

11 July 2022

Dane Gunnell
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Commerce Commission
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Via email: <u>im.review@comcom.govt.nz</u>

Dear Dane

Re: Process and Issues/Draft Framework submission

- This submission is made in response to the Commerce Commission Part 4 Input Methodologies
 Review 2023 Draft Framework paper and Process and Issues Paper dated 20 May 2022. The
 submission is made on behalf of the Major Gas Users Group (MGUG).
- 2. Our members have been consulted in making this submission. Nothing in this submission is confidential and some members may choose to make separate submissions.
- 3. Our submission is focused on gas IM matters unless otherwise stated.
- 4. MGUG was engaged in the gas IM amendment submission process leading into the determination for gas DPP3. The Commission indicated in its Final Reasons Paper that the 2023 IM review was a further opportunity to go over some issues covered in the gas IM amendments¹. Our assumption is that the starting point for this review is where the gas IM determination finished. That is, the Commission's starting point will be that:
 - a. it believes that economic stranding (long term demand) risk for gas pipelines is likely and early enough to represent a risk of substantial loss to suppliers, and
 - b. S52A and S52R are both served by allowing GPBs to shift the loss to consumers by accelerated depreciation for asset stranding risk.

The gas IMs were amended 30 May 2022² and represent the current versions on which this submission is based. Unless otherwise indicated, when we refer to gas IM determination we are referring to [2022] NZCC [15] and [2022] NZCC [16] published 30 May 2022.

¹ Commerce Commission, 31 May 2022, Default price-quality paths for gas pipeline businesses from 1 October 2022- Final Reasons Paper, 2.35, and 6.59

² [2022]NZCC[15]and ([2022]NZCC[16]

- 5. MGUG disagreed with the Commission's gas IM and DPP determinations and has lodged s52Z and s91 notices of appeal in the High Court³. MGUG stands by the statements and arguments in those appeals and consider them to highlight important substantive issues for this review. We will ensure that the Notices of Appeal are lodged to be part of the record for this process. We will ensure that copies are made available to all participants.
- 6. MGUG further considers that in light of the topics and issues expected to be re-examined, and the Commission's foreshadowing in the recent Reasons Papers of reconsideration of the stranded asset risk, the submissions made by MGUG and others in the gas IM determination should also become part of the record for this IM review. Please let us know if you think some further step is required for this. We think not.
- 7. This submission is in two parts as it deals with the two separate papers published by the Commission.
 - a. The first part covers the draft framework where we deal specifically with the current gap in the definition of gas pipeline services and the amendments made in the gas IM determinations.
 - b. The second part deals with process and issues. In particular we address the need to reexamine the economic principles when faced with long term demand risk and within the context of promoting outcomes that are consistent with outcomes produced in competitive markets.
- 8. Given the issues raised through the gas IM, which have led to our appeal, and which we expect to carry over into this IM review, we consider that a workshop or conference is likely to be necessary before the Commission issues its draft advice. We urge the Commission to schedule for such a forum.

³ Notices of Appeal Served 29 June 2022

Summary of MGUG response

Framework for the IM review

- 9. We consider that the gas IM cannot properly address the purposes of Part 4 because it does not address the prospect of extended economic life for gas pipeline services delivering gases other than natural gas. We are confident that the government would not wish the services to have an artificially high price, and enhanced prospects of early (inefficient) loss of demand, simply because the Commission considers itself unable to take properly into account extended use with non-fossil gases.
- 10. We are advised that the Commission can take that likelihood into account, substantively in considering the likely life and values of the RAB. Just as it has, and can, take into account speculative scenarios for early cessation of natural gas use. The causes are essentially political (through legislation and anticipated regulation.). We consider that the Commission should be seeking amendment of the Act to ensure that it can freely take into account the likely evolution of alternative uses of gas pipeline assets. And it should expect timely amendment of the law if necessary to remove uncertainty.
- 11. We consider that including low carbon gases in likely future uses of gas pipelines reduce economic stranding (long term demand) risk in this review and reduce the difference between suppliers and consumers on whether economic stranding (long term demand) risk is even a material consideration for the Commission. It would also help create a more rational discussion around the TCFD framework that the Commission intends to use to assess risk if the Commission can agree that low carbon gases are included in both risks and opportunities.
- 12. MGUG suggests that if the Commission has what it considers to be definitive legal advice on the interpretation and application of the definitions in s 55A, it should make that advice available for discussion in this current review process. The purpose should be to ensure that residual value of pipelines is determined by the economic value with realistic prospects of repurposing the system, rather than arbitrary selected accounting book value of the RAB.
- 13. The Appeal Notices against the Commission's gas IM determinations argue that the recent amendments to the gas IM are not consistent with Part 4. We consider that the amendments also did not significantly reduce compliance costs, other regulatory costs, or complexity.
- 14. MGUG considers that this current review would be closer to better outcomes if it started with the gas IMs without the recent amendments.

Process and Issues

Context for the IM review

- 15. When considering long term demand risk and economic efficiency, we suggest that the Commission recognise the option value in deferring action that could prove to be premature, under conditions of unavoidable uncertainty. Commission to review economic principles in context of long-term demand risk
- 16. MGUG considers that the Commission needs to restate its objectives and constraints in promoting FCM.

