Title of Proposal - Newcastle Power Station Project

Section 1 - Summary of your proposed action

Provide a summary of your proposed action, including any consultations undertaken.

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 Proposal would involve the construction and operation of a power station with a nominal capacity of about 250MW. The Proposal would supply electricity to the grid at short notice during periods of high electricity demand, particularly during low supply periods from intermittent renewable sources or during supply outages.

The Proposal would also involve the construction and operation of a gas pipeline(s) and an electricity transmission line. The pipeline(s) would supply the proposed power station with gas from the existing Hexham to Newcastle Gas Storage Facility (NGSF) high pressure pipeline (HPP). A new electricity transmission line would transfer the electricity produced by the proposed power station to the national electricity network via connection to the existing 132kV Tomago switchyard.

The Proposal has a capital investment value of approximately $400 million and is anticipated to be operational in 2022.

The main elements of the Proposal are as follows:

• Power station comprising of either large reciprocating engine generators or aero-derivate gas turbine generators, necessary supporting ancillary equipment and supporting infrastructure. The power station would be capable of operating with diesel fuel, if necessary.
• 132kV electricity transmission line to the existing Tomago switching yard, operated by TransGrid.
• Gas transmission/storage pipeline(s) and receiving station, compressor units, and ancillary infrastructure.
• Storage tanks and laydown areas.
• Water management infrastructure including pond(s), a connection to Hunter Water potable and non-potable service and discharge infrastructure in line with Hunter Water requirements.
• Diesel storage and truck unloading facilities.
• Site access road.
• Office / administration, amenities, workshop / storage areas and carparking.
2.1.1 Power station
The power station would be a dual fuel power plant, capable of generating about 250MW of electricity. The proposed power station would either consist of large reciprocating engine generators or aero-derivate gas turbine generators. Generation units would be dual fuel capable, meaning they would be able to be supplied by natural gas and/or liquid fuel.

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

Gas Turbine Technology

Electricity would be generated by gas turbine technology through the combustion of natural gas and/or liquid fuel in turbines. With its heritage in the airline industry, aeroderivative gas turbine units consist of a compressor, combustion chamber, turbine and generator. Air is compressed to a high pressure before being admitted into the combustion chamber. Fuel (natural gas or diesel as required) is injected into the combustion chamber where combustion occurs at very high temperatures and the gases expand. The resulting mixture of hot gas is admitted into the turbine causing the turbine to turn, generating power. In an open cycle configuration, hot exhaust gas is vented directly to the atmosphere through an exhaust stack, without heat recovery.

Reciprocating Engine Technology

With its heritage in the shipping industry and a form of internal combustion engine, reciprocating engines used for power generation harness the controlled ignition of gas and/or diesel to drive a piston within a cylinder. A number of pistons move sequentially to rotate a crank shaft which turns the generator.

Ancillary facilities

The power station, regardless of chosen technology, would require supporting ancillary facilities. These would include:
• Natural gas reception yard potentially including gas metering, pressure regulation, compression, heating stations, pigging facilities and provision for flaring.
• Generator circuit breakers, generator step-up transformers and switchyard including overhead line support gantry.
• Water collection and treatment facilities.
• Water storage tanks and ponds.
• Truck loading/unloading facilities.
• Liquid fuel storage tanks.
• Emergency diesel generators with associated fuel storage.
• Closed circuit cooling systems.
• Control room.
• Offices and messing facilities.
• Electrical switch rooms.
• Occupational health and safety systems including an emergency warning and evacuation system.
• Workshop and warehouse.
• Firefighting system.
• Communication systems.
• Security fence, security lighting, stack aviation warning lights (if required) and surveillance system.
• Landscaped areas and staff parking areas.

• Concrete foundations, bitumen roadways, concrete pads in liquid fuel unloading station and gas turbine or engine unit maintenance areas.
• Concrete bunded areas with drains for liquid fuel tanks, liquid chemicals store, oil filled transformers (if installed) and other facilities where contaminated liquids could leak.
• Level construction and laydown area.
• Engineered batters to support and protect the power plant platform.
• Sedimentation pond and associated diversion drain and earth bunding.

2.1.2 Gas pipeline

Natural gas fuel will originate from the existing gas network and the many facilities that feed it. The nearest supply point in the gas network is the AGL owned and operated Hexham to NGSF HPP which terminates at the AGL owned and operated NGSF. The NGSF is located about two kilometres north east of the proposed power station site.

A new gas pipeline connection to the Hexham to NGSF HPP will supply the power station. This connection would be made east of Old Punt Road to the south-eastern section of the proposed power station site. The pipeline will be constructed of approximately 500m of DN 300 (12”) ASME Class 600 pipe.

To augment the proposed gas supply, AGL is considering a new gas pipeline to connect the power station to the gas supply available from the NGSF. The pipeline route will leave the NGSF in the existing HPP easement towards the Pacific Highway before heading southwest to the power station site. AGL will enter negotiations for a pipeline easement in accordance with the Pipelines Act 1967 (NSW) (Pipelines Act). The pipeline will be constructed of approximately 4.6km of DN 1050 ASME Class 900 pipe.

Gas compression, conditioning, heating and other facilities necessary to transport and store gas are also likely to be required and would be constructed at the proposed power station site.

2.1.3 Electricity transmission line

A high voltage 132kV electricity transmission line would be required to connect the proposed power station to the TransGrid Tomago 132kV switchyard, approximately 500 metres south east. The switching station would transfer the electricity produced at the power station to the regional electricity transmission system. The transmission line will be located alongside the existing transmission line running northwest from the switchyard before heading west to the proposed power station.

1.3 What is the extent and location of your proposed action? Use the polygon tool on the map below to mark the location of your proposed action.

Area	Point	Latitude	Longitude
Power station study area	1	-32.81422463396	151.70148183429
Power station study area	2	-32.814242667675	151.70150329196
Power station study area	3	-32.810707989714	151.70890618884

Area	Point	Latitude	Longitude
Power station study area	4	-32.810455507337	151.70944263065
Power station study area	5	-32.8102390933	151.7097859534
Power station study area	6	-32.809932505846	151.7101721915
Power station study area	7	-32.809499674697	151.71062280261
Power station study area	8	-32.809229154159	151.71085883701
Power station study area	9	-32.809030771908	151.71098758304
Power station study area	10	-32.808579901508	151.71126653278
Power station study area	11	-32.810689955283	151.72813226306
Power station study area	12	-32.811898254116	151.727874771
Power station study area	13	-32.809968575013	151.71300460422
Power station study area	14	-32.811086711935	151.71276856982
Power station study area	15	-32.813052434675	151.72750999057
Power station study area	16	-32.813629519332	151.72738124454
Power station study area	17	-32.813629519332	151.72744561755
Power station study area	18	-32.813629519332	151.72772456729
Power station study area	19	-32.813575417805	151.72806789004
Power station study area	20	-32.813521316244	151.72836829745
Power station study area	21	-32.813431146904	151.72858287418
Power station study area	22	-32.813322943575	151.72871162021
Power station study area	23	-32.81319670619	151.72873307788
Power station study area	24	-32.813070468627	151.7287974509
Power station study area	25	-32.812890128939	151.7287974509
Power station study area	26	-32.812962264858	151.72899056995
Power station study area	27	-32.81326884186	151.72884036624

