



Feedback by New Zealand Steel Limited on the Gas Disruption Study

31 July 2014

Introduction:

New Zealand Steel Limited operates a fully integrated steel mill at Glenbrook, South Auckland, producing a large range of steel products for the local and export markets. It is a wholly owned subsidiary of BlueScope Steel Limited of Australia. New Zealand Steel wishes to make a submission to the Ministry of Business, Innovation and Employment (MBIE) on the Worley and Parsons Gas Disruption Study 2014.

Background:

Natural gas is consumed at the New Zealand Steel Glenbrook site in a variety of processes associated with iron and steelmaking, and steel rolling and finishing operations. Site consumption ranges from 1.8PJ to 2.2PJ per year. The predominant use of natural gas is in the Hot Strip Mill Slab Reheat Furnace, which consumes approximately 50 % of the gas delivered to site, or 1PJ per year. Other uses are of considerably less volume and distributed widely across site.

While the predominant use of natural gas at New Zealand Steel is as an energy source, natural gas is also used for specialist purposes such as a coolant in the steelmaking process, and for influencing the ironmaking chemical process if required.

NZ Steel has shown commitment as an industrial end user of gas for improvements in the design of critical contingency management, and has participated in the submission process and all national critical contingency exercises. NZ Steel has no viable substitute for natural gas for processes where it is predominantly used. As a consequence disruption to natural gas supply would result in depletion of feedstock for downstream finishing plants and hence saleable products within days.

Submission:

New Zealand Steel has reviewed the Worley Parsons Gas Disruption Study 2014. We support the views represented in the Major Gas Users Group submission and appreciate the opportunity to make further comment.

We believe the underlying message of this report is distorted by gross under estimation of the economic impact on industries whose normal gas supply was disrupted as per the consequences of each loss scenario.

From a risk management perspective, for the pipeline outage scenario, we consider a centralized approach, focusing on reducing the likelihood and potential downtime on the gas pipeline effecting any repair from a contingent event, would appear to be far more effective than distributed efforts which the numerous companies using gas across the North Island would need to take to an attempt to offset the impact, resulting in a greater amount of time, effort, and expenditure.

For the scenario of gas field outages supplying into the pipeline(s), managing the outcome via a contractual means warrants further consideration.

Economics

Ultimately it is the benefit to the New Zealand economy that continuity of gas provides in the mindsets of the pipeline owners, the regulators, and the consumers which serves as a driver to prioritise those actions, either identified in the report or not, to reduce and mitigate risks.

New Zealand Steel believes that the loss in economic value of businesses consuming gas across the North Island is severely under estimated if the error in determining the value over a four week outage to NZ Steel was applied to others. Notably, as acknowledged in the report, the economic value discussed is the direct costs and excludes additional value lost due to flow on effects such as loss of market share, procurement of alternative feedstock, and consequential losses due to requisite arrangements.

For NZ Steel, the impact of a short duration gas outage of some days cannot be used to extrapolate the proportionately greater loss for an extended period. We reiterate the concerns expressed by others that an outage of four weeks would have a serious impact on our business hence we are at odds with conclusion 5 on p vi “The effects are likely to be short term and wash through quite quickly without permanent long term effects”.

Further work on understanding the economic importance of gas continuity to businesses across the North Island will help to underpin the direction and effort required to deliver the best possible outcome.

Dual Fuelling

For a loss of pipeline scenario, given the constraints in facilitating the provision of any sizeable dual fuelling contingency measure in terms of cost, fuels availability, and lengthy time required for fuel interchanging due to extensive refitting after shutdown and which may be equal to the length of a lengthy curtailment, it does not make any sense to include this in any business continuity measures. In many cases it is just not technically possible to retrofit equipment for dual fuelling.

For minor industrial appliances it may be feasible to implement temporary dual fuelling, but this is more of a case of managing short term requirements during curtailment of critical processing plant to avoid damage or in downstream finishing plants until feedstock is depleted.

Risk Management

Whilst “on the surface” the Vector and Maui Asset Management Plans appear to be very thorough we note the slight difference between the two. The former details the risks and plans related to land movement and erosion issues¹ including that of the affected area pertaining to the Maui 2011 outage, whereas the latter does not. That being said given the economics there appears to be a preference for increasing the risks by “..may have to consider the alternative approach of isolating and abandoning the affected section of pipeline due to its lower forecast expenditure.” From a risk management perspective this is not a desirable outcome. As discussed above a centralized proactive approach is more effective than a distributed approach managing risks for the companies using gas should they need to react to a contingency therefore it would be a perverse outcome to increase risk to pipelines due to flawed methodology for cost recovery to mitigate against such risks.

Despite the level of detail in the AMPs we believe they should go further providing the risk register disclosing, and detailing the risks for each pipeline is considered necessary for the pipeline owners, the

¹ Vector Gas transmission Asset Management Plan 2013-2023 Section 6, p18-19, and Section 9, p14

regulators, and the consumers all to be equally aware of the risks, their severity, their likelihood, and required remedial work for offsetting.

Further consideration required

The executive summary draws a number of general conclusions from the study on page vi. We question the validity of 3) and 5):

3) The economic impact on other industries is likely to be through increased input costs rather than loss in output.

5) The effects are likely to be short term and wash through quite quickly without permanent long term effects.

Similarly comments made on pg 65 of the report need to be re-examined:

“... we find the consequences that arise from any loss event are likely to be manageable, and well within the bounds of normal business interruption scenarios”.

“...industries have alternative sources of energy available to them which acts to limit the effect of curtailment of supply.”

“NZ has an emerging secondary gas market and thus the response mechanisms already available to it.”

Concluding comment

The security of the pipeline(s) is paramount. Further work should be undertaken to ensure the risks are known by all concerned, are properly addressed to reduce the likelihood of the occurrence of a critical contingency incident, and adequate contingency plans provide for expeditious repairs should issues arise. A fuller assessment of economic impact is necessary to re-enforce the need for risk mitigation.

Alan Eyes | New Zealand Steel

Energy Manager

Private Bag 92121, Auckland, New Zealand

Mission Bush Road, Glenbrook, New Zealand

T. +64 9 375 8393 | M. +64 21 870629

alan.eyes@bluescopesteel.com | www.bluescopesteel.com