Appendix A SEARs and Agency Comments

Planning Secretary's Environmental Assessment Requirements

Section 5.16 of the *Environmental Planning and Assessment Act 1979*

Application Number	SSI 9837
Project	The Newcastle Gas Fired Power Station Project which includes: • the construction and operation of a gas fired power station; and • ancillary infrastructure including connection to gas supply, gas compression facilities, fuel storage tanks, water management facilities and grid connection.
Location	Tomago, north of Newcastle, in the Port Stephens local government area.
Proponent	AGL Energy Limited
Date of Issue	18 February 2019
General Requirements	The Environmental Impact Statement (EIS) must comply with the requirements in Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation). In particular, the EIS must include, but not necessarily be limited to, the following: • a stand-alone executive summary; • a full description of the project, including: - all components, materials and activities required to construct the project (including any infrastructure that would be required for the project, but the subject of a separate approvals process); - site plans and maps at an adequate scale showing: - the location and dimensions of all project components; and - existing infrastructure, land use, and environmental features in the vicinity of the project (including any other existing, approved or proposed infrastructure in the region); - likely staging or sequencing of the project, including construction and rehabilitation; - the likely interactions between the project and any other existing, approved or proposed major projects in the vicinity of the site (including the Newcastle Gas Storage Facility, Tomago Aluminium Smelter, and M1 to Raymond Terrace Motorway Project); • a justification for the proposed project as opposed to other alternatives; • statutory context for the project, including: - how the project meets the provisions and objectives of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and EP&A Regulation; - consideration of the project against all relevant environmental planning instruments; - any approvals that must be obtained before the project can commence; and • an assessment of the likely impacts of the project on the environment, focusing on the specific issues identified below, including:

	- a description of the existing environment likely to be affected by the project using sufficient baseline data; - a description of how the project has been designed to avoid and minimise impacts (including selection of gas connection option); and - an assessment of the potential impacts of the project, including any cumulative impacts, and taking into consideration relevant guidelines, policies, plans and industry codes of practice; • a consolidated summary of all the proposed environmental management and monitoring measures, identifying all the commitments in the EIS; and • an evaluation of the project as a whole having regard to: - relevant matters for consideration under the EP&A Act including ecologically sustainable development; - the strategic need and justification for the project having regard to energy security and reliability in NSW and the broader National Electricity Market; and - the biophysical, economic and social costs and benefits of the project. While not exhaustive, Attachment 1 contains a list of some of the environmental planning instruments, guidelines, policies, and plans that may be relevant to the environmental assessment of the project.
Key issues	The level of assessment of likely impacts should be commensurate with the significance or degree or extent of impact within the context of the proposed location and surrounding environment, and having regard to applicable NSW Government policies and guidelines. In particular, the EIS must address the following matters: • **Biodiversity** – including: - an assessment of the biodiversity values and the likely biodiversity impacts of the project in accordance with the NSW *Biodiversity Conservation Act 2016*, the Biodiversity Assessment Method (BAM) and documented in a Biodiversity Development Assessment Report (BDAR); and - the BDAR must document the application of the avoid, minimise and offset framework including assessing all direct, indirect and prescribed impacts in accordance with the BAM; • **Heritage** – including: - an assessment of the likely Aboriginal and historic heritage (cultural and archaeological) impacts of the project, including adequate consultation with Aboriginal stakeholders having regard to the *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (OEH, 2010); • **Hazards and Risks** – including: - a Preliminary Hazard Analysis (PHA), covering all aspects of the project which may impose public risks, to be prepared consistent with *Hazardous Industry Planning Advisory Paper No. 6 – Guidelines of Hazard Analysis* (DPE, 2011) and *Multi-level Risk Assessment.* The PHA must: ▪ include a pipeline risk assessment to estimate the risks from the pipeline to the surrounding land uses, with reference to Australian Standards *AS2885 Pipelines – Gas and Liquid Petroleum, Operation and Maintenance;* ▪ Demonstrate that the risks from the project comply with the criteria set out in *Hazardous Industry Planning Advisory Paper No. 4 – Risk Criteria for Land Use Safety Planning* (DPE, 2011); and

	- a plume rise impact assessment prepared in accordance with CASA's guidelines for conducting plume rise assessments; • **Land and Contamination** – including: - an assessment of impacts of the project on soils, land capability and geotechnical stability of the site and surrounds; - an assessment of the extent and nature of any contaminated materials or acid sulphate soils on site or in dredged material; - as assessment of potential risks to human health and the receiving environment; and - a description of the measures that would be implemented to avoid or mitigate impacts; • **Water** – including**:** - an assessment of the impacts of the project on groundwater aquifers and groundwater dependent ecosystems having regard to the *NSW Aquifer Interference Policy* and relevant *Water Sharing Plans*; - a detailed site water balance for the project, including water supply and wastewater disposal arrangements; - an assessment of the flood impacts of the project; and - a description of the erosion and sediment control measures that would be implemented to mitigate any impacts during construction; • **Air Quality** – including: - an assessment of the likely air quality impacts of the project in accordance with the *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW* (EPA, 2016); - ability to comply with the relevant regulatory framework, specifically the *Protection of the Environment Operations Act 1997* and the *Protection of the Environment Operations (Clean Air) Regulation 2010;* and - an assessment of the likely greenhouse gas impacts of the project; • **Noise and Vibration** – including: - assessment of the likely construction noise impacts of the project under the *Interim Construction Noise Guideline* (DECCW, 2009); - an assessment of the likely operational noise impacts of the project under the *NSW Noise Policy for Industry* (EPA, 2017); - an assessment of the likely road noise impacts of the project under the *NSW Road Noise Policy* (EPA, 2011); and - an assessment of the likely vibration amenity and structural impacts of the project under *Assessing Vibration: A Technical Guideline* (DEC, 2006) and *German Standard DIN 4150-3 Structural Vibration – effects of vibration on structures*; • **Transport** – including: - an assessment of the transport impacts of the project on the capacity, condition, safety and efficiency of the local and State road network including consideration of the future M1 Motorway extension to Raymond Terrace; - an assessment of the site access point and rail safety issues; - a description of the measures that would be implemented to mitigate any impacts during construction; and - a description of any proposed road upgrades developed in consultation with the relevant road authorities (if required); • **Visual** – including an assessment of the likely visual impacts of the project on the amenity of the surrounding area and private residences in the vicinity of the project**;**

	• **Socio-Economic** – including an assessment of the likely impacts on the local community, demands on Council infrastructure and consideration of the construction workforce accommodation; and • **Waste** – identify, quantify and classify the likely waste stream to be generated during construction and operation, and describe the measures to be implemented to manage, reuse, recycle and safely dispose of this waste.
Consultation	During the preparation of the EIS, you must consult with the relevant local, State and Commonwealth Government authorities, infrastructure and service providers, community groups and affected landowners. The EIS must describe the consultation that was carried out, identify the issues raised during this consultation, and explain how these have been considered and addressed.
Further consultation after 2 years	If EIS for the project is not lodged within 2 years of the issue date of these Environmental Assessment Requirements, the Applicant must consult further with the Secretary in relation to the preparation of the EIS.

ATTACHMENT 1

Environmental Planning Instruments, Policies, Guidelines & Plans

Water	
Groundwater	NSW State Groundwater Policy Framework Document and component policies (DPI)
	Relevant Water Sharing Plans
	NSW Aquifer Interference Policy 2012 (DPI)
	National Water Quality Management Strategy Guidelines for Groundwater Protection in Australia (ARMCANZ/ANZECC)
	Guidelines for Development in the Drinking Water catchments (Hunter Water, 2017)
Surface Water	NSW State Rivers and Estuary Policy (DPI Water)
	NSW Government Water Quality and River Flow Objectives at http://www.environment.nsw.gov.au/ieo/
	Using the ANZECC Guideline and Water Quality Objectives in NSW (DEC, 2006)
	Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZG)
	Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (DECC, 2008)
	Managing Urban Stormwater: Soils & Construction (Landcom)
	Technical Guidelines: Bunding & Spill Management (EPA)
	NSW Guidelines for Controlled Activities (various) (DPI)
Contamination	
	State Environmental Planning Policy No. 55 – Remediation of Land
	Managing Land Contamination – Planning Guidelines SEPP 55 – Remediation of Land (EPA)
	Guidelines for Consultants Reporting on Contaminated Sites (EPA)
	Contaminates Sites Sampling Design Guidelines 1995 (EPA)
	Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites (ANZECC)
	National Environment Protection (Assessment of Site Contamination) Measure 1999 (with amendment April 2013)
	Acid Sulfate Soils Manual (OEH)
	Australian and New Zealand Guidelines for Fresh and Marine Water Quality (EPA)
Land and Soils	
	Managing Urban Stormwater: Soils & Construction (Landcom)
	Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites (ANZECC & NHMRC)
	National Environment Protection (Assessment of Site Contamination) Measure 1999 (with amendment April 2013)
	Guidelines for developments adjoining land and water managed by the Department of Environment, Climate Change and Water (DECCW, 2010)
	The land and soil capability assessment scheme: Second approximation (OEH)
	Guidelines for Surveying Soil and Land Resources (CSIRO)
	Australian Soil and Land Survey Handbook (CSIRO)
	Soil and Landscape Issues in Environmental Impact Assessment (DPI)

