Energy Resources Aotearoa
POWERING A BETTER NEW ZEALAND TOGETHER

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25 January 2022

Electricity Authority
via email Consult-2021DryYearReview@ea.govt.nz

Submission on the 2021 Dry Year event review

Introduction

1. Energy Resources Aotearoa ("Energy Resources") represents people and firms in the energy resources sector, from explorers and producers to distributors and users of natural resources like oil, LPG, natural gas and hydrogen.
2. This document constitutes Energy Resources' submission to Electricity Authority on its *2021 Dry Year event review*.

Submission

Electricity Authority Question One: Do you agree with the findings in the MartinJenkins report? If not, why not?

3. The MartinJenkins report is generally reasonable and fair canvassing of the issues.
4. However, we note that Martin Jenkins did not consult with any representatives from the upstream gas sector as part of its report. Doing so would have helped to ensure relevant primary information informed the findings and approach. This is relevant given the discussion in the report on information availability and contractual arrangements.
5. We note the concerns about the following three points and make some comments in turn:
    - the lack of a formalised contractual framework for reallocating gas;
    - information concerning gas availability; [1] and
    - effects of the political environment.

Comments on the contractual framework for reallocating gas

6. Primary gas production may continue to be restrained (compared to a counterfactual scenario) by reduced investment confidence, and the secondary

[1] It is unclear as to whether the concern about information relates to unavailability from upstream producers (i.e. primary gas) or large consumers who could trade it (on the secondary market).

market may not be a particularly liquid source of fuel for reallocation purposes given it is largely procured from producers for a particular purpose (e.g. methanol production) and not for trading per se. That market dynamic should be considered when looking at whether a more sophisticated arrangement for reallocation is realistic in the New Zealand context.

7. We continue to favour market-based responses if allocation issues arise. We note existing electricity based swaption arrangements as examples of agreements put in place for the reallocation of resources in timely and non-pressured manner. We consider that the arrangements put in place for 2021 will act as a useful guide for future arrangements in terms of precedence and suitability for all parties. In addition to considering potential upstream arrangements (and the agreement reached between Methanex and Genesis), it might have been worthwhile for the MartenJenkins report to have looked at whether response from large electricity users (such as the Tiwai Point smelter) was appropriate or adequate.

Comment on information concerning gas availability

8. In terms of information disclosure, as the Authority may be aware, we lead the coordination and development of an Upstream Outage Information Disclosure Code 2020. The Code represented a commitment by gas producers to specify and require the timely information about gas field outages is made available to the market. This Code is likely to be used as the basis for regulation under recent amendments to the Gas Act, which should further increase confidence in outage disclosure.

Comments on the political environment generating uncertainty in gas production

9. We strongly agree with the report's comments regarding the "political environment generating uncertainty in gas production".

10. The investment climate for new natural gas developments has rapidly changed and is being greatly influenced by government policy settings. The co-regulatory Gas Industry Company, in its recent Gas Market Settings Investigation found that:

> "Despite the outlook showing there are sufficient reserves in the ground to meet New Zealand's gas demand, without ongoing investment well in advance of when the gas is needed, there is a real risk that not enough gas will be able to be delivered to major gas users, including electricity generators, during the transition out to 2030 and beyond."[2]

11. The gas market is geared to meet long term contractual loads and will remain so into the medium term and even the long term unless the upstream petroleum sector (i.e. natural gas producers) invests capital. Investment of capital is contingent upon at least two important factors:

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2 Gas Industry Company. Gas Market Settings Investigation. 30 September 2021.

https://www.gasindustry.co.nz/work-programmes/gas-market-settings-investigation/developing-2/final/document/7342

a. predictable and stable settings; and

b. reasonable confidence that downstream counterparties will be around in New Zealand long enough to justify the investment.

12. Unfortunately, there is a cacophony of negative signals which add significant risk (especially for the next cycle of investments which may see production beyond 2030) for those considering investing in natural gas projects including the development of contingent resources. The upstream petroleum sector operates with significant technical and commercial risks as it is, so adding political and policy risk compromises a key factor that has traditionally made New Zealand's sector attractive to invest in.