Area	Point	Latitude	Longitude
Power station study area	28	-32.813377045256	151.72884036624
Power station study area	29	-32.813521316244	151.72869016254
Power station study area	30	-32.813629519332	151.7284112128
Power station study area	31	-32.813665586999	151.72813226306
Power station study area	32	-32.813773789911	151.72738124454
Power station study area	33	-32.813972161575	151.72735978687
Power station study area	34	-32.812132698255	151.71203900897
Power station study area	35	-32.81231303948	151.71188880527
Power station study area	36	-32.813359011366	151.7110948714
Power station study area	37	-32.813503282384	151.71118070209
Power station study area	38	-32.815883720363	151.71197463596
Power station study area	39	-32.816064053975	151.71326209628
Power station study area	40	-32.816605052615	151.71309043491
Power station study area	41	-32.81649685315	151.71197463596
Power station study area	42	-32.816731285156	151.71060134494
Power station study area	43	-32.816605052615	151.70875598514
Power station study area	44	-32.815919787115	151.70283366763
Power station study area	45	-32.81507221458	151.70227576816
Power station study area	46	-32.814964013249	151.70206119144
Power station study area	47	-32.81422463396	151.70148183429

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 power station site is located at 1940 Pacific Highway, Tomago (Lot 3 DP 1043561) about five kilometres south west of Raymond Terrace and about two kilometres north east of Hexham. The site has been used mainly for rural activities including grazing and agricultural purposes and hosts a single storey residential dwelling. The Hunter River is about 470 metres north-west. The site retains some isolated trees and strands of native vegetation are generally confined to the boundaries (refer to Attachment A - Figure 3).

The adjacent lot to the west (Lot 2 DP 1043561) would be used as a laydown area or similar, during construction and for water storage and other ancillary infrastructure during operation.

Both lots are owned by AGL and are zoned industrial. The site is more than two kilometres from the closest zoned residential area. Road access to the proposed power station site would be provided with a new access road that would extend from Old Punt Road to the proposed power station site.

The proposed utilities (gas and electricity) are proposed to be located in investigation areas as shown in Attachment A (Figure 2). The utilities investigation areas would contain a new 132kV transmission line and one or more new gas pipelines (Attachment A - Figure 3).

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

25.19 ha

1.7 Is the proposed action a street address or lot?

Lot

1.7.2 Describe the lot number and title. Lots 2 and 3 DP 1043561, Lot 4 DP 1043561, Lots 1203 and 1202 DP 1229590 and Lot 202 DP 1173564

1.8 Primary Jurisdiction.

New South Wales

1.9 Has the person proposing to take the action received any Australian Government grant funding to undertake this project?

No

1.10 Is the proposed action subject to local government planning approval?

No

1.11 Provide an estimated start and estimated end date for the proposed action.

Start date 10/2020

End date 11/2022

1.12 Provide details of the context, planning framework and State and/or Local government requirements.

Environmental Planning and Assessment Act 1979

The Environmental Planning and Assessment Act 1979 (NSW) (EP&A Act), the Environmental Planning and Assessment Regulation 2000 (NSW) and associated environmental planning instruments (including State Environmental Planning Policies (SEPPs) and Local Environmental Plans (LEPs)) provide the framework for the assessment of the environmental impact of development proposals in New South Wales.

Sections 5.12 and 5.13 of Part 5 of the EP&A Act provide for the declaration of SSI and critical SSI. Section 5.12(4) of the EP&A Act enables a SEPP or an order of the NSW Minister for Planning (published on the NSW legislation website) to declare development to be SSI. Section 5.13 enables the Minister to declare SSI to be critical SSI if "…in the opinion of the Minister, it is essential to the State for economic, environmental or social reasons".

The NSW Minister for Planning declared the Proposal to be critical SSI in December 2018 after a request was made to the Minister by AGL on 5 November 2018. The Declaration by the Minister came into effect in December 2018 and has been included within Schedule 5 of the State and Regional Development SEPP.

In accordance with section 5.16 of the EP&A Act, the Planning Secretary has prepared the Secretary's environmental assessment requirements (SEARs), which require the preparation of an EIS for the Proposal for submission to the consent authority, the NSW Minster for Planning. SEARs were provided to AGL on 18 February 2019.

Environmental planning instruments

State Environmental Planning Policy (State and Regional Development) 2011

The State Environmental Planning Policy (State and Regional Development) 2011 (State and Regional Development SEPP) identifies development to which the critical SSI assessment and approval process under Part 5 of the EP&A Act applies. In addition, the State and Regional Development SEPP identifies development that is State significant infrastructure and State significant development.

Development specified in Schedule 5 is declared to be critical SSI. Clause 16 of the State and Regional Development SEPP provides:

Development specified in Schedule 5:

a) May be carried out without development consent under Part 4 of the Act, and

b) Is declared to be State significant infrastructure for the purposes of the Act if it is not

otherwise so declared, and

c) Is declared to be critical State significant infrastructure for the purposes of the Act.

Therefore, as the Proposal has been declared critical SSI it requires approval under Division 5.2 of the EP&A Act.

State Environmental Planning Policy (Infrastructure) 2007

The State Environmental Planning Policy (Infrastructure) 2007 (Infrastructure SEPP) aims to facilitate the effective delivery of infrastructure across NSW. Division 4 of the Infrastructure SEPP outlines provisions for electricity generating works. Clause 34(1) allows for development for the purpose of electricity generating works to be carried out by any person with consent on any land in a prescribed rural, industrial or special use zone. Electricity generating works are defined as 'a building or place used for the purpose of making or generating electricity'.

The proposed power station is located within land zoned IN1 General Industrial under the Port Stephens Local Environmental Plan 2013 (Port Stephens LEP) which is a listed zoning in Clause 34(1) and is therefore permissible with consent under the Infrastructure SEPP.

Under Clause 66A(1) a person may undertake development for the purpose of a gas pipeline without consent on any land provided the pipeline is subject to a licence under the Pipelines Act 1967 (NSW) or a licence or authorisation under the Gas Supply Act 1996 (NSW). The proposed gas pipeline is permissible without consent subject to AGL gaining the appropriate licences.

Development for the purpose of above ground electricity transmission lines can be undertaken without consent on any land by electricity supply authorities under Clause 41. However, as the proposal is considered critical SSI, approval for the above ground electricity transmission lines would be obtained under Division 5.2 of the EP&A Act.

Clause 104 of the Infrastructure SEPP refers to traffic generating developments and, Schedule 3 lists the types of developments that must be referred to Roads and Maritime Services (RMS). As electricity generating works are not listed within Schedule 3 and the Proposal would not trigger Clause 104, as the Proposal would not accommodate 200 or more vehicles, the Proposal does not need to be referred to RMS.