Biodiversity	
	Biodiversity Assessment Method 2017 (OEH)
	Threatened Species Assessment Guidelines - Assessment of Significance (OEH)
	Biosecurity Act 2015
	Policy and Guidelines for Fish Habitat Conservation and Management – Update (DPI, 2013)
	NSW State Groundwater Dependent Ecosystem Policy (DPI Water)
	Risk Assessment Guidelines for Groundwater Dependent Ecosystems (DPI Water)
	Why Do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings (DPI)
	Fisheries Management Act 1994
Heritage	
	The Burra Charter (The Australia ICOMOS charter for places of cultural significance)
	Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW (OEH, 2011)
	Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (DECCW, 2010)
	Code of Practice for the Archaeological Investigation of Aboriginal Objects in NSW (OEH)
	NSW Heritage Manual (Heritage Office and Department of Urban Affairs and Planning, 1994)
	Assessing Heritage Significance (NSW Heritage Office, 2001)
	Statements of Heritage Impact (Heritage Office and Department of Urban Affairs and Planning, 2002)
Air	
	Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA 2016)
	Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (DEC, 2005)
	Technical Framework – Assessment and Management of Odour from Stationary Sources in NSW (DEC, 2006)
	National Greenhouse Accounts Factors (Commonwealth)
Noise, Vibration and Blasting	
	NSW Noise Policy for Industry (EPA)
	NSW Road Noise Policy and associated Application Notes (EPA)
	Interim Construction Noise Guideline (DECCW, 2009)
	Assessing Vibration: a Technical Guideline (DEC, 2006)
	German Standard DIN 4150-3: Structural Vibration – effects of vibration on structures
	Technical Basis for Guidelines to Minimise Annoyance Due to Blasting Overpressure and Ground Vibration (ANZECC, 1990)
Transport	
	Guide to Traffic Generating Projects (RMS)
	Road Design Guide (RMS) & relevant Austroads Standards
	Austroads Guide to Traffic Management Part 12: Traffic Impacts of Project
Hazards and Risks	
	State Environmental Planning Policy No. 33 – Hazardous and Offensive Project
	Hazardous and Offensive Project Application Guidelines – Applying SEPP 33
	Hazardous Industry Planning Advisory Paper No. 4 – Risk Criteria for Land Use Safety Planning
	Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis
	Hazardous Industry Planning Advisory Paper No. 11 – Route Selection

	AS2885 Pipelines – Gas and Liquid Petroleum, Operation and Maintenance
	Planning for Bushfire Protection (NSW RFS)
	Advisory Circular AC 139-05 v3.0 Plume Rise Assessments (CASA)
Visual	
	AS4282-1997 Control of the obtrusive effects of outdoor lighting
Waste	
	Waste Classification Guidelines (EPA)
Environmental Planning Instruments – General	
	State Environmental Planning Policy (State and Regional Development) 2011
	State Environmental Planning Policy (Infrastructure) 2007
	State Environmental Planning Policy (Three Ports) 2013
	State Environmental Planning Policy (Coastal Management) 2018
	Port Stephens Local Environmental Plan 2013
	Relevant Water Sharing Plans (available at https://www.industry.nsw.gov.au/water)

Anthony Ko

From: Airport Developments <Airport.Developments@AirservicesAustralia.com>
Sent: Friday, 1 February 2019 3:26 PM
To: Tatsiana Bandaruk
Cc: Anthony Ko; Hogan, Timothy MR 2
Subject: NSW-MI-025 - SEARs, Newcastle Gas Fired Power Station (SSI 9837) [SEC=UNCLASSIFIED]

Hi Tatsiana,

We recommend that operators of Newcastle Airport, which is the Department of Defence, be consulted to evaluate this development in the first instance. We suggest also a plume rise assessment is provided to Newcastle Airport. Newcastle Airport will determine if this development needs to be referred to Airservices for assessment.

Regards,

William Zhao
Advisor Airport Development | Operations Standards & Assurance
Airservices Australia

Phone: +61 3 9339 2504
Email: airport.developments@airservicesaustralia.com

www.airservicesaustralia.com

attached for your reference.

From:	GCR CASA
To:	Tatsiana Bandaruk
Cc:	GCR CASA
Subject:	CASA Response GI19/69 Newcastle Gas Fired Power Station (SSI 9837) - Request for input to the SEARs [SEC=UNCLASSIFIED]
Date:	Friday, 1 February 2019 9:27:23 AM
Attachments:	image001.png

UNCLASSIFIED

Dear Ms Bandaruk

I refer to your email below requesting comment from the Civil Aviation Safety Authority (CASA) on the Newcastle Gas Fired Power Station Project, located in Tomago, north of Newcastle NSW.

CASA has reviewed the Secretary's Environmental Assessment Requirements (SEARs) and I am advised that a Plume Rise assessment should be conducted by the proponent.

As the proposal is within the Williamtown Control Zone, CASA recommends that input from the Department of Defence be sought. However, before Defence can comment or provide an informed response on the proposal they will require answers to the following:

1. Height of the stacks (above mean sea level and above ground level)
2. The location of the proposed stacks (Latitude and Longitude)
3. Height and lateral extent of the exhaust plume
4. Results of the plume rise modelling
5. Will there be any proposed, associated danger areas
6. Plans for catastrophic and minor failures, i.e. what danger areas would need to be put in place if any, how would it affect the airspace, etc, and
7. Has an AVRMP been done? If so, a copy of the report.

Please contact Mr Aaron Doherty at the Department of Defence if you wish to discuss this matter further. Mr Doherty can be contacted by email at aaron.doherty@defence.gov.au.

I trust this information is of assistance.

Yours sincerely

Steve Neal
Section Manager
Government and Corporate Relations

Phone 131 757

From: Tatsiana Bandaruk <Tatsiana.Bandaruk@planning.nsw.gov.au>
Sent: Friday, 25 January 2019 2:46 PM
Cc: Anthony Ko <Anthony.Ko@planning.nsw.gov.au>

Subject: Newcastle Gas Fired Power Station (SSI 9837) - Request for input to the SEARs

Newcastle Gas Fired Power Station Project (SSI 9837)
Request for Input into Secretary's Environmental Assessment Requirements

Good afternoon,
AGL Macquarie Pty Ltd has requested Secretary's Environmental Assessment Requirements (SEARs) for the Newcastle Gas Fired Power Station Project, located in Tomago, north of Newcastle, within the Port Stephens local government area.
The proposal involves:

- the construction and operation of a 250 MW gas fired power station; and
- ancillary infrastructure including connection to gas supply, gas compression facilities, fuel storage tanks, water management facilities and grid connection.

This email is to seek agency input to the SEARs for this project.
The Preliminary Environmental Assessment is available at http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=9837, and a copy of the proposed SEARs is attached for your reference.
It would be appreciated if you could review these documents and provide any comments by COB **Friday 8 February 2019**.

Kind regards,

Tatsiana Bandaruk
Environmental Assessment Officer
Resource and Energy Assessments | Planning Services
Level 30, 320 Pitt Street | GPO Box 39 | Sydney NSW 2001
T 02 8275 1349
E: tatsiana.bandaruk@planning.nsw.gov.au

NSW GOVERNMENT | Planning & Environment

Subscribe to our newsletter

Please consider the environment before printing this e-mail.

IMPORTANT:

This email remains the property of the Civil Aviation Safety Authority. If you are not the intended recipient, any use or dissemination of this email is prohibited.
If you have received this email in error, you are requested to contact the sender and delete the email.

PORT STEPHENS COUNCIL

6 February 2019

Department of Planning & Environment
GPO Box 39
Sydney NSW 2001

APPLICATION NO: (Our Ref. 25-2019-1-1)
PROPOSAL: Newcastle Gas Fired Power Station Project (SSI 9837)
PROPERTY: 1940 Pacific Highway, TOMAGO 2322 (Lot: 3 DP: 1043561)

ATTN: Tatsiana Bandaruk

Dear Sir / Madam,

Thank you for your correspondence dated 25 January 2019 requesting Council's comments for the above development. Council has given consideration to the likely impacts of the proposal and makes the following comments.

Biodiversity considerations

- Assessment of koala habitat on site and offsetting requirements are to be conducted in accordance with Port Stephens Council's Comprehensive Koala Plan of Management.
- Any offsetting requirements in accordance with the biodiversity offset scheme should be secured within the local area, where possible.
- As the proposal site is located within proximity to a number of wetland environments including the Hunter Estuary Wetlands (Ramsar site) and known habitat for threatened species and migratory birds, an assessment of air and water quality impacts in relation to biodiversity impacts is required to determine potential impacts of emissions (chemical and heat (including plume rise)) and associated acid rainfall events on wetlands environments (including SEPP wetlands, nationally important wetlands and internationally important wetlands). Special consideration should be given to potential impacts on habitat quality, food sources (insects, fish etc.), fight patterns of migratory birds and amphibians.

Heritage considerations

- As the site has been identified as an area of high Aboriginal heritage significance, comprehensive assessment including detailed consultation with Aboriginal stakeholders and subsurface investigations are required. Subsurface investigations are to be completed by a qualified archaeologist in accordance with the Code of Practice for Archaeological Investigation of Aboriginal objects in NSW (DECCW 2010). The results of subsurface investigations should inform future management potential archaeological deposits and determine whether an Aboriginal Heritage Impact Permit (AHIP) would be required.

Thank you for the opportunity to comment on the proposed development. If you wish to discuss the matters raised above or have any questions, please contact me on the number below and I will be happy to help.

Yours Faithfully



Jessica Franklin
Development Planner

Port Stephens Council
Phone: 4988 0141
Email: jessica.franklin@portstephens.nsw.gov.au
Web: www.portstephens.nsw.gov.au

OUT19/1114

Tatsiana Bandaruk
Environmental Assessment Officer
Resource and Energy Assessments
NSW Department of Planning and Environment

Tatsiana.Bandaruk@planning.nsw.gov.au

Dear Ms Bandaruk

Newcastle Gas Fired Power Station (SSI 9837)
Comment on the Secretary's Environmental Assessment Requirements (SEARs)

I refer to your email of 25 January 2019 to the Department of Industry (DoI) in respect to the above matter. Comment has been sought from relevant branches of Lands & Water and Department of Primary Industries (DPI), and the following requirements for the proposal are provided:

DoI -– Water and Natural Resources Access Regulator

- The identification of an adequate and secure water supply for the life of the project. This includes confirmation that water can be sourced from an appropriately authorised and reliable supply. This is also to include an assessment of the current market depth where water entitlement is required to be purchased.
- A detailed and consolidated site water balance.
- Assessment of impacts on surface and ground water sources (both quality and quantity), related infrastructure, adjacent licensed water users, basic landholder rights, watercourses, riparian land, and groundwater dependent ecosystems, and measures proposed to reduce and mitigate these impacts.
- Proposed surface and groundwater monitoring activities and methodologies.
- Consideration of relevant legislation, policies and guidelines, including the NSW Aquifer Interference Policy (2012), the Guidelines for Controlled Activities on Waterfront Land (2018) and the relevant Water Sharing Plans (available at https://www.industry.nsw.gov.au/water).

