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Energy Resources Markets Branch
Ministry of Business, Innovation and Employment
By email: gastransition@mbie.govt.nz

Gas Transition Plan Issues Paper

Meridian appreciates the opportunity to provide comment on MBIE's Gas Transition Plan issues paper.

Introduction

Meridian agrees that gas will be an essential part of the transition. We also agree that while baseload thermal generation will exit the electricity market, there will still be a continuing role for gas to provide peaking capacity during times of tight supply in the electricity market.

For this gas to be available at crucial times, there needs to be investment in upstream gas and flexible storage. Gas will be essential in delivering a secure electricity supply in the coming years as the sector transitions. Unfortunately, there is a risk that investment in gas will not show up in time. Our view is that this risk is being exacerbated by regulatory uncertainty, and past government decisions that have eroded confidence amongst investors in the New Zealand gas sector.

Government needs to be clear about its role, and its intentions. It should be clear whether government will or will not intervene to direct the gas transition. In Meridian's opinion, political cycles will make it very difficult for any government to take a role in directing market outcomes. It would be preferable for the government to provide a robust emissions price signal and allow the market to identify the pathway that achieves a transition away from fossil gas while maintaining a secure and low-cost electricity supply.

Meridian agrees that hydrogen production will provide opportunities for New Zealand, both in the export market and in hard-to-abate sectors of the domestic economy. We also see a role for government in designing certification or assurance of origin regimes to give purchasers of renewable gasses confidence regarding the emissions-intensity of the product. This may be of particular value in export markets.

Regulatory uncertainty makes investment in gas challenging

It is critical that the electricity sector maintains a secure supply for consumers as the economy electrifies and emissions reduce. To achieve this while keeping costs low for consumers, the mix of generation fuels available to investors should not be unnecessarily constrained, so that all feasible options are on the table. In Meridian's opinion, current policy settings risk eroding the business case for investment in gas peaking generation, and this could drive up electricity costs and lead to security of supply concerns over peak periods over the next couple of decades. In the longer-term, batteries and large-scale and aggregated demand response will play a greater role, but in the near-term we see an ongoing role for gas peaking in the market. This is consistent with the advice and preferred pathway identified by the Climate Change Commission.

The policy settings that risk chilling investment in gas peaking as well as the upstream supply and flexible storage include:

- the New Zealand Battery Project; and
- the aspirational goal of 100% renewable electricity by 2030.

The concerns expressed in the consultation paper about encouraging too much gas peaking capacity, for too long, are unfounded based on the economics of thermal generation, including the likely price pathway for fossil gas and emissions. Meridian's view is that the real risk is not having enough gas peaking in the near term.

New Zealand Battery Project

The threat of direct government investment in peak and dry year capacity appears to have had a chilling effect on private investment in peaking capacity (including demand response solutions) over the past few years.

Although the project has been set up to help address the dry year risk, we note that dry years in New Zealand have been managed through the use of thermal fuel. As we transition off gas, market participants with exposure to dry year risk will have strong incentives to identify and invest in

alternatives. However, the uncertainty generated by this project will overhang all investments. If a decision is made by the Government to build a pumped hydro scheme, it will be even more difficult to make a business case add up for private investment in peaking capacity or dry year solutions as those private investments would become redundant upon completion of the pumped hydro scheme. This is hugely problematic given the need for private investment in peak capacity is immediate and waiting until completion of a government scheme in 2037 (according to the latest estimate) is not a viable option and would not keep the lights on between now and then.

100% renewable electricity generation aspirations

Uncertainty regarding the government's intentions regarding its aspirations to reach 100% renewable electricity generation also makes investment decisions very difficult. We note that gas peaker options such as Todd Generation's Waikato Power Plant at Otorohanga[1] and Genesis' Huntley Repowering[2] have been consented but not built. Although we can only speculate as to the reasons why, we note that Concept Consulting's August 2021 review of the generation environment carried out for the Authority noted it is "likely to be affected by the government target of achieving 100% renewable electricity by 2030."[3]

As long as the aspirational goal remains, investors must ask themselves what interventions the government might be willing to make in order to deliver on the aspiration.

Meridian's view is consistent with that of the Climate Change Commission and other commentators, which is that a more suitable target would be for 50% of all energy consumed to come from renewable sources by 31 December 2035.

Meridian agrees that there are opportunities for hydrogen to play a role as part of New Zealand's transition to a renewable energy system

This submission should be read alongside Meridian's submission on the Interim Hydrogen Roadmap.

While Meridian's Southern Green Hydrogen project is focused initially on export markets, it would likely open up domestic opportunities in the longer term to decarbonise hard-to-abate sectors. As noted in our submission on the Interim Hydrogen Roadmap, the most significant benefit from large-

[1] Nova Energy plans gas-fired power plant | RNZ News
[2] https://www.mbie.govt.nz/assets/2020-thermal-generation-stack-update-report.pdf. See Part 4.
[3] Concept-Report_-Review-of-generation-investment-environment-v3.pdf (ea.govt.nz)

scale hydrogen production would be the flexibility provided to the electricity system to help manage dry years and peak capacity needs.

The consultation paper also discusses the potential role for hydrogen blended into reticulated gas networks. This is an area outside of Meridian's expertise but in our opinion would require several challenges to be overcome and is unlikely to be as cost effective as electrification.

The emergence of a hydrogen production sector in New Zealand would also provide opportunities for iwi. As noted earlier in this submission, Meridian is progressing a project to develop a hydrogen facility in Murihiku-Southland called Southern Green Hydrogen (SGH). The project is a partnership between Meridian, Woodside Energy, Mitsui & Co, and Murihiku Regeneration (on behalf of Ngāi Tahu). Ngāi Tahu have the option to step in as a project partner, which includes a seat on the governing board, at the final investment decision stage. From the beginning of the project, it has been important to give SGH a New Zealand feel, and to ensure that regional interests are taken into account by ensuring the community is involved in decisions. Work is also currently underway to set up a Cultural Reference Group to support the partners in developing the brand and story, reflecting the connection of the project to Murihiku-Southland and mana whenua.

Finally, the paper also raises the possibility of a renewable energy certification scheme for gases such as hydrogen. Meridian is broadly supportive of government playing a role in gas certification. Our view is that certification schemes will be dependent on the needs of international purchasers. Meridian would appreciate government working with SGH if purchasers identify a need for government certification, or assurance of product origins.

Concluding remarks

This submission is not confidential and can be released in full. I can be contacted to discuss any of the points made.

Nāku noa, nā