9 August 2023

Charlotte Reed
Input Methodologies Manager,
Input Methodologies Review 2023 Commerce Commission
P O Box 2351
Wellington
By email to IM.Review@comcom.govt.nz

Dear Charlotte

Re: Cross submission on Commission draft decisions for Part 4 Methodologies Review.

1. This following cross submission is in response to the posted submissions on the Commerce Commission's *draft decisions for the Part 4 Input Methodologies Review.* This submission is on behalf of the Major Gas Users Group inc (MGUG):

    a. Ballance Agri-Nutrients Ltd
    b. Fonterra Co-operative Group
    c. New Zealand Steel Ltd
    d. Oji Fibre Solutions (NZ) Ltd

2. Our members have been consulted on the preparation of this cross submission. Nothing in this cross submission is confidential and some members may choose to make separate cross submissions.

Yours sincerely

[redacted]

Len Houwers
Arete Consulting Ltd/ Envisory Ltd
Secretariat for the Major Gas Users Group Inc

Summary of Our Submission

X 1 This submission responds to submissions on:

a. WACC midpoint selection for GDB and gas asset beta uplift.

b. Changing the form of control for GDBs to a total revenue cap.

c. Firstgas' submission on allowing appeal costs in OPEX.

X 2 Submissions have asserted that a higher WACC is needed to maintain investment in asset integrity and safety. Such assertions could be plausible if:

a. There was evidence that GDBs reasonably expect returns to be persistently below their real cost of capital; and

b. The information required by the Commission from GDBs (including reliability and other quality disclosure) was not likely to disclose deficiencies in precautionary investment and maintenance spending in time to enable the Commission to adjust settings;

c. The liabilities of GDBs and their officers for inadequate safety precautions were seen as unlikely to be pursued.

We see no evidence of any of those conditions. The prices paid for RAB implicit in takeovers suggests that returns have been persistently above the real cost of capital, to an extent that will sustain continuing valuations above regulatory values after the resetting of WACC at the midpoint of the sample range.

X 3 WAPC is still the form of control that best promotes the long-term interest of consumers. Supplier submissions do not contain evidence that the uncertainties allegedly affecting their investment decisions that counters the outcomes and conditions we can observe:

a. GPB revenue is determined by the number of gas connections (which we observe to mean gas demand).

b. Demand forecasting is not highly problematic for GPBs in the context of gas transition. GPBs service the smallest and most resilient sector of the gas market which has remained unaffected by policy turmoil since 2018. Demand for gas connections and connection growth has maintained its growth trend.

c. Gas consumers benefit through lower prices from lower per connection costs when GPBs have incentives to increase connection density on their networks. A WAPC creates and supports these incentives. GBPs can influence these connections through their connection policies and tariff structures.

X 4 We support the Commission's draft decision to exclude appeal costs from regulatory OPEX. This is against Firstgas' submission:

a. Appeal proceedings can serve the public good, but that is not the motive of supplier parties. They do it out of commercial self-interest. Their self- interest calculations

should have to take account of litigation cost as real. Their decisions are distorted when litigation is essentially free to them but not to consumers.

b. The current situation leaves consumers paying for their own compensation (if costs are awarded to consumer parties on success in an appeal) as well as full exposure to supplier costs. When the cost of litigation to a supplier is essentially nil, or below the real cost of the litigation for any outcome, the incentives are for inefficient decisions on litigation. Efficient cost allocation should incentivise pursuit only of meritorious defences or claims.

c. The current allocation of litigation cost and risk is not an outcome consistent with outcomes under workable competition.

GPB Submissions

WACC Estimate

3. Lowering the WACC to the midpoint and removing the WACC uplift is a matter for Commission judgement based on the findings of its own *independent* commissioned advice. The CEPA advice provides evidence for lowering the WACC percentile *and* for removing the uplift. We submit as consumers aware of the risks if the WACC estimates are persistently below the actual or real cost of capital for GDBs. We will bear the costs of outages and non-performance directly. We wish to carry the risks that have been cited to induce the Commission to err on the side of generosity to suppliers. We consider that the likelihood of the real cost of capital being persistently higher than the midpoint of the WACC sample is low enough to outweigh the putative asymmetry of the cost of being wrong.

