

23 October 2018

Electricity Price Review
Secretariat, Ministry of Business, Innovation and Employment
15 Stout Street
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Submission on the Electricity Price Review

Introduction

1. This document constitutes the Petroleum Exploration and Production Association of New Zealand's (**PEPANZ**) submission in respect of the Electricity Price Review, for which submissions close on 23 October 2018.
2. Established in 1972, we are the industry association of the upstream oil and gas sector. We proudly represent the companies that explore for, and produce, New Zealand's oil and gas resources. Our Members produce an estimated 95 percent of New Zealand's petroleum. We also represent more than 50 associate member companies who provide a wide range of goods and services to the industry.

The role of gas in the electricity sector

3. We recommend the role of natural gas in providing affordable electricity is recognised.

Resilience of energy supply and cost of energy

4. After the decision to cease issuing new offshore petroleum exploration permits, officials at the Ministry of Business, Innovation and Employment prepared a Regulatory Impact Statement (**RIS**) that addressed energy security implication. The RIS states that "The reduction in the availability of a reliable and flexible source of energy may have a negative impact on both energy security and affordability"¹. This means the policy can directly harm the 395,000 industrial, commercial and residential users of natural gas and LPG². In addition to higher costs, these consumers may face significant capital costs if they need to replace gas infrastructure, equipment and appliances with electric equivalents.
5. The RIS notes that electricity security and affordability may also be compromised³. We agree with this concern, on the basis that natural gas provides affordable and reliable supply (to cover shortfalls in generation from hydro, wind, and solar). Indeed, the peaking capability offered from New Zealand natural gas is a direct enabler of the high level of renewable electricity which the country generates.
6. We submit that the role of gas should be recognised and provided for going forward, through enabling new exploration and production. We also note that high electricity prices compromise the competitiveness of the entire trade sector, so reiterate the importance to New Zealand's economic fundamentals of keeping gas in the system.
7. New Zealand has approximately 10.5 years of natural gas reserves at current rates of production and when reserves are depleted, gas imports will be needed, and this will be at much higher cost (and with higher greenhouse gas emissions due to shipping and processing). This will adversely affect affordability for consumers. We note that with

¹ Page 29, Regulatory Impact Statement on the Crown Minerals (Petroleum) Amendment Bill. <https://www.mbie.govt.nz/info-services/sectors-industries/natural-resources/oil-and-gas/overview-crown-minerals-act-regime/pdf-document-library/regulatory-impact-statement-proposed-changes-to-the-crown-minerals-amendment-act-1991.pdf>

² Number sourced from <http://www.gasnz.org.nz/nz-gas-industry>

³ Page 5, Regulatory Impact Statement on the Crown Minerals (Petroleum) Amendment Bill

demand set to surpass supply in the coming few years increases in price would be expected and this is why continued exploration for natural gas is critical. We note similar comments from the Chief Executive of Genesis Energy such as:

*Removing the supply of local gas will make it harder to replace Coal in the electricity system. Importing gas will not only drive gas prices up but also consumer electricity prices are likely to rise and the electrification of other higher emitting sectors will slow down. Add a higher Carbon price to the mix and consumers will increasingly feel the burden.*⁴

Te Mauri Hiko - Energy Futures

8. We note that in April 2018, Transpower released a report *Te Mauri Hiko - Energy Futures*⁵ promoting renewable electricity to help decarbonise the economy. The report explained that dry-year risk increases three-fold if renewables are increasingly relied on. To manage that risk, and effectively to enable further marginal increases in renewable generation, Transpower recommended that gas-fired peaking capacity is maintained until any imagined alternative may be developed.

Understanding a gas-constrained electricity market

9. To understand the importance of gas, and to inform consideration of the value of keeping gas in the electricity generation system, we recommend that officials model the effects of a gas-constrained market on the electricity sector. We understand that recent modelling from another party has shown that replacing fossil fuels in process heat, general heating, and transport would double annual electricity demand⁶.

Other unintended consequences of removing natural gas from the electricity system

10. The Productivity Commission, in its Low Emission Economy report identified the need to be mindful of perverse outcomes and unintended consequences of removing natural gas too early:

*Under current technology and technology costs, reducing emissions from electricity generation will likely entail an increase in wholesale electricity prices. Rising electricity prices, if substantial, could dissuade adoption of emissions-reducing technology in process heat and in transport, as well as increasing costs throughout the economy.*⁷

⁴ Comments made the company's AGM on 10 October 2018. [https://gesakentico.blob.core.windows.net/sitecontent/genesis/media/new-library-\(dec-2017\)/about_us/investor/pdfs/2018/shareholder%20meeting/genesis-2018-annual-shareholder-meeting-chief-executive-address.pdf](https://gesakentico.blob.core.windows.net/sitecontent/genesis/media/new-library-(dec-2017)/about_us/investor/pdfs/2018/shareholder%20meeting/genesis-2018-annual-shareholder-meeting-chief-executive-address.pdf)

⁵ <https://www.transpower.co.nz/resources/te-mauri-hiko-energy-futures>

⁶ <http://www.gasnz.org.nz/uploads/may2018/analysis.php>

⁷ Finding 13.3, page 400. https://www.productivity.govt.nz/sites/default/files/Productivity%20Commission_Low-emissions%20economy_Final%20Report_FINAL_2.pdf