- a. FCM (and related, NPV=0) are **ex ante concepts**, their application part-way through the lifetime of an asset (such as in the context of shortening asset lives) is inappropriate.
- b. It is often not consistent with outcomes in competitive markets. Price control in the interests of consumers should condition all decisions in Part 4 regulation.
- c. Demand reduction in a competitive market can be expected to put *downward pressure* on prices.
- d. Looking at overseas experience for guidance needs to be tempered with making careful distinctions between what guides New Zealand's regulation (promoting competitive market outcomes) vs what the basis of overseas regulation is (where there is no explicit reference to competitive market outcomes).
- 17. Where the Commission determines that useful economic asset lives should be shortened because of e.g. Government Policy (or technology shifts), its position should then be supported by coherent IM settings that promote the purpose of Part 4 (promote outcomes seen in competitive markets):
 - a. Supplier RAB need to be marked to market (written down); and,
 - b. RAB indexation should be removed (if assets aren't expected to be replaced then maintaining real value is not appropriate); and,
 - c. New/ replacement assets will have a shorter economic life and supplier capex solutions should reflect these shorter asset lives.
- 18. It is possible that some new investments may require incentives. For example, we can see arguments in favour of investments for repurposing gas pipelines. An incentive could be a split cost of capital.

Form of Control

19. As form of control deals with price volatility within a control period we don't consider that there is any new evidence that suggests that changes in form of control are needed for GDBs.

Commission should emphasise empirical evidence over theory/beliefs

- 20. We would look for the Commission to put more weight on facts than theory when judging the merits of an argument.
- 21. Where factual evidence presented to the Commission is discounted, we would look for a better response from the Commission than was MGUG's experience in the gas IM review in the gas, as to why facts were not persuasive.

Discussion

Framework for the IM review

Is Part 4 regime fit for purpose?

- 22. MGUG agrees with the Commission that in the context of energy transition pathways under a net zero (accounting) carbon target for 2050, "the Part 4 regime can accommodate change and remain fit for purpose⁴." However, we do not consider it is fit for purpose for gas if pipeline services only mean the conveyance of natural gas.
- 23. MGUG's earlier submission⁵ on this topic addressed the question of interpretation of "gas pipeline services" under Part 4 as a regulated service, and disagreed with the Commission that it was confined to considering only natural gas in considering the definition of gas pipeline services:
 - a. S52 provides for the regulation of the price and quality of goods or services in *markets* where there is little or no competition and little or no likelihood of a substantial increase in competition.
 - b. S52B(3)(b) identifies gas pipeline services as a service that falls under Part 4.
 - c. While S55A(1) appears to limit this to natural gas it also provides the rider, "unless the context otherwise requires".
 - d. Part 4 subpart 2 (S52G-S52K) anticipated future needs to capture services that couldn't be foreseen when Part 4 was first enacted. Part 4 therefore includes provisions to update the list of services that fall under the definition of markets where there is little or no competition.
- 24. It appears to us that there is a natural and logic hierarchy in the drafting order of S52, S52B(3)(b), and S55A(1) that should guide decision making when considering areas of conflicting interpretation between them. By emphasising S55A(1) and minimising the possible intent of that clause's rider it seems to us that the Commission has reversed that interpretation order and undermined the intent of Part 4. The Commission's interpretation of S55A(1) within the overall legislative context seems particularly restrictive given that S55A(1) is qualified with "unless the context otherwise requires," and the Commission starts this review describing the changed context.
- 25. The Commission explains that the context has significantly altered given Government policy settings under the Climate Change Response Act 2004 (CCRA). This isn't only reflected in the current notification⁶, but was also fundamental to the position and arguments adopted by the Commission in the gas IM review forming part of DPP3. It should have been unsurprising within that context, that GPBs were actively considering the future of their networks in a lower carbon

⁴ Commerce Commission, 23 February 2022 IM review notice of intention Cover Letter "Ensuring our energy and airports regulation is fit for Purpose"

⁵ MGUG – 14 March 2022 "202203 MGUG- Submission on draft decisions IM and DPP3-Final"

⁶ Commerce Commission, 23 February 2022 IM review notice of intention Cover Letter "Ensuring our energy and airports regulation is fit for Purpose" – para 1

economy by considering that the regulated infrastructure might be repurposed to carry lower carbon gases. Consumers, through public disclosure of GPB efforts to repurpose the system⁷, were likewise made aware that the energy source for delivered gas might change. If the dominant context is one of energy transition, then in our view the Commission should have considered this to qualify for "unless the context otherwise requires" within the wording and intent of S55A(1).

- 26. In support of the wider interpretation of S55A(1), is the consumer expectation of gas pipeline services. Consumers will continue to have a demand for a service (gas transport) to deliver them the benefits of gas, i.e. the option of using gas for various purposes (energy carrier, or as a raw material). The possibility that low carbon gases could blend with or displace the traditional natural gas to provide consumer utility is a means to the end that consumers retain gas as a choice for their households or businesses.
- 27. MGUG strongly suggests that the Commission revisits the legal advice on the definition it used in the recent gas IM decisions:
 - a. To decide whether interpreting "unless the context otherwise requires" in S55A(1) should permit the inclusion of low carbon gases transported within the regulated gas transport businesses; or,
 - b. It considers an urgent request to Government to include low carbon gases within the definition of gas pipeline services (under Part 4 Subpart 2 provisions⁸); or,
 - c. If neither of these two approaches is successful, the Commission should in assessing economic stranding (long term demand) risk accept that the infrastructure itself still has an economic remaining life as a "going concern" for lower carbon gas transport. The residual value of networks as it transitions from natural gas to a range of lower carbon gases translates into the starting (R)AB for a service that continues to provide consumer benefits of gas pipeline services. No supplier compensation is required for what is technically stranded only for natural gas, but not for gas transport.