4. We of course accept the *possibility of* under-investment risks but consider there is enough evidence that they are not *probable*[1].

5. Firstgas' submission focuses on the WACC percentile and asset beta used for gas pipelines[2]. In particular the submission claims that the Commission's draft decisions on the cost of capital undermines predictability, lacks rigours justification, and is absent "new evidence" to justify changes. Together with Vector and Powerco, Firstgas commissioned Oxera to promote their position that removing gas uplift and dropping the WACC to the 50th percentile is a risk to gas consumers because of "underinvestment risk".

6. Unpredictability as an argument does not need much consideration. The asymmetry claims have been in contention from the first IM Determinations. GPBs notably didn't oppose the Commission making out of cycle adjustments to the gas IM in 2022. This step arguably decreased the certainty of the normal IM review process outcomes, since what occurred in 2022 can be repeated at every DPP reset (4-5 years instead of 7 for the IM review). Arguments on the grounds of unpredictability imply that the Commission shouldn't be free to change its settings at any time. What role does that argument leave for a meaningful 7-year cycle review?

7. The threat of under-investment was applied to claim justification for accelerated depreciation on the RAB in the 2022 Gas IM determination.

8. Our primary submission drew attention to the reduction in investment in asset renewals and reliability despite the 2022 Gas IM determination, as reflected in supplier AMPs. The accelerated depreciation allowed suppliers to boost their income from consumer charges by $156 million over DPP3. Oxera's claims that under- investment because of a lowered percentile is risking asset integrity for maintaining pipeline services is not compelling in terms of establishing cause and effect links.

9. Oxera's report is carefully caveated with "*may*", "*could*", and "*might*". This is realistic because the report speculates. We think it concentrates on the worst possible (but not probable)

[1] Anything is possible when there is a probability of it occurring that is greater than zero, not everything is probable (ie more likely than not, ie >50%)

[2] https://comcom.govt.nz/__data/assets/pdf_file/0017/323126/FirstGas-Ltd-Submission-on-IM-Review-2023-Draft-Decisions-19-July-2023.pdf

outcomes. Equally, "*may*", "*could*", "*might"*, can change to "*may not*", "*could not*", and "*might not*" and still not constitute solid evidence. Unlike the CEPA report, which the Commission paid for, Oxera's report is not independent. Its point is to persuade the Commission to the suppliers' viewpoint, not to make an objective assessment.

10. The implied message that network reliability would be compromised if the current WACC settings aren't maintained lack commercial credibility:

    a. It assumes that suppliers would underinvest in asset integrity maintenance to place a higher priority on shareholder dividends, rather than maintaining the source of those dividends.

    b. Asset integrity management is at the heart of supplier AMPs. Consumers and the Commission have sufficient visibility and involvement in these to test their programmes against prudent operator standards and work with suppliers on network priorities.

Quantum at stake is not undermining for suppliers' investment in asset integrity.

11. We've calculated that a 0.05 uplift on the asset beta and the 67th percentile of the WACC distribution adds approximately $15 million pa to consumer bills for all gas pipeline services (Table 1). We used energy asset beta (0.35 – no uplift, 0.40 – with uplift) and notional leverage of 0.39 as recommended by CEPA[3].

Table 1: WACC impact[4]

Gas Pipeline Business	Opening RAB 2023 ('$000)	WACC settings	Post-tax WACC
GasNet	25,549	With uplift – 67%	0.0701
Vector	465,839	With uplift – midpoint	0.0661
Powerco	408,027	No uplift - midpoint	0.0623
FirstGas Distribution	184,174	Delta-uplift (67%-50%)	0.00395
FirstGas Transmission	880,906	Delta-uplift 67% - No	0.00776
Total	**$ 1,964,495**	**Impact – uplift/ midpoint**	**$7,760**
		Impact – no uplift/midpoint	**$15,244**

12. Keeping the uplift and moving to the 50th percentile the approximate revenue impact is $7.76 million.

13. To put that in context, the combined line revenue of the GPBs in 2022 was $269 million[5]. The line revenue will be considerably more in 2023, and beyond, with the accelerated depreciation allowances currently in force.

