EPBC Act referral



Australian Government Department of Agriculture, Water and the Environment

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Title of proposal	2021/8989 - Loy Yang Battery Energy Storage System
Section 1	

Summary of your proposed action

1.1 Project industry type

Energy Generation and Supply (non-renewable)

1.2 Provide a detailed description of the proposed action, including all proposed activities

The proposed action comprises the construction and operation of a Battery Energy Storage System (BESS) at Loy Yang, Victoria. The Proposed activity includes the construction of up to 1480 battery storage enclosures (battery cells are situated in enclosures) with a capacity of up to 200MW and 4 hours' worth of storage (800MWh) (Battery Facility). The proposed action will also include the installation of 2km of 66kV overhead powerline (OHL) both above and underground. The following ancillary equipment is also included:

-Transformers and invertors

- Control and office building
- Cabling and collector units
- Security fencing and lighting
- Drainage and stormwater management
- Minor works to connect the BESS to transformer compound or switchyard;

-Access to the BESS during construction is proposed via an access route that includes both existing made road (Hyland Hwy/Bartons Lane) and informal tracks. Access proposed from Hyland Hwy is on existing bitumen will not be subject to any upgrades prior to construction and no works beyond the existing road footprint are required in this section. The east-west section of the proposed access route (unmade section) will be re-sheeted with gravel prior to construction. A gatehouse will be established within the study area at the entry to the access route off Highland Highway for security purposes.

- Other ancillary infrastructure, including temporary construction compounds, amenities, upgrade to access roads and laydown areas. Provision of five car parking spaces and one loading bay.

The proposed action will occur within the land parcel of Loy Yang Power Plant, an operational coal mine and power plant. The proposed site was chosen as the area is highly disturbed with minimal environmental or amenity value. The proposed action will not directly impact any MNES.

The direct impacts to the environment associated with the proposed action, within the proposed activity area include: Excavation - The proposed action will take advantage of hardstanding already in place. This has reduced the need for significant earthworks and excavation as well as vegetation removal. It is anticipated that the 150m of OHL to be placed underground will require trenching through concrete hardstanding and previously cleared land.

Native vegetation removal - Vegetation removal is required for two native scattered trees only; two Narrow-leaf Peppermint (Eucalyptus radiata) trees within the footprint for the BESS. These trees require removal to allow adequate hardstanding around the BESS site to enable safe access to the BESS containers for maintenance and potential emergency service access.

The indirect impacts to the environment associated with the proposed action, within the proposed activity area include:

Indirect impacts to flora and fauna species during construction and operation i.e. short-term construction noise, light, dust – The construction and transportation of materials to site will generate some noise, light and dust. Environmental impacts will be managed through an Environmental Management Plan (EMP) that will likely require approval from the Minister for Planning (Vic). The construction methodology for the proposed action will be developed in more detail during the preparation of the EMP.

For the purposes of this referral, direct and indirect impacts on MNES or the environment are not considered to be significant. Potential impacts to ecological values are identified in Attachment 3_Updated_Loy_Yang_BESS_MNES_Report, Section 4.1, page 20

1.3 What is the extent and location of your proposed action?

See Appendix B

1.5 Provide a brief physical description of the property on which the proposed action will take place and the location of the proposed action (e.g. proximity to major towns, or for off-shore actions, shortest distance to mainland)

The proposed action is located in Loy Yang in Victoria's Latrobe Valley, 150km east south east of Melbourne, and 7km south east of Traralgon. The BESS site is proposed to be located north of Bartons Lane (Hyland Highway), 800m north east of the Loy Yang A Power Station. The BESS site largely comprises open farmland and is dominated by introduced pasture grasses. The BESS site also comprises areas with existing hard surfaces and buildings which are currently utilised for storage of heavy materials and hard waste. Existing bitumen roads dissect the BESS area and provide access from Bartons Lane. The section of the study area surveyed for the OHL between the BESS site and the existing coal conveyors comprised of heavily grazed pastures. The proposed access route includes both existing made road and informal track, totalling approximately 1.5 kilometres from the Hyland Highway to the BESS site. Refer to



Attachment_1_Study_area_and_locality_map and Attachment_4_Study_Area.

1.6 What is the size of the proposed action area development footprint (or work area) including disturbance footprint and avoidance footprint (if relevant)?

The development area (project footprint) and avoidance areas are depicted in Attachment

3_Updated_Loy_Yang_BESS_MNES_Report, Section 4, page 20, Figure 3.

The project footprint totals 29.44ha. Of this, the total avoidance area is 4.91ha, which incorporates all areas of native vegetation being retained within the Project footprint. The remaining 24.53 ha of the Project footprint is classified as the disturbance footprint, which incorporates the area for the development of BESS, OHL, road access, and additional laydown and temporary disturbance areas.

The BESS site totals approximately 4.52 hectares in area. This incorporates the area of the BESS facility and a 10m-wide perimeter firebreak that adhere to guidance from the Country Fire Authority (CFA) for battery installations in Victoria. The OHL extends for approx. 1.9km from the south of the BESS site to the grid connection location. The proposed access route includes both formal and informal track, totalling approx. 1.5km.

1.7 Proposed action location

Other - Loy Yang A Power Station, near the corner of Bartons Lane and an unnamed Road, Loy Yang, Victoria.