Gas IM not consistent with Part 4

- 28. MGUG's Notices of Appeal against the gas IM determination outline the case for the amendments not constituting or properly form part of input methodologies.
- 29. The substantive material of those appeal notices as they impact on this IM review form part of this submission. In essence the notices of appeal posit that there are fundamental aspects of the current gas IM that should be considered as potentially in conflict with the IM. To the extent that the same/ similar amendments might be sought for other IMs we consider that the Commission needs to find alternative approaches as solutions to its problem statement of long-term demand risk.

⁷ For example First Gas' publications on hydrogen and biogas https://firstgas.co.nz/about-us/bringing-zero-carbon-gas-to-aotearoa/

⁸ S52G, S52H(1)(b), 52I, 52J, and 52K

Application of Economic Principles

30. We are pleased that the Commission has clearly stated the economic principles that it uses to guide its decisions do not amount to a regulatory compact and that they do not take precedence over the statutory purposes and provisions of Part 4. This should clarify the expectations on what the economic principles are meant to convey and how they should be used⁹.

Process and Issues

Chapter 1- Process for the IM review

- 31. The key topics for the IM review¹⁰ (Table 1) appear to address the substantive issues of interest to our members.
- 32. MGUG would also seek clarity and assurance on the Commission's approach when engaging with stakeholders. In MGUG's experience the Commission hasn't always made clear why it would override or reject views made by submitters, particularly where these views arise out of empirical evidence. From a process perspective we would appreciate clarity on the following:
 - a. How empirical evidence (facts) will be considered and evaluated where that evidence challenges or is at odds theoretical thinking on particular issues, for example:
 - Where empirical evidence appears to contradict theoretical understanding, then both perspectives should be discussed and the relevant reasoning for any choice be articulated; and,
 - ii. The Commission should address these challenges back to submitters in a timely fashion, particularly when evidence is being discounted or rejected in the Commission's reasoning. As a matter of process if would help if these matters are addressed as soon as possible, and be included in the draft/ final reasons paper rather than answered in the proposed IM review report.
 - b. We consider that it may be necessary for the Commission to allow for conferences and workshops before a final decision on the decision-making framework for the IM review is made.
 - c. We consider that the Commission should allow for conferences and workshops associated with Draft and Final reports on the IM review, Topic Papers, and IM amendment determinations.

⁹ In particular we were left confused by the argument for ex-ante FCM presented to us in the gas DPP process that there was an implied regulatory bargain. i.e. there was an implied tradeoff between a restriction that only allowed "normal returns" should mean that regulated entities receive protection from economic loss.

¹⁰ Commerce Commission, Part 4 Input Methodologies Review 2023 Process and Issues paper, p8, Table 1

Chapter 2 - The Record for the IM review

- 33. MGUG considers the following to be part of the record for this IM review:
 - a. MGUG's notice of s52Z appeal that its solicitors lodged with the High Court on 29 June 2022 appealing the gas IM amendments¹¹.
 - b. Submissions made during the gas IM and gas DPP3 process such as they relate to topics brought up and discussed for this IM review.

Chapter 2 - Report on the IM review

- 34. MGUG supports the publication of a report at the conclusion of the IM review that summarises the Commission's review decisions.
- 35. We support the supposed structure of the IM review.
- 36. We do not see this document as an alternative for full explanations being provided in a timelier manner for draft and final decision documents.

Chapter 3 - Gas IM review

- 37. MGUG's appeal notices lay out the grounds for review of the gas IMs by revoking the amendments (Amendments) made:
 - a. cl 4.2.2(4), which allows the Commerce Commission ("Commission") to apply an adjustment factor in respect of a Default Price Path ("DPP") regulatory period for the purpose of determining the remaining asset life for existing assets and the remaining asset life for additional assets, provided the Commission is satisfied that applying an adjustment factor would better reflect economic asset lives and doing so would better promote the purpose of Part 4 of the Act;
 - b. cl 4.2.2(3)(a)(ii) and cl 4.2.2(3)(b)(ii) which provide definition alternatives to give effect to cl 4.2.2(4) for "existing assets" and "additional assets" in cl 4.2.2(2) to determine allowable depreciation by a gas distribution business ("GDB") and a gas transmission business ("GTB") under cl 4.2.2(1). In this notice GDBs and the GTB are referred to generically and each is encompassed with the term Gas Pipeline Business ("GPB"); and
 - c. other clauses or parts consequential on or intended to apply or to give effect to cl 4.2.2(4), such as clause 2.2.8(5), Schedules 1, 2 and 3 in the GDS DPP3 and Schedules 1, 2 and 4 in the GTS DPP3 and terms with such effects defined in cl 1.1.4(2) including "remaining asset life", "forecast depreciation for existing assets" and "transitional adjusted asset life for existing assets".
- 38. The substantive grounds for reviewing these Amendments are laid out in the Appeal Notice.
 - a. Inconsistency with s52A purpose.
 - b. The Amendments do not constitute or properly form part of input methodologies.

¹¹ Notices of Appeal Served 29 June 2022 still pending High Court administrative reference.