14. Will a reduction of $15 million pa (if uplift is also removed), or $7.8 million pa (if uplift remains and midpoint is used), across all GPBs, be a sufficient cause for GPBs to underinvest in their

[3] We also used the standard errors for debt premium (0.15%) and asset beta (0.13) to simulate the WACC distribution to calculate the 67th percentile. Note that it didn't effect the outcomes whether vanilla WACC or post tax was used to determine the delta, or difference, between settings.
[4] We understand that WACC is also used in more minor ways for PV discounting in determining MAR. These aren't material relative to the main application of WACC applied to the RAB.
[5] Reference Schedule 3 from respective Financial Information disclosures

network integrity programs? The Commission has plenty of time to watch asset replacement and reliability experience to find out in the 7 years of this IM.

15. We have considered where GPB revenue is applied. We have examined Vector's published annual accounts, assuming that it is likely to be similar for other GPBs.[6]

16. Vector comprises regulated businesses (EDB and GDB) and unregulated businesses (Gas Trading and metering). Regulated businesses comprise **66% of their revenue** in YE June 2022 ($831.5 m vs $1265.3 m) and **88% of their profit** ($357.6 m vs $406.0 m)[7]. The returns from YE June 2023 won't be known until the end of August, but we can reasonably expect regulated returns from its GDB business to be significantly higher because of the front end loaded revenue GPBs have been permitted to earn since October last year.

17. In 2022, Vector paid out $169 million in dividends, or 16.75 cents/ share, the same as the year before after steady increases from about 13.75 cps in 2009.

18. Assuming a prorated reduction created by having the WACC set at the midpoint and with the uplift removed, Vector's profit would have reduced (approximately) by $1.4 million and shareholders would have received 16.61 cps instead of 16.75 cps in 2022 (assuming that the reduction would be applied to dividends and not to other less essential costs in the business). If it was just the midpoint while maintaining the uplift shareholders would have only received 16.68 cps instead of 16.75 cps.

19. This highlights that consumers also fund GPB dividend policy maintenance, and not just essential investment and expenses for providing a service. The purpose of this example is to use this as a reality check against (admittedly vague) implications that asset integrity would be compromised to protect against foregoing a small percentage on a dividend pay-out. This wouldn't be our experience in how the commercial world operates.

20. There is a further reason why vague claims of underinvestment appear unlikely to us.

Consumer and Commission engagement with Supplier AMPs

21. Oxera refers to the 2011 Maui pipeline outage as an example of the wider impact of a major gas outage. We are familiar with the background and circumstances of this event, and as Oxera also notes that incident was unrelated to investment issues. It is true that "*a WACC that is set too low **could** result in networks reducing such investments where there is discretion in relation to the level and types of expenditure"*[8] But that says nothing about whether the midpoint of the WACC proposed by the Commission is too low.

22. Firstgas similarly highlight the Maui outage in 2011 as well as ESSO Longford (1998), and Varanus Island (2008) as examples of serious gas outages. As noted, the Maui incident was

[6] Ie all the GPBs have shareholders seeking stable dividends, and cost structures and revenues for running those businesses are similar. NB from the Whanganui District Council Long Term Plan we also note that GasNet is expected to deliver between $120k - $180k pa to the Council https://www.whanganui.govt.nz/files/assets/public/plans/long-term-plan-2021-2031-volume-1.pdf p115

[7] https://blob-static.vector.co.nz/blob/vector/media/vector-2022/vector-2022-annual-report.pdf

[8] Ibid p3

unrelated to investment issues. Likewise, Longford and Varanus also had no relationship with regulated pipeline investment. Both these incidents happened to privately owned processing plants. The corroded line at Varanus for example was a 30 cm line owned by Apache whose rupture led to fire and explosion at its processing facility that disrupted gas supplies to Western Australia. Longford was an incident created by failure of internal safety systems at the ESSO site. We don't consider these examples to be relevant to the debate whether removing uplift and shifting the WACC percentile to the midpoint is likely to lead to lower investment in maintaining asset integrity for GPBs.

23. Nor is it useful to ponder on the impact of gas outages as much of the further Firstgas submission focuses on. Most of these outages are more likely to be created out of supply disruptions at gas processing facilities, or random events that AMPs can't cater for (like a bulldozer going through an underground pipe). These types of incidents are often outside the control of asset management plans and influence of prudent investment programs.