1.8 Primary jurisdiction	Victoria			
.9 Has the person proposing to take the action received any Australian Government grant funding to undertake this project?				
🗌 Yes 🗹 No				
1.10 Is the proposed action subject to local government planning approval?				
🗹 Yes 🔲 No				
1.10.1 Is there a local government area and council contact for t	the proposal?			
🗹 Yes 🔲 No				
1.10.1.0 Council contact officer details				
1.10.1.1 Name of relevant council contact officer	Department of En	vironment, Land, Water and Planning		
1.10.1.2 E-mail	development.approvals@delwp.vic.gov.au			
1.10.1.3 Telephone Number	1800789386			
1.11 Provide an estimated start and estimated end date for the	Start Date	01/10/2021		
proposed action	End Date	01/10/2041		
1 12 Provide details of the context planning framework and ate	to and/or local Cova	romont roquiromonto		

1.12 Provide details of the context, planning framework and state and/or local Government requirements

The site is subject to the Latrobe Planning Scheme however a planning permit application is being lodged with the Minister for Planning for the development (construction of buildings) of a battery energy storage system (BESS) and removal of native vegetation. The Minister for Planning is the Responsible Authority of this planning application under the Victorian Planning Scheme.

The entire study area is zoned Special Use Zone (SUZ1) in the Latrobe Planning Scheme. The site partially sits within the Bushfire Management Overlay (BMO). The entire study area is designated as a Bushfire Prone Area (BPA).

The site of the proposed action falls under the jurisdiction of the West Gippsland Catchment Management Authority (WGCMA) and lies within the Gippsland Plain bioregion.

1.13 Describe any public consultation that has been, is being or will be undertaken, including with Indigenous stakeholders

Community Consultation

AGL will inform the local community and stakeholders at key milestones as the proposed action progresses, in line with AGL's commitment to transparency and accountability.

Due to the separation of the proposed action area from publicly accessible areas and sensitive uses, and the assessed low level of impact, consultation will focus on key local and regulatory stakeholders. AGL has existing strong relationships due to



ongoing community relations activities from the operation Loy Yang A Power Station. Stakeholder engagement is expected to be targeted at keeping neighbours and key local stakeholders informed of the assessment process and anticipated construction activities such that questions can be identified, answered and any impacts mitigated throughout the design process.

AGL maintains a company-wide engagement policy and management standard that applies to stakeholders and the community. AGL's approach to stakeholder engagement can be summarised in terms of leaving a positive legacy; AGL will strive to make a net positive social, economic and environmental contribution to the communities in which we operate. Project details were provided publicly on the AGL website and the ASX on the 23 March 2021, see link:

https://www.agl.com.au/about-agl/media-centre/asx-and-media-releases/2021/march/agl-firms-up-reliability-as-loy-yangbattery-moves-ahead

Latrobe City Council

A meeting with the Latrobe City Council (the Council) was undertaken on 22 January 2021, prior to the submission of the planning permit application.

An overview of the Project including siting and design, approval pathway and environmental and heritage assessment considerations were presented to the Council's Acting General Manager for Regional City Growth and Investment and Coordinator for Statutory Planning.

Council officers are supportive of the Project with no concerns raised at the meeting.

Department of Jobs, Precincts and Region

A meeting with the Department of Jobs, Precincts and Regions – Earth Resources Regulation (ERR) was undertaken on 9 February 2021 and 12 February 2021, prior to the submission of the planning permit application.

An overview of the Project including siting and design, approval pathway, sensitive receptors and their interaction with the BESS and consideration for the safe operation of the BESS, was presented to the Gippsland Regional Manager and Senior Planning Advisor.

ERR is supportive of the Project. ERR will be seeking confirmation of any potential variations to the Mining Work Plan. This will be an ongoing discussion between AGL and ERR.

Country Fire Association

A meeting with the Country Fire Association (CFA) was undertaken on 5 February 2021, prior to the submission of the planning permit application, acknowledging the site's location within a Bushfire Prone Area and subject to design standards outlined in the CFA Guidelines for Renewable Energy Installations.

An overview of the Project including siting and design, approval pathway and consideration for the safe operation of the BESS, including bushfire risk and emergency service access, was presented to the Acting Manager Specialist Risk and Fire Safety.

The CFA is supportive of the Project; however, they will seek to have a Fire Risk Assessment undertaken as part of the Project. AGL acknowledge this and will prepare a Fire Risk Assessment in consultation with the CFA under their guidelines.

Indigenous Stakeholders

An Aboriginal cultural heritage desktop and standard assessment were undertaken in May 2021 to determine the presence of areas of cultural heritage sensitivity (CHS), recommend measures to avoid impacts and determine legislative requirements. No places or artefacts of CHS were identified via the desktop survey and, as such, a mandatory Cultural Heritage Management Plan (CHMP) is not required under the Aboriginal Heritage Act 2006.

AGL has been in consultation with the Registered Aboriginal Party being the Gunaikurnai Land and Waters Aboriginal Corporation (GLaWAC) and have opted to prepare a voluntary CHMP. The CHMP 17739 was approved on the 9 June 2021. CHMP is attached for reference.

1.14 Describe any environmental impact assessments that have been or will be carried out under Commonwealth, State or Territory legislation including relevant impacts of the project

A detailed ecological (flora and fauna) assessment was undertaken by Aurecon for the proposed action. This assessment involved a field based ecological assessment of the site of the proposed action on 1st December 2020, 22nd January 2021 and 24th June 2021, and preparation of an impact assessment report in February 2021 to support a local planning permit application. An MNES assessment report (Attachment 3) has since been prepared based on the information from the initial flora and fauna assessment to document the methods and findings of the assessment, outline any potential impacts on MNES and present the implications under the EPBC Act. The MNES assessment report is provided in Attachment 3 and should be read in conjunction with this referral.



