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Mr Ian Dempster  
Gas Industry Company Ltd.  
Level 9, State Insurance Tower  
1 Willis St.  
Wellington

Dear Ian

**SUBMISSION ON GIC CONSULTATION PAPER: REVIEW OF NZ SPECIFICATION FOR RETICULATED NATURAL GAS**

1. Thank you for the opportunity to comment on the Plant & Platform consultation paper.

**Summary of Vector's View**

2. In general, Vector agrees with Plant and Platform's conclusion that NZS 5442:1999 is the appropriate standard to apply to reticulated natural gas in New Zealand.
3. The questions raised by this consultation cover two related but distinct issues: a) changes to the gas specification (questions 1-3); and b) enforcement of the specification (Question 4 and 5). The issues we raise in response to the specific questions below relate to specification enforcement, in particular to the current water content level within the specification.

**What is your view of Plant and Platform's recommendation that the specification limits in Table 2 of NZS 5442:1999 do not need to be changed?**

4. In Vector's opinion, the specification limits are currently adequate and do not need changing. The current gas specification suits most industry participants, as well as industrial equipment and domestic appliances used in NZ. Widening or narrowing the specification would not be practical without reviewing the impact on all existing appliances.

5. Narrowing the specification may also put additional constraints on producers with minimal or no benefit to existing users. It would be difficult to pass the costs of compliance with a tighter specification on to the few users who wanted it.

**What is your view of Plant and Platform's recommendation that there is little value to be obtained by undertaking an in-depth, rigorous review of the specification because it would be a costly and time-consuming exercise for stakeholders?**

6. Vector agrees with this view. Subject to our response to questions four and five, a thorough review would be of little benefit to stakeholders and would be an unnecessary expense to them and ultimately their customers.

**What is your view of the recommendation by Plant and Platform that [the three areas identified] are matters best left to the stakeholders concerned and that they have the appropriate commercial incentives to handle these matters most efficiently?**

7. Vector's firm view is that detection of out-of-specification gas, and the prevention of it entering the Transmission system, is the responsibility of upstream gas producers, who hold ultimate (and contractual) responsibility for the quality of gas entering the Transmission system. Producers are better placed to monitor conditions in their respective gas fields and processing facilities than other industry participants.
8. Similarly, it is impractical for transporters to put any form of rate control on the Calorific Value (CV) or Wobbe index. Putting constraints on producers would also not help, as with multiple fields feeding into the same pipelines, it is easy for dramatic changes in CV to occur due to changes in gas rates from producers. Little can be done to prevent significant changes in the pipeline CV, and it is therefore not practical to control the mixing ratios of dissimilar gases in the Transmission Pipeline System.
9. As this is only an issue for a small group of large users, Vector believes it is better for users sensitive to changes in CV (such as gas turbine and engine operators) to install monitoring equipment themselves. The advance warning given would allow them to take appropriate measures to accommodate CV changes. A practical alternative at Transmission level would be costly and that cost would be borne by a large group of users with lower consumption who would find it unnecessary. All users would pay for the benefit of a few.

**If there are any matters you are aware of that have a bearing on the specification for reticulated natural gas and have not been considered by Plant and Platform please detail these together with their effect(s) on stakeholders.**

10. Vector is not aware of any recent or near-future changes that would have a material bearing on NZS:5442 or the conclusions of the Plant and Platform report.

**Are there any changes that you are aware of, either recently or in the near future, that have not been accounted for in either NZS 5442 or on the report from Plant and Platform? If so, please provide detail on these.**

11. Vector is generally pleased with the breadth and depth of P & P's report, and is comfortable with the approach taken to technical aspects of the topic.

12. However we strongly believe that the water content level within the specification needs further investigation in light of the probable future development of the gas industry in future. Water levels within NZ reticulated natural gas have historically been dictated by the Maui and Kapuni fields and are well within New Zealand specified limits. New gas sources coming to market may use cheaper processing facilities without water removal equipment. Water levels within reticulated gas may therefore rise over time, creating the risk of supply interruptions due to hydrate formation.

13. The specified water content limit within NZS:5442 ( $100\text{mg}/\text{m}^3$ , based on a MAOP of 86 bar) is higher than comparable overseas specifications. If the water content limit was lowered to approximately  $90\text{mg}/\text{m}^3$  (in line with Australian specifications) producers may install water removal facilities to lessen this possibility. Producers would be unlikely to experience hardship as current industry practice is for them to run at less than  $90\text{mg}/\text{m}^3$ .

### **Concluding Remarks**

14. Vector is happy to provide further information as required, and would welcome the opportunity to work with the GIC further on this matter. Please contact me in the first instance.

Kind regards



**Paul Hodgson**

Group Regulatory Affairs Manager