Any further referrals to Department of Industry can be sent by email to landuse.enquiries@dpi.nsw.gov.au.

Yours sincerely



Liz Rogers
Manager, Assessments
Lands and Water - Strategy and Policy
6 February 2019

30 January 2019

Tatsiana Bandaruk
Environmental Assessment Officer
Resource and Energy Assessments – Planning Services
GPO Box 39
Sydney NSW 2001

Your Reference: SSI 9837
Our Reference: DOC19/74683

Emailed: tatsiana.bandaruk@planning.nsw.gov.au

Dear Ms Bandaruk

Re: Request for Secretary's Environmental Assessment Requirements – Newcastle Gas Fired Power Station (SSI 9837)

I refer to your letter of the 25th of January 2019 requesting advice on issues concerning the preparation of Secretary's Environmental Assessment Requirements for the Newcastle Gas Fired Power Station (SSI 9837).

The Division of Resources & Geoscience has not identified the potential for the project to impact on significant mineral resources, including metallic minerals, industrial and extractive minerals, petroleum, gas or coal resources. No operating extractive industry, mines or petroleum production facilities have been identified for consideration, nor any exploration activities.

As such, the Division does not have specific requirements regarding land use compatibility for the project site or utilities investigation areas. The Division may provide advice on the location of biodiversity offset areas for the project through the Biodiversity Offsets Scheme.

Queries regarding the above information, and future requests for advice in relation to this matter, should be directed to the Division of Resources & Geoscience - Land Use team at landuse.minerals@geoscience.nsw.gov.au.

Yours sincerely

Andrew Helman
A/Manager - Land Use



For Paul Dale
Director – Land Use & Titles Advice

DOC19/66222-2; EF14/502 (SSI 9837)

Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Attention: Tatsiana Bandaruk
By email: tatsiana.bandaruk@planning.nsw.gov.au

8 February 2019

NEWCASTLE GAS FIRED POWER STATION PROJECT - (SSI 9837)
SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS

I refer to your email to the Environment Protection Authority (EPA) dated 25 January 2019 seeking the EPA's comments on the draft Secretary Environmental Assessment Requirements (SEARS) for the Newcastle Gas Fired Power Station Project, located at 1940 Pacific Highway, Tomago, in the Port Stephens local government area.

The EPA understands that the proposal involves:

- construction and operation of a 250 MW gas fired power station; and
- ancillary infrastructure including connection to gas supply, gas compression facilities, fuel storage tanks, water management facilities and grid connection.

The EPA has considered the proposal and has identified in **Attachment A** the information it requires to assess the project. The EPA has included specific comments on air issues based on the information presented in the Preliminary Environmental Assessment and the known capacity of the Tomago airshed to accept additional pollutants.

In carrying out the EIS assessment, the EPA recommends that the proponent refers to the relevant guidelines listed in **Attachment B** and any relevant industry codes of practice and best practice management guidelines.

Phone 131 555
Phone 02 4908 6800
Fax 02 4908 6810
TTY 133 677
ABN 43 692 285 758
PO Box 488G
Newcastle
NSW 2300 Australia
117 Bull Street
Newcastle West
NSW 2302 Australia
info@epa.nsw.gov.au
www.epa.nsw.gov.au

If you require any further information regarding this matter, please contact Genevieve Lorang on 4908 6869 or by email to hunter.region@epa.nsw.gov.au.

Yours sincerely

MITCHELL BENNETT
Head Strategic Operations Unit - Hunter
Environment Protection Authority

Encl: **Attachment A** – EPA's Recommended Secretary's Environmental Assessment Requirements – Newcastle Gas Fired Power Station -1940 Pacific Highway Road, Tomago (SEAR 9837).

Attachment B – Guidance Material

ATTACHMENT A

EPA's Recommended Secretary's Environmental Assessment Requirements – Newcastle Gas Fired Power Station, Tomago. (SEAR 9837).

1 Environmental impacts of the project

Impacts related to the following environmental issues need to be assessed, quantified and reported on:

- Air Quality
- Noise and Vibration
- Water and Soil Quality and Management
- Waste Management
- Dangerous Goods, Chemical Storage and Bunding

The Environmental Impact Statement (EIS) should address the specific requirements outlined under each heading below and assess impacts in accordance with the relevant guidelines mentioned. A full list of guidelines is at Attachment B.

2 Licensing requirements

Should project approval be granted, the proponent will need to make a separate application to EPA for an Environment Protection Licence for the scheduled activity of Electricity Generation. Additional information is available through EPA's *Guide to Licensing* document.

General information on licence requirements can also be obtained from EPA's Environment Line on 131 555 during office hours, or can be found at the EPA web site at:
http://www.epa.nsw.gov.au/licensing/

3 The Proposal and Premises

The objectives of the proposal should be clearly stated and refer to:

- The size and type of the operation;
- The nature of the processes and the products, by-products and wastes produced;
- The types and quantities of any chemicals to be used and stored onsite;
- Proposed operational hours, including any heavy vehicle movements;
- Proposed maximum and average annual production rates that will occur at the premises; and
- Proposed staging and timing of the proposal.

The EIS will need to fully identify all the processes and activities intended for the site over the life of the development. This will include details of:

- The location of the proposed facility and details of the surrounding environment;
- The proposed layout of the site;
- Appropriate land use zoning;
- Ownership details of any residence and/or land likely to be affected by the proposed operations;
- Maps/diagrams showing the location of residences and properties likely to be affected and other industrial developments, conservation areas, wetlands, etc. in the locality that may be affected by the facility;
- All equipment proposed for use at the site;
- All chemicals, including fuel, used on the site and proposed methods for their transportation, storage, use and emergency management;
- Clearly detail the boundary of the premises; and
- Methods to mitigate any expected environmental impacts of the development.

4 Air Issues

4.1 Air quality

The EIS should include an air quality impact assessment (AQIA) in accordance with the Approved Methods for the Modelling and Assessment of Air Pollutants in NSW, including, as a minimum the following components:

Specifics relating to the proposed project

In reviewing the Preliminary Environmental Assessment (PEA) the EPA has identified some specific issues that need to be addressed based on the information presented to date:

1. The PEA mentions that either reciprocating engines or turbines may be used as generators running on both/either gas or diesel. The EIS must clearly state what type of generators will be used.
2. Gas and diesel may have very different air emissions profiles and if either fuel source may be used, each fuel source need to be assessed separately under worst case scenarios (in terms of operating output, predicted emissions at that output and the maximum amount of time the unit will operate (if it is less than 24 hours).
3. If diesel is to be used for "cold start" of the generators prior to switching to gas the EIS needs to clearly detail the average synchronisation times and diesel burn times prior to switching to gas operation. Such operations would need to be assessed and modelled covering both fuel sources and maximum times each would run for.
4. The EIS needs to specifically assess known issues within the Tomago airshed in the cumulative air assessment. The EPA advises that the airshed is currently constrained in terms of additional pollutant inputs, particularly with regard to sulphur dioxide and fluoride. Combustion of diesel may be limited by the local airshed capacity.

Assessment Objective

1. Demonstrate the proposed project will incorporate and apply best management practice emission controls. The EPA notes that the PEA mentions that if turbines are to be used that thermal emissions will be vented to atmosphere. This is not best practice and the EIS should explore alternative options such as heat capture to reboilers using closed cycle turbines; and

2. Demonstrate that the project will not cause violation of the project adopted air quality impact assessment criteria at any residential dwelling or other sensitive receptor.

Assessment Criteria

- Demonstrate the proposal's ability to comply with the relevant regulatory framework, specifically the *Protection of the Environment Operations* (POEO) *Act* (1997) and the POEO (Clean Air) Regulation (2010).

Existing Environment

- Provide a detailed description of the existing environment within the assessment domain, including:
    - geophysical form and land-uses;
    - location of all sensitive receptors;
    - local and regional prevailing meteorology.

Emissions Inventory

- Provide a detailed description of the project and identify the key stages with regards to the potential for air emissions and impacts on the surrounding environment.

- Identify all sources of air emissions, including mechanically generated, combustion and transport related emissions likely to be associated with the proposed development.

Air Quality Emission Control Measures

- Provide a detailed discussion of all proposed air quality emission control measures, including details of a reactive/predictive management system. The information provided must include:
    - explicit linkage of proposed emission controls to the site specific best practice determination assessment
    - timeframe for implementation of all identified emission controls;
    - key performance indicators for emission controls;
    - response mechanisms;
    - responsibilities for demonstrating and reporting achievement of KPIs;
    - record keeping and complaints response register; and

5 Noise and Vibration

The following matters should be addressed in relation to noise and vibration impacts associated with the proposal. This includes identification of the hours of operations, assessment of all activities where proposed, and impacts on sensitive receivers associated with the proposed hours of operation. The EPA notes that the PEA mentions that either reciprocating engines or turbines may be used as generators running on both/either gas or diesel. Given that these different generators may have different noise outputs, the EIS must clearly state what type of generators will be used and the noise assessment is conducted based on this.

The following matters should be addressed as part of the EIS.

General

- Construction noise associated with the proposed development should be assessed using the Interim Construction Noise Guideline (DECC, 2009).

Industry

- Operational noise from all industrial activities (including private haul roads) to be undertaken on the premises should be assessed using the guidelines contained in the NSW Industrial Noise Policy (EPA, 2000) and Industrial Noise Policy Application Notes.

Road

- Noise on public roads from increased road traffic generated by land use developments should be assessed using the guidelines contained in the NSW Road Noise Policy (DECCW, 2011).
- Noise from new or upgraded public roads should be assessed using the NSW Road Noise Policy (DECCW, 2011).

