



Level 17, 125 Queen Street
PO Box 4299, Shortland Street – 1140
Auckland, New Zealand

T: (09) 356 9300
F: (06) 356 9301

27 July 2020

Gas Industry Company Limited

By e-mail: Tim.Kerr@gasindustry.co.nz

Methanex thanks the Gas Industry Company for providing an opportunity to submit on its Statement of Proposal for amending the Critical Contingency Management Regulations ("SOP").

In respect to the questions raised in the SOP, Methanex has addressed those questions it considers relevant to it and/or that it considers qualified to answer.

While Methanex recognises some elements of the regulations may warrant amendment it is surprised at the content and scope of some of the changes that have been proposed which in its view do not appear to have been sufficiently considered and which present risks that undermine the intention of effective management of critical contingencies, and increase the prospect of unsafe, inefficient and disproportionate outcomes.

Methanex wants to bring particular attention to certain proposals made in the SOP which Methanex considers are materially adverse to the gas industry generally.

1. Removing Band 1 and the alternative fuel distinction (Question 6)
2. The split of thermal generators into a separate band (Question 7)
3. Revising the curtailment order that unnecessarily accelerates the point in time when large installations with Critical Processing designations will be required to trip their plants (Question 18)
4. The impact of the changes proposed in respect to Question 18 being exacerbated by the combination of changes proposed to curtailment bands (Questions 6- 11)

Methanex considers the proposals it has highlighted in its submission as being of concern need further assessment and consultation with affected parties before GIC provides its recommendations to the Minister.

Yours sincerely

Phil Watson
Methanex New Zealand Limited

1	<p>Do you agree with our view that, in relation to the proposed amendments, there are no other reasonably practicable options for achieving the regulatory objective other than an amendment to the CCM Regulations? If not, why not?</p>	<p>GIC has expressed that its objectives under the Gas Policy Statement relate to pursuing "proper and efficient management of risks relating to security of supply and the management of critical gas contingencies" [p10].</p> <p>Methanex considers that some of the changes proposed by GIC run counter to the objective of proper and efficient management of critical contingencies, including:</p>	<p>(i) Proposed amendments to curtailment bands that are contrary to the objective of efficient and proportionate curtailment actions, particularly in respect to the proposal to remove the existing Band 1 and uncertainty concerning how the proposal to give Band 2 thermal generators priority would be applied in a manner that genuinely addresses immediate security of electricity supply risks ; and</p> <p>(ii) Proposed amendments to curtailment order instructions that reduce the prospect of safe, efficient and proportionate demand curtailment, subvert the intended purpose of Critical Processing designations and will likely result in disproportionate outcomes.</p>	
2	<p>Do you agree with rewording regulation 71 to remove 71(3)(a) as described above?</p>	<p>Agree</p>	<p>Methanex supports use of a price floor based on gas market VWAP and the use of a 7-day rolling average represents a reasonable compromise between a price which reflects current conditions without at same time being too volatile or relying on a price where market depth or trading activity may have been insufficient.</p> <p>Methanex generally supports strengthening incentives for participants to follow curtailment instructions. However, it is also critical that curtailment instructions, as far as practicable, provide consumers with a reasonable opportunity to shed load in a safe, efficient and orderly manner and minimise exposure to "no-fault" imbalance penalties. In a number of respects the proposals made in Sections 5 and 6 of the SOP run counter to this.</p>	
3	<p>Do you agree with adding a floor price to the calculation of the contingency price?</p> <p>Do you agree with the proposed calculation method, using VWAP for the 7 days prior to and including the critical contingency day?</p>			