1.15 Is this action part of a staged development (or a component of a larger project)?			
	Yes	S	No
1.16 Is the proposed action related to other actions or proposals in the region?			
	Yes	S	No



Section 2					
Matters of national environmental significance					
2.1 Is the proposed action likely to have any direct or indirect impact on the values of any World Heritage properties?					
□ Yes ☑ No					
2.2 Is the proposed action likely to have any direct or indirect impact on the values of any National Heritage places?					
Yes 🗹 No					
2.3 Is the proposed action likely to have any direct or indirect impact on the ecological character of a Ramsar wetland?					
I Yes I No					
2.4 Is the proposed action likely to have any direct or indirect impact on the members of any listed species or any threatened ecological community, or their habitat?					
🗌 Yes 🗹 No					
2.5 Is the proposed action likely to have any direct or indirect impact on the members of any listed migratory species or their habitat?					
Yes 🗋 No					
Migratory species					
Attachment 3_Updated_Loy_Yang_BESS_MNES_Report, Appendix F,p.35 identified 14 migratory (bird) species that may occur within 5km of the proposed action. Records for 4 out of 14 species also exist within 5km of the study are in the Victorian Biodiversity Atlas. Based on an analysis of the likelihood of occurrence of migratory species in the study area (See Attachment_3_Updated_Loy_Yang_BESS_MNES_Report, Appendix E,p33) it was concluded that 1 migratory species listed under the EPBC Act (Latham's Snipe, Gallinago hardwickii) has a moderate likelihood of occurrence in the study area. The small wetland patches in the study area (Habitat Zones 2 - 5) are very small, disconnected from other aquatic habitats and are					

of poor floristic diversity. This habitat is considered unlikely to be regularly utilised by Latham's Snipe. The study area does not support 'important habitat' for the species. One historical record (from 1977) exists immediately to the south of the proposed BESS site.

Impact

There will be no direct impacts to Latham's Snipe (i.e. no removal of wetland habitats) from the proposed action. The BESS is located north of Habitat Zones 3 – 5 and as such will not directly impact any wetlands. The OHL for the proposed action will span across (over) Habitat Zone 4. By spanning over Habitat Zone 4 any potential direct impact to the narrow wetland areas will be avoided (refer to Attachment 3_Updated_Loy_Yang_BESS_MNES_Report, Section 4.1.2, page 19).

Construction of the OHL in this area will not result in any indirect impacts on Latham's Snipe. With the exception of a narrow area where the OHL will span across, all wetland habitats in the study area have been classified as avoidance areas as shown in Attachment 3_Updated_Loy_Yang_BESS_MNES_Report, Section 4, page 20, Figure 3. There will be no significant impacts to migratory species.

2.5.2 Do you consider this impact to be significant?

2.0.2		Side	
	Yes	$\mathbf{\nabla}$	No
2.6 ls	s the propos	sed a	ction to be undertaken in a marine environment (outside Commonwealth marine areas)?
	Yes	$\mathbf{\nabla}$	No
2.7 ls	2.7 Is the proposed action likely to be taken on or near Commonwealth land?		
	Yes	$\mathbf{\nabla}$	No



2.8 Is the proposed action taking place in the Great Barrier Reef Marine Park?					
	Yes		$\mathbf{\nabla}$	No	
2.9 Is the proposed action likely to have any direct or indirect impact on a water resource from coal seam gas or large coal mining development?					
	Yes		$\mathbf{\nabla}$	No	
2.10	Is the	e propo	osed a	action	n a nuclear action?
	Yes		$\mathbf{\nabla}$	No	
2.11	Is the	e propo	osed a	action	n to be taken by a Commonwealth agency?
	Yes		$\mathbf{\nabla}$	No	
2.12	Is the	e propo	osed a	actior	n to be undertaken in a Commonwealth Heritage place overseas?
	Yes		$\mathbf{\nabla}$	No	
2.13 Is the proposed action likely to have any direct or indirect impact on any part of the environment in the Commonwealth marine area?					
	Yes		\square	No	



Section 3

Description of the project area

3.1 Describe the flora and fauna relevant to the project area

Flora

During the field assessments 39 flora species were recorded, 18 (46%) of which were native. Fifteen fauna species were recorded in/flying over the study area during the survey, 12 of which were common native bird species. Lists of all flora and fauna species recorded in the study area for the proposed action are provided in Attachment

3_Updated_Loy_Yang_BESS_MNES_Report, Appendix C, page 27.

No threatened flora or fauna species, or ecological communities listed under the EPBC Act were recorded in the Project area.

Details of native vegetation present in the Project area is addressed in Attachment

3_Updated_Loy_Yang_BESS_MNES_Report, Section 3.2.2, page 13; and is mapped in Attachment

3_Updated_Loy_Yang_BESS_MNES_Report, Section 3.2.2, Figure 2, page 15.