Monitoring

- Detail monitoring that will be conducted to assess the impacts of the proposal.

6 Water and Soils

6.1 Water Quality

Describe Proposal

- Describe the proposal including position of any intakes and discharges, volumes, water quality and frequency of all water discharges.

- Demonstrate that all practical options to avoid discharges have been implemented and environmental impact minimised where discharge is necessary.

- Where relevant include a water balance for the development including water requirements (quantity, quality and source(s)) and proposed storm and wastewater disposal, including type, volumes, proposed treatment and management methods and re-use options.

Background Conditions

- Describe existing surface and groundwater quality. An assessment needs to be undertaken for any water resource likely to be affected by the proposal. Issues to be discussed should include but are not limited to:
  - a description of any impacts from existing industry or activities on water quality
  - a description of the condition of the local catchment e.g. erosion, soils, vegetation cover, etc.
  - an outline of baseline groundwater information, including, for example, depth to water table, flow direction and gradient, groundwater quality, reliance on groundwater by surrounding users and by the environment
  - historic river flow data

- State the Water Quality Objectives for the receiving waters relevant to the proposal. These refer to the community's agreed environmental values and human uses endorsed by the NSW Government as goals for ambient waters (http://www.environment.nsw.gov.au/ieo/index.htm). Where groundwater may be impacted the assessment should identify appropriate groundwater environmental values.

- State the indicators and associated trigger values or criteria for the identified environmental values. This information should be based on the ANZECC (2000) Guidelines for Fresh and Marine Water Quality as a minimum but should also be based on advice from Hunter Water Corporation given the sensitive receiving environment of the Hunter River.

- State any locally specific objectives, criteria or targets which have been endorsed by the NSW Government.

Impact Assessment

- Describe the nature and degree of impact that any proposed discharges will have on the receiving environment, both surface water and groundwater.
- Detail contractual and other arrangements that will be put in place to prevent pollution from haul roads and unsealed roads per se, particularly rights of carriageways not owned by the proponent.
- Assess impacts against the relevant ambient water quality outcomes. Demonstrate how the proposal will be designed and operated to:
  - protect the Water Quality Objectives for receiving waters where they are currently being achieved; and
  - contribute towards achievement of the Water Quality Objectives over time where they are not currently being achieved.

- Where a discharge is proposed that includes a mixing zone, the proposal should demonstrate how wastewater discharged to waterways will ensure the ANZECC (2000) water quality criteria for relevant chemical and non-chemical parameters are met at the edge of the initial mixing zone of the discharge, and that any impacts in the initial mixing zone are demonstrated to be reversible.
- Propose water quality limits for any discharge(s) that adequately protects the receiving environment.
- Assess impacts on groundwater and groundwater dependent ecosystems.
- Describe how stormwater will be managed both during and after construction.

Monitoring

- Describe how predicted impacts will be monitored and assessed over time.

6.2 Soil

The EIS should include:

- An assessment of potential impacts on soil and land resources should be undertaken, being guided by Soil and Landscape Issues in Environmental Impact Assessment (DLWC 2000). The nature and extent of any significant impacts should be identified. Particular attention should be given to:
  - Soil erosion and sediment transport - in accordance with Managing urban stormwater: soils and construction, vol. 1 (Landcom 2004) and vol. 2 (A. Installation of services; B Waste landfills; C. Unsealed roads; D. Main Roads; E. Mines and quarries) (DECC 2008).

- A description of the mitigation and management options that will be used to prevent, control, abate or minimise identified soil and land resource impacts associated with the project. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented.

7 Waste

The EIS should:

- Include a detailed plan for in-situ classification of waste material, including the sampling locations and sampling regime that will be employed to classify the waste, particularly with regards to the identification of contamination hotspots.

- Identify, quantify, characterise and classify all waste that currently exists at the site. Identify the intended end use, for example reuse or disposal, and the end use location(s) for the waste. Also, specify the mechanism under which waste will be reused or disposed, such as a Resource Recovery Exemption. Note: All waste must be classified in accordance with EPA's Classification Guidelines.

- Identify, characterise and classify all waste that will be generated onsite through excavation, demolition or construction activities, including proposed quantities of the waste.
  Note: All waste must be classified in accordance with EPA's Waste Classification Guidelines.

- Identify, characterise and classify all waste that is proposed to be disposed of to an offsite location, including proposed quantities of the waste and the disposal locations for the waste. This includes waste that is intended for re-use or recycling.
  Note: All waste must be classified in accordance with EPA's Classification Guidelines.

- Include a commitment to retaining all sampling and classification results for the life of the project to demonstrate compliance with EPA's Waste Classification Guidelines.

- Provide details of how waste will be handled and managed onsite to minimise pollution, including:

  a) Stockpile location and management
     - Labelling of stockpiles for identification, ensuring that all waste is clearly identified and stockpiled separately from other types of material (especially the separation of any contaminated and non-contaminated waste).
     - Proposed height limits for all waste to reduce the potential for dust and odour.
     - Procedures for minimising the movement of waste around the site and double handling.
     - Measures to minimise leaching from stockpiles into the surrounding environment, such as sediment fencing, geofabric liners etc.

  b) Erosion, sediment and leachate control including measures to be implemented to minimise erosion, leachate and sediment mobilisation at the site during works. The EIS should show the location of each measure to be implemented. The Proponent should consider measures such as:
     - Sediment traps
     - Diversion banks
     - Sediment fences
     - Bunds (earth, hay, mulch)
     - Geofabric liners
     - Other control measures as appropriate

     The Proponent should also provide details of:
     - how leachate from stockpiled waste material will be kept separate from stormwater runoff;
     - treatment of leachate through a wastewater treatment plant (if applicable); and
     - any proposed transport and disposal of leachate off-site.

- Provide details of how the waste will be handled and managed during transport to a lawful facility. If the waste possesses hazardous characteristics, the Proponent must provide details of how the waste will be treated or immobilised to render it suitable for transport and disposal.

- Include details of all procedures and protocols to be implemented to ensure that any waste leaving the site is transported and disposed of lawfully and does not pose a risk to human health or the environment.

- Include a statement demonstrating that the Proponent is aware of EPA's requirements with respect to notification and tracking of waste.

- Include a statement demonstrating that the Proponent is aware of the relevant legislative requirements for disposal of the waste, including any relevant Resource Recovery Exemptions, as gazetted by EPA from time to time.

- Outline contingency plans for any event that affects operations at the site that may result in environmental harm, including: excessive stockpiling of waste, volume of leachate generated exceeds the storage capacity available on-site etc.

- Include details of the quantity and type of liquid and/or non-liquid waste(s) generated, handled, processed or disposed of at the premises, including:
  - the transportation, assessment and handling of waste arriving at or generated at the site;
  - any stockpiling of wastes or recovered materials at the site;
  - any waste processing related to the facility, including reuse, recycling, reprocessing or treatment both on- and off-site;

- the method for disposing of all wastes or recovered materials at the facility;
- the emissions arising from the handling, storage, processing and reprocessing of waste at the facility;
- the proposed controls for managing the environmental impacts of these activities.

8 Dangerous Goods, Chemical storage and Bunding

- The EIS must outline all details regarding the transport, handling, storage and use of dangerous goods, chemicals and products, including fuel, both on site and with ancillary activities and describe the measures proposed to minimise the potential for leakage or the migration of pollutants into the soil/waters or from the site.

- The EIS should identify any fuel or chemical storage areas proposed for the site.

- The EIS should consider compliance with the following legislation, standards and guidelines where relevant:
  - Australian Standard AS1692:1989 Tanks for Flammable and combustible liquids;
  - The DECC's "Bunding and Spill Management" Technical Guideline (November 1997)
  - Australian Standard AS 1940:2004 The Storage and Handling of Flammable and Combustible Liquids
  - Australia Standard AS 4452-1997: The Storage and Handling of Toxic Substances;
  - Australian/New Zealand Standard AS/NZS 4452:1997: The Storage and Handling of Mixed Classes of Dangerous Goods in Packages and Intermediate Bulk Containers; and
  - Road and Rail Transport (Dangerous Goods) Act 1997

9 Monitoring Programs

The EIS should include a detailed assessment of any noise, air quality, weather, water or waste monitoring required during the construction and on-going operation of the site to ensure that the development achieves a satisfactory level of environmental performance. The evaluation should include a detailed description of the monitoring locations, sample analysis methods and the level of reporting proposed.

ATTACHMENT B

Guidance Material

Title	Web address
Relevant Legislation	
Environmentally Hazardous Chemicals Act 1985	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+14+1985+cd+0+N
Environmental Planning and Assessment Act 1979	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+203+1979+cd+0+N
Protection of the Environment Operations Act 1997	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+156+1997+cd+0+N
Water Management Act 2000	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+92+2000+cd+0+N
Licensing	
Guide to Licensing	www.environment.nsw.gov.au/licensing/licenceguide.htm
Air Issues	
Air Quality	
Approved methods for the Modelling and Assessment of Air Pollutants in NSW (2016)	http://www.epa.nsw.gov.au/resources/epa/approved-methods-for-modelling-and-assessment-of-air-pollutants-in-NSW-160666.pdf
Approved methods for the Sampling and Analysis of Air Pollutants in NSW (2016)	http://www.epa.nsw.gov.au/resources/air/07001amsaap.pdf
POEO (Clean Air) Regulation 2010	http://www.legislation.nsw.gov.au/maintop/view/inforce/subordleg+428+2010+cd+0+N
Noise and Vibration	
Interim Construction Noise Guideline (DECC, 2009)	http://www.environment.nsw.gov.au/noise/constructnoise.htm
Assessing Vibration: a technical guideline (DEC, 2006)	http://www.environment.nsw.gov.au/noise/vibrationguide.htm
NSW Industrial Noise Policy Noise Policy for Industry (2017)	http://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/nsw-industrial-noise-policy
NSW Road Noise Policy (DECCW, 2011)	http://www.epa.nsw.gov.au/resources/noise/2011236nswroadnoisepolicy.pdf
Waste	
Waste Classification Guidelines (EPA, 2014)	http://www.epa.nsw.gov.au/wasteregulation/classify-guidelines.htm
Resource recovery exemption	http://www.epa.nsw.gov.au/wasteregulation/recovery-exemptions.htm
Water	
Water Quality Objectives	http://www.environment.nsw.gov.au/ieo/index.htm
ANZECC (2000) Guidelines for Fresh and Marine Water Quality	http://www.mincos.gov.au/publications/australian_and_new_zealand_guidelines_for_fresh_and_marine_water_quality