		contingency imbalances being incurred by consumers.
4	Are there other pricing benchmarks that should be used in setting the critical contingency price?	No Changes proposed in Section 5 generally
		It has been difficult to clearly interpret the changes that have been proposed in the SOP, with the descriptions of the amendments not being specific enough, either in terms of how each particular proposal would be applied in isolation and how the proposed changes fit together as a combination. The SOP leaves Methanex with an incomplete picture of the specifics and implications of the changes proposed by GIC. It would have been helpful to have included a table similar to Table 3 setting out in detail the proposed definitions for each Band and Methanex requests GIC provide more details on the specifics of the proposed band definitions before proceeding further.
6	Do you agree that the distinction between large consumers that have alternative fuel capability and those that do not should be removed from the curtailment bands? Why or why not?	Methanex disagrees with the proposal to remove the distinction between large gas consumers with alternative fuel options and those without that capability. It is not unreasonable to expect large consumers with alternative fuel options to be required to curtail gas load, and continue operating their businesses, before turning to curtailing consumers without that option and who would be required to shut down their operations. The economic cost for consumers switching to an alternative fuel and sustaining their operations is almost certainly less than the economic cost of consumers being required to shut down their plants. In its arguments GIC does not consider this important aspect of maintaining the current distinction. In its 2019 review of the Gas Act, and specifically in regard to Critical Contingency Management, MBIE made the remark that " <i>if alternative fuel sources are not available, a gas disruption event and subsequent curtailment will cause significant business disruption.</i> " [Options for amending the Gas Act 1992, page 25"]. Given that statement and in the context it was made, which clearly contemplates the value of alternative fuel sources in a critical contingency, Methanex finds it inconsistent to propose removing the alternative fuel distinction from the curtailment order.

"Curtailing Bands 0 and 1 themselves would be insufficient to balance the pipeline, but curtailing

	<p><i>Band 2 as well would result in excessive – and therefore inefficient - levels of curtailment” [p25]</i></p> <p>Band 2 may well have more curtailable load than is required to address the particular contingency but having the option for partial curtailment within Band 2 resolves that issue. Methanex does not consider that reconfiguring the curtailment bands as proposed contributes to improved efficiency as suggested by GIC in its conclusion to Section 5.2.1.</p> <p>With regard to the statement:</p> <p><i>“On the face of it, it would seem sensible to curtail users who can switch to an alternate fuel ahead of users who cannot. However, the size of the band of consumers with alternative fuels was small in comparison to the band of consumers without alternative fuels, meaning that both bands would likely have been directed to curtail at the same time in a critical contingency event. Further, it was considered that having a distinction based on alternative fuel capability might act as a disincentive to gas consumers considering installing such capacity.” [p29]</i></p> <p>Methanex wishes to unpack this statement into two parts:</p> <p>(a) <i>“the size of the band of consumers with alternative fuels was small in comparison to the band of consumers without alternative fuels”</i></p> <p>Band 1 represents 30 PJ of annual load¹ so represents a significant volume of gas in its own right (about 20% of total volume and the second largest Band). It is also worth pointing out that although a contingency might affect both Bands 1 and 2 together it is not a foregone conclusion and using the argument of a “likely” outcome is not a sound basis for policy making regarding contingency management, that should be based upon addressing any number of scenarios which are possible but can’t be predicted with certainty.</p> <p>(b) <i>“having a distinction based on alternative fuel capability might act as a disincentive to gas consumers considering installing such capacity.”</i></p>
--	--

¹ Per Figure 7, p24 of the SOP

	<p>We struggle to understand the rationale for this statement. It appears to suggest that a consumer that would otherwise see merit in having an alternative fuel capability decides not to proceed because of the perceived risk that they will be more likely to have to utilise that alternative fuel during a critical contingency.</p> <p>Methanex does not believe the argument that having a fuel switching distinction in the curtailment order would act as a disincentive for consumers considering investing in alternative fuel options carries any weight.</p>	<p>The rational decision basis a gas consumer would use in deciding whether or not to invest in having an alternative fuel option would be how best to minimise costs to its business should a critical contingency ever occur (or indeed any gas supply constraint that might arise from time to time). Measuring the prospects of the particular point in time during a critical contingency that the business may be called upon to curtail gas use and trigger its fuel switching optionality, in order to continue its operations, is unlikely to be a decision factor in making such an investment.</p>	<p>The economic cost to a business that has the ability to use an alternative fuel source should a gas curtailment occur, and in doing so keep it business operating, is almost certainly less than the economic cost faced by a consumer (and for the wider economy) that does not have that option and has to instead cease operation when there is a gas curtailment. This is a fundamental reason for having the current distinction in a separate Band 1.</p>	<p>With regard to the statement:</p> <p><i>“... some industrial consumers who have alternative natural gas supply arrangements, as they can receive natural gas via private pipelines that are unconnected to the open-access transmission system. Arguably such consumers should also be considered to have “alternative fuel capability,” since they can continue to operate without taking gas from the transmission system.”</i></p> <p>[p29]</p>	<p>Apart from Ahuroa gas storage, there are no alternative natural gas resources or gas capacity that is held in reserve that could conceivably be switched to, whether or not that gas is accessible through open access or private networks and that would legitimately qualify as an alternative fuel.</p>
--	---	---	--	---	---