- 39. In identifying which IMs to consider changing, and in reaching decisions on changing IMs the Appeal Notice links with the overarching objectives for the IM review¹²:
 - a. promoting the Part 4 purpose in section 52A more effectively;
 - b. promoting the IM purpose in section 52R more effectively (without detrimentally affecting the promotion of the section 52A purpose).

Chapter 4 – Context for the IM review

- 40. While we consider that sectors may be entering a period of change, there remains considerable uncertainty as to what that will ultimately mean.
- 41. When considering long term risk and economic efficiency, we would expect that the Commission should rely only on the facts in front of them rather than try to anticipate and give excess weight to necessarily speculative potential results of current and future government and government agency decision-making.
- 42. For gas we consider that speculative outcomes for economic stranding of network assets as an outcome of long-term demand risk, can be mitigated by considering that the context of economy decarbonisation includes efforts already underway to repurpose existing infrastructure to carry lower carbon gases.
- 43. The inclusion of low carbon gas as substitute product or complementary with natural gas will also align the discussion around the use of Task Force on Climate-Related Financial Disclosures (TCFD) framework as the basis for the Commission's initial review of climate change related risks and opportunities.

Chapter 4 - Whether Part 4 enables decarbonisation

44. The Commission's definition of gas pipeline services restricts incentives for efficient investment and innovation that would enable economically efficient investment in decarbonisation of gas. We have addressed this under Framework issues.

Chapter 5 – Issues for gas – Form of Control

- 45. Form of control addresses volatility of supplier revenues within a control period.
- 46. While Vector argued for the Form of Control on its GDB to change from a WAPC to a pure revenue cap in the recent gas IM determination, the Commission opted to retain the current forms of control.
- 47. We see no new evidence for changing the Forms of Control for GTB and GDBs in this IM review. Instead, we would propose that the solution is for the Commission to broaden its definition of gas pipeline services to include lower carbon gases to maintain the relevance of the current Forms of Control for GPBs.

¹² Part 4 Input Methodologies Review 2023 Process and Issues paper, 3.9 (p 29)

Chapter 5 – Issues for gas – Long Term Demand Risk

Economic principles

- 48. To date the Commission has relied on three economic principles to guide its decision making:
 - a. Ex-ante real financial capital maintenance (FCM).
 - b. Allocation of Risk
 - Asymmetric consequences of over-/ under-investment.
- 49. The concept of ex-ante FCM principle proved somewhat contentious when the IMs were first developed, particularly in the context of determining the initial Regulatory Asset Base with asset revaluations¹³.

Ex-ante FCM principle in context of Competitive Markets

- 50. Part 4 purpose is carefully framed: The purpose of this Part is to promote the long-term benefit of consumers in markets referred to in section 52 by promoting outcomes that are consistent with outcomes produced in competitive markets. In other words, the regulatory arrangements are designed to promote long-term consumer benefits, and to do so in a way that is guided by references to outcomes in competitive markets.
- 51. The NZ High Court judgment in WELLINGTON INTERNATIONAL AIRPORT LTD & ORS v COMMERCE COMMISSION 14 considered what outcomes produced in competitive markets should mean. The court concluded:

...workable competition means a market framework in which the presence of other participants (or the existence of potential new entrants) is sufficient to ensure that each participant is constrained to act efficiently and in its planning to take account of those other participants or likely entrants as unknown quantities. To that end there must be an opportunity for each participant or new entrant to achieve an equal footing with the efficient participants in the market by having equivalent access to the means of entry, sources of supply, outlets for product, information, expertise and finance. This is not to say that particular instances of the items on that list must be available to all. That would be impossible. For example, a particular customer is not at any one time freely available to all suppliers. Workable competition exists when there is an opportunity for sufficient influences to exist in any market, which must be taken into account by each participant and which constrain its behaviour¹⁵.

[2013] NZHC 3289 [11 December 2013] - para [26]

52. The Court noted the Commission's description of the FCM principle as:

Over the lifetime of its assets, a typically efficient firm in a workably competitive market would expect ex ante to earn at least a normal rate of return (i.e. its risk-adjusted cost of

¹³ [2013] NZHC 3289 [11 December 2013]. The NZ High Court judgment in WELLINGTON INTERNATIONAL AIRPORT LTD & ORS v COMMERCE COMMISSION

¹⁴ ibid

¹⁵ Our emphasis added

capital). Because allowing a firm the expectation of being able to earn normal returns over the lifetime of an investment provides it with the chance to preserve its 'financial capital' in real (not nominal) terms, such an outcome is often referred to as 'financial capital maintenance' or 'FCM'. In a regulatory context, FCM is achieved, on an ex ante basis

[2013] NZHC 3289 [11 December 2013] – para [261]

53. The FCM principle is further described¹⁶ as:

The FCM principle is that regulated suppliers should have the **expectation ex-ante** of earning their risk-adjusted cost of capital (ie, a 'normal return'), which provides them with the opportunity to maintain their financial capital in real terms over time frames longer than a single regulatory period

Price-quality regulation does not guarantee a normal return over the lifetimes of a regulated supplier's assets. However, given that a typically efficient firm would expect exante to earn at least a normal rate of return over time, application of this principle can assist in promoting the s 52A(1) outcomes and purpose

- 54. In a regulatory context therefore, FCM is achieved, on an *ex ante* basis. This is comparable to and aligns with expectations in competitive markets that are conducive to promoting investment¹⁷.
- 55. If FCM and NPV=0 are **ex ante concepts**, their application part-way through the lifetime of an asset (such as in the context of shortening asset lives) is inappropriate.
- 56. While the High Court didn't specifically deal with the issue of FCM in the context of long term demand risk, it did note that workable competition outcomes are reflected in prices.