Title	Web address
Applying Goals for Ambient Water Quality Guidance for Operations Officers – Mixing Zones	http://deccnet/water/resources/AWQGuidance7.pdf
Approved Methods for the Sampling and Analysis of Water Pollutant in NSW (2004)	http://www.environment.nsw.gov.au/resources/legislation/approvedmethods-water.pdf

Anthony Ko

From: Fire Safety <FireSafety@fire.nsw.gov.au>
Sent: Monday, 18 February 2019 12:06 PM
To: Tatsiana Bandaruk
Subject: FRN19/354 - BFS19/291 - FW: Newcastle Gas Fired Power Station Project (SSI 9837) Request for Input into Secretary's Environmental Assessment Requirements

Dear Tatsiana,

In regards to your email correspondence dated the 25th of January 2019, Fire & Rescue NSW confirms receipt of the Secretary's Environmental Assessment Requirements (SEARs) for AGL Macquarie Pty Ltd, Newcastle Gas Fired Power Station Project (SSI 9837), located in Tomago, north of Newcastle, within the Port Stephens local government area.

It has been the experience of FRNSW that power stations pose unique challenges to firefighters when responding to and managing an incident. Factors such as high and potentially hazardous fuel loads, facility layout, and design of fire safety systems have a significant impact on the ability to conduct firefighting operations safely and effectively. Consultation with organisations such as FRNSW throughout the development process enables the design and implementation of more effective fire safety solutions that help to mitigate the impact of incidents when they occur.

FRNSW understands the project will undergo a State Environmental Planning Policy No.33 – Hazardous and Offensive Development (SEPP 33) screening process and the subsequent development of a Preliminary Hazard Analysis (PHA) report.

Following a review of the SEARs FRNSW initial recommendations are that a comprehensive Fire Safety Study (FSS) will be required for the site.

FRNSW requests the opportunity to review and comment on the forthcoming EIS.

Regards

NSW GOVERNMENT | FIRE + RESCUE

STATION OFFICER BRENDAN HURLEY
TEAM LEADER SPECIAL HAZARDS
INFRASTRUCTURE LIAISON UNIT | Fire and Rescue NSW
T: (02) 9742 7343 | M: 0438 601 582
1 Amarina Ave, Greenacre, NSW 2190 | Locked Mail Bag 12, Greenacre, NSW 2190

PREPARED FOR ANYTHING. www.fire.nsw.gov.au

FRNSW CONFIDENTIALITY NOTICE AND DISCLAIMER

The information in this transmission may be confidential and/or protected by legal professional privilege, and is intended only for the person or persons to whom it is addressed. If you are not the intended recipient of this message you must not read, forward, print, copy, disclose, use or store in any way the information in this e-mail or any attachment it may contain. Please notify the sender immediately and delete or destroy all copies of this e-mail and any attachment it may contain.

Hunter Water Corporation
ABN 46 228 513 446

PO Box 5171
HRMC NSW 2310
36 Honeysuckle Drive
NEWCASTLE NSW 2300
hunterwater.com.au
1300 657 657 (T)
enquiries@hunterwater.com.au

8 February 2019

Our Ref: HW2018-813

Resource and Energy Assessments
NSW Department of Planning and Environment
GPO Box 39
Sydney NSW 2001

Attention: Tatsiana Bandaruk, Environmental Assessment Officer
Via email: Tatsiana.Bandaruk@planning.nsw.gov.au

Dear Tatsiana,

RE: REQUEST FOR INPUT INTO SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS - NEWCASTLE GAS FIRED POWER STATION PROJECT (SSI 9837)

Thank you for your email on 25 January 2019 to Hunter Water Corporation (Hunter Water) seeking input for the Secretary's Environmental Assessment Requirements (SEARS) for the Environmental Impact Statement (EIS) for the proposed 250 MW gas fired power station and ancillary infrastructure at Tomago. Hunter Water understands that the proposed power station would operate as a peak load generation facility, would connect into the existing gas supply system at the Newcastle Gas Storage Facility (NGSF) and/or the Tomago to Hexham high pressure gas pipeline via new pipeline(s), and would connect into the existing electricity network at the Tomago switchyard via a new 132 kV transmission line. Ancillary infrastructure to be constructed on the power station site would include fuel storage tanks, water management facilities, workshops, administration buildings and amenities.

The proposed power station site is located adjacent to the Tomago Sandbeds Special Area as gazetted in the *Hunter Water Regulation 2015*, while the gas pipeline and electrical transmission investigation areas are located within the Special Area. The Tomago aquifer can supply up to 30% of the region's drinking water supply and plays an important strategic function for Hunter Water as a drought reserve.

Hunter Water's Operating Licence requires compliance with the Framework for Management of Drinking Water Quality that is part of the Australian Drinking Water Guidelines (ADWG). The Framework requires adoption of a multiple barrier approach to water quality, and states that "*the most effective barrier is protection of source water to the maximum degree practical*". Protection of land within the Special Area is key to ensuring that this barrier is effective. In accordance with the *Hunter Water Regulation 2015*, prevention of pollution or contamination of water in the Special Area is of paramount importance to the Corporation.

It is noted that the draft SEARs include, among others, the requirement for the EIS to address the following matters:

- an assessment of the impacts of the project on groundwater aquifers and groundwater dependent ecosystems;
- a detailed site water balance for the project, including water supply and wastewater disposal arrangements;
- an assessment of whether the project would have a neutral or beneficial effect on water quality;
- an assessment of potential contamination from the proposed construction of the site and its associated risks to human health and the environment; and
- a Biodiversity Development Assessment Report.

Hunter Water's recommended additions to these requirements are described below.

Aquifers and Groundwater Dependent Ecosystems (GDEs)
An assessment of the impact of the project on the Tomago aquifer and GDEs should specifically address the extraction of groundwater for both construction and operation as well as discharge of stormwater and excess water from operational activities to the environment, if proposed.

The NGSF is located within the groundwater draw zone for extraction wells at Station 20 in the Tomago aquifer, as indicated in Attachment 1. Where the proposed new gas pipeline would connect into the NGSF (either option) the construction and/or operation of the pipeline will potentially impact on the Hunter Water boreline and this should be addressed in the EIS.

Neutral or Beneficial Effect on Water Quality (NorBE)
Hunter Water expects that all development in drinking water catchments will demonstrate NorBE. NorBE applies to all releases of water, wastewater and other contaminants from the site that may affect water quality, during both construction and operation. A development is considered to demonstrate NorBE if the development:

(a) has no identifiable potential impact on water quality, or

(b) will contain any water quality impact on the development site and prevent it from reaching any watercourse, waterbody or drainage depression on the site, or

(c) will transfer any water quality impact outside the site where it is treated and disposed of to standards approved by the consent authority.

Hunter Water has published guidelines for development in drinking water catchments and these can be viewed on Hunter Water's website at Guideline for Development in the Drinking Water catchments. This link may be included in the list of reference documents in Attachment 1 to the SEARS.

Water Supply and Associated Services
Hunter Water understands that operational water demands will be determined by the preferred power generation technology. Hunter Water notes that the Preliminary Environmental Assessment (PEA) identifies a range of options for water supply, including groundwater bores, the Hunter River, and the Hunter Water potable water network.

There is an existing water supply network in the vicinity of the NGSF. Environmental impacts associated with extending the existing water supply network, if required, should be addressed in the EIS.

Potable water supply would be from Grahamstown Water Treatment Plant which can be sourced from either Grahamstown Dam or Tomago Borefields depending on operational

requirements. There is varying water quality from either source which Hunter Water will be able to provide upon request.

From a water system demand perspective it is important to understand annual volume, volume required when operating, how long a 'peak' may last, average/peak flow rate required, and operating implications – this could influence how Hunter Water configures the network and what to do when changing source water

In addition to a water balance, the feasibility of each of the identified options should be detailed in the EIS. In particular, the EIS should address how water usage for the project will affect water availability for other relevant water users, including the environment, if groundwater bores are proposed to supply water from the Tomago aquifer. We reiterate that the Tomago Sandbeds are an important source of drinking water for the Lower Hunter Region, particularly during times of drought, and that this function should not be compromised.

The construction of ancillary services for the project, in particular, have the potential to impact on the Tomago aquifer and the EIS must assess these potential impacts. These include general construction impacts, such as erosion and spill risk, and the discharge of potable water to the downstream environment during the commissioning of new water supply assets, such as the impact of scouring the pipes and the need for dechlorination and other scour control measures. Designs should address site selection for scour or other maintenance access locations, including potential alternative locations.

Wastewater and Associated Services
The expected concentrations of contaminants and volumes of wastewater (sewage and process water), together with the preferred disposal option/s and any associated impacts, should be clearly addressed in the EIS. The EIS should also address whether the operation of the proposed power station would produce brine and how that would be disposed.

The PEA mentions potential options for the management of excess process water from the operation, but does not discuss how sewage generated at the power station will be managed. The site is not currently service by the existing Hunter Water sewer network, however, a private sewer scheme services the industrial area to the south of the site by way of a pump out system that operates under a Trade Waste Agreement with Hunter Water. The Proponent should liaise with Hunter Water to identify the requirements for connection to this system or alternate sewage management options.