7	<p>Do you agree with reserving band 2 for large consumers who are electricity generators who export electricity to the grid? If not, what alternative way would you suggest for defining bands 1 and 2?</p>	<p>Methanex considers the issue of sub-dividing the current Band 2 should be addressed in isolation to the merits of the earlier discussion around removing Band 1 to distinguish consumers with alternative fuel options. We don't consider that the question "<i>if alternative fuel capability is not a useful way to distinguish bands 1 and 2, then what would be?</i>" [p29] is the right question to be asking. The two proposals should be treated as independent issues.</p>
		<p>Methanex does not support giving preference to thermal generators where security of electricity supply is not at significant risk. At the time of a critical contingency there may be sufficient alternative generating capacity available from other sources such as spare hydroelectric station capacity that is available for dispatch that would make giving priority for gas to thermal generators unreasonable.</p>
8	<p>Do you agree that the lower threshold of the curtailment band for the largest consumers should be changed to yearly consumption? Why or why not?</p>	<p>We do not support an arbitrary distinction which might allow thermal generators to keep operating where there is not a <u>genuine</u> and <u>immediate</u> risk to the security of electricity supply that requires those plants to continue operating. To be clear, any priority afforded to thermal generation should not be simply to protect the economic well-being of owners of thermal power stations or artificially moderate wholesale electricity prices at the expense of other gas consumers being curtailed.</p> <p>Methanex recognises the importance of security of electricity supply even if that requires some large consumers being curtailed in priority to thermal power generators to address <u>genuine</u> and <u>immediate</u> risks to the security of electricity supply.</p> <p>In order to achieve the objective of addressing immediate electricity supply risks that may arise by curtailing gas during a critical contingency, Methanex considers a better approach to splitting Band 2 and arbitrarily giving gas priority to thermal generators would be to amend Regulation 53(2)(a) to provide the CCO with clearer instructions to allow thermal generators to continue taking gas provided that it is only done where the thermal generation is necessary to ensure security of electricity supply.</p> <p>Methanex does not consider that having additional annual consumption delimiters proposed for Bands 1-3 adds any value.</p> <p>For large consumers (those covered by current Bands 1-3), their current <u>daily</u> capacity to take <u>gas</u> is the soundest metric for determining the order of curtailment. Methanex disagrees that the annual,</p>

	<p>historic, consumption of larger consumers with significant capacity to take gas on any day is a useful measure at all, particularly in the case of peaking thermal generators that may infrequently operate at full capacity but could well be operating at a significant rate at a time coincident with a critical contingency event.</p> <p>The application of annual consumption for smaller consumers does become more valid where it is applied under the current categorisations, but only because those consumers individually have insufficient capacity to “move the needle” and so delineating by annual consumption then becomes useful as an alternative means of demarcation if only for administrative purposes.</p>	<p>In response to the statement that “<i>there have been instances of a Band 3 customer using more than 15 TJ per day</i>” [p30]; Methanex’ view is that should not have been allowed to occur and the failure is that those consumers have been placed in the wrong curtailment band, rather than it being a flaw in the way the bands are formulated. When determining curtailment order for larger consumers, the criteria should not be based on some measure of past usage but on the consumer’s <u>capacity</u> to take gas on any given day. That would avoid the miscategorisation that appears to have occurred in this regard.</p>	<p>Methanex considers that GIC concerns would be better addressed by revisiting whether the 15 TJ/day delimiter is appropriate. The <u>lowest</u> daily capacity associated with a load of 4,000 TJ/year would be approximately 11 TJ. A thermal power unit of 50 MW capacity would be expected to consume about 10 TJ/day² if running continuously. Given the typical size of individual peaking units Methanex wants to highlight the risk of miscategorising large consumers that should be in Band 2. For this reason it believes the current 15 TJ/d is set too high when distinguishing Band 2 and Band 3 consumers.</p>
9	Do you agree with the proposed 4,000 TJ per year threshold? Is there a different threshold you consider would work better?	No, see our comments in respect to Question 8	
10	Do you agree with an annual threshold and a daily consumption threshold for a curtailment band of gas thermal	No, the demarcation for <u>larger</u> consumers should be based on daily capacity rather than historical gas usage.	