Markets where there is little or no competition do not produce price outcomes that are consistent with the outcomes to be promoted in the s 52A(1) purpose. It is the difficult role of Part 4 regulation to produce prices that generate the s 52A(1)(a) to (d) outcomes, consistent with the outcomes produced in workably competitive markets. **Prices are, therefore, at the heart of Part 4 regulation**.

[2013] NZHC 3289 [11 December 2013] – para [29]

57. The issue of prices being at the heart of Part 4 regulation is instructive. While in competitive markets companies regularly make accounting adjustments to depreciation schedules and asset registers, including write-offs, when it appears that assets may become stranded before they are fully written off, they do not pass on those accounting losses to their customers by raising prices.

¹⁶ Consolidated im review draft decisions 16 june 2016 – p107 of 790

¹⁷ For example: "No commercial competitors would come into an industry if they did not expect to be able to recover the decline in real values of their assets, as well as earn a normal profit (the opportunity cost of capital). They would measure their return on investment after recovery of funds sufficient to maintain the real value of the financial capital they had invested" (HM Treasury Advisory Group, Accounting for Economic Costs and Changing Prices: A report to HM Treasury by an Advisory Group, Vol. 1, HMSO, London, 1986, paragraph 19 (emphasis in original)).

Ex-ante FCM needs to be examined in the context of long- term demand risk

- 58. Most of the discussion on how FCM should be used in the context of long-term demand risk is new. Contrary to the evidence presented in most of the preceding discussion, In the gas IM determination the Commission seems to have accepted that:
 - a. ex-ante FCM risk should be placed on consumers and that it should be applied retrospectively to sunk investments. This effectively provides for an ex-post adjustment and gives suppliers an investment assurance that companies in a competitive environment do not expect.
 - b. In allocating risk, the Commission assumes that consumers, rather than suppliers should carry the risk burden of demand reduction. In practice this has been translated by the Commission to mean that consumers today should pay to compensate suppliers for revenue risk through higher prices.

Demand (Stranding) Risk is borne by Suppliers under workable competition

- 59. In the Orion CPP determination¹⁸ the Commission sought an expert opinion on whether Orion was entitled to claim compensation for lost revenue as a result of the damage its network suffered in the Christchurch Earthquake, including for customers lost permanently. The Commission engaged Professor Yarrow to provide advice on this matter¹⁹.
- 60. The situation for economic stranding through loss of demand is analogous in that the argument assesses the merits for revenue clawback. The Commission in considering accelerated depreciation for the existing RAB in the gas IM determination is essentially providing for ex-ante clawback by GPBs for anticipated loss of revenue.
- 61. Professor Yarrow noted:

"In the context of supply of a reasonably homogeneous product/service, using long-lived specialised assets, demand reduction in a competitive market can be expected to put downward pressure on prices, more or less immediately in spot markets and potentially more gradually in contract markets (depending upon the form of the contracts used: a long term contract for specified volumes at a price determined by a spot price index would likely show a price response almost quick as the spot price response itself). It would, I think, be surprising if, having lost some customers, competitive firms with excess capacity and short-run marginal costs well below the prevailing price level, then increased prices to remaining customers to restore their profitability. Cartelisation might do the trick, but the market could not then be said to be workably competitive".

P13, Para 3

¹⁸ Commerce Commission 29 November 2013

¹⁹ Yarrow review of claw back issues Orion CPP 30 May 2013 https://comcom.govt.nz/ data/assets/pdf file/0024/63186/1582851-Yarrow-Further-advice-on-clawback-4-August-2013.PDF

62. The Commission supported Professor Yarrow's analysis and assessment in 2013 in denying Orion's claim for lost revenue in the final CPP determination. It's perplexing that the Commission has overlooked its own case history to arrive at a different conclusion when assessing economic stranding risk created from loss of demand and risk allocation.

Long Term Demand Risk – need an internally consistent approach

- 63. If the Commission is determined in its view that there is a long-term demand risk for gas pipeline services, it should also adopt a coherent approach in how this is reflected in its IM settings. It seems contradictory for the Commission, to on the one hand talk down the prospect of having long lived assets, and then on the other provide incentives and settings to suppliers to invest for the long term. In particular a number of inconsistencies with this approach were highlighted in the gas IM determination:
 - a. To encourage investment in long lived assets but shorten depreciation periods.
 - b. To continue with RAB indexation to maintain real ex-ante FCM
- 64. In a competitive market, firms who view the demand for their services as being at significant risk take a number of steps to mitigate their potential downside exposure:
 - a. They mark the value of their impaired assets to market by writing them down to their market value²⁰. This is then reflected as a "loss" on their books (an ex-post outcome of an ex-ante decision). This reduces their asset base and their depreciation expense.
 - b. They shorten their investment horizons to ensure that their ex-ante FCM expectation for new investment can still be met. They may also trade-off higher operating expenditures to extend the life of assets rather than risk not recovering their cost of capital for replacement capital.
 - c. They look to maximise their fixed cost recovery by using their operating leverage to price their product to maximise assets utilisation. In practice this means that firms to set price that won't recover the full cost of the asset, but that still exceeds the marginal production cost in order to maximise the fixed cost contribution and so maximise their profit.
- 65. A stylised presentation of what happens in a competitive market using standard microeconomic theory is shown in Figure 1²¹. Figure 1 shows the supply curve of a firm as the sum of fixed (capital recovery and other fixed costs) and variable costs. It also shows the demand curves under two scenarios; normal demand, and curtailed demand. The key point is that supply of