24. While the 2011 outage wasn't due to underinvestment, it did highlight the importance of managing outage risk. It led to MGUG arguing for a reliability standard for gas transmission to be made a more explicit measure as a reminder of its importance under the Commission's Price Quality regulation. This was adopted during the DPP2 review of GPBs in 2017.

25. MGUG has a constructive relationship with Firstgas asset managers, and their senior people in general. MGUG is regularly updated by Firstgas on a range of initiatives affecting the gas sector it is leading, including their annual AMP development and revisions. Engagement is characterised by dialogue. We believe that our views on AMP priorities and programs are valued and included in Firstgas' final decisions. Accordingly, we feel confident with Firstgas' approach to its asset management program is based on proper asset risk assessment with CAPEX prioritised accordingly. It is based on good pipeline industry practice and we consider Firstgas to be a reasonable and prudent operator of its gas network.

26. MGUG for example, were closely consulted on the Maui line CAPEX program that resulted from the 2011 incident. These included changes of scope that deferred CAPEX on rerouting of the main line based on the evidence to focus on higher risk areas. It also included discussion on deferring major CAPEX on compressor replacement in favour of higher OPEX. We were comfortable with program changes that had already been approved by the Commission.

27. Firstgas seem to appreciate that the gas transmission system is critical infrastructure for New Zealand and that more than their short-term bottom line is at risk if they were to "under-invest" in its safety and reliability. Incentives to invest come from many quarters; a long term perspective, and the culture that supports it, regulation and fines, reputation risk management, social license.

28. While MGUG doesn't have the same relationship with other GPBs, like the Commission, we see their AMPs and Information Disclosures which are backed by Director Certificates and CEO assurances.

29. We expect that GPBs would swap CAPEX for OPEX under uncertainty as an early response to concerns about long term profitability. That expectation about asset integrity is supported by

the Gas Infrastructure Future Working Group[9] (GIFWG) report[10]. This considered the question what alternative gas transition scenarios would mean for future gas network expenditure and revenue requirements, and how might these vary over time.

> *Under those scenarios, gas pipeline businesses are expected to substitute operating expenditure for capital expenditure to ensure that can provide a safe and reliable service during the transition period without over-investing in long-lived assets that are only required for a short period of time.*

30. Other than catastrophic failures of pipelines, Oxera also mention other potential consequences of underinvestment risks that "*may"* occur:

    a. Increased leakages and gas escapes.

    b. Decarbonisation costs of delaying the transition to renewable gases.

    c. Preventing an orderly transition.

31. The first example relates to asset management, which we have already discussed. Other than reputation, gas leakages are serious issues, commercially as well as for public safety. We are confident that GPBs consider these risks a high priority to mitigate in their AMPs.

32. The other examples are hypothetical, and in the case of decarbonisation costs not relevant. If we understand the argument correctly, Oxera are asserting that loss of revenue will scale back GPB repurposing initiatives. The Commission has explicitly ruled out investment in renewable gas repurposing as outside the scope of the definition of pipeline services.

33. Premature shut down of sections of the network to create a "disorderly" transition would only be likely if marginal costs of the network exceed marginal revenue. As Firstgas' recent work on revenue received vs marginal cost on their network shows[11], these sit above in (most) parts of the network[12]. There is no commercially good reason to decommission a network where contribution margin exceeds marginal cost.

[9] The Working Group was established in May 2021 by Vector, Powerco, Firstgas, and GasNet to consider the potential impacts of emerging energy and climate policy on their gas infrastructure.

[10] https://comcom.govt.nz/__data/assets/pdf_file/0012/323130/Gas-Infrastructure-Working-Group-GIFWG-Attachment_-Gas-Transition-Analysis-Paper-13-June-2023-Submission-on-IM-Review-2023-Draft-Decisions-19-July-2023.pdf p3

[11] Firstgas Transmission-Transmission Pricing Review- July 2023

[12] Gisborne is an outlier. This has always been the case. This lateral was built when the Government owned the network as a political project.

Figure 1: Firstgas Transmission - subsidy free pricing

34. In conclusion MGUG support the decision to bring the WACC percentile back to the midpoint and as noted in our submission. We also suggest that the Commission notes the lack of support for a WACC uplift from the data**, and to remove it in their final decision**. Both matters are well within the scope of the Commission to make that call, and supported by their own independent advice.