² Based on a conversion factor of 9 GJ of gas consumed per MWh of electricity generated. ($50 \times 9 / 1000 \times 24$)

	generation plant?	
11	Do you agree with the proposal to create curtailment band 3A as described above? Do you agree with an annual consumption threshold of 300 TJ? Why or why not?	Methanex does not have a particular view as to the merit of the proposal, other than to note that if Band 3 is indeed unwieldy then it might warrant sub-division. Given that some consumers at the lower end of Band 3 have small maximum loads the use of annual consumption remains an acceptable approach to delimiting the proposed Band 3A, but, consistent with Methanex' response to earlier questions, the upper limiter for Band 3 should remain <u>solely</u> a daily capacity measure, set at the appropriate level and monitored for conformance.
12	Do you have any other comments about the proposed changes to the curtailment bands?	No additional matters
13	Do you agree that guidance is required on assigning consumers to curtailment bands? Do you agree with the concept of an average over the previous three years for the annual threshold volumes?	Methanex is not concerned regarding how annual consumption metrics are derived for categorising smaller consumers in Bands that already have annual consumption measures. As discussed earlier Methanex does not support the proposal to added new annual consumption measures to delineate larger consumers.
14	Do you agree with using three years to determine whether thermal generators use at least 15 TJ per day from time to time?	No. Our view is that the capacity to take gas on any day should determine the categorisation of consumers for critical contingency management purposes, to avoid the issue of miscategorisation that appears to have occurred in the past with consumers incorrectly placed in Band 3 [p30].
15	Do you agree with amending the definition of "consumer installation" to include a gas installation with multiple points of connection to a distribution system or transmission system? Why or why not?	Methanex supports the change as it reflects reality at least in respect to Methanex' Motunui plant which has two delivery points jointly delivering gas to a single installation.
16	Do you agree that gas wholesalers should be responsible for issuing critical contingency notices to their retailers and for receiving and forwarding compliance updates to the transmission system owner? If not, can you suggest an alternative way to ensure that nonshipper	Methanex agrees with proposal to the extent it covers all Retailers who might otherwise have not been given any instructions.

	retailers and their consumers receive critical contingency directions and provide compliance updates?	
17	Do you agree with this assessment and proposals? Why or why not?	<p>PARTIAL CURTAILMENT</p> <p>Methanex wants to draw attention to the need for partial curtailment directions to continue to remain consistent with shut-down profiles associated with Critical Processing designations, just as a full curtailment direction does. We want to ensure perverse outcomes are avoided such as a large consumer with a Critical Processing designation being forced to trip its plant entirely (and/or incur excessive contingency balances) because a partial curtailment instruction requires it to curtail gas demand at a rate that exceeds its safe shut-down profile (or more accurately its ramp-down profile in the context of a partial curtailment direction).</p>
18	Do you agree with the changes to the curtailment order as outlined in Table 4? Why or why not?	<p>CRITICAL PROCESSING</p> <p>Methanex agrees that a shut-down profile under a Critical Processing designation should indeed be implemented from the point on the profile that coincides with actual load at the time a direction is given.</p> <p>Methanex considers that the original specification of consumer bands and curtailment order directions was reasonably well designed and a number of proposals made in the SOP undermine this and deliver less safe, less efficient and more disproportionate outcomes.</p> <p>In particular, Methanex does not support the proposal to amend curtailment order directions as proposed in Section 6.3.</p> <p>The comment made in the SOP that Critical Processing designations are “<i>important to the consumers who hold them</i>” is misleading. The criteria set out in Regulation 46C to qualify for a Critical Processing designation are based on industry-specific objectives. The principal reason for a Critical Processing designation is not simply for the well-being of the particular consumer with the designation, it is to achieve a more fundamental objective of the safe, efficient and proportionate management of critical contingencies for the industry and environment as a whole.</p>