²⁰ An asset is impaired if its projected future cash flows are less than its current carrying value. An asset may become impaired as a result of materially adverse changes in legal factors that have changed the asset's value, significant changes in the asset's market price due to a change in consumer demand, or damage to its physical condition. Another indicator of potential impairment occurs when an asset is more likely than not to be disposed prior to its original estimated disposal date. Asset accounts that are likely to become impaired are the company's accounts receivable, goodwill, and fixed assets.

²¹ This is illustrative and simplified

service stays fixed but for demand, the curve shifts. The market clears at a lower price point for consumers. For the supplier with fixed assets and high operating leverage it means that while the supplier can recover its variable costs and other fixed costs (e.g. insurance, rates, employee costs) it can only recover a portion of its sunk cost in its asset base. This is a profit maximising strategy for the firm even if it suffers an ex-post economic loss on its investment in fixed assets.

66. Note that this figure can also be interpreted in a temporal dimension if demand (Q) is seen as cumulative in time. In this case the two demand curves reflect a shortened firm life.

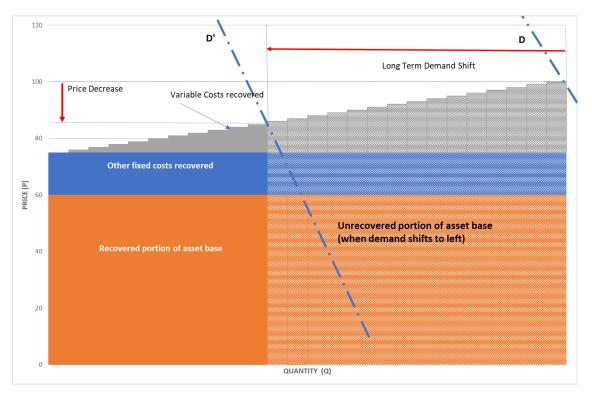


Figure 1: Demand shift effect on price in competitive markets

- 67. This is how a regulated firm is expected to behave under a price/ quality control framework that promotes outcomes consistent with outcomes seen in competitive markets.
- 68. Instead of promoting a competitive market outcome, the Commission is promoting the outcome shown in Figure 2. In this case the supplier is approved to recover all (or most) of the capital that it has invested, and instead of seeing a price decrease, as would be the case in competitive markets, the consumer instead sees a price rise.
- 69. The characteristic of Figure 2 is that not only has the demand curve shifted, so has the supply curve. The only reason a supply curve shifts in a competitive market is for changes in production cost. For a regulated supplier with a fixed asset base the only changes in production cost that relate to falling demand are how this affects their operating expenditures. This could be up or down (less wear and tear, less staff) or more opex but less capex to maintain quality of services. Lifting the entire supply curve to guarantee capital recovery of an ex-ante investment is not consistent with behaviour seen in competitive markets.

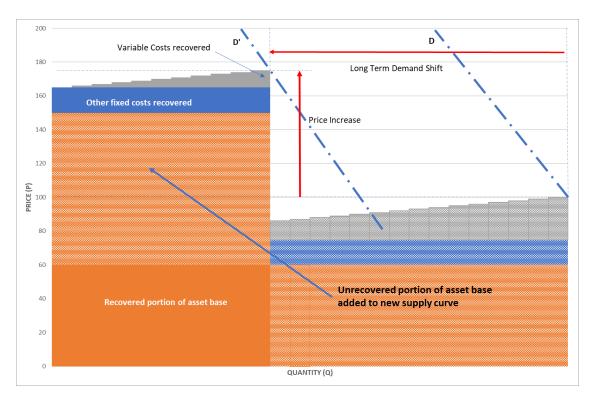


Figure 2: Price behaviour promoted by the Commission

- 70. Figure 1 and Figure 2 are a static analysis but the same conclusions can be drawn from viewing this dynamically. In (Figure 3, Figure 4, Figure 5) we simulate the residential gas sector. The demand curve is not straight and is concave to the right. The horizontal part (price elastic part) could represent low users in the system who face a high average cost of delivered gas because they only use gas in winter for heating. The curve steepens to the left reflecting consumers who are increasingly less price elastic. There is an assumed maximum limit at which a rational consumer would disconnect. This limit will be different for every consumer, driven by a range of factors, not all economic. For simplicity we've just shown a nominal cap.
 - a. Figure 3 shows the equilibrium state of the sector before accelerating depreciation
 - b. Figure 4– A depreciation adjustment factor of 0.67 is applied and the supply curve lifts. The demand shifts to the left along the demand curve. The most price sensitive consumers disconnect. The supplier doesn't recover all fixed costs. A further price rise is indicated to compensate for the economic loss of the asset base.
 - c. Figure 5 supplier is allowed to recover the RAB it didn't recover in the first period. Prices are raised and more consumers disconnect. Prices need to rise again.