The provisions of the Infrastructure SEPP prevail where an inconsistency arises between the Infrastructure SEPP and any local, regional or State policy, with the exception of the State Environmental Planning Policy (Coastal Management) 2018 (Coastal Management SEPP) and the State and Regional Development SEPP. Clause 16 of the State and Regional Development SEPP operates to override the Infrastructure SEPP and provides that the project may be carried out without development consent under Division 4 of the EP&A Act. Rather, as the project is critical SSI, it instead requires approval under Division 5.2 of the EP&A Act.

State Environmental Planning Policy No. 33 – Hazardous and Offensive Development

Under the State Environmental Planning Policy No. 33 – Hazardous and Offensive Development (SEPP 33) developers and consent authorities are required to assess the hazards and risks associated with a proposed development before approval is given for construction and

operation. A potentially hazardous industry under SEPP 33 is defined as development for the purposes of any industry where, if the development were to operate without employing any measures to reduce or minimise its impact the development would pose a significant risk to human health, life or property or to the biophysical environment.

Developments that are classified as potentially hazardous under SEPP 33 are required by Clause 12 to have a preliminary hazard analysis prepared to determine the risk to people, property and the biophysical environment at the proposed location and in the presence of controls.

During preparation of the environmental assessment, consideration would be given to whether the proposal is considered potentially hazardous or offensive.

State Environmental Planning Policy (Coastal Management) 2018

Approximately 800 metres to the west and 400 metres north of the proposed power station site there is an area mapped as ‘coastal wetlands’ and a ‘proximity area for coastal wetlands’ under the Coastal Management SEPP. No works are to be undertaken within these areas, however the biophysical, hydrological and ecological impacts of the works would be considered, and appropriate mitigation measures would be implemented to minimise any potential to affect nearby coastal wetlands. The assessment would also need to consider and confirm that the land for the Proposal does not fall within any other categories of coastal zone.

Port Stephens Local Environmental Plan 2013

The proposed power station site and the investigation areas for the gas pipeline and electrical transmission line are zoned IN1 General Industrial by the Port Stephens LEP. The objectives of zone IN1 as stated in the Port Stephens LEP are:

- to provide a wide range of industrial and warehouse land uses,
- to encourage employment opportunities,
- to minimise any adverse effect of industry on other land uses,
- to support and protect industrial land for industrial uses.

Electricity generation is not listed among developments which are permitted with consent for the zone under the Port Stephens LEP; however, under Clause 34(1) of the Infrastructure SEPP the Proposal is permissible with consent on any land in a prescribed rural, industrial, or special use zone. The investigation areas for the proposed gas pipeline and electrical transmission routes are also zoned IN1 by the Port Stephens LEP.

Clause 16 of the State and Regional Development SEPP operates to override both the Port Stephens LEP and Infrastructure SEPP and provides that the project may be carried out without development consent under Division 4 of the EP&A Act. However, as the Proposal has been declared critical SSI, it instead requires approval under Division 5.2 of the EP&A Act.

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

The Proposal occurs within the Worimi Local Aboriginal Land Council (LALC) boundary. To date, Aboriginal and stakeholder consultation has been limited due to commercial sensitivities. As the Proposal has now moved into the design and environmental phase, stakeholder consultation has commenced, with advertising for Registered Aboriginal Parties on 6 December 2018 and consultation letters circulated to Aboriginal stakeholder organisations and agencies.

AGL has an existing Community Dialogue Group (CDG) for the NGSF. AGL has invited the members of the existing CDG to be involved in the Proposal. During the preparation of the environmental assessment consultation would be undertaken with members of the NGSF CDG and additional stakeholders including:

- Local Councillors and state and Federal Members of Parliament.
- Tomago Aluminium Company.
- Newcastle Airport.
- Ausgrid.
- TransGrid.
- Worimi Local Aboriginal Land Council and Aboriginal stakeholder group(s).
- Hunter Water
- Department of Defence
- Civil Aviation Safety Authority
- Business community groups.
- The community, including potentially affected land owners.

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.

An Environmental Impact Assessment WILL be carried out under NSW legislation.

The NSW Department of Environment and Planning provided its requirements in February 2019 (attached).

1.15 Is this action part of a staged development (or a component of a larger project)?

No

1.16 Is the proposed action related to other actions or proposals in the region?

Yes

1.16.1 Identify the nature/scope and location of the related action (Including under the relevant legislation).

The proposed power station is to be located in the Tomago area where AGL has an existing presence as the owner and operator of the NGSF. This facility supports the distribution of gas to homes and businesses across the greater Sydney and Newcastle region. Connection of the power station to the gas supply at the NGSF with a new gas pipeline and/or connection of the power station directly to the existing Hexham to Tomago HPP is being investigated as part of the Project.

Approval for the NGSF project under section 75J of the EP&A Act was provided by the NSW Department of Planning and Infrastructure (now the Department of Planning and Environment) on 10 May 2012. Two modifications to this approval under section 75W of the EP&A Act were approved on 5 February 2013 and 31 January 2014.

The NGSF project was determined to be a “controlled action” under the EPBC Act. Approval of the project under sections 130 and 133 of the EPBC Act was granted by the Department of Sustainability, Environment, Water, Population and Communities (now Department of the Environment & Energy) on 18 July 2012. The approval under the EPBC Act included seven conditions. The approval conditions relevant to environmental management during operation of the NGSF were addressed in the site’s Operation Environmental Management Plan.

Section 2 - Matters of National Environmental Significance

Describe the affected area and the likely impacts of the proposal, emphasising the relevant matters protected by the EPBC Act. Refer to relevant maps as appropriate. The interactive map tool can help determine whether matters of national environmental significance or other matters protected by the EPBC Act are likely to occur in your area of interest. Consideration of likely impacts should include both direct and indirect impacts.

Your assessment of likely impacts should consider whether a bioregional plan is relevant to your proposal. The following resources can assist you in your assessment of likely impacts:

• Profiles of relevant species/communities (where available), that will assist in the identification of whether there is likely to be a significant impact on them if the proposal proceeds;

• Significant Impact Guidelines 1.1 – Matters of National Environmental Significance;

• Significant Impact Guideline 1.2 – Actions on, or impacting upon, Commonwealth land and Actions by Commonwealth Agencies.

2.1 Is the proposed action likely to have ANY direct or indirect impact on the values of any World Heritage properties?

No

2.2 Is the proposed action likely to have ANY direct or indirect impact on the values of any National Heritage places?

No

2.3 Is the proposed action likely to have ANY direct or indirect impact on the ecological character of a Ramsar wetland?

Yes

2.3.1 Impact table

Wetlands	Impact
Hunter Estuary Ramsar wetlands	The Proposal has the potential to impact upon surface water and hydrology during construction and operation. The following surface water and hydrology impacts have been considered as having potential to occur during construction and/or operation of the Proposal: • Accidental spill or discharge of chemicals or hydrocarbons, such as fuels and oils in vehicles

Wetlands	Impact
	and/or equipment with the potential to contaminate surface water. • Erosion of soil and sedimentation through runoff and transport of eroded sediments to waterways particularly during high rainfall events. • Dewatering sediment laden water from excavations. • Flooding during construction of the gas pipeline or electrical transmission line has the potential to result in erosion and water quality impacts, including within the Hunter drinking water catchment. • Transport of pollutants offsite contaminating groundwater, including potentially the Tomago sandbeds. • Water or groundwater potential impacts associated with the disposal of wastewater.

