

Newcastle Gas Storage Facility

Community Dialogue Group Meeting 4 18 January 2018

Agenda



Open and welcome
Previous minutes
Business arising

NSW Generation Plan

Local Community Investment Program presentations

General Business

Modification 3

Next meeting
Close

Open and welcome

Previous minutes and business arising

New Community Relations Manager



Marina Draper

Marina joined AGL at the end of November 2017 and will be taking over the Community Relations role for the Newcastle Gas Storage Facility. Marina also leads AGL's community engagement at the Silverton Wind Farm and Broken Hill Solar Plant, and works with the broader team on the NSW Generation Plan.

Marina has extensive experience in community relations, coming to AGL from a ten year career at Sydney Water, and prior to that, Toronto Hydro in Canada.

Marina can be contacted on:

• Email: MDraper@agl.com.au

• Work: 02 9921 2548

Mobile: 0498 020 244

Local Community Investment Program

Presentations and next steps

Local Community Investment Program



The first round of applications for AGL's Local Community Investment Program attracted a number of quality submissions. The number of applications received exceeded the funds available during this allocation. Accordingly, not all requests could be supported.

Following consideration against the selection criteria and a merit based assessment, some organisations have been invited to this meeting, to present their project for final consideration. Those that were unsuccessful in this round, have been advised.

Presentation order:

- Native Animal Trust Fund
- 2. Hunter Life Education
- 3. Tanilba Bay & District Senior Citizens
- 4. Hunter Region Botanic Gardens (at 11:30am)

Next Steps:

- Endorsement of applicants
- Process review

Update and next steps



Public exhibition began on 03/11/2017 and ended on 17/11/2017 and was advertised in the Bay News of The Area, Raymond Terrace News of The Area and the Port Stephens Examiner.









Comments were received from:

- Crown Lands and Water Division: request to clarify whether the minimal earthworks required for construction of the maintenance flare and transfer skid will intercept any groundwater.
 - Response: The minimal earthworks proposed as part of the proposed modification are not anticipated to intercept groundwater.
- **Hunter Water Corporation:** recommendation that AGL's commitment to providing containment for the oily waste collection vessel be incorporated as a condition of consent, with the requirement that the bunding is undertaken in accordance with Australian Standards.
 - Response: AGL has committed to providing containment for the oily waste collection vessel as part of the proposed modification.
- Environment Protection Authority: noted that the proposed maintenance flare will need to be of a specific design and AGL will need to submit an Environment Protection Licence variation application to the EPA.
 - Response: The proposed maintenance flare will be designed in accordance with of the requirements of clause 49 of the
 Protection of the Environment Operations (Clean Air) Regulation 2010 and AGL will submit an Environment Protection
 Licence variation application to the EPA.



Objection to modification received from:

- Tomago Aluminium Company: assertions made in the EA regarding flaring of tail gas and delivering additional gas to the
 market were incorrect.
 - · Response: Clarification of statements made.

Complete Response to Submissions available at:

http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8840

Next steps:

- NSW Department of Planning and Environment assessing AGL's response to submissions.
- NSW Department of Planning and Environment will then determine whether or not the modification application is approved.
- If the Modification Application is approved, AGL has drafted the following timeframe for construction:
 - Jemena construction period: April through to October 2018
 - NGSF construction period: June through to October 2018
 - Commissioning period: October to November 2018



Liddell replacement is AGL's preferred option compared to the proposal to extend the life of Liddell

Liddell replacement

Preferred option

Liddell Power Station closed in 2022 and repurposed with series of investments in new, low emissions generation and upgrades to existing generation

- Staged approach to bring new investment online ahead of Liddell retirement
- Each phase will track timing, deliverables and completion dates of each new investment



Newcastle gas peaker 250MW or other NSW sites



NSW gas peaker 500MW



Demand response up to 150MW

Liddell battery



Bayswater upgrade 100MW

Renewables 1600MW



NSW pumped hydro Feasibility



Liddell synchronous condenser Inertia and reactive power

Total capital investment: ~\$1,360m (of which ~\$490m in stage 1 projects)

Levelised cost of energy: \$83/MWh

Asset life: 15 to 30 years

Liddell extension

Work undertaken at Liddell Power Station to enable AGL to operate the station beyond 2022

- Extending Liddell's life by five years to deliver 1000MW of peak capacity at reduced availability
- Analysis has been done to examine the costs and other risks associated with extending Liddell



Total capital investment: ~\$920m

Levelised cost of energy: \$106/MWh

Asset life: five years



Stage 1 (feasibility during 2019 or earlier)

rechnology	PROJECT	Announced closu	re date for Liddell
O GAS	NSW Flexible gas peaker 250MW	Project delivery	
UPGRADE	Bayswater Efficiency upgrade 100 MW	Development undertaken during existing outage schedule	
	Liddell Synchronous condenser	Ongoing generation	Delivery
DEMAND RESPONSE	Up to 20MW	Progressive trials & pilots	
RENEWABLES	Coopers Gap 453MW	Project delivery	
	Silverton 200MW	Pelivery	
	Solar offtake (NSW) 300MW	Project delivery	
	20	017 2018 2019 2020 2021 2022	2023 2024
Delivery Ap	proved FID (conditional ¹)	Offtake approved	

1. Conditional final investment decisions will be subject to planning approval, EPC contract and connection agreement.



Feasibility of a gas peaker located at the NGSF or another suitable location in NSW

Gas fired peaking/intermediate power stations will form part of the electricity market's response when old coal fired power stations are withdrawn from the market, playing an increasingly important role by providing capacity to firm intermittent renewable generation.

The NGSF is one of the sites AGL are looking at, as well as elsewhere in NSW.

As well as the site, AGL are considering the best technology for the peaker, this could be reciprocating engines or gas turbines.

General Business

Next meeting and close



Lisa Andrews

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Marina Draper

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