Threatened species

An EPBC Act PMST was generated to determine the MNES that have potential to occur within a 5km radius of the site of the proposed action (See Attachment_3_Loy_Yang_BESS_MNES_Report, Appendix F). The PMST identified 30 EPBC Act listed threatened species that may occur within 5km of the proposed action. This included 9 birds, 2 fish,2 frogs, 6 mammals and 11 plants. Records for 7 of these 30 species also exist within 5km of the site of the proposed action in the Victorian Biodiversity Atlas (See Attachment_2_Locations_of_EPBC_Act_listed_flora_and_fauna_species_records_within_5_kms). An analysis of the likelihood of occurrence for all 30 EPBC Act listed threatened species in the study area assessed for the proposed action is provided in Attachment_3_Updated_Loy_Yang_BESS_MNES_Report, Appendix D, page 29). Based on a lack of suitable habitat, no threatened flora or fauna species listed under the EPBC Act are considered likely to occur in the study area for the proposed action. For this reason, the proposed action is unlikely to result in any direct or indirect impacts on any EPBC Act listed threatened species.

Further to this, historical records of 3 EPBC Act listed fauna species exist within close proximity to the south east corner of the Project site (See Attachment_2_Locations_of_EPBC_Act_listed_flora_and_fauna_species_records_within_5_kms). These include Australasian Bittern (Botaurus poiciloptilus), White-throated Needletail (Hirundapus caudacutus) and Spottailed Quoll (Dasyurus maculatus maculatus). Each of these species records are at least 40 years old (See Attachment_3_Updaed_Loy_Yang_BESS_MNES_Report, Appendix D, page 29). Due to changes in land use over time and the current lack of habitat in the study area, it is very unlikely that any of these three species would currently occur in the study area. As such, the Project is unlikely to have any direct or indirect impacts on the Australasian Bittern, White-throated Needletail or Spot-tailed Quoll.

Threatened ecological communities

The PMST identified one EPBC Act listed ecological community that may occur within 5km of the proposed action. This was the Gippsland Red Gum (Eucalyptus tereticornis subsp. mediana) Grassy Woodland and Associated Native Grassland ecological community (listed as Critically Endangered). In its treed form, the tree canopy of this ecological community is dominated by Gippsland Red Gum. No Gippsland Red-gum trees were recorded within the BESS site or the OHL. Three scattered Gippsland Red-gums were recorded nearby to the north-south section of the proposed access route study area and are noted in this assessment as Trees 23 to 25 (See Attachment_3_Updated_Loy_Yang_BESS_MNES_Report, Section 4, page 20, Figure 3). These trees were scattered and did not form part of a broader patch of native vegetation, and do not meet the criteria to classify as the listed community (DEWHA 2010). Furthermore, no such areas of native grassland with adequate cover or diversity were recorded in the study area that would meet the classification of the treeless form of this community. It is therefore determined that this ecological community does not occur in the study area.

Whilst no other EPBC Act listed ecological communities were listed in the PMST as potentially being present in the search area, further consideration has been given to one additional EPBC Act listed community, the Seasonal Herbaceous Wetlands (Freshwater) of the Temperate Lowland Plains. While Habitat Zones 2 to 5 in the study area supported wetland vegetation they were each too small (<0.5ha) and degraded, and hence did not meet the thresholds for listing as the threatened ecological community.

No other areas of native vegetation recorded in the study area of the proposed action were consistent with any ecological communities listed under the EPBC Act. It is therefore determined that no EPBC Act listed communities occur in the study area. For this reason, the proposed action is unlikely to result in any direct or indirect impacts on any EPBC Act listed threatened ecological communities.

There will be no significant impact to threatened species or ecological communities.

3.2 Describe the hydrology relevant to the project area (including water flows)

The site of the proposed action largely comprises dry land. Small areas of wetland flora were observed in isolated lower lying parts of the study area, both north and south of the proposed location of the BESS site

Sheepwash Creek is located over one kilometre to the east of the project site, and Traralgon Creek is located over three kilometres to the west. The site is over two kilometres from any area subject to inundation or flooding (as characterised by the Victorian planning schemes). Three small, disconnected ephemeral drainage lines (Habitat Zones 3 to 5) were recorded



in this area that supported a low but consistent cover of native aquatic plants, namely Common Spike-sedge and rush (Juncus spp.).

As the site is unlikely to have a direct or indirect impact on local or regional hydrology, no further investigations are required.

3.3 Describe the soil and vegetation characteristics relevant to the project area

The proposed action is located in the Gippsland Plain in Victoria, approximately eight kilometres north of the Strzeleckii Ranges. Much of the Gippsland Plain region consists of flat to slightly undulating Cainozoic sediments.

Details of the vegetation are provided elsewhere in this referral and in more detail in Attachment

3_Updated_Loy_Yang_BESS_MNES_Report, Sections 3.2.2, page 13; Section 3.2.3 page 16 and Section 3.2.5 page 17.

3.4 Describe any outstanding natural features and/or any other important or unique values relevant to the project area

The project site is an area of farmland situated between the existing coal mine and coal fired power station at Loy Yang. There are no outstanding natural features in the project area.

3.5 Describe the status of native vegetation relevant to the project area

Native vegetation recorded within the study area included:

-Six patches of native vegetation including:

-One patch of Lowland Forest (EVC 16) which consisted of five canopy trees (two large and three small);

-Four small patches of Plains Grassy Wetland (EVC 125);

-One linear patch of Plains Grassy Woodland (EVC 55), which occurred to the west of the BESS site, beyond the western perimeter fence; and

-21 scattered trees (12 large and nine small).