2.3.2 Do you consider this impact to be significant?

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

2.4.1 Impact table

Species	Impact
Coastal Swamp Oak (Casuarina glauca) Forest of South-east Queensland and New South Wales	No direct impact. All areas of the EEC will be retained. Indirect impacts will be mitigated. (refer to Attachment C for detailed MNES impact assessment)
Regent Honeyeater (Anthochaera phrygia)	The action will lead to the removal of up to 4.59 ha of potential foraging habitat. No critical habitat to be impacted. (refer to Attachment C for detailed MNES impact assessment)
Swift Parrot (Lathamus discolor)	The action will lead to the removal of up to 4.59 ha of potential foraging habitat. (refer to Attachment C for detailed MNES impact assessment)
Grevillea parviflora subsp. parviflora	No individuals to be directly impacted. The current area of occupancy will be reduced by the removal of 0.13 ha of Woodland Rehabilitation. No critical habitat to be impacted. (refer to Attachment C for detailed

Species	Impact
	MNES impact assessment)
Earp's Gum (Eucalyptus parramattensis subsp. decadens)	Three individuals will be directly impacted. The current area of occupancy will be reduced by the removal of 0.13 ha of Woodland Rehabilitation. No critical habitat to be impacted. (refer to Attachment C for detailed MNES impact assessment)
New Holland Mouse (Pseudomys novaehollandiae)	Maximum of 4.59 ha of potential habitat to be removed. Not considered habitat critical to the survival of the species. An important population of the species is unlikely to occur on site. (refer to Attachment C for detailed MNES impact assessment)
Grey-headed Flying-fox (Pteropus poliocephalus)	A total of 14.38 ha of native vegetation will be directly impacted. While the majority of this vegeation was mapped as low condition, these areas represetn potential foraging habitat. Not considered habitat critical to the survival of the species. An important population of the species is unlikely to occur on site. (refer to Attachment C for detailed MNES impact assessment)
Green and Golden Bell Frog (Litoria aurea)	The 0.07 ha patch of Coastal Freshwater Wetland on the corner of the Pacific Highway and Old Punt Road represents marginal habitat for this species. Horizontal Direct Drilling will pass underneath the wetland, avoiding any direct impacts to potential habitat. Not considered habitat critical to the survival of the species. An important population of the species is unlikely to occur on site. (refer to Attachment C for detailed MNES impact assessment)
Koala (Phascolarctos cinereus)	The Proposal may reduce the potential area of occupancy for this species by approximately 5.11 ha (of which 0.27 ha represents Preferred Koala Habitat, 0.22 ha represents Supplementary Koala Habitat, 4.54 ha represents Marginal Koala Habitat and the remaining 0.08 ha is 50m Buffer over other vegetation). Not considered habitat critical to the survival of the species. An important population of the species is unlikely to occur on site. (refer to Attachment C for detailed MNES impact assessment)

2.4.2 Do you consider this impact to be significant?

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

2.5.1 Impact table

Species	Impact
Rufous Fantail (Rhipidura rufifrons)	A maximum of 0.16 ha of this habitat will require removal (Alluvial Tall Moist Forest, Redgum – Apple – Banksia Forest and larger areas of Swamp Mahogany – Paperbark Swamp Forest and Coastal Sand Apple – Blackbutt Forest which are likely to provide suitable habitat for this species). (refer to Attachment C for detailed MNES impact assessment)
Black-faced Monarch (Monarcha melanopsis)	A maximum of 0.16 ha of this habitat will require removal (Alluvial Tall Moist Forest, Redgum – Apple – Banksia Forest and larger areas of Swamp Mahogany – Paperbark Swamp Forest and Coastal Sand Apple – Blackbutt Forest which are likely to provide suitable habitat for this species). (refer to Attachment C for detailed MNES impact assessment)
White-throated Needletail (Hirundapus caudacutus)	Potentially forages (aerially) over study site. No important habitat for the species is liekly to be impacted. As such, the lifecycle of the species is unlikely to be disrupted. (refer to Attachment C for detailed MNES impact assessment)
Fork-tailed Swift (Apus pacificus)	Potentially forages (aerially) over study site. No important habitat for the species is liekly to be impacted. As such, the lifecycle of the species is unlikely to be disrupted. (refer to Attachment C for detailed MNES impact assessment)

2.5.2 Do you consider this impact to be significant?

No

2.6 Is the proposed action to be undertaken in a marine environment (outside Commonwealth marine areas)?

No

2.7 Is the proposed action to be taken on or near Commonwealth land?

No

2.8 Is the proposed action taking place in the Great Barrier Reef Marine Park?

No

2.9 Is the proposed action likely to have ANY direct or indirect impact on a water resource related to coal/gas/mining?

No

2.10 Is the proposed action a nuclear action?

No

2.11 Is the proposed action to be taken by the Commonwealth agency?

No

2.12 Is the proposed action to be undertaken in a Commonwealth Heritage Place Overseas?

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?

No

Section 3 - Description of the project area

Provide a description of the project area and the affected area, including information about the following features (where relevant to the project area and/or affected area, and to the extent not otherwise addressed in Section 2).

3.1 Describe the flora and fauna relevant to the project area.

Vegetation communities occurring within the study area are listed in Table 4 (and mapped in Attachment A - Figure 4) along with the total area of each community occurring within the three distinct investigation areas for the Proposal.

Kleinfelder have undertaken extensive targeted searches (5 - 10 m wide transects throughout the entire vegetated portions of the study area) during August – December 2018 and in January 2019 (Attachment A - Figure 5). The threatened flora species Eucalyptus parramattensis subsp. decadens occurs within the Woodland Rehabilitation in the southern gas pipeline investigation area (several individuals are located just inside the proposal footprint) (Attachment A - Figure 4). Approximately 10 individuals of Grevillea parviflora subsp. parviflora are known to occur from the patch of Spotted Gum – Broad-leaved Mahogany – Red Ironbark Forest occurring within the southern gas pipeline investigation area (Attachment A - Figure 4). No further EPBC-listed flora species are known or expected to occur within the Proposal footprint.

The proposed power station site and electrical transmission easement investigation area contains low to moderate value fauna habitat (predominantly cleared with few hollow-bearing trees) and is occupied by a variety of commonly occurring amphibian, reptile, bird and mammal species. Targeted fauna surveys in accordance with the NSW BAM (2017) methodology were undertaken between August 2018 and January 2019. Survey methods across the whole study area included: small mammal trapping, spotlighting, bat echolocation recording, remote cameras and bird surveys.

Four nights of spotlighting were undertaken by two Kleinfelder ecologists in February 2019 across the range of dry sclerophyll forest, wet sclerophyll forest, freshwater wetland and swamp forest communities within the study area (Attachment A - Figure 5). Spotlighting surveys targeted the following EPBC-listed species: Grey-headed Flying-fox, Long-nosed Potoroo, Spotted-tailed Quoll, Greater Glider and Koala. None of these species were detected during the surveys. No flying-fox camps are known to occur within the study area (based on extensive walking transects completed by Kleinfelder ecologists during targeted flora searches).