The EIS should assess the options for the disposal of wastewater and the potential environmental and/or operational impacts of the chosen option. If disposal to sewer or tankering to the Raymond Terrace Wastewater Treatment Works is the preferred option, the assessment must address impacts to the capacity and functionality of the Hunter Water wastewater treatment system. Where development is located within a drinking water catchment, disposal of wastewater to a Hunter Water wastewater treatment system, whether by sewer or tanker, is considered to meet NorBE. If the proponent proposes to discharge process wastewater to the environment, evidence must be provided to demonstrate that the discharge meets NorBE.

If connection to the reticulated sewerage network is proposed, details of the impact assessment for such connection may be included in the EIS rather than in a separate document to Hunter Water. This should include assessment of the impacts of overflows from any manholes required.

Stormwater
The EIS should include a stormwater management plan and MUSIC modelling to demonstrate that the proposed stormwater treatment train will result in post-development stormwater quality that is equal to or better than the pre-development stormwater quality. The appropriate Port Stephens MUSIC Link defaults should be used, and the modelling files should be provided to Hunter Water (where there is a risk of impacts on the drinking water catchment) and Port Stephens Council for review, together with the MUSIC Link report and justification for any parameters that have been modified.

Contamination Risk
The potential for contaminants to be liberated and enter the Tomago aquifer as a result of construction and operation of the project should be addressed in the EIS. The nature and extent of the contamination risk should be described, including an estimation of the likely pollutant concentrations that may reach the aquifer and how such risks are proposed to be managed.

Biodiversity Development Assessment Report (BDAR)
The BDAR should include an assessment of the impact of the development on the adjacent biodiversity stewardship site proposed by Hunter Water. Hunter Water can provide more information about the biodiversity stewardship site to the consultant preparing the EIS. We note that the southern gas investigation corridor is less likely to affect the proposed biodiversity stewardship site than the northern corridor.

In particular, the BDAR needs to include an assessment of the impact of edge effects and disruption of movement corridors, particularly for koalas. It is noted that the PEA refers to endangered koala populations in Hawks Nest and Tea Gardens, which are in the Great Lakes Local Government Area and are a separate and distinct population from the population in the Tomago Sandbeds in the Port Stephens Local Government Area. During preparation of the BDAR, consultation should be undertaken with relevant organisations regarding koala population studies undertaken across the Tomago Sandbeds and regarding other koala data. Such organisations include Port Stephens Council, Hunter Wildlife Rescue and Port Stephens Koalas.

Regarding biodiversity offsets, we note that the Hunter Region Botanic Gardens has a register Biobanking Agreement with the Office of Environment and Heritage and has biodiversity credits available for purchase.

Additional Considerations
Indicative construction laydown and stockpiling areas must be nominated and assessed. All potentially contaminating materials should be stored outside the catchment area and construction should include the preparation of environmental management plans that address the management of all potential risks.

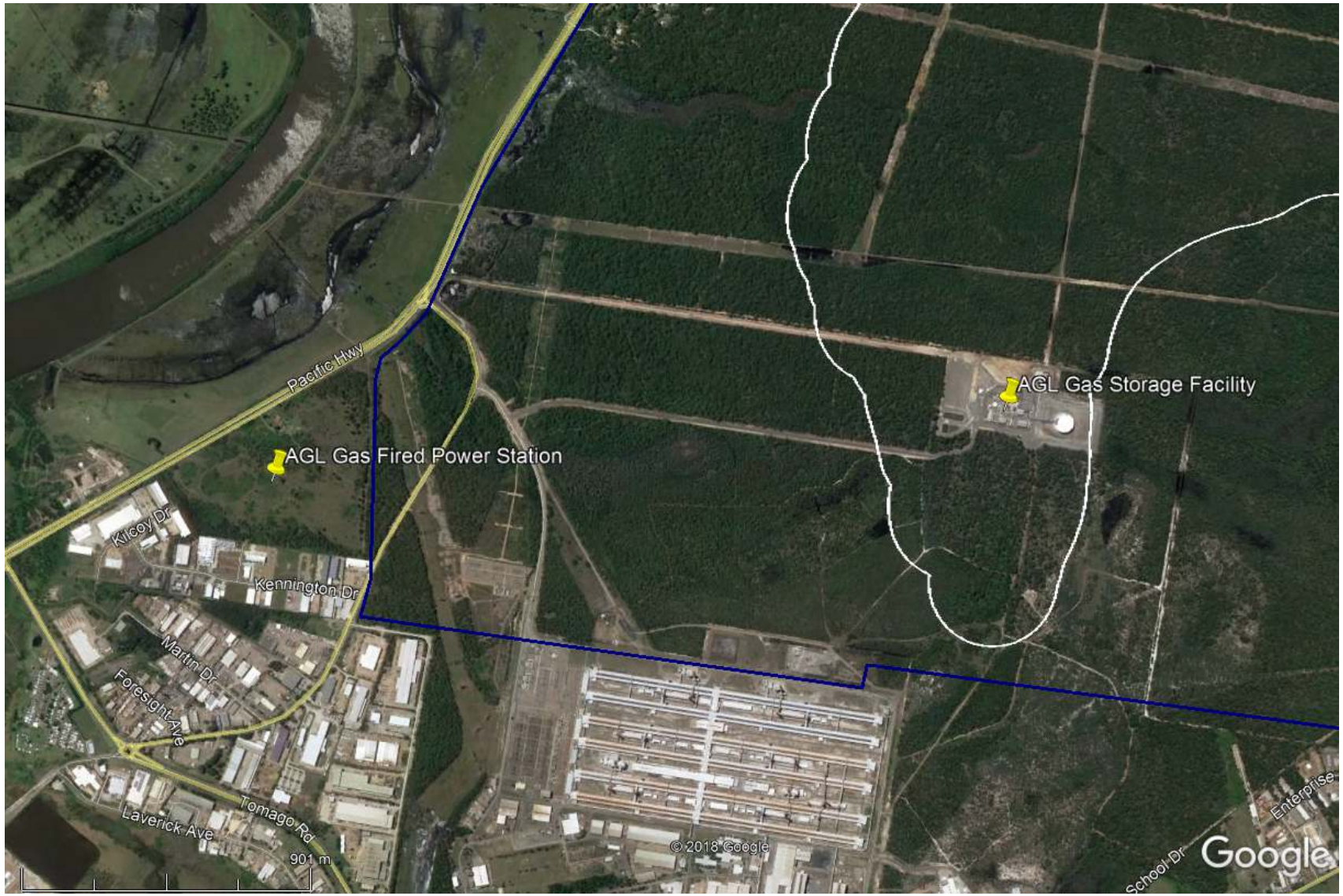
If you require further advice or clarification regarding the above comments, please contact me on (02) 4979 9545.

Yours sincerely,



Malcolm Withers
Account Manager Major Development

ATTACHMENT 1



Location of proposed Gas Fired Power Station site and existing Newcastle Gas Storage Facility in relation to the gazetted Tomago Special Area (dark blue line) and Station 20 groundwater draw zone (white line).

DOC19/67554-1
SSI 9837

Tatsiana Bandaruk
Environmental Assessment Officer
Resource and Energy Assessments – Planning Services
Department of Planning and Environment
tatsiana.bandaruk@planning.nsw.gov.au

Dear Tatsiana

Input into Secretary's Environmental Assessment Requirements – Newcastle Gas Fired Power Station Project – Port Stephens LGA (SSI 9837)

I refer to your email dated 25 January 2019 seeking input into the Secretary's Environmental Assessment Requirements (SEARs) for the Newcastle Gas Fired Power Station Project, located at 1940 Pacific Highway, Tomago. The proposed development is within the Port Stephens local government area.

The Office of Environment and Heritage (OEH) understands that AGL is seeking to establish a gas fired power station, electricity transmission line, gas transmission pipeline and associated infrastructure. OEH understands that the proposal is a critical State Significant Infrastructure (SSI 9837) project under the *Environmental Planning and Assessment Act 1979*.

OEH has reviewed the Preliminary Environmental Assessment document as prepared by AGL (dated 9 January 2019) and has prepared Standard SEARs which are presented in **Attachment A**. There are no project-specific SEARs provided for this project (**Attachment B**). Details of guidance documents are provided in **Attachment C**.

With respect to Aboriginal cultural heritage, OEH notes that any Aboriginal cultural heritage assessment undertaken prior to 2010 is unlikely to meet current OEH Aboriginal cultural heritage guidelines for the assessment of Aboriginal cultural heritage in NSW. The OEH 2011 *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW* should be referenced in this instance.

If you have any further questions in relation to this matter, please contact Brendan Mee, Senior Conservation Planning Officer, on 02 4904 2730 or via email at rog.hcc@environment.nsw.gov.au

Yours sincerely



STEVEN COX

Senior Team Leader - Planning
Hunter Central Coast Branch
Conservation and Regional Delivery Division

7 February 2019

Enclosure: Attachments A, B, C

Attachment A – Standard Environmental Assessment Requirements

Biodiversity

1. Biodiversity impacts related to the proposed development (SSI 9837) are to be assessed in accordance with the Biodiversity Assessment Method and documented in a Biodiversity Development Assessment Report (BDAR). The BDAR must include information in the form detailed in the *Biodiversity Conservation Act 2016* (s6.12), *Biodiversity Conservation Regulation 2017* (s6.8) and Biodiversity Assessment Method.
2. The BDAR must document the application of the avoid, minimise and offset framework including assessing all direct, indirect and prescribed impacts in accordance with the Biodiversity Assessment Method.
3. The BDAR must include details of the measures proposed to address the offset obligation as follows;
   - The total number and classes of biodiversity credits required to be retired for the development/project;
   - The number and classes of like-for-like biodiversity credits proposed to be retired;
   - The number and classes of biodiversity credits proposed to be retired in accordance with the variation rules;
   - Any proposal to fund a biodiversity conservation action;
   - Any proposal to conduct ecological rehabilitation (if a mining project);
   - Any proposal to make a payment to the Biodiversity Conservation Fund.

If seeking approval to use the variation rules, the BDAR must contain details of the reasonable steps that have been taken to obtain requisite like-for-like biodiversity credits.