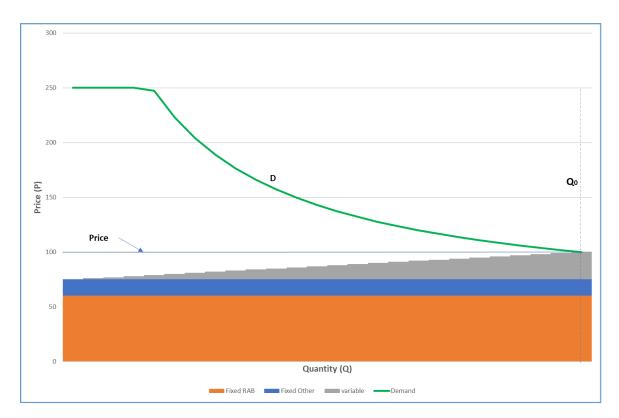


Figure 3: Residential Pricing before shortening asset lives

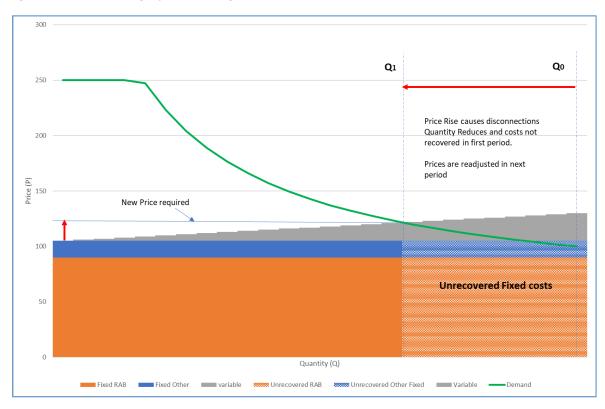


Figure 4: Residential Pricing after shortening asset lives

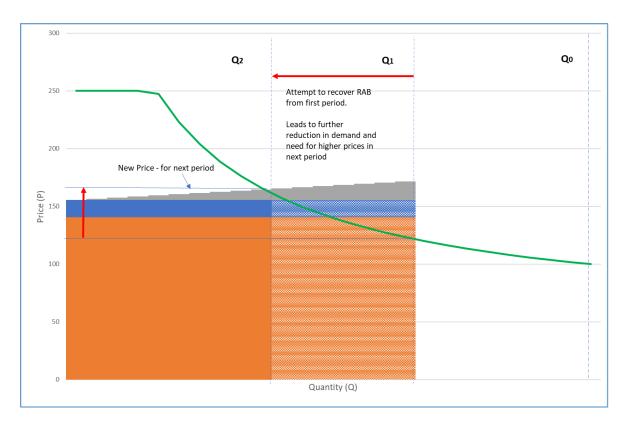


Figure 5: Residential Response- period 2

- 71. The speed and depth of demand destruction obviously depends on the shape of the demand curve. The only situation where this pattern doesn't occur is where consumers have zero price elasticity (demand curve is vertical) and they'll accept a quantity at any price.
- 72. This illustrates that this dynamic is not only adverse for consumers, but also for suppliers, as they can't recover all of their fixed costs, and are continuously needing to raise prices to try and get to their MAR. It's not a profit maximising strategy so it's surprising that producers should be advocates for shortening asset lives (or any other mechanisms that provides ex-ante FCM compensation).
- 73. The only reason that MGUG can see as to why suppliers believe that this is a good strategy, is because they believe that consumers "can afford to pay more.²²" As our example above illustrates, when a more nuanced approach is taken to gas market segmentation, using market averages can give false conclusions.
- 74. However, if the Commission is of a mind to consider a shortened asset life as more likely than not, then it should also determine that:
 - a. RAB should be marked to market, reducing the RAB to reflect the shortened economic life; and,

²² This seemed to be the argument put forward by First Gas in their submission on the Commission's draft decision for the gas IM https://comcom.govt.nz/ data/assets/pdf file/0041/278987/First-Gas-Submission-on-Gas-DPP3-draft-decision-14-March-2022.pdf - para 3.2

- b. RAB indexation can no longer appropriate since maintaining the real value of asset can no longer be seen in the context of asset replacement in the future; and,
- c. New/ replacement assets will have a shorter economic life and capex solutions will reflect these shorter asset lives; and,
- d. Variable and other fixed costs may change (either up or down)²³

Overseas experience – limited ability to adopt lessons

- 75. When faced with a new situation it is tempting to look at other jurisdictions to see how they might deal with similar challenges and whether those solutions should be adopted here. While this seems pragmatic, it is also important to consider whether a good like for like comparison is being made.
- 76. The Commission references the Australian Energy Regulator as a relevant case study for how best to manage long term demand risk for regulated suppliers²⁴, but in doing so seems to have overlooked the differences in legislation between Australia and New Zealand that affect the overall context.
- 77. The specific New Zealand legislative context has a unique reference to seeking outcomes consistent with outcomes produced in competitive markets. This is not the case in Australia (or other jurisdictions where Commission might look for guidance). In Australia the regulation of gas pipelines follows from the National Gas (South Australia) Act 2008, particularly the Schedule National Gas Law²⁵. Part 3 –National gas objectives and principles defines the National gas objective as:

The objective of this Law is to promote efficient investment in, and efficient operation and use of, natural gas services for the long term interests of consumers of natural gas with respect to price, quality, safety, reliability and security of supply of natural gas.

