviewed in consultation with the Department's Hazards team (see **Section 6**). • The project would not increase the existing risk profile of the power station due to existing controls being enforced by AGL. • The recommended conditions include proposed general operating conditions relating to operation of plant and equipment, construction and demolition conditions to ensure structural adequacy of the buildings and safe demolition at the end of project life.

Objects	Consideration
(i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State; and	• The Department notified and consulted with Singleton Council, Muswellbrook Shire Council and NSW government authorities (including further discussion of key issues with BCS) throughout the assessment of the project and carefully considered all responses in its assessment (see **Section 5**).
(j) to provide increased opportunity for community participation in environmental planning and assessment.	• The Department publicly exhibited the project application and EIS and made all relevant documents publicly available on its website (see Section 5). All public submissions have been considered by AGL and the Department during the assessment process.

C.2 Environmental Planning Instruments

Under Section 4.15 of the EP&A Act, the consent authority is required to consider, amongst other things, the provisions of the relevant EPIs, including any exhibited draft EPI1. **Section 4** of the Department's assessment report provides a summary of the Department's consideration of the relevant EPIs and notes AGL's consideration of applicable provisions of relevant EPIs in its EIS. Further consideration is provided in the Department's assessment (see **Section 6**) and below.

Applicable Local Environment Plans

The Department has considered the permissibility of the proposed development under the Muswellbrook and Singleton LEPs (see **Section 4**).

SEPP No. 33 – Hazardous and Offensive Development (SEPP 33)

The key aims of SEPP 33 are to ensure that, in considering any application to carry out potentially hazardous or offensive development, the consent authority has sufficient information to assess whether the development is hazardous or offensive and to impose conditions to reduce or minimise any adverse impacts and that any measures proposed to be employed to reduce the impact of the development are taken into account.

Clause 12 of SEPP 33 requires persons proposing to carry out development for the purposes of potentially hazardous industry to prepare a Preliminary Hazard Analysis (PHA) and to submit this with the DA. The EIS considered the potential hazards and risks associated with the Project, including the storage of hazardous goods, potential for fire and/or explosion and contamination of land, water and air and contained a PHA (see Chapter 19 of the EIS).

The Department has considered AGL's assessment of these matters and commitments to maintain appropriate setbacks between hazardous substance facilities and nearby land users. The Department considers that suitable mitigation measures could be incorporated into the design of the project to ensure that it would meet relevant standards and be compatible with the existing or likely future use of

1 Note that due to the effect of clause 11 of the SRD SEPP, development control plans do not apply to SSD.

land surrounding the project. With the proposed measures in place, the PHA demonstrated that the potential hazards associated with the project can be managed.

The Department considers that the project would not increase risks to public safety and would not alter the consequences or likelihood of a hazardous event on the site or during materials transport. As such, the Department considers that the project is consistent with the provisions of SEPP 33.

SEPP No. 55 – Remediation of Land (SEPP 55)

SEPP 55 relates to the remediation of contaminated land. AGL has considered the potential land contamination matters associated with the Project in its EIS. The assessment concluded that the potential contamination risk associated with the Project are low and acceptable. No change of use to a more sensitive land use is proposed and therefore no remediation is required or proposed as part of the project. The Department considers that the additional areas of disturbance associated with the project would be suitable for the intended uses and that the proposal is generally consistent with the aims, objectives, and provisions of SEPP 55.

SEPP (State and Regional Development) 2011 (the SRD SEPP)

Under Section 4.36 of the EP&A Act, the Project is considered a State Significant Development, because it is development for the purpose of electricity generating works with a capital investment value of more than $30 million.

In accordance with section 4.5 of the EP&A Act and clause 8(1) of the SRD SEPP, the Minister for Planning and Public Spaces is the consent authority.

State Environmental Planning Policy (Infrastructure) 2007 (ISEPP)

The Infrastructure SEPP requires the consent authority to notify relevant public authorities about the development that may affect public infrastructure or land, including electricity transmission and distribution networks, gas pipeline corridors, railways and rail corridors.

The Department notified all relevant infrastructure providers including TfNSW.

The Department has consulted with other government agencies and considered the matters raised in its assessment of the project (see **Section 6**). Where appropriate, the Department has also developed conditions of consent to address the recommendations and advice of these agencies. The Department considers that such conditions would provide appropriate protection for public infrastructure. As such, the Department considers that the requirements of the Infrastructure SEPP have been satisfied.

Appendix D – Recommended Instrument of Consent

See the Department's website at https://www.planningportal.nsw.gov.au/major-Projects/Project/39631