4. The BDAR must be prepared by a person accredited in accordance with the Accreditation Scheme for the Application of the Biodiversity Assessment Method Order 2017 under s6.10 of the *Biodiversity Conservation Act 2016*.

Aboriginal cultural heritage

5. The Environmental Impact Assessment (EIS) must identify and describe the Aboriginal cultural heritage values that exist across the whole area that will be affected by the development and document these in the Aboriginal Cultural Heritage Assessment Report (ACHAR). This may include the need for surface survey and test excavation. The identification of cultural heritage values should be guided by the Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (DECCW, 2011) and consultation with OEH regional branch officers.

6. Consultation with Aboriginal people must be undertaken and documented in accordance with the Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW). The significance of cultural heritage values for Aboriginal people who have a cultural association with the land must be documented in the ACHAR.

7. Impacts on Aboriginal cultural heritage values are to be assessed and documented in the ACHAR. The ACHAR must demonstrate attempts to avoid impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the ACHAR must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to OEH.

Historic heritage

8. The EIS must provide a heritage assessment including but not limited to an assessment of impacts to State and local heritage including conservation areas, natural heritage areas, places of Aboriginal heritage value, buildings, works, relics, gardens, landscapes, views, trees should be assessed. Where impacts to State or locally significant heritage items are identified, the assessment shall:

   a. outline the proposed mitigation and management measures (including measures to avoid significant impacts and an evaluation of the effectiveness of the mitigation measures) generally consistent with the NSW Heritage Manual (1996),

   b. be undertaken by a suitably qualified heritage consultant(s) (note: where archaeological excavations are proposed the relevant consultant must meet the NSW Heritage Council's Excavation Director criteria),

   c. include a statement of heritage impact for all heritage items (including significance assessment),

   d. consider impacts including, but not limited to, vibration, demolition, archaeological disturbance, altered historical arrangements and access, landscape and vistas, and architectural noise treatment (as relevant), and

   e. where potential archaeological impacts have been identified develop an appropriate archaeological assessment methodology, including research design, to guide physical archaeological test excavations (terrestrial and maritime as relevant) and include the results of these test excavations.

Water and soils

9. The EIS must map the following features relevant to water and soils including:
   a. Acid sulfate soils (Class 1, 2, 3 or 4 on the Acid Sulfate Soil Planning Map).
   b. Rivers, streams, wetlands, estuaries (as described in s4.2 of the Biodiversity Assessment Method).
   c. Wetlands as described in s4.2 of the Biodiversity Assessment Method.
   d. Groundwater.
   e. Groundwater dependent ecosystems.
   f. Proposed intake and discharge locations.

10. The EIS must describe background conditions for any water resource likely to be affected by the development, including:
   a. Existing surface and groundwater.
   b. Hydrology, including volume, frequency and quality of discharges at proposed intake and discharge locations.
   c. Water Quality Objectives (as endorsed by the NSW Government http://www.environment.nsw.gov.au/ieo/index.htm) including groundwater as appropriate that represent the community's uses and values for the receiving waters.
   d. Indicators and trigger values/criteria for the environmental values identified at (c) in accordance with the ANZECC (2000) Guidelines for Fresh and Marine Water Quality and/or local objectives, criteria or targets endorsed by the NSW Government.

11. The EIS must assess the impacts of the development on water quality, including:
    a. The nature and degree of impact on receiving waters for both surface and groundwater, demonstrating how the development protects the Water Quality Objectives where they are currently being achieved, and contributes towards achievement of the Water Quality Objectives over time where they are currently not being achieved. This should include an assessment of the mitigating effects of proposed stormwater and wastewater management during and after construction.
    b. Identification of proposed monitoring of water quality.

12. The EIS must assess the impact of the development on hydrology, including:
    a. Water balance including quantity, quality and source.
    b. Effects to downstream rivers, wetlands, estuaries, marine waters and floodplain areas.
    c. Effects to downstream water-dependent fauna and flora including groundwater dependent ecosystems.
    d. Impacts to natural processes and functions within rivers, wetlands, estuaries and floodplains that affect river system and landscape health such as nutrient flow, aquatic connectivity and access to habitat for spawning and refuge (e.g. river benches).
    e. Changes to environmental water availability, both regulated/licensed and unregulated/rules-based sources of such water.
    f. Mitigating effects of proposed stormwater and wastewater management during and after construction on hydrological attributes such as volumes, flow rates, management methods and re-use options.
    g. Identification of proposed monitoring of hydrological attributes.

Flooding and coastal erosion

13. The EIS must map the following features relevant to flooding as described in the Floodplain Development Manual 2005 (NSW Government 2005) including:
    a. Flood prone land.
    b. Flood planning area, the area below the flood planning level.
    c. Hydraulic categorisation (floodways and flood storage areas).

14. The EIS must describe flood assessment and modelling undertaken in determining the design flood levels for events, including a minimum of the 1 in 10 year, 1 in 100 year flood levels and the probable maximum flood, or an equivalent extreme event.

15. The EIS must model the effect of the proposed development (including fill) on the flood behaviour under the following scenarios:
    a. Current flood behaviour for a range of design events as identified in 11 above. This includes the 1 in 200 and 1 in 500 year flood events as proxies for assessing sensitivity to an increase in rainfall intensity of flood producing rainfall events due to climate change.

16. Modelling in the EIS must consider and document:

    a. The impact on existing flood behaviour for a full range of flood events including up to the probable maximum flood.
    b. Impacts of the development on flood behaviour resulting in detrimental changes in potential flood affection of other developments or land. This may include redirection of flow, flow velocities, flood levels, hazards and hydraulic categories.
    c. Relevant provisions of the NSW Floodplain Development Manual 2005.

17. The EIS must assess the impacts on the proposed development on flood behaviour, including:

    a. Whether there will be detrimental increases in the potential flood affectation of other properties, assets and infrastructure.
    b. Consistency with Council floodplain risk management plans.
    c. Compatibility with the flood hazard of the land.
    d. Compatibility with the hydraulic functions of flow conveyance in floodways and storage in flood storage areas of the land.
    e. Whether there will be adverse effect to beneficial inundation of the floodplain environment, on, adjacent to or downstream of the site.
    f. Whether there will be direct or indirect increase in erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses.
    g. Any impacts the development may have upon existing community emergency management arrangements for flooding. These matters are to be discussed with the SES and Council.
    h. Whether the proposal incorporates specific measures to manage risk to life from flood. These matters are to be discussed with the SES and Council.
    i. Emergency management, evacuation and access, and contingency measures for the development considering the full range or flood risk (based upon the probable maximum flood or an equivalent extreme flood event). These matters are to be discussed with and have the support of Council and the SES.
    j. Any impacts the development may have on the social and economic costs to the community as consequence of flooding.

Attachment B – Project specific environmental assessment requirements

Biodiversity - nil
Aboriginal cultural heritage - nil
Historic heritage - nil
Water and soils - nil
Flooding and coastal erosion - nil

Attachment C – Guidance material

Title	Web address
Relevant legislation	
Biodiversity Conservation Act 2016	https://www.legislation.nsw.gov.au/#/view/act/2016/63/full
Coastal Management Act 2016	https://www.legislation.nsw.gov.au/#/view/act/2016/20/full
Commonwealth Environment Protection and Biodiversity Conservation Act 1999	http://www.austlii.edu.au/au/legis/cth/consol_act/epabca1999588/
Environmental Planning and Assessment Act 1979	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+203+1979+cd+0+N
Fisheries Management Act 1994	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+38+1994+cd+0+N
Marine Parks Act 1997	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+64+1997+cd+0+N
National Parks and Wildlife Act 1974	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+80+1974+cd+0+N
Protection of the Environment Operations Act 1997	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+156+1997+cd+0+N
Water Management Act 2000	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+92+2000+cd+0+N
Wilderness Act 1987	http://www.legislation.nsw.gov.au/viewtop/inforce/act+196+1987+FIRST+0+N
Biodiversity	
Biodiversity Assessment Method (OEH, 2017)	http://www.environment.nsw.gov.au/resources/bcact/biodiversity-assessment-method-170206.pdf
Guidance and Criteria to assist a decision maker to determine a serious and irreversible impact (OEH, 2017)	http://www.environment.nsw.gov.au/resources/bcact/guidance-decision-makers-determine-serious-irreversible-impact-170204.pdf
NSW Guide to Surveying Threatened Plant	http://www.environment.nsw.gov.au/resources/threatenedspecies/160129-threatened-plants-survey-guide.pdf
Fisheries NSW policies and guidelines	http://www.dpi.nsw.gov.au/fisheries/habitat/publications/policies,-guidelines-and-manuals/fish-habitat-conservation
List of national parks	http://www.environment.nsw.gov.au/NationalParks/parksearchatoz.aspx
Revocation, recategorisation and road adjustment policy (OEH, 2012)	http://www.environment.nsw.gov.au/policies/RevocationOfLandPolicy.htm
Guidelines for developments adjoining land and water managed by the Department of Environment, Climate Change and Water (DECCW, 2010)	http://www.environment.nsw.gov.au/protectedareas/developmntadjoiningdecc.htm
Heritage	
The Burra Charter (The Australia ICOMOS charter for places of cultural significance)	http://australia.icomos.org/wp-content/uploads/The-Burra-Charter-2013-Adopted-31.10.2013.pdf
Statements of Heritage Impact 2002 (HO & DUAP)	http://www.environment.nsw.gov.au/resources/heritagebranch/heritage/hmstatementsofhi.pdf
NSW Heritage Manual (DUAP) (scroll through alphabetical list to 'N')	http://www.environment.nsw.gov.au/Heritage/publications/