Kleinfelder undertook targeted small mammal trapping in January 2019 as part of the State environmental impact assessment process. Four transects containing a total of 100 traps were

placed in potentially suitable habitat across the study area. The traps were set for four consecutive nights, totaling 400 trap nights. No New Holland Mouse individuals were captured, however, the exotic House Mouse and native Brown Antechinus (Antechinus stuartii) were trapped within the study area.

Remote cameras (a total of 16 cameras) were placed in the vicinity of the trapping transects to further target arboreal and terrestrial mammal species. Locally common species such as the Common Brushtail Possum, Brown Antechinus, Sugar Glider, Feathertail Glider and Black Rat were detected on the remote cameras. An individual Squirrel Glider (listed as Vulnerable under the BC Act) was also detected at one location.

Two threatened woodland bird species (Regent Honeyeater and Swift Parrot) are considered to have suitable habitat present within the study area. In particular, the Spotted Gum – Broad-leaved Mahogany – Red Ironbark community, Smooth-barked Apple – Blackbutt – Old Man Banksia and Swamp Mahogany – Broad-leaved Paperbark – Swamp Forest contain preferred foraging resources (mature Eucalypt species). Targeted searches (within these communities searching for the presence of these birds and assessing potential habitat) have been completed in August 2018 in accordance with the Survey Guidelines for Australia's Threatened Birds (Commonwealth of Australia 2010). Neither species was detected, despite records of the Regent Honeyeater being noted during July and August 2018 from the Hunter Region Botanic Gardens to the north of the study area. It was observed that there was very little blossom within the study area, however, there is potential habitat present.

The proposed gas pipeline investigation area contains high value fauna habitat which is known to be occupied by nine vulnerable fauna species listed under the BC Act (refer to ecobiological 2010). Two of these species are also listed as vulnerable under the EPBC Act: Koala and New Holland Mouse. One migratory bird species, Rufous Fantail, is known to occur within the gas pipeline investigation area from previous surveys (ecobiological 2010).

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

The Hunter River is located about 470 metres north west of the site at its closest point and generally runs from north to south. The proposed power station site is at 14 to 16 metres AHD, relatively higher than the surrounding area. The topography of the proposed power station site slopes towards the Hunter River, indicating that surface runoff would run towards the river. There are no mapped waterways running across the proposed power station site or the investigation areas for the gas pipeline and electrical transmission line routes.

The proposed power station site is unlikely to be impacted by flooding being located on a relatively higher point in the landscape to the surrounding area. However, the investigation area

for the gas pipeline is within the one in one hundred-year flood event mapping and may be impacted by flooding.

Both the gas pipeline and electrical transmission routes investigation areas are within the Drinking Water Catchment identified by Port Stephens LEP 2013 which includes the Tomago sandbeds a regionally important underground water source. The power station site is located outside of this catchment.

A search of WaterNSW groundwater monitoring bores found one groundwater bore within 500 metres of the proposed power station site, however, no groundwater data was available. There are several groundwater bores within the investigation area for the gas pipeline and electrical transmission line routes. Of the groundwater bores queried, standing water level was identified at its shallowest at 1.8 metres below ground level. Areas of shallow groundwater have been anecdotally identified in the north western part of the gas pipeline investigation area.

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

As previously noted the proposed power station site is at a relatively high point to the surrounding landscape at 14-16 metres AHD, with the investigation area for the gas pipeline being relatively flat sloping to a low point between the NGSF and the proposed power station site. The proposed electrical transmission route is on gently sloping land to the east.

Reference to the 1:250,000 scale Geological Series Sheet for Newcastle (S1 56-2) indicates that the Proposal area is marked as ‘Qa’ indicating gravel, sand, silt, clay, “Waterloo Rock” Marine and freshwater deposits and ‘Pc’ – Tomago Coal Measures (shale, mudstone, sandstone, tuff and coal).

The soil landscape of the Proposal area generally consists of poorly drained acid soils with low fertility. Port Stephens LEP Acid Sulfate Soils (ASS) mapping identifies the soils in the Proposal area as predominately Class 4 ASS.

A search of the OEH Contaminated Land Record of Notices on 6 July 2018, identified one former contaminated site within Tomago at 25 School Drive. The identified site is over two kilometres south east of the identified proposed power station site and was deemed to be contaminated by the presence of lead and chromium in soils and groundwater on the premise and in the surrounding area. Additionally, given the proposed power station and investigation areas for the proposed gas pipeline and electrical transmission route are within an industrial area, there is the potential for unidentified contamination.

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

The Hunter Estuary Ramsar Wetland is located within a 5km radius of the Study Site (along the Hunter River). The Hunter Estuary Wetlands Ramsar site consists of the Kooragang Nature Reserve and the Wetlands Centre Australia, previously known as Shortland Wetlands. The Ramsar wetland is not located within the Study Site.

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

Vegetation mapping of the study area has been undertaken by Kleinfelder and is provided in Attachment A (Figure 4) of this referral.

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

The proposed power station site is at 14 to 16 metres AHD, relatively higher than the surrounding area. The topography of the proposed power station site slopes towards the Hunter River.

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

The proposed power station site is largely cleared due to past agricultural activities, however, there are isolated native trees and the regeneration of native vegetation occurring in parts of the site. The investigation areas for the gas pipeline routes are generally densely vegetated with some areas of cleared land for roads and electrical easements.

The investigation areas and the eastern portion of the proposed power station site are bushfire prone land.

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

Searches of the following heritage lists were undertaken:

- NSW State Heritage Register.
- Port Stephens Local Environmental Plan 2013.
- Australian Heritage Database.

No heritage items were identified within the proposed power station site or investigation areas for the proposed gas pipeline and electrical transmission route.

Further assessment of non-Aboriginal heritage would be undertaken for the EIS, to confirm

heritage constraints at the site and to avoid or minimise impacts.

3.9 Describe any Indigenous heritage values relevant to the project area.

The Proposal is located within the Worimi Local Aboriginal Land Council area. The land on which the power station is proposed has been cleared and disturbed in the past. However, as the proposed power station site is at a relatively high point in the landscape, and given there are waterways nearby, there is the potential for Aboriginal heritage to be present.

The investigation area for the proposed gas pipeline and electrical transmission routes includes undisturbed areas and existing cleared land.

A search of the Aboriginal Heritage Information Management System (AHIMS) database maintained by the Office of Environment and Heritage (OEH) was undertaken on 6 July 2018 for a broad area and identified four recorded Aboriginal sites within 200 metres of the area. The site information card for AHIMS site, Hexham M12RT 1 (38-4-1751) identified Aboriginal values associated with the proposed power station site. The site is listed as a potential archaeological deposit, which includes surface and sub-surface artefacts. Several artefacts were recovered from the site during test excavations that included the proposed power station site. The site is identified as an area of high Aboriginal heritage significance at the local level as it provides tangible evidence of the use of the area by Aboriginal people.

Further assessment of Aboriginal heritage would be undertaken for the EIS, to confirm heritage constraints at the site and to avoid or minimise impacts. The above assessment would be informed and undertaken in accordance with the project SEARs.