Of the above native vegetation, two native scattered trees are required for removal due to their placement within the footprint of the BESS (Trees 3 and 4). The design of the BESS footprint and proposed location of the OHL have been designed in a way that allows for the retention of all other native vegetation recorded within the study area. No native vegetation removal is required for the use of the proposed access route.

No additional scattered trees are required for removal. As only a very small proportion (<10%) of the Tree Protection Zone of Tree 2 intersects with the 10m firebreak buffer, this tree can be retained. Further details and mapping of the location of native vegetation recorded in the study area is provided in Attachment 3_Updated_Loy_Yang_BESS_MNES_Report, Section 3.2.2 page 15, Figure 2

3.6 Describe the gradient (or depth range if action is to be taken in a marine area) relevant to the project area

The BESS site is flat. The OHL route slopes upward towards Bartons Lane (Hyland Highway) and flattens out as it goes south. The proposed site is not in a marine area.

3.7 Describe the current condition of the environment relevant to the project area

The current condition of the environment in the location of the proposed action is heavily altered from its original (pre-European settlement) state, largely due to its location between the existing coal mine and coal fired power station at Loy Yang. The BESS site's long term farming use is evidenced by the linear banding visible across the paddocks (particularly from aerial photo) and the largely uniform cover of introduced pasture grasses. The BESS site also comprises areas with existing hard surfaces and buildings which are currently utilised for storage of heavy materials and hard waste.

The section of the OHL between the BESS site and the existing coal conveyors comprised a hard surface storage area, and otherwise grazed farmland. The southern section of the OHL occurs along existing internal roadways that service the Loy Yang Power Station and is landscaped with planted trees and shrubs.

The proposed access route includes both existing made road and informal tracks between Hyland Highway and the BESS site. The area immediately adjacent (within 2m) of the existing access road is limited to introduced grasses. Vegetation further than 2m beyond the existing road was not assessed, however was observed to include large areas of eucalypt plantation (to the west), as well some small areas of native vegetation and scattered trees.

3.8 Describe any Commonwealth Heritage places or other places recognised as having heritage values relevant to the project

There are no Commonwealth Heritage places onsite.

3.9 Describe any Indigenous heritage values relevant to the project area

An Aboriginal cultural heritage desktop and standard assessment were undertaken in May 2021 to determine the presence of areas of cultural heritage sensitivity (CHS), recommend measures to avoid impacts and determine legislative requirements.

No places or artefacts of CHS on site and as such a mandatory Cultural Heritage Management Plan is not required as stipulated under the Aboriginal Heritage Act 2006 (Vic).



3.10 Describe the tenure of the action area (e.g. freehold, leasehold) relevant to the project area

The land forms part of the Loy Yang Power Plant and Mining site and sits across three land parcels identified as Lot 1 PS449976, Lot 1 PS340417 and Lot 5V on PP3020 (Certificate of Title Volume 11334 Folio 540, Certificate of Title Volume 1033 Folio 547, and Certificate of Title Volume 10248 and Folio 675 respectively).

The land is freehold and owned by the proponent AGL Generation Pty Ltd and AGL Generation Holdco Pty Ltd (AGL). Describe any existing or any proposed uses relevant to the project area.

3.11 Describe any existing or any proposed uses relevant to the project area

The broader Loy Yang coal mine and power station is used to supply electricity to the state. Parts of the BESS site are currently used for storage of heavy machinery and other materials. Other parts of the site are used for grazing. The proposed use is for the construction and operation of a BESS.



Section 4

Measures to avoid or reduce impacts

4.1 Describe the measures you will undertake to avoid or reduce impact from your proposed action

As detailed in Section 2 of this online referral form, the proposed action is unlikely to result in a significant impact on any threatened species, threatened ecological communities or migratory species listed under the EPBC Act. Furthermore, the project will not result in any significant impact on any MNES. As such, no measures to avoid or reduce impacts to MNES are required. This is outlined in Attachment 3_Updated_Loy_Yang_BESS_MNES_Report in Section 4.1.1, page 18 and Section 4.1.2 page 19.

Efforts in design to avoid and minimise impacts to native vegetation are detailed below. The avoidance areas are also identified in Attachment 3_Updated_Loy_Yang_BESS_MNES_Report, Section 4.1.2, page 20, Figure 3.

The location chosen for the BESS is largely disturbed, mainly comprising farmland as well as an area with an existing hard surface. This initial location chosen for the BESS shows the proponents effort to avoid native vegetation at the site selection phase of the project (also see Attachment 3_Updated_Loy_Yang_BESS_MNES_Report, Section 3.2.1, page 11 for more detail on the site description).

Further to the above, the proponent has adhered to the avoid and minimise principles by engaging Aurecon to provide an assessment of the location and quality of native vegetation in the broader study area. Following this assessment, efforts have been made to locate the BESS, OHL and associated infrastructure in a way that avoids native vegetation. This has been achieved in the current proposed design which allows for the retention of all patches of native vegetation, and all but two scattered trees (Trees 3 and 4) which are required to be removed due to their location in the BESS footprint. No native vegetation is proposed to be removed along the OHL route and no native vegetation is required for removal within the 10m firebreak around the BESS. No native vegetation removal is required for the use of the proposed access route.