Part 3, Division 1, 23

- 78. The revenue and pricing principles under the Australian legislation also provide no linkage to competitive markets.
- 79. Much of our preceding discussion has focused on the New Zealand context that does require a competitive market test to be applied and we consider the established principles to be clear:
 - a. FCM (and related, NPV=0) are **ex ante concepts**, their application part-way through the lifetime of an asset (such as in the context of shortening asset lives) is inappropriate.

²³ Maintenance costs might go down, e.g. less use of compressors to cause wear and tear, less staff might be needed, insurance coverage might be adjusted, etc. Equally there may be some increases – eg if equipment is not replaced because it makes sense to spend the maintenance instead. Either way, the Commission might not find historical costs a reliable indicator of future costs.

²⁴ Process and Issues – para 5.175

²⁵ Despite the title suggesting that this applies only to South Australia, Part 2 describes the participating jurisdictions as including the Commonwealth.

- b. Prices are at the heart of Part 4 regulation.
- c. Demand reduction in a competitive market can be expected to put *downward pressure* on prices.
- 80. We realise that this discussion is at odds with the Commission's view that prices need to increase for current consumers relative to prices for future consumers to maintain a reasonable expectation of FCM.²⁶ However we think that this is because the Commission has failed to apply the competitive market outcome test, or that it has failed to understand what happens in competitive markets. It has instead elevated FCM to justify the transfer to consumers of potential supplier losses on assets that the Commission thinks are presumptively stranded.
- 81. Unsurprisingly, we would also reject the Commission's solution to dealing with long term demand risk where these create outcomes not consistent with competitive markets, such as raising prices for consumers.

Chapter Six – split cost of capital

- 82. Within the context of creating incentives to invest and given the distinctions between sunk and new investments and how FCM should apply, we think there is merit in exploring whether new investments should be given a higher WACC than existing assets.
- 83. This recognises that in sunk assets, the decision to invest has already been made on ex-ante expectations and no further incentives or WACC adjustments make a difference to those sunk investment decisions.
- 84. For new investments further incentives *may be* needed. We stress "may", purely because we don't consider that this should be an automatic expectation. For example, the argument that extra investment incentives are needed to ensure that consumers can continue to receive safe and reliable services are demonstrably incorrect. Suppliers have little discretion to go below minimum safety and reliability standards set down in regulation. Aside from prescribed safety and reliability standards there are also internal reputation risks that incentivise suppliers to maintain their brand image. Similarly, there are often alternative solutions to meet customer quality standards including shortening investment horizons for CAPEX, or transferring costs to consumers²⁷.
- 85. If the Commission considered that low carbon gases were included in the definition of gas pipeline services, then a split cost of capital might be an approach for incentivising investment in repurposing assets.

Other Matters

Empirical evidence vs theory

86. In attending to the Commission's scope to deal with clawback questions Professor Yarrow observed:

²⁶ Process and Issues Paper 5.145.1

²⁷ For example Vector's policy since July 2021 for new connections to be billed fully to the connecting party.

"As an aside at this point, I think it would prove helpful to the Commission if, given the use of the concept of workable competition in the legislation, those making economic submissions were encouraged to put more weight on empirical material drawn from comparator markets which might be held to be workably competitive. **Sometimes an ounce of fact is worth more than a ton of theory**²⁸"

P2, last para

- 87. We consider this is helpful advice. For example, in arguing that accelerated depreciation was necessary in order to promote S52A(1)(a), i.e. that suppliers have incentives to innovate and to invest, including in replacement, upgraded, and new assets, the Commission seemed to rely solely on assertions and presumptions that suppliers would not invest without the additional regulatory incentive. This was in spite of the empirical evidence in front of them that suppliers were managing investment risk efficiently.
 - a. Suppliers were already subject to incentives to invest to maintain reliability and ensure that their networks were safe. These included the regulatory framework itself (Price Quality, Information Disclosure), as well as petroleum pipeline regulation, asset management standards, and intrinsic incentives to manage organisational reputation. No further incentives are needed for suppliers to invest to maintain minimum safety and reliability standards.
 - b. The supplier asset management plans (AMPs) which extend 10-years include a CAPEX program for not only asset replacement and renewal, but also for growth CAPEX. It was also evident that suppliers were managing future risk using tools at their disposal, including deferring major expenditure in favour of smaller projects, additional OPEX, or in the case of new customer connections, requiring the connecting party to pay for the connection.
- 88. So, while a theoretically attractive presumption that suppliers might underinvest in an environment where, ex-ante, they might not earn a normal return, the facts in front of the Commission didn't appear to have been tested.
- 89. We also considered the qualitative work that the Commission used in the gas IM determination, in particularly their modelling to be challenging to follow. Complicated models lacked transparency in terms of identifying assumptions and connections. While we didn't doubt that modellers created internal consistency in their spreadsheets, it was harder to discern the extent to which assumptions deviated from reality.
- 90. We would look for an improved response from the Commission in this process as to why facts presented to them directly challenging their reasoning/ arguments were not persuasive. Equally we would seek for the Commission to present empirical evidence that it has used to justify its position.

²⁸ Our emphasis added

Yours sincerely

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Secretariat for the Major Gas Users Group

Encl:

Notice of Appeal – Under Section 52Z of the Commerce Act 1986

Notice of Appeal – Under Section 91 of the Commerce Act 1986