	<p>The suggestion made that the current arrangement does not “seem proportionate” misses the point of having a Critical Processing designation as a measure to maintain safety and asset integrity as far as practicable. Going further, Methanex considers that the proposal will itself result in a less proportionate outcome than current arrangements, further exacerbated by the impact (on consumers who rely upon Critical Processing designations) of the other proposals associated with amending curtailment bands described in Section 5 of the SOP.</p> <p>The proposal will increase the prospect of abrupt, large scale curtailments that may impact adversely on safety, orderly curtailment and asset integrity, and which may not have been necessary in the circumstances. If Methanex is ordered to trip its plant, gas load across the system will collapse abruptly with potential safety and integrity issues across the system, in addition to the likely damage to Methanex’ plant.</p>	<p>Methanex recognises that rapid curtailment of its load may become unavoidable in the event of major critical contingency but we believe the proposal made in Section 6.3 will unnecessarily accelerate the point in time when the CCO essentially triggers massive and abrupt load shedding.</p>	<p>GIC comments that the current arrangements means “<i>that another band of consumers must stop using gas in order for critical processing consumers to curtail fully, which can lead to excessive and inefficient levels of demand curtailment.</i>”</p>	<p>Methanex argues that the proposed change itself will increase the prospect of excessive and inefficient levels of demand curtailment from the status quo if Methanex, in particular, is ordered to trip its plant at an earlier stage of its shut-down profile than is currently provided for under the existing regulations.</p>	<p>If Methanex shuts down in a safe and orderly manner it means that it will also maximise the prospect of being able to immediately restart when a critical contingency ends and restore normal levels of gas production. If instead Methanex is forced to trip its plant it will inevitably take an extended period to restart, even if no serious damage has occurred as a result of the trip.</p> <p>It will also bring forward the point in time during a contingency event where curtailment actions start to impose safety and asset integrity risks.</p>
--	--	---	--	--	--

		The adverse impacts of this proposed change are exacerbated by proposed changes to the curtailments bands, with Methanex potentially being required to shut down with immediate effect before any curtailment instruction is given to thermal generators or, worse, with large consumers that have alternative fuel options still being entitled to take gas.
19	Do you agree with the proposed changes regarding information provided to the CCO? Why or why not?	<p>Asset Outages</p> <p>Methanex does not agree with the proposed changes.</p> <p>Methanex is unclear how providing advanced information on planned outages assists critical contingency management. The only relevant information for CCO at the time of a critical contingency event is the actual state of gas supply and demand at the time of a critical contingency.</p> <ul style="list-style-type: none"> - How does a notice of a planned outage that may occur weeks or months away have any bearing on critical contingency planning for an event that may occur at any time? - Planned outages, especially if given weeks or months out do not normally represent commitments, are subject to change, and may prove inaccurate at the time of a critical contingency event; - If the issue is to gain a better understanding of what gas load may be at the time of a critical contingency event, there may also be a range of other gas consumers (eg peakers) who don't have planned outages but may or may not be operating at the time of a critical contingency event. For this purpose, the CCO would also need to have information on power generation dispatch plans at all times. <p>More importantly, information on current and planned gas use is always available in the form of Scheduled Quantities and Methanex considers this provides the information the CCO actually needs.</p> <p>Methanex <u>does not agree</u> with the short turnaround potentially expected of stakeholders.</p> <p>Methanex recognises that the proposal applies the timeframe as a minimum so it contemplates providing more time but nevertheless the proposal leaves stakeholders with the prospect that they</p>
37	Do you agree with these proposed amendments? Why or why not?	

	<p>may only be given those 5 business days to respond to the draft report.</p> <p>In Methanex' opinion five business days is an unreasonably short period of time to respond meaningfully to a draft performance report <u>under any circumstances</u>. Methanex considers that stakeholders should at a minimum be given 10 business days.</p> <p>We consider the time allowed for preparing the draft report seems reasonable but the turnaround time allowed for the <u>final report</u> may be too short (and in this respect no flexibility is contemplated). While timeliness is important it should not come at the cost of a reasonable level of diligence and consultation. A correct and well canvassed assessment should be the objective and not an expeditious but flawed or incomplete assessment.</p>
--	--