Further detail on the retention of native vegetation is provided as follows:

- All treed patches of native vegetation (Habitat Zones 1 and 6) will be retained. While all trees in Habitat Zone 6 are located beyond (to the west) of the BESS site perimeter fence, some of the tree canopies (particularly those of large trees) extend over the fence. An appropriate buffer has been implemented between the BESS and the dripline of Habitat Zone 6, so that all trees in this patch can be retained.

- All small patches of wetland native vegetation (Habitat Zones 2, 3, 4 and 5) will be retained. While the OHL will pass over Habitat Zones 3 and 4, no earthworks or excavation will be undertaken in these areas. Appropriate no-go zones will be established around Habitat Zones 3 and 4 to avoid impacts during works.

- All scattered trees (with the exception of Trees 3 and 4) will be retained. The BESS, OHL and associated infrastructure has been configured and located in a way that retains the vast majority of native vegetation in the study area.

4.2 For matters protected by the EPBC Act that may be affected by the proposed action, describe the proposed environmental outcomes to be achieved

N/A. No matters protected by the EPBC Act will be affected by the proposed action.



Section 5				
Conclusion on the likelihood of significant impacts				
5.1 You indicated the below ticked items to be of significant impact and therefore you consider the action to be a controlled				
action				
World Heritage properties				
National Heritage places				
Wetlands of international importance (declared Ramsar wetlands)				
Listed threatened species or any threatened ecological community				
Listed migratory species				
Marine environment outside Commonwealth marine areas				
Protection of the environment from actions involving Commonwealth land				
Great Barrier Reef Marine Park				
A water resource, in relation to coal seam gas development and large coal mining development				
Protection of the environment from nuclear actions				
Protection of the environment from Commonwealth actions				
Commonwealth Heritage places overseas				
Commonwealth marine areas				
5.2 If no significant matters are identified, provide the key reasons why you think the proposed action is not likely to have a				
significant impact on a matter protected under the EPBC Act and therefore not a controlled action				
No MNES have been recorded in the Project Footprint and none are considered likely to occur. As such, the Project will not result in any direct or indirect impacts on any MNES. Given no impacts are proposed to MNES, it is considered the Project is Not a Controlled Action.				



Section 6

Environmental record of the person proposing to take the action

6.1 Does the person taking the action have a satisfactory record of responsible environmental management? Explain in further detail

Yes - AGL operates its assets and projects under a rigorous Health, Safety and Environmental Management System (HSEMS). The HSEMS outlines the policies/ procedures to support AGL to meet its vision of zero harm to its people and the environment and applies to all AGL subsidiaries.

The HSE Policy commits AGL to conduct its business in a way that prevents harm to its people, customers and the community, and minimises impact to the environment.

Attachment_5_AGL-HSE.pdf contains the Health, Safety and Environmental Management System.

6.2 Provide details of any past or present proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against either (a) the person proposing to take the action or, (b) if a permit has been applied for in relation to the action – the person making the application

AGL Generation Pty Ltd and AGL Generation Holdco Pty Ltd (AGL) regards sound environmental management and protection as an integral part of its business and of playing its part in the community. It is committed to excellence in this area in all of its activities. This commitment is reflected in the AGL Group Health, Safety and Environment Policy.

AGL's businesses are subject to a range of environmental laws and regulations as well as project and site-specific environmental permits and approvals issued at both the Federal and State Government levels.

There are no past or present proceedings under a Commonwealth, State or Territory law associated with AGL Generation Pty Ltd and AGL Generation Holdco Pty Ltd.

6.3 If it is a corporation undertaking the action will the action be taken in accordance with the corporation's environmental policy and framework?

🗹 Yes 🗌 No

6.3.1 If the person taking the action is a corporation, provide details of the corporation's environmental policy and planning framework

AGL's HSEMS would apply to the proposed action.

The HSEMS includes details procedures and obligations on incident management and reporting, risk, training, compliance and training. All contractors who will be engaged to undertake works on behalf of AGL will be required to complete a prequalification process, which includes an assessment of their HSE policies and competencies. Only those contractors with adequate systems in place will be progressed with AGL.

The HSEMS will be used to assure compliance with the conditions of all approvals granted at both a State and Commonwealth level, as well as existing regulatory requirements.

6.4 Has the person taking the action previously referred an action under the EPBC Act, or been responsible for undertaking an action referred under the EPBC Act?

🗹 Yes 🗌 No

6.4.1 EPBC Act No and/or Name of Proposal

Below is a list of the previous project referred in the past 10 years

- 2021/8918 Broken Hill Battery Energy Storage System
- 2021/8889 Torrens Island Battery
- 2020/8844 Liddell Battery, Decoupling and Bayswater Ancillary works
- 2020/8623 Bayswater Power Station water infrastructure upgrade
- 2019/8425 Newcastle Power Station Project
- 2018/8298 Gas Import Facility
- 2013/6742 Nyngan Solar Plant
- 2012/6638 Northern Expansion of Camden Gas Project
- 2012/6621 Broken Hill Solar Plant
- 2011/5976 Coopers Gap Wind Farm
- 2010/5752 Newcastle Gas Storage Facility



Section 7
Information sources

Reference source

DAWE 2021, EPBC Act Protected Matters Report. Department of Environment and Energy, Canberra, ACT, generated 12th January 2021

Reliability

High

Uncertainties

Nil uncertainties for Commonwealth published guidance.

Reference source

DoE 2013, MNES, Significant Impact Guidelines 1.1 Environment Protection and Biodiversity Conservation Act 1999, Department of Environment, now DAWE.