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

The proposal would be located in Lots 2, 3, and 4 DP 1043561, Lot 1203 DP 1229590, and Lot 202 DP 1173564.

AGL has ownership of Lots 2 and 3 DP 1043561 and has negotiated tenure over land owned by Tomago Aluminium Corporation (TAC).

The pipeline route would traverse freehold and leasehold land via an appropriate easement. Subject to access constraints and council approval the pipeline route would use existing roadways to minimise the impact on land holders.

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

The study area is partly within the industrial buffer area surrounding the TAC smelter. Industrial properties dominate along Tomago Road and Old Punt Road, including the smelter. Immediately to the north, east and south of the study area is vegetated land owned by TAC and

Hunter Water Corporation (HWC).

The surrounding land use is mixed further afield. The Tomago industrial area is located to the south with some residential properties to the east and west, the closest of which is 2 km from the proposed power station site. Large areas of land to the south, west and east of Tomago are covered with native vegetation or have been cleared for open pastures.

The Hunter River flows in a southwest direction approximately 3 km west of the site. A bend in the river then directs the flow towards the southeast into the Hunter Estuary Wetland Ramsar site wetland, approximately 2.5 km south and east of the proposed power station site.

Williamtown Royal Australian Air Force (RAAF) Base and adjoining Newcastle Airport are approximately 10 km from the site to the northeast. A plume rise assessment will be completed as a component of the EIS, including consultation with Department of Defence. The Pacific Highway, a major north-south transport corridor linking Sydney and Brisbane, is located along the northern boundary of the power station site.

Section 4 - Measures to avoid or reduce impacts

Provide a description of measures that will be implemented to avoid, reduce, manage or offset any relevant impacts of the action. Include, if appropriate, any relevant reports or technical advice relating to the feasibility and effectiveness of the proposed measures.

Examples of relevant measures to avoid or reduce impacts may include the timing of works, avoidance of important habitat, specific design measures, or adoption of specific work practices.

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

Erosion and Sediment Control and Management

The Project understands the significance of the coastal mangroves and saltmarsh situated alongside the Hunter River and the Hunter Estuary Wetlands Ramsar site located further downstream. A detailed Erosion and Sediment Control Plan would be undertaken as part of the Statement of Commitments in the Environmental Impact Assessment and would be prepared in accordance with NSW DECC Managing Urban Stormwater: Soils and Construction – Volume 2A Installation of Services (2008), NSW DECC Waste Classification Guidelines (2009) and Managing Urban Stormwater: Soils and Construction (The Blue Book) (Landcom, 2004). All erosion control and drainage works would be appropriately designed in accordance with Urban and Sediment Control Guidelines (DLWC, 1992).

The proposed objectives of the Erosion and Sediment Control Plan would be to prevent erosion and transporting sediments from:

- Construction sites, work compounds or vehicle access tracks.
- Removal of vegetation.
- Earthworks and drainage works.
- Lengthy exposure of soil to weather.

Surface Clearing

- Clearing activities would be restricted to those areas nominated for construction at each stage of the project to prevent large areas of earth from being exposed. Disturbed areas would be minimised as far as practicable. All exposed areas would be stabilised as soon as practicable following completion of the works through compaction, revegetation or paving.
- Vehicle movement, vegetation clearance and construction activities would be minimised, where practicable.

Erosion Control

- During trench excavations, spoil would be deposited upslope of the excavations, as far as practicable from possible contact with runoff flows.

- Activities that involve soil disturbance would be avoided during rain periods or when heavy rain is forecast.

Erosion and Sediment Control Structures

- Sediment control measures would be installed and maintained prior to and during construction activities. These may include one, or several, of the following measures at specific sites: diversion banks, sediment control ponds, sediment trenches, sediment pits, sediment traps and sediment control barriers.

- Erosion and sediment control structures would be maintained by ensuring silt fences are upright and securely fixed, and that any sediment or residue behind the fence or barrier is removed and disposed appropriately to maintain retention capacity of the structure.

- Regular inspections and maintenance of erosion and sedimentation control structures would be undertaken on a weekly basis. Inspections would also be undertaken during and following significant rainfall events, with maintenance initiated as appropriate.

Equipment and Materials

- Concrete mixers and pump trucks would not be washed out on-site.

- Materials stored on-site, and wastes generated on-site that are likely to produce leachate would be stored in an appropriate manner prior to removal from the site.

- Excess construction materials would be contained using appropriate methods such plastic-lined pits, skips or holding tanks for appropriate reuse or off-site disposal.

- Designated areas for parking of construction equipment and vehicles would be provided to prevent potential

- erosion of surface soils.

- Temporary stockpiles would be covered using impervious geofabric, or similar, and filter fences would be erected

- down slope.

- Vehicle movements would be restricted to sealed or dedicated areas and roadways.

- Vehicle movement, vegetation clearance and construction activities are to be minimised, where practicable.

Soil and Water Management Plan

A Soil and Water Management Plan would be prepared as part of the Construction Environmental Management Plan. The management measures would include:

- Construction materials would be stored away from watercourses.
- Plant materials would be stored and maintained away from watercourses.
- Silt fences, bunding or similar would be used around exposed ground and stockpiles.
- Surface water runoff treatment ponds would be constructed prior to other construction work commencing.
- Revegetation of completed elements of the development would be undertaken as soon as possible to reduce
- silt laden run off.
- Grass seeding and watering of any stockpiles would be undertaken to reduce the likelihood of sediment entrainment through wind driven processes.
- Daily inspections of construction areas, stormwater devices and other areas.
- Inspection of all plant and machinery to reduce the likelihood of oil or grease leaks.
- Provision of appropriately sized spill kits.

Environmental Management Framework

The Proposal would operate under the AGL Health, Safety and Environment Management Systems (HSEMS), which forms the basis for managing the environmental aspects of the construction and operation of the proposed power station. The contracting strategy for the construction of the power station would require the major contractors for these components of the Project to have and maintain systems that reflect the requirements of HSEMS.

Environmental management of the construction and operation of the power station would be in accordance with the conditions of approval determined through the approvals process and, as a minimum, to the HSEMS equivalent standards (provided by the construction contractors). A construction environmental management plan (EMP) would be prepared and implemented during the Proposal's construction phase. An operations EMP would be prepared and implemented during operations.

The requirements of the conditions of approval and relevant standards would be incorporated into both the construction and operations EMPs as appropriate. The EMPs would be written to clearly define objectives, issues and mitigation measures for each environmental aspect that may be impacted by the Proposal. The EMPs would also include detailed monitoring measures.

Offsets would be provided to meet the requirements of the BC Act. Also, general management measures are proposed to minimise risks to flora and fauna. These are summarised below in Table 6 and include measures to reduce or avoid impacts associated with loss of vegetation,

introduction of weeds, reduced conditions favourable for plant growth, habitat loss and fragmentation, reduced species abundance and impacts to threatened and other species. These proposed management measures would be reviewed following approval of the Proposal in light of any relevant approval conditions.

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.

The Project is not anticipated to result in significant impacts on matters protected under the EPBC Act.

