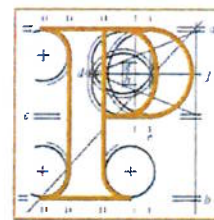


Our Case Number: ABP-317810-23



**An
Bord
Pleanála**

Health and Safety Authority
The Metropolitan Building
James Joyce Street
Dublin
Dublin 1

Date: 05 October 2023

Re: Open Cycle Gas turbine power plant (350MW) and associated infrastructure
Located on land to the north of Tynagh Power Station, Derryfrench, Tynagh, Loughrea, Co. Galway.

Dear Sir / Madam,

An Bord Pleanála has received your response in relation to the above mentioned proposed development and will take it into consideration in its determination of the matter.

The Board will revert to you in due course in respect of this matter.

Please be advised that copies of all submissions / observations received in relation to the application will be made available for public inspection at the offices of the local authority and at the offices of An Bord Pleanála when they have been processed by the Board.

More detailed information in relation to strategic infrastructure development can be viewed on the Board's website: www.pleanala.ie.

If you have any queries in the meantime, please contact the undersigned officer of the Board or email sids@pleanala.ie quoting the above mentioned An Bord Pleanála reference number in any correspondence with the Board.

Yours faithfully,

PP EGM

Niamh Hickey
Executive Officer
Direct Line: 01-8737145

PA09



An tÚdarás Sláinte agus Sábháilteachta
Health and Safety Authority

☎ 0818 289 389 ☎ landuseplanning@hsa.ie ☎ www.hsa.ie

An Bord Pleanála,
64 Marlborough street,
Dublin 1
D01 V902
By email to sids@pleanala.ie

Our Ref: PAR 4169

02/10/2023

Re: Proposed strategic infrastructure development [ABP-317810-23] by EP Energy Development Ltd. Park North of Tynagh power station, Derryfrench, Tynagh, Loughrea, Co. Galway

To whom it may concern,

The Health and Safety Authority (the Authority), acting as the Central Competent Authority under the Chemicals Act (Control of Major Accident Hazards Involving Dangerous Substances) Regulations 2015 (S.I. 209 of 2015), gives technical advice to the planning body when requested, under regulation 24(2) in relation to:

- (a) the siting and development of new establishments;
- (b) modifications to establishments of the type described in Regulation 12(1);
- (c) new developments including transport routes, locations of public use and residential areas in the vicinity of establishments, where the siting, modifications or developments may be the source of, or increase the risk or consequences of, a major accident.

The Authority currently has insufficient information to provide technical advice on this application, therefore the Authority requests the Planning body to seek further information in accordance with regulation 24(10) from the applicant in relation to this application.

See attachment 1 for further clarification required on the COMAH Land Use Planning Assessment for Tynagh OCGT North

The Authority will be in a position to provide advice to An Bord Pleanála within 4 weeks of receipt of the requested information.

If you have any queries please contact the undersigned.

Yours sincerely



Geoff Hynes

Inspector,
COMAH, Chemical Production & Storage (CCPS)

Attachment 1

1. The report should include a drawing showing the site boundaries and the location/routes of all major hazards for all three COMAH installations – the current Tynagh Energy site, along with the Tynagh South and North sites. The drawing should show over ground and underground gas pipelines, AGIs, fuel storage bunds, CCGT and OCGT gas turbine enclosure locations, power station turbine hall, hydrogen operations etc. The report does not make clear the location of the Tynagh North OCGT turbine enclosures (only the AGI, fuel bund and underground gas pipelines are shown).
2. Section 7.2 indicates that these are 3 separate sites within a domino group. But Section 7.3 states that they “all share administration and workshop space. In addition, the three sites will have a single security gatehouse”. In terms of the COMAH Regulations, each COMAH establishment shall have a clear boundary, it is not permissible to traverse one establishment to access another. Further details required on shared facilities to determine compliance with COMAH Regulations
3. Clarification is required on the inventory of dangerous substances to be stored/used on the proposed site.
4. Section 5.1 – the report does not seem to consider the risks associated with a VCE in a gas turbine enclosure for the OCGT. This should be justified or included in the assessment.
5. Section 5.1 – the report does not seem to consider the risks associated with the AGI. This should be justified or included in the assessment.
6. Also, to note in section 5.1, and 5.2.1 – rupture of a natural gas pipeline and a pipeline rupture can lead to a fireball. This should be considered as it is often the dominant risk.
7. Section 5.2.1 Table 4 – the HSA refs should be to HSE Events #087 and #088 in the current [TLUP](#) (February 2023)
8. Section 5.2.1 - actual diameter and routes of the 75 bar and 30 bar gas pipelines to be set out. (250mm seems to be an ‘example’).
9. Section 5.2.2.1 – vertical jet fires have been modelled as per the current advice in TLUP Section 2.9. This may be reasonable in some cases, but it is now more standard/conservative to consider a horizontal jet fire. This may be particularly important when considering the risk of escalation/domino events. Horizontal jet fire to be modelled.
10. Section 5.2.2.1 – details on which model was used to generate the jet fire hazard ranges? It would help to quote all the key modelling inputs.
11. Section 5.2.2.2 – no information is provided on flash fire hazard ranges. How have flash fires been modelled?
12. Section 5.2.2.2 – provide detail on meteorological data probabilities (i.e. 80/20 for D5/F2) or wind rose, which are relevant for flash fires for gas releases.
13. Section 5.2.2.3 – provide detail on the direction used for the release for pipeline VCE hazards?
14. Section 5.2.3 – what approach has been taken to ignition location for gas pipeline VCE events?
15. Section 5.3.1 Table 7 – HSA refs should be Events #123, #125, #127.
16. Section 5.3.1 Table 7 – what model has been used to calculate these pool fire hazard ranges? And what material was used to represent distillate? It would help to quote all the key modelling inputs.
17. Section 5.3.2 – what frequency has been used for an overtop pool fire? TLUP Section 3.6.3 indicates 5×10^{-8} /yr per tank, provide further detail.
18. Section 6.3 – provide detail on how the risks to people indoors from overpressure have been evaluated?
19. In terms of the domino risk set out in Section 7.1, you are required to complete an assessment of the domino risk from the proposed North OCGT to the other two sites i.e. the operational Tynagh

Energy along with the Tynagh South OCGT site. It is expected the most significant events would be a major release/rupture at the AGI leading to a fireball and a VCE in a turbine enclosure or turbine hall.

20. Section 7.2 Figure 3 – it is unclear whether the risk contours relate to a hypothetical residential population (outdoors 10% of time, indoors 90% of time, always present) as required for TLUP LUP zones.
21. Section 7.3 Table 13 – row 3 IR - query should this be 0.3 not 0.2?
22. Section 7.3 Table 13 – the location of all these areas should be shown on a site drawing.
23. Section 7.3 Table 13 – have the 'Risk' values quoted for different locations considered the design of each building (in terms of indoor overpressure vulnerability) and indoor/outdoor probability? The approach used for calculating risks should be made clear.
24. Section 7.3 – below Table 13 it is stated that *"The level of risk to an individual security guard is calculated to be 4.2 cpm"* which does not seem consistent with Table 13 which indicates 1.57×10^{-7} as the risk level at this location.