Reliability

High

Uncertainties

Nil uncertainties for Commonwealth published guidance.

Reference source

DoEE, 2017, EPBC Act Policy Statement 3.21 - Industry guidelines for avoiding, assessing and mitigating impacts on EPBC Act listed migratory shorebird species, Department of Environment and Energy, now DAWE.

Reliability

High

Uncertainties

Nil uncertainties for Commonwealth published guidance.

Reference source

DEWHA 2010, Gippsland Red Gum Grassy Woodland and Associated Native Grassland: A nationally threatened ecological community EPBC Policy Statement 3.22, Department of Environment, Water, Heritage and the Arts (DEWHA).

Reliability

High

Uncertainties

Nil uncertainties for Commonwealth published guidance.



Section 8		
Proposed alte	ernative	S
Do you have a	ny feasi	ble alternatives to taking the proposed action?
Yes	$\mathbf{\nabla}$	No



Section 9					
Person proposing the action					
9.1.1 Is the person proposing the action an organisation or business?					
Organisation					
Organisation name (as registered for ABN/ACN)	AGL Generation Proprietary Limited				
Business name					
ABN	17155344077				
ACN					
Business address	200 George St, Sydney, 2000, NSW, Australia				
Postal address					
Main Phone number	0407788412				
Fax					
Primary email address	sgalway@agl.com.au				
Secondary email address					
 9.1.2 I qualify for exemption from fees under Regulation 5.23(1)(ii) of the Small business Not applicable 	EPBC Regulations because I am:				
9.1.2.2 I would like to apply for a waiver of full or partial fees under Regional Stress Stress No	ulation 5.21A of the EPBC Regulations				
9.1.3 Contact (for an organisation - the contact details of the perso	on authorised to sign on behalf of the organisation)				
First name	Stuart				
Last name	Galway				
Job title	Group Manager Land & Approvals				
Phone					
Mobile					
Fax					
Email	sgalway@agl.com.au				
Primary address	Locked Bag 14120, Melbourne, 3001, Vic, Australia				
Address					
Declaration: Person proposing the action (To be signed by the person at 9.1.3)					
I,Stuart Galway on behalf of AGL Generation Proprietary Limite	d, declare that				
to the best of my knowledge the information I have given on, or attached to the EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence. I declare that I am not taking the action on behalf or for the benefit of any other person or entity.					
Signature:					
	I, Stuart Galway on behalf of AGL Generation Proprietary Limited , the person				
proposing the action, consent to the designation of <u>Stuart Galway on behalf of AGL Generation Proprietary Limited</u> as the proponent for the purposes of the action described in this EPBC Act Referral.					
Signature:					



Proposed designated proponent				
9.2.1 Is the proposed designated proponent an organisation or business?				
🗹 Yes 🔲 No				
Organisation				
Organisation name (as registered for ABN/ACN)	AGL Generation Proprietary Limited			
Business name				
ABN	17155344077			
ACN				
Business address	200 George St, Sydney, 2000, NSW, Australia			
Postal address				
Main Phone number	0407788412			
Fax				
Primary email address	sgalway@agl.com.au			
Secondary email address				
9.2.2 Contact (for an organisation - the contact details of the perso	on authorised to sign on behalf of the organisation)			
First name	Stuart Stuart			
Last name	Galway			
Job title	Group Manager Land & Approvals			
Phone	0407788412			
Mobile				
Fax				
Email	sgalway@agl.com.au			
Primary address	200 George St, Sydney, 2000, NSW, Australia			
Address				
Declaration: Proposed Designated Proponent				
Stuart Galway on behalf of AGL Generation Proprietary Limited				
proposed designated proponent, consent to the designation of myself as the proponent for the purposes of the action described in this EPBC Act Referral.				
Signature:				



Referring party (person preparing the information)					
9.3.1 Is the referring party an organisation or a business?					
Yes No					
Organisation					
Organisation name (as registered for ABN/ACN)	AGL Generation Proprietary Limited				
Business name					
ABN	17155344077				
ACN					
Business address	200 George St, Sydney, 2000, NSW, Australia				
Postal address					
Main Phone number	0407788412				
Fax					
Primary email address	sgalway@agl.com.au				
Secondary email address					
9.3.2 Contact (for an organisation - the contact details of the personal sector of the pers	on authorised to sign on behalf of the organisation)				
First name	Stuart				
Last name	Galway				
Job title	Group Manager Land & Approvals				
Phone	0407788412				
Mobile					
Fax					
Email	sgalway@agl.com.au				
Primary address	200 George St, Sydney, 2000, NSW, Australia				
Address					
Declaration: Referring party (person preparing the information)					
I,Stuart Galway on behalf of AGL Generation Proprietary Limited, declare that					
to the best of my knowledge the information I have given on, or attached to this EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence.					
Signature:					



