

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

28/05/2020

Dear Ms Henty

**Newcastle Power Station (SSI-9837)
Request for Additional Information**

I refer to the Submissions Report for the proposed Newcastle Power Station Project, dated April 2020.

The Department has referred the Submissions Report to the relevant government agencies for advice. The key issues that the Department's Hazards Team require further detail, information and or assessment are summarised in **Attachment 1**. All the other agency submissions are available in **Attachment 2**.

The Department can facilitate meeting with the government agencies and your team to ensure the matters raised are adequately addressed.

The Department requests that you provide your written responses to the issues raised in the **Attachments 1 and 2** by 26 June 2020. Please advise if this date is not achievable based on any additional consultation/ assessment required.

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

Yours sincerely,



Stephen O'Donoghue
Director
Resource Assessments

Enclosed: Attachment 1 and Attachment 2

Attachment 1

The preliminary hazards assessment (PHA) 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 requests clarification on the assumptions and input into the risk modelling, and verification that the risk from the proposed project has not been underestimated, including further details and updates to the analysis from Section 8.4 and Table 24, specifically:

- A. clarification of how the ignition probabilities (81% and 40% for underground and aboveground sections) in Table 24 were used within the event tree in Table 19. Further details of how the 81% and 40% probabilities are apportioned for direct ignition (P1), delayed ignition (P2) and flame front acceleration (P3) are required;
- B. It is understood that for each underground section, jet fire, flash fire and VCE scenarios are analysed for 30, 50 and 110 mm release sizes. The choice of these release sizes appears to align with UK HSE RR1035 Table 72 for pin, small and large holes respectively. Please provide clarifications for the following matters, include full-bore rupture scenarios in the analysis, and revise the analysis as necessary:
 - the quoted failure frequencies in Table 24 are different to UK HSE RR1035 Table 72;
 - the meaning of "frequency for pipe length of 0.47km" and "frequency for pipe length of 7.8km", and how these frequencies were used in the analysis are unclear; and
 - no full-bore rupture scenarios were analysed in the revised PHA. These were analysed in the previous PHA; and

Based on the above matters, the individual risks outcomes in Figure 8 could be underestimated, possibly indicating that the proposal may not comply with the 50 pmpy individual fatality risk criteria for industrial land uses in HIPAP 4. Please update Figure 8 after revising the risk analysis to include items A and B above.