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By email: mark.dragar@jemena.com.au

Implementation of PICARRO Vehicle Mounted Leak Survey Methodology 23 July 2024

Dear Mr Dragar

Thank you for your letter notifying the Department of Climate Change, Energy, the Environment and Water (the Department) on 21 February 2024 of the implementation of the PICARRO vehicle for undertaking leakage surveys of Jemena's gas distribution networks, and seeking the Department's endorsement of this technology.

Jemena has an obligation under the *Gas Supply (Safety and Network Management) Regulation 2022* to both lodge a safety and operating plan (SAOP) and ensure it operates and maintains its gas distribution networks in accordance with this plan. The purpose being to ensure that the network reticulates gas reliably to its customers to an acceptable level of quality while preserving public safety.

The Department supports and encourages any and all practices that contribute to the improvement of the safety, reliability and quality of Jemena's gas distribution network, this includes the introduction of new and innovative technologies such as PICARRO's Surveyor Leakage Detection technology. Through previous showcasing events and as summarised in your letter, the Department acknowledges the clear benefits that the PICARRO technology brings to this aspect of Jemena's operations, as well as assisting them to meet operational efficiency, energy reporting, environmental and broader business objectives.

The Department would like to take this opportunity to outline the regulatory and risk management process that would be expected to have taken place prior to the introduction and during the implementation of PICARRO:

1. Part 3, Clause 17(1)(a) of the *Gas Supply (Safety and Network Management) Regulation 2022*, requires that a network operator revise its SAOP after significant change occurs in relation to the operation or maintenance of the gas network to which the plan relates, in this case, the introduction of the PICARRO leak survey process for monitoring the integrity of the network.
 - The change from a process that includes manual walking with a handheld gas detector to a one utilising vehicle mounted technology is considered a significant

change under Part 3, Clause 17(2)(a) of the *Gas Supply (Safety and Network Management) Regulation 2022*.

- The latest version of the SAOP (GAS-999-PA-HSE-001 Rev8) submitted to the Department, does not directly reflect this change in the leak survey process or makes reference to a specific procedure describing this practice.
2. The leak detection survey is considered a key asset integrity monitoring process, and as such any changes to it requires it to be managed through a Management of Change process as it involves technical changes and both a change in exposure of and the introduction of new occupational hazards (e.g. road safety).
 3. The use of PICARRO where it replaces the manual process should be;
 - Validated, and
 - Fit for purposes and be considerate of compatibility with future changes made to the gas quality and composition (e.g. hydrogen blended natural gas).

The Department requests that the effectiveness of PICARRO's vehicle mounted leak survey methodology be monitored, assessed and reported as part of the annual APAIR for gas networks during the transition period. Additionally, the Department may request to accompany the PICARRO vehicle and to see and experience the application of this technology in the field first hand.

In providing this response to Jemena, the Department is not exercising any formal or legislative powers under the *Gas Supply Act 1996*, and reminds you that Jemena remain responsible for the safe operation and maintenance of its gas distribution network by way of rolling out and utilising the PICARRO technology to undertake leakage survey activities.

Should you have any further questions, please contact Mr Nikhil Maharaj, Senior Manager (Pipelines and Gas Networks), on 0403 754 536 or at nikhil.maharaj@planning.nsw.gov.au.

Yours Sincerely



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CC Jacques Commarmond email jacques.commarmond@jemena.com.au