13. As presented fully in **Appendix One**, key issues in the current political and policy environment which compound uncertainty and risk for gas producers are:

a. the 100% renewable electricity target;

b. review of the industrial allocation regime;

c. a possible ban on new gas connections;

d. phasing out fuel fossils in process heat;

e. the NZ Battery Project and Lake Onslow pumped hydro concept;

f. the end to new petroleum exploration permits outside Taranaki; and

g. retrospectively implementing perpetual liability on Crown Mineral permits in the context of decommissioning.

14. If we assume that:

a. the goal of 100% renewable electricity by 2030 is maintained, and gas producers and thermal generators act as if it will remain a goal (by either not investing in long-lived assets or raising prices to recover costs over a shorter timeframe);[3]

b. the Government either directly intervenes in the market to achieve 100% renewable electricity by 2030 or firms act in anticipation of such a possibility; and

c. if the Lake Onslow pumped hydro scheme is committed to being built.

then we expect that gas producers will identify that they do not have a role beyond 2030 and they will act accordingly. This would mean gas exits the electricity sector, which (aside from the collateral damage) means the actual challenge becomes ensuring enough electricity is generated in a reliable and

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3 The Gas Industry Company's *Gas Market Settings Investigation Consultation Paper* makes this point succinctly on page 30, stating: "As well as the need for ongoing upstream investment, the thermal generation assets themselves require upgrading and recertification from time to time. Such work requires significant capital expenditure and is only viable if the plant is expected to be operating for a reasonable period of time following that investment."

affordable manner. That is to say, the challenge shifts to the electricity sector due to a supply gap arising from the premature exit of gas from electricity generation.[4]

[4] Natural gas serves to manage peak demand and acting as a firmer of intermittent generation (i.e. wind or solar).

Appendix one: Description of key issues compounding risk

1. This appendix expands on the brief list of key issues in the current political and policy environment which compound uncertainty and risk for gas producers and thermal generators:

    a. **the 100% renewable electricity target:** the government policy of 100% renewables has been 'doubled down' upon through removal of the 'normal hydrological year' qualification and brought forward from 2035 to 2030. This policy appears to be becoming an absolute goal which sends strong negative signals to thermal generators and their gas producers that they will shortly have no role or place. This leads to a significant risk that such firms either exit or limit investment due to a lack of confidence in the future

    b. **a possible ban on new gas connections:** the Climate Change Commission's recommendation to ban new natural gas and LPG connections is demand-destruction by regulatory fiat and represents both another ban and more focus on particular fuels;

    c. **phasing out fossil fuels in process heat:** this new 'hard phase-out' language and policy direction reinforces the narrow focus on fuels and technology rather than net emissions;

    d. **the NZ Battery Project and Lake Onslow pumped hydro concept:** having this government project on the horizon as a possibility will have a major chilling effect on investment into new generation because it threatens to impair private assets by filling the market with nominally cheap electricity (we say nominally as in reality the multitude of economic costs are real and socialised);

    e. **the end to new petroleum exploration permits:** the ban on new petroleum exploration permits outside onshore Taranaki and the manner in which it was made significantly added to sovereign risk. It has put parameters around the existing sector meaning it is now operating with a closed and contracting system. Some may consider that the exploration ban is not relevant to the current energy shortage as today's gas deliverability issues are not caused by it directly. That is possibly true in a narrowest sense, but the ban certainly becomes relevant in terms of how firms (across the wider energy system) respond to the current situation; and

    f. **retrospectively implementing perpetual liability on Crown Mineral permits:** Crown Minerals legislation, recently introduced, will implement retrospective legislation to institute a perpetual liability regime on permit holders and will also require financial assurance in the event of environmental issues post-decommissioning. The poor policy process (i.e. being implemented without prior public consultation) and retrospective nature is chilling for business and shows that the rules of the game can be changed at any time.