Title	Web address
Aboriginal cultural heritage	
Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW, 2010)	http://www.environment.nsw.gov.au/resources/cultureheritage/commconsultation/09781ACHconsultreq.pdf
Code of Practice for the Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW, 2010)	http://www.environment.nsw.gov.au/resources/cultureheritage/10783FinalArchCoP.pdf
Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW (OEH 2011)	http://www.environment.nsw.gov.au/resources/cultureheritage/20110263ACHguide.pdf
Aboriginal Site Recording Form	http://www.environment.nsw.gov.au/resources/parks/SiteCardMainV1_1.pdf
Aboriginal Site Impact Recording Form	http://www.environment.nsw.gov.au/resources/cultureheritage/120558asirf.pdf
Aboriginal Heritage Information Management System (AHIMS) Registrar	http://www.environment.nsw.gov.au/contact/AHIMSRegistrar.htm
Care Agreement Application form	http://www.environment.nsw.gov.au/resources/cultureheritage/20110914TransferObject.pdf
Acid sulphate soils	
Acid Sulfate Soils Planning Maps via Data.NSW	http://data.nsw.gov.au/data/
Acid Sulfate Soils Manual (Stone et al. 1998)	http://www.environment.nsw.gov.au/resources/epa/Acid-Sulfate-Manual-1998.pdf
Acid Sulfate Soils Laboratory Methods Guidelines (Ahern et al. 2004)	http://www.environment.nsw.gov.au/resources/soils/acid-sulfate-soils-laboratory-methods-guidelines.pdf This replaces Chapter 4 of the Acid Sulfate Soils Manual above.
Flooding and coastal erosion	
Reforms to coastal erosion management	http://www.environment.nsw.gov.au/coasts/coastalerosionmgmt.htm
Floodplain development manual	http://www.environment.nsw.gov.au/floodplains/manual.htm
Guidelines for Preparing Coastal Zone Management Plans	Guidelines for Preparing Coastal Zone Management Plans http://www.environment.nsw.gov.au/resources/coasts/130224CZMPGuide.pdf
NSW Climate Impact Profile	http://climatechange.environment.nsw.gov.au/
Climate Change Impacts and Risk Management	Climate Change Impacts and Risk Management: A Guide for Business and Government, AGIC Guidelines for Climate Change Adaptation
Water	
Water Quality Objectives	http://www.environment.nsw.gov.au/ieo/index.htm
ANZECC (2000) Guidelines for Fresh and Marine Water Quality	www.environment.gov.au/water/publications/quality/australian-and-new-zealand-guidelines-fresh-marine-water-quality-volume-1
Applying Goals for Ambient Water Quality Guidance for Operations Officers – Mixing Zones	http://deccnet/water/resources/AWQGuidance7.pdf

Title	Web address
Approved Methods for the Sampling and Analysis of Water Pollutant in NSW (2004)	http://www.environment.nsw.gov.au/resources/legislation/approvedmethods-water.pdf

NSW RURAL FIRE SERVICE

The Secretary
NSW Planning & Environment
GPO Box 39
Sydney NSW 2001

Your Ref: SSD 9837
Our Ref: D19/305
DA19013117196 AB

ATTENTION: Tatsiana Bandaruk **8 February 2019**

Dear Ms Bandurak

Agency Comment:- Secretary Environmental Assessment Requirements for Newcastle Gas Fired Power Station Project; Lots 2&3 DP 1043561 - 1940 Pacific Hwy Tomago

I refer to NSW Planning and Environment correspondence dated 25 January 2019 seeking comment from the NSW Rural Fire Service (NSW RFS) on matters to be included in the Environmental Impact Statement (EIS) for the above State Significant Development proposal.

The NSW RFS understands the proposal will include:

- *A new power station with a nominal capacity of about 250MW comprising of either large reciprocating engine generators or aero-derivate gas turbine generators. The power station would operate as a "peak load" generation facility supplying electricity at short notice during periods of high electricity demand or low electricity supply.*
- *Facilities ancillary to the power station include gas compression facilities, fuel storage tanks and infrastructure including diesel storage and truck unloading facilities, water management facilities and office, administration / amenities areas, workshop / storage facilities.*
- *Connection of the power station to the gas supply at the Newcastle Gas Storage Facility (NGSF) with a new gas pipeline(s) and/or connection of the power station directly to the existing Tomago to Hexham high pressure gas pipeline.*
- *Connection of the power station to the existing TransGrid operated Tomago switchyard with a new 132kV transmission line.*

The subject land is part mapped bush fire prone land by Port Stephens Shire Council. The NSW RFS considers that the EIS for the Newcastle power station should address the following bush fire criteria:

- *Department of Planning and Environment – Hazardous Industry Planning Advisory Papers;*
- *the aim and objectives of 'Planning for Bush Fire Protection 2006';*
- *identification of potential ignition sources during construction and operation of the development;*
- *storage of fuels and other hazardous materials (e.g., explosives for blasting);*

Postal address
Records
NSW Rural Fire Service
Locked Bag 17
GRANVILLE NSW 2142

Street address
NSW Rural Fire Service
Planning and Environment Services (North)
Suite 1, 129 West High Street
COFFS HARBOUR NSW 2450

T (02) 6691 0400
F (02) 6691 0499
www.rfs.nsw.gov.au
Email: pes@rfs.nsw.gov.au

- *proposed bush fire protection measures for the development, including vegetation management and fire suppression capabilities;*
- *operational access for fire fighting appliances to the site; and*
- *emergency and evacuation planning.*

For any enquiries regarding this correspondence, please contact Alan Bawden on 6691 0400.

Yours sincerely

John Ball

Manager – Planning and Environment Service North

The RFS has made getting information easier. For general information on 'Planning for Bush Fire Protection, 2006' , visit the RFS web page at www.rfs.nsw.gov.au and search under 'Planning for Bush Fire Protection, 2006'.

CR2019/000440
SF2019/018633
MJD

6 February 2019

Department of Planning & Environment
Resource and Energy Assessments
GPO Box 39
SYDNEY NSW 2001

Attention: Tatsiana Bandaruk

SEARS REQUEST - SSI 9837 - NEWCASTLE GAS FIRED POWER STATION PROJECT, LOT: 3 DP: 1043561, 1940 PACIFIC HIGHWAY TOMAGO

Reference is made to Department of Planning and Environment's email dated 25 January 2019, requesting Roads and Maritime Services' (Roads and Maritime) requirements under Schedule 2 of the *Environmental Planning and Assessment Regulation 2000.*

Transport for NSW and Roads and Maritime's primary interests are in the road network, traffic, broader transport issues and the inclusion of the M1 Motorway extension to Raymond Terrace. In particular, the efficiency and safety of the classified road network, the security of property assets and the integration of land use and transport.

Roads and Maritime have reviewed the Preliminary Environmental Assessment, prepared by AGL, dated 9 January 2019. It is understood that the proposal be for:

- the construction and operation of a 250 MW gas fired power station at 1940 Pacific Highway Tomago, with access to Old Punt Road; and
- ancillary infrastructure including connection to gas supply, gas compression facilities, fuel storage tanks, water management facilities and grid connection.

Roads and Maritime response & requirements

Roads and Maritime recommends that the Environmental Impact Statement (EIS) should refer to the following guidelines with regard to the traffic and transport impacts of the proposed development:

- Road and Related Facilities within the Department of Planning EIS Guidelines, and,
- Section 2 Traffic Impact Studies of Roads and Maritime's *Guide to Traffic Generating Developments 2002*.

Furthermore, a traffic and transport study shall be prepared in accordance with the Roads and Maritime's *Guide to Traffic Generating Developments 2002* and is to include (but not be limited to) the following:

- Assessment of all relevant vehicular traffic routes and intersections for access to and from the site, including current traffic counts,
- Assessment of trip generation of the proposed power station. As a power station is not a defined use in the RMS Guide to Traffic Generating Developments, it is recommended that an assessment of the peak hour trip generation be made relative to the expected employees and visitors driving to and from the site during the AM and PM peak hours.
- The distribution on the road network of the trips generated by the proposed development. It is requested that the predicted traffic flows are shown diagrammatically to a level of detail sufficient for easy interpretation.
- Identify any necessary road network infrastructure upgrades that are required to maintain existing levels of service on both the local and classified road network for the development. In this regard, preliminary concept drawings shall be submitted with the EIS for any identified road infrastructure upgrades. However, it should be noted that any identified road infrastructure upgrades will need to be to the satisfaction of Roads and Maritime and Council.

M1 Motorway Extension to Raymond Terrace

The M1 Motorway extension to Raymond Terrace (M12RT) project has been declared critical State significant infrastructure (SSI 7319) under section 115V of the *Environmental Planning and Assessment Act 1979*, as it is considered to be essential to the State for economic, environmental or social reasons. Roads and Maritime is currently carrying out environmental assessment of the project through the completion of an Environmental Impact Statement (EIS).

Noting the interaction of the proposed Newcastle Gas Power Station and the M12RT project, Roads and Maritime have been holding negotiations and design reviews with the proponent AGL to ensure that both projects can be delivered across the site (mainly being Lot 2 & 3 DP1043561).

Negotiations and reviews to date have resulted in potential changes to both projects so that both can be accommodated on the subject site. It is RMS's position to achieve this outcome and ensure both major infrastructure projects can be delivered and function across the subject site. It is anticipated that negotiations and review will continue to occur until both projects achieve project approval and are constructed through the site.

The potential timing of delivery of the AGL proposal may occur earlier than the M12RT. In this circumstance, specific conditions may be required on the AGL approval instrument to enable the efficient future delivery of the M12RT. The reverse would potentially apply should the M12RT proceed earlier. It would be appreciated if the Department could consider including requirements in the respective approval instrument conditions for either project.

In relation to the M1 Motorway extension in addition to the above requirements, Roads and Maritime request the following:

- Key Issue Transport –include reference to the future M1 Motorway extension to Raymond Terrace in the list of roads that should be assessed for capacity, condition, safety and efficiency.
- Key Issue Transport –include a requirement to demonstrate consultation with Roads and Maritime to support the objective of the delivery of the M12RT within the site.

On determination of this matter, please forward a copy of the SEARs to Roads and Maritime for record and / or action purposes. Should you require further information please contact Hunter Land Use on 4908 7688 or by emailing development.hunter@rms.nsw.gov.au.

Yours sincerely



Peter Marler
Manager Land Use Assessment
Hunter Region