- Minimise adverse effects on, and protect terrestrial ecosystems and associated biodiversity of state and national conservation significance.

- Minimise the potential for adverse affects to the native wildlife of the Proposal area.

- Prevent construction activities from introducing or spreading new or existing environmental and noxious weeds or plant and animal pathogens.

- Minimise the direct loss of terrestrial habitat.

- Identify areas of high ecological value.

- Align the Proposal Project footprint to minimise vegetation removal.

- Where practical, fence off areas of significant vegetation to avoid disturbance.

- Conduct a survey of weeds in the development area and prepare a weed and pathogen management plan.

- Minimise the extent of vegetation clearance.

- Capture and manage water runoff from construction areas.

- Implement management plans for noise, lights and other potential disturbances to flora and fauna.

- Implement management plans to minimise the introduction of additional exotic plant species onto the Proposal site.

- Implement erosion controls to prevent sediment-laden runoff entering the adjacent vegetation.

- Erect flagging tape to mark “no-go? zones to ensure areas to be protected are clearly defined, identified and avoided.

- Trim vegetation where possible rather than remove.

- Revegetate all temporary construction areas.

- Re-spread cleared vegetation in the Proposal project area to facilitate natural regeneration of native vegetation, where appropriate.

- Control weeds where necessary to promote the rehabilitation of native vegetation.

- Fence rehabilitated areas until after successful regeneration is evident.

- Monitor rehabilitation success, and conduct supplementary active revegetation if required.

- Housekeeping at construction sites and at the operating site to reduce the attraction for feral animals such as foxes, rabbits and feral cats.

- Wash down all construction machinery prior to initially entering the project Proposal construction zone and at regular intervals (as required) to prevent the introduction and spread of weeds and soil pathogens to the site.

Section 5 – Conclusion on the likelihood of significant impacts

A checkbox tick identifies each of the matters of National Environmental Significance you identified in section 2 of this application as likely to be a significant impact.

Review the matters you have identified below. If a matter ticked below has been incorrectly identified you will need to return to Section 2 to edit.

5.1.1 World Heritage Properties

No

5.1.2 National Heritage Places

No

5.1.3 Wetlands of International Importance (declared Ramsar Wetlands)

No

5.1.4 Listed threatened species or any threatened ecological community

No

5.1.5 Listed migratory species

No

5.1.6 Commonwealth marine environment

No

5.1.7 Protection of the environment from actions involving Commonwealth land

No

5.1.8 Great Barrier Reef Marine Park

No

5.1.9 A water resource, in relation to coal/gas/mining

No

5.1.10 Protection of the environment from nuclear actions

No

5.1.11 Protection of the environment from Commonwealth actions

No

5.1.12 Commonwealth Heritage places overseas

No

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.

Given the surrounding land use and low level of impact on the surrounding environment and matters of national significance, it is proposed that the AGL Newcastle Power Station Project is not a controlled action. The Proposal is consistent with current industrial land uses in Tomago and would not impact on the cultural, aesthetic or environmental values of any places listed on the National Heritage Register.

In considering significant impact criteria outlined in the EPBC Act Policy Statement 1.1: Significant Impact Guidelines Matters of National Environmental Significance (Commonwealth of Australia, 2013) for other matters protected under the EPBC Act, it is concluded that the Project Proposal would not have a significant impact on any other matter of national environmental significance because:

- There are no World Heritage areas in the vicinity of the Proposal area.

- The Proposal would not reduce the environmental importance or quality of the Ramsar listed wetlands.

- There are no Nuclear Actions associated with the Proposal.

- The proposed project area is not located near any Commonwealth marine areas.

- The proposed project area would avoid removal of any threatened ecological communities. Refer to Attachment C for detailed MNES impact assessment.

- The proposed project area would minimise removal of any threatened flora species (using ground-based controls at the time of construction to avoid individual Eucalyptus parramattensis subsp. decadens wherever possible). Refer to Attachment C for detailed MNES impact assessment.

- The potential removal of a small area of threatened fauna habitat is not expected to significantly impact on threatened fauna populations in the locality or wider region. Refer to Attachment C for detailed MNES impact assessment.

Therefore, the proposed action is not likely to have significant adverse impacts on matters protected under the EPBC Act.

A comprehensive environmental assessment would be undertaken and will be assessed by NSW Department of Planning and Environment and other state agencies as part of the planning process.

Section 6 – Environmental record of the person proposing to take the action

Provide details of any proceedings under Commonwealth, State or Territory law against the person proposing to take the action that pertain to the protection of the environment or the conservation and sustainable use of natural resources.

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

Yes. AGL regards sound environmental management and protection as an integral part of its business and of playing its part in the community and is committed to excellence in this area of activity. This commitment is reflected in AGL's Environment Policy.

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.

Nil.

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

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

The Proposal would operate under the AGL Health, Safety and Environment Policies (2015) forming the basis for managing the environmental aspects of the operation of the proposed power station.

The contracting strategy for the construction of the Proposal infrastructure would require the Engineering, Procurement and Construction (EPC) contractor for the project to have and maintain systems that meet the minimum requirements of AGL's HSEMS system. The health, safety, environmental and security systems of the EPC contractor would be evaluated prior to final contractor selection and engagement to ensure that the contractors' systems adequately reflect the key requirements of a HSEMS and meet the high standard of, health, safety, environmental and security management that AGL expects in addition to statutory requirements.

EPC Contractor Management plans, policies and procedures which describe management processes and procedures to manage health, safety and security through the Design,

Construction and Commissioning phases of the Proposal would be developed and implemented by the EPC Contractor. A Proposal specific health, safety and security management plan would be prepared that addresses all construction, operation and decommissioning work proposed for the Proposal.

Environmental management of the operation of the proposed power station facility would be in accordance with the conditions of approval determined through the development approval process and, as a minimum, to the AGL HSEMS equivalent standards (provided by the construction contractors). These conditions and standards, along with commitments made in the development approval process, would be incorporated into the Proposal -specific environmental management plans (EMPs).

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

6.4.1 EPBC Act No and/or Name of Proposal.

AGL has previously made the following referrals:

- 2011/5976: Development of the Coopers Gap Wind Farm, near Cooranga North, QLD (submitted by AGL Energy Pty Limited).

- 2010/5752: Newcastle Gas Storage Facility Project, Tomago, NSW (submitted by AGL Energy Pty Limited).

- 2010/5484: Gas Fired Power Station & Associated Facilities, Dalton, NSW (submitted by AGL Energy Pty Limited).

- 2010/5398: Construct and operate a power station and gas storage facility, Torrens Island, SA (submitted by AGL Energy Limited).

- 2010/5299: Tarrone Power Station Project, Tarrone, VIC (submitted by AGL Energy Pty Limited).

- 2009/5025: Wind Farm and Transmission Line, Mt Bryan, SA (submitted by AGL Energy Limited).

- 2008/4385: Construct and operate 112km long underground gas transmission pipeline, Berwyndale to Wallumbilla, SE Qld (submitted by AGL Energy Limited and AGL Pipelines Investment Pty Limited).

- 2007/3535: Substation for Hallett Hill Wind Farm (submitted by AGL Energy Limited).

