

Ms Arianna Henty
AGL - Land & Approvals Manager
200 George St
SYDNEY NSW 2000

20/12/2019

Dear Ms Henty

**Newcastle Power Station (SSI-9837)
Submissions Report**

The public exhibition of the proposed Newcastle Power Station Project (the project) and Environmental Impact Statement concluded on Wednesday 18 December 2019.

The Department requests that you prepare and submit a Submissions Report detailing your response to issues raised in submissions. All the submissions can be viewed on the Department's website <https://www.planningportal.nsw.gov.au/major-projects/>.

In addition to any issues identified in the submissions, **Attachment 1** provides specific advice on key areas of consideration by the Department's Hazards Team in relation to the hazards and risks associated with the project. The Department can facilitate a meeting with its Hazards Team and your risk consultant to ensure the matters raised are adequately addressed.

The Department requests that you provide a written response to all submissions by 28 February 2020.

If you wish to discuss this matter, please contact Mandana Mazaheri on 02 9995 5093.

Yours sincerely



Stephen O'Donoghue
Director
Energy Assessments

as nominee of the Secretary

Attachment 1

The preliminary hazards assessment (PHA) included in the Environmental Impact Statement (EIS) of the Newcastle Power Station Project must demonstrate that the risks from the project can comply with the criteria set out in the Department's *Hazardous Industry Planning Advisory Paper No. 4 Risk Criteria for Land Use Safety Planning* (HIPAP 4).

The Department's Hazards Team require further detail, information and or assessment including:

- clarification on ignition probabilities in Table 26 of the PHA. Failure Frequencies associated per scenario appear low for full bore rupture piping from gas compression units, pig receiver and launcher on gas storage pipeline and to the storage pipeline (aboveground), pipe leak rupture of the gas storage pipeline – a comparative review of ignition probabilities with other literatures sources is required;
- review of other available literature sources for large pipeline failure frequencies, such as UK Health and Safety Executive (HSE), 2015, Update of Pipeline Failure Rates for Land Use Planning Assessments, Research Report (RR) 1035 (HSE RR 1035);
- clarification on whether a Vessel Phast Model has been adopted and whether a linear source risk model should be adopted;
- site layout diagrams to include more detail pertaining to proposed pipelines, pigging stations, compression stations (reciprocating compressors), tie in pipelines at the dual fuel peaking power plant (NPS), aboveground connection from Horizontal Directional Drilling to NPS and clearer connection points/lines at AGL's Newcastle Gas Storage Facility, separation of gas generator housing to control room and switchyard, etc;
- further details on comparing the proposed power station against the Dalton Power Station to justify the result from Dalton Power Station can be referenced. Otherwise, please update the PHA to reflect the preliminary design based on the proposed power station;
- clarification on whether the PHA included Flash Fire and vapour cloud explosion (VCE);
- clarification on whether the PHA included determination of the propagation risk, including but not limited to the 'storage pipeline', pigging facility, power station (such as control room, switching room, generators) and other neighbouring industrial development. If propagation between the two pipelines is possible, it is required to be include in the analysis;
- the individual fatality risk and illustrate the Individual Risk (IR) contour shown in Section 10.3 of the PHA. It should clearly illustrate the potential interaction between the IR risk contour to the neighbouring facility (circular vs contour along the pipelines); and
- an update to Table 29 of the PHA and provision of the IR value for various land uses.