Appendix A Attachment	
action_area_images	Attachment_1_Study_area_and_locality_map.pdf
action_area_images	LOYYANG_KML.kmz
action_area_images	Attachment_4_Study_Area.pdf
public_consultation_reports	CHMP_17739_100521_REDACTED.pdf
shp	0-OHL-66kV-New.shp
supporting_tech_reports	Attachment_3_Loy_Yang_BESS_MNES_Report.pdf
supporting_tech_reports	Attachment_2_Locations_of_EPBC_listed_species_within_5
supporting_tech_reports	_kms.pdf Attachment 3_Updated_Loy_Yang_BESS_MNES_Report.
corp_env_policy_docs	pdf Attachment_5_AGL-HSE.pdf
corp_env_policy_docs	Attachment 6_HSE_Policy_2020.pdf
Appendix B	
Coordinates	
Area 1	
-38.24548838355,146.58446264919	
-38.245551205989,146.58444996187	
-38.245577126194,146.58465424887	
-38.245579695531,146.58466643937	
-38.245582671533,146.58467486773	
-38.245666546894,146.58487507233	
-38.245825510438,146.58677122138	
-38.245826072255,146.5867761814	
-38.245827659394,146.58678438461	
-38.245884833629,146.58701688711	
-38.245874769307,146.58717875624	
-38.245874602783,146.58718445178	
-38.245874629126,146.58718630412	
-38.245885792495,146.58763585635	
-38.245886629915,146.58764590603	
-38.245887125581,146.58764897852	
-38.24603546613,146.58847187001	
-38.246174327625,146.58936216061	
-38.246723408367,146.59394475319	
-38.246725344728,146.59395526241	
-38.246728557513,146.59396525618	
-38.246732967133,146.59397448692	
-38.246738464345,146.59398272596	
-38.246744912964,146.5939897692	
-38.246752153236,146.59399544213	
-38.246760005795,146.59399960423	
-38.246768276104,146.59400215239	
-38.246776759279,146.59400302347	
-38.246785245164,146.5940021959	
-38.249632918258,146.59343598171	
-38.250163703306,146.59332846443	
-38.250494095619,146.59325876265	
-38.250765015539,146.59321609976	
-38.250767722897,146.59321558409	
-38.251101499853,146.59314110677	
-38.251543059669,146.59307189077	
-38.251634566219,146.59308888512	
-38.251825479995,146.59315183437	
-38.252322649012,146.59336697837	
-38.252328249088,146.59336898269	



-38.252440772825,146.5935541001
-38.252506458068,146.59382943387
-38.252695659933,146.5938343022
-38.252682909245,146.5926738298
-38.252367290566,146.59267391717
-38.252330035676,146.59322526243
-38.25185850206,146.59302121225
-38.251854645947,146.59301974456
-38.251658925669,146.59295521095
-38.251654473802,146.59295399459
-38.251653153452,146.59295372766
-38.251551505842,146.59293485056
-38.251543432676,146.59293412757
-38.251537036524,146.5929346444
-38.251086870966,146.59300520982
-38.251084133884,146.59300573024
-38.250750341707,146.59308021168
-38.250479674048,146.59312283479
-38.250477463804,146.59312324255
-38.250146359209,146.59319309519
-38.249615968758,146.59330053351
-38.246822169146,146.59385604197
-38.246281065976,146.58934003866
-38.246280733845,146.58933758577
-38.246141406471,146.58844428296
-38.246141074195,146.58844230777
-38.245993722443,146.58762489847
-38.245982817403,146.58718576995
-38.245993467765,146.58701448739
-38.245993571671,146.58700578741
-38.245992806088,146.58699714075
-38.245991183337,146.58698868658
-38.245932491245,146.58675001205
-38.245772983489,146.58484737682
-38.245771819352,146.58483876836
-38.245769802653,146.584830417
-38.245766966038,146.58482245792
-38.245682388897,146.58462057832
-38.245657989884,146.58442823837
-38.247027367328,146.58415040837
-38.247011837733,146.58399878244
-38.248012195629,146.58379534433
-38.247354911298,146.58104987223
-38.248687187688,146.58077887547
-38.248032957454,146.5781188779
-38.249173633653,146.57774141671
-38.249753722294,146.57607447214
-38.249644763099,146.57549991272
-38.249601316892,146.57418592338
-38.249593102078,146.57276873687
-38.249641191285,146.57179211084
-38.249692179694,146.57086450571
•



-38.250523514659,146.57050799136
-38.25123026882,146.57020450923
-38.251769481445,146.56998315433
-38.252418825486,146.56972755562
-38.253637285345,146.57011731756
-38.25410516569,146.57112893362
-38.254378340464,146.57133027508
-38.254552284196,146.5712276103
-38.25465174657,146.57134901099
-38.254753755594,146.57158860951
-38.255754709303,146.57078003731
-38.255653447182,146.57051102622
-38.255167105589,146.57023919779
-38.254058175774,146.56973196211
-38.25364832164,146.56953599525
-38.252841187885,146.56929150749
-38.252408484084,146.56924098365
-38.251434245123,146.56955414158
-38.250793504317,146.56983768249
-38.249956313784,146.57014780781
-38.249231488038,146.57047252403
-38.249096396636,146.5708242844
-38.24905338929,146.57222839778
-38.249019958089,146.57296104246
-38.248964209289,146.57417702918
-38.249010727966,146.57483799631
-38.249048816298,146.5753871118
-38.249045695773,146.57619907717
-38.248464801086,146.57679616574
-38.247777682515,146.57697476952
-38.247649465125,146.57636742815
-38.246797094402,146.57664290152
-38.246932424842,146.57722448274
-38.247439843752,146.5791618703
-38.247032174111,146.57926394826
-38.247101638256,146.57958124059
-38.244218737945,146.58018165033
-38.244261510823,146.58078239601
-38.244444785069,146.58075902032
-38.244644250464,146.58445038258
-38.245443230854,146.5843177719
-38.24548838355,146.58446264919