- 2005/2183: Expansion and upgrade of Biogas Utilisation Facilities at the Western

Treatment Plant, Werribee, VIC (submitted by AGL Energy Services Limited).

- 2000/100: Biogas Utilisation Facility, Werribee, VIC (submitted by AGL Energy Services).

Section 7 – Information sources

You are required to provide the references used in preparing the referral including the reliability of the source.

7.1 List references used in preparing the referral (please provide the reference source reliability and any uncertainties of source).

Reference Source	Reliability	Uncertainties
AGL (2019). Newcastle Gas Fired Power Station Project: Preliminary Environmental Assessment. Commonwealth of Australia (2013). EPBC Act policy statement 1.1: Matters of National significance. Department of the Environment, Canberra, Australia. DEC, (2004). Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities. Ecobiological (2010). Flora and Fauna Baseline Report for Old Punt Road, Tomago. Prepared by Ecobiological, Gateshead, NSW. Murray, M., Bell, S., and Hoye, G. (2002). Flora and fauna survey guidelines: Lower Hunter and Central Coast Regional Environmental Strategy, Callaghan. Volume 2. NPWS (2000). Vegetation Survey, Classification and Mapping Lower Hunter and Central Coast Region. Version 1.2. A project undertaken for the Lower Hunter and Central Coast Regional Environment Management Strategy CRA Unit Sydney Zone, National Parks and Wildlife Service. Office of Environment & Heritage (2018). https://www.environment.nsw.gov.au/topics/water/wetlands/internationally-sign	The information presented here is the most recent available for the project area. The information has been analysed and collated by Aurecon, specialist consultants with many years' experience in social and environmental impact assessment and by Kleinfelder Australia (specialist consulting ecologists). The information sources used in the preparation of this document include: • DotE EPBC Act protected matters database, search undertaken on 04/12/2018 • Published scientific literature. • Field surveys conducted by Kleinfelder (previously ecobiological, 2010), specialist flora and fauna consultants between August 2018 and February 2019. • Field surveys conducted by ecobiological, specialist flora and fauna consultants between 2009 – 2010. • AGL internal reports.	There are no uncertainties with the field information obtained by Kleinfelder (and Ecobiological). The protected matters database advises the standard caveats on the completeness of information within it.

Reference Source	Reliability	Uncertainties
ificant-wetlands/hunter-estuary-wetlands, accessed 31/01/19. Port Stephens Council (June 2002). Comprehensive Koala Plan of Management.		

Section 8 – Proposed alternatives

You are required to complete this section if you have any feasible alternatives to taking the proposed action (including not taking the action) that were considered but not proposed.

8.0 Provide a description of the feasible alternative?

No feasible alternative have been identified.

8.1 Select the relevant alternatives related to your proposed action.

8.27 Do you have another alternative?

No

Section 9 – Contacts, signatures and declarations

Where applicable, you must provide the contact details of each of the following entities: Person Proposing the Action; Proposed Designated Proponent and; Person Preparing the Referral. You will also be required to provide signed declarations from each of the identified entities.

9.0 Is the person proposing to take the action an Organisation or an Individual?

Organisation

9.2 Organisation

9.2.1 Job Title

Manager Power Development

9.2.2 First Name

Neil

9.2.3 Last Name

Cooke

9.2.4 E-mail

Ahenty2@agl.com.au

9.2.5 Postal Address

200 George Street
Sydney NSW 2000
Australia

9.2.6 ABN/ACN

ABN

74115061375 - AGL ENERGY LIMITED

9.2.7 Organisation Telephone

0410 479310

9.2.8 Organisation E-mail

Ahenty2@agl.com.au

9.2.9 I qualify for exemption from fees under section 520(4C)(e)(v) of the EPBC Act because I am:

Not applicable

Small Business Declaration

I have read the Department of the Environment and Energy's guidance in the online form concerning the definition of a small a business entity and confirm that I qualify for a small business exemption.

Signature:..... Date: .....

9.2.9.2 I would like to apply for a waiver of full or partial fees under Schedule 1, 5.21A of the EPBC Regulations

No

9.2.9.3 Under sub regulation 5.21A(5), you must include information about the applicant (if not you) the grounds on which the waiver is sought and the reasons why it should be made

Person proposing the action - Declaration

I, Neil Cooke, 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 of or for the benefit of any other person or entity.

Signature: Neil Cooke Date: 19th June 2019

I, _____, the person proposing the action, consent to the designation of _____ as the proponent of the purposes of the action describe in this EPBC Act Referral.

Signature:..... Date: .....

9.3 Is the Proposed Designated Proponent an Organisation or Individual?

Organisation

9.5 Organisation

9.5.1 Job Title

Manager Power Development

9.5.2 First Name

Neil

9.5.3 Last Name

Cooke

9.5.4 E-mail

Ahenty2@agl.com.au

9.5.5 Postal Address

200 George Street
Sydney NSW 2000
Australia

9.5.6 ABN/ACN

ABN

74115061375 - AGL ENERGY LIMITED

9.5.7 Organisation Telephone

0410 479310

9.5.8 Organisation E-mail

Ahenty2@agl.com.au

Proposed designated proponent - Declaration

I, Neil Cooke, the 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: ..... Date: 19th June 2019

9.6 Is the Referring Party an Organisation or Individual?

Organisation

9.8 Organisation

9.8.1 Job Title

Senior Ecologist

9.8.2 First Name

Daniel

9.8.3 Last Name

O’Brien

9.8.4 E-mail

dobrien@kleinfelder.com

9.8.5 Postal Address

PO Box 585
Warners Bay NSW 2282
Australia

9.8.6 ABN/ACN

ABN

23146082500 - Kleinfelder Australia Pty LTD

9.8.7 Organisation Telephone

02 4949 5200

9.8.8 Organisation E-mail

dobrien@kleinfelder.com

Referring Party - Declaration

I, Daniel O’Brien, I 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:…  …… Date: …25/03/2019…….

Appendix A - Attachments

The following attachments have been supplied with this EPBC Act Referral:

1. 20191297_EPBC_Fig04_VegetationCommunities_.pdf
2. 20191297_EPBC_Fig07_PrelimKoalaHabitat_.pdf
3. 255601631_2_AGL_Newcastle_Power_Station_Project_EPBC referral-210319.docx
4. 255601631_2_AGL_Newcastle_Power_Station_Project_EPBC referral-210319.pdf
5. AGL consultation.docx
6. Attachment A - Figures.zip
7. Attachment B - Protected Matters Search.pdf
8. Attachment C - MNES impact assessment (Updated June 2019).pdf
9. Attachment C - MNES impact assessment.docx
10. Attachment C - MNES impact assessment.pdf
11. Fig01_Locality.pdf
12. Fig02_StudyArea.pdf
13. Fig03_ProposedDevelopmentFootprint.pdf
14. Fig04_VegetationCommunities.pdf
15. Fig05_FloraSurveyEffort.pdf
16. Fig06_FaunaSurveyEffort.pdf
17. Fig07_PrelimKoalaHabitat.pdf
18. GIS Shape files.zip
19. Newcastle GFPS - SEARs.pdf