

25 July 2014

Victoria Christp
Energy Markets
Infrastructure and Resource Markets
Ministry for Business, Innovation and Employment
33 Bowen Street
Wellington 6011

Dear Tori

Gas Disruption Study

Mighty River Power welcomes the opportunity to provide these comments on the Gas Disruption Study (Study) prepared by Worley Parsons for the Ministry of Business Innovation and Employment dated January 2104. No part of the submission is confidential and Mighty River Power is happy for it to be publicly released.

We agree with the analysis of the gas supply chain and the Study's conclusions as to the potential risks associated with the production and transportation of gas through the high pressure transmission systems. Likewise with the various caveats on the conditions at the time of a critical contingency event we agree with the study's assessment of the impact of a loss of gas supplies on electricity generation.

With regards to the case studies which the Study reviewed we were surprised that the Longford incident in Victoria Australia was not included as a third case study. The gas explosion at the Esso production plant occurred in 1998 and resulted in the cessation of gas supplies in the state of Victoria for almost three weeks. We believe this would have been an ideal reference for a case study on a complete gas outage over a number of weeks.

We found the Varunus Island case study from Western Australia very interesting when considered against the scenario of a Pohokura gas plant outage. We note that following the loss of the gas supplies from the Varunus Island production plant the Western Australian government set up the Gas Bulletin Board to create a secondary gas market to minimise the impact on gas customers. The Study concluded that although the current gas spot markets in New Zealand are still in their early stages of development these would be sufficiently effective in allowing the reallocation of gas between gas retailers to minimise the impact of the loss of Pohokura. Government intervention would therefore not be required.

Whilst the conclusions around this scenario are reasonable there are a few issues that we would like to raise. Firstly gas supply agreements can be field specific therefore it is possible that a gas retailer may lose access to their total gas supplies if the field that they were contracted with was, under this scenario, Pohokura. We agree that the gas retailer would attempt to contract for gas either through a short term bi-lateral agreement or on the secondary market. The gas retailer would of course have to be prepared to pay higher market prices for a short period of time in order to maintain supply to and to retain their customers. All this does however assume that sufficient gas supplies will be available on the secondary trading markets to meet this type of demand.

The Study has assumed that the larger gas users such as Methanex and Fonterra would shut down a number of their production facilities during a gas field outage but in our opinion that would only be true if their gas supplies were coming from the affected field. If a customer has contractual rights to gas from an unaffected field or fields we question whether those customers would in fact reduce their gas supply voluntarily. The outage of a field as large as Pohokura would undoubtedly result in a significant reduction in the availability of non-contracted gas on the secondary market. This in turn could lead to some gas retailers being unable to contract for gas to continue supplying their customers. Should this occur then some form of regulatory intervention may be required.

With regards to the final scenario, a pipeline incident affecting both the Maui and Vector North transmission pipelines, under the assumptions that have been made we agree with the outcomes predicted. We are however less sure that with severe damage to the Maui pipeline and the severing of the Vector pipeline that it would be possible to get the Vector pipeline working again with 4 days. We also wonder what the views of the gas network operators would be on the potential risks to their networks under this scenario.

Dependant on a combination of the time of year and weather it is likely that there would be sufficient gas in the Maui pipeline above the rupture to supply critical care and residential gas supplies on the North and Bay of Plenty pipelines for at least a 4 day period. At what point however would the network operators, in this case Nova Gas and Vector, consider that there was a risk that the pressure in their distribution networks would fall to such a level that the complete cessation of gas use was required.

There are approximately 150,000 gas supplies on the North and Bay of Plenty pipelines. If the Network Operators decided that a complete cessation of gas use on their networks was required then would they want to physically disconnect customers? The time to organise, implement and complete that number of disconnections would take substantially longer than 4 days. More importantly the reconnection of that number of gas supplies would significantly longer than the disconnection process. The lessons of the Longford incident would be useful in this type of emergency e.g. how did Victoria manage this situation, were gas supplies physically disconnected? If the gas supplies were not disconnected then how was the situation policed to ensure customers did not continue to use gas?

Our understanding is that gas customers during the Longford outage were not physically disconnected but gas use was subject to strict policing and customers fined if they were found to be using gas. The question is how would this be managed if the situation arose in New Zealand?

If you would like to discuss any of our above comments directly with Mighty River Power, then please do not hesitate to contact me on 06 348 7926 or jim.raybould@mightyriver.co.nz .

Yours sincerely

A handwritten signature in black ink that reads "Jim Raybould". The signature is written in a cursive, slightly slanted style.

Jim Raybould
Gas Manager