Vector, GasNet, Powerco and Frontier Submission – Form of Control

35. In March 2022 MGUG cross submitted against Vector's submission for a revenue cap for GDBs.

36. 15 months later Vector is joined by other GDBs in again calling for a revenue cap as the form of control for GDBs. GDBs have used Frontier Economics to present their argument[13]. The same arguments as used in 2022 have been repackaged (government climate change policies and claims an inability to forecast gas volumes in a dynamic environment)[14].

37. Our cross submission on the argument for form of control is that the underlying facts haven't changed).[15] We've focused some of our evidence on Vector as, given the time constraints in this process, we were in a better position to update the factual information that we produced in 2022.

38. The argument is put forward that a WAPC can't achieve price stability within each regulatory period[16]. Our observation is that recent price stability isn't a function of the form of control as much as it has been a function of the Commission allowing accelerated depreciation, and GDBs

[13] 6 April 2023 -Frontier Economics - *The merits of introduced a revenue cap for gas distribution businesses*
[14] Ibid – p2, para 9, 11
[15] https://comcom.govt.nz/__data/assets/pdf_file/0020/323174/Vector-Submission-on-IM-Review-2023-Draft-Decisions-19-July-2023.pdf para 2, p1
[16] Ibid – p2, para 10

ability to shift greater fixed cost burden onto consumers through its price methodology[17]. This is unrelated to form of control[18].

39. Frontier also assert that GDBs can't influence demand. GDBs however have the ability to influence demand through their gas connection policies, and their tariff structures. Network costs contribute about 1/3 to the total delivered cost of gas to households[19], which is a significant price lever that GPBs can exercise when considering consumer decisions around energy choices. This lever is most effective when they can encourage connection growth on their networks, which is what a WAPC incentivises.

40. With respect to the future of gas pipeline services continuing, the uncertainty around gas demand has diminished since 2022 with the government signalling that it is more open to gas continuing in New Zealand's energy mix. GDBs willing to invest in the future of gas through repurposing can influence long term gas demand. This includes Vector, a key and influential participant on the Gas Infrastructure Futures Working Group (GIFWG). As MGUG has noted in its submission:

    a. MBIE are looking to alter the definition of gas pipeline services so that it is not restricted to natural gas.

    b. Industry is also working on an updated gas specification to enable low carbon gas in open access systems.

    c. Firstgas also announced its work on connecting biogas into its system. The CEO, Paul Goodeve communicated a bullish outlook on the future of Firstgas networks[20].

> *"We think this is a tremendous way for New Zealand to make small, incremental and meaningful contributions to our emissions but still allow people to live the way they want to live and use energy the way they want to use it"*
>
> *Paul Goodeve*

[17] Notably Vector as outlined in MGUG's submission

[18] https://comcom.govt.nz/__data/assets/pdf_file/0013/323140/Major-Gas-Users-Group-MGUG-Submission-on-IM-Review-2023-Draft-Decisions-19-July-2023.pdf Figures 6-9

[19] 2018 GIC – Gas Story – Gas Pricing chapter

[20] 20 July 2023 - https://www.energynews.co.nz/news/gas/142575/firstgas-connect-more-biogas

Uncertain gas demand is not leading to uncertain revenue expectations

41. The continued framing of the debate on *"(natural) gas demand*" is leading to false conclusions. The relevant debate is around pipeline revenues and connection demand and growth. Both are remarkably resilient in the face of perceived policy uncertainty.

42. The following figures demonstrate why issues of gas demand "uncertainty" needs to be considered more closely in terms of supplier claims on how it affects their revenue uncertainty and forecasting ability:

    a. Figure 2 - GDB gas volumes have proven stable throughout the period of policy instability starting with the offshore gas ban announcement in April 2018, and the subsequent decarbonisation advice from the Climate Change Commission (CCC)

    b. Figure 3 – GDBs' notional revenue continues to grow independent of gas volume. In the period 2018-2022 gas volume decreased by 3% while notional revenue grew steadily by 14%

    c. Figure 4 - Vector's demand for connections and connection growth which underpin their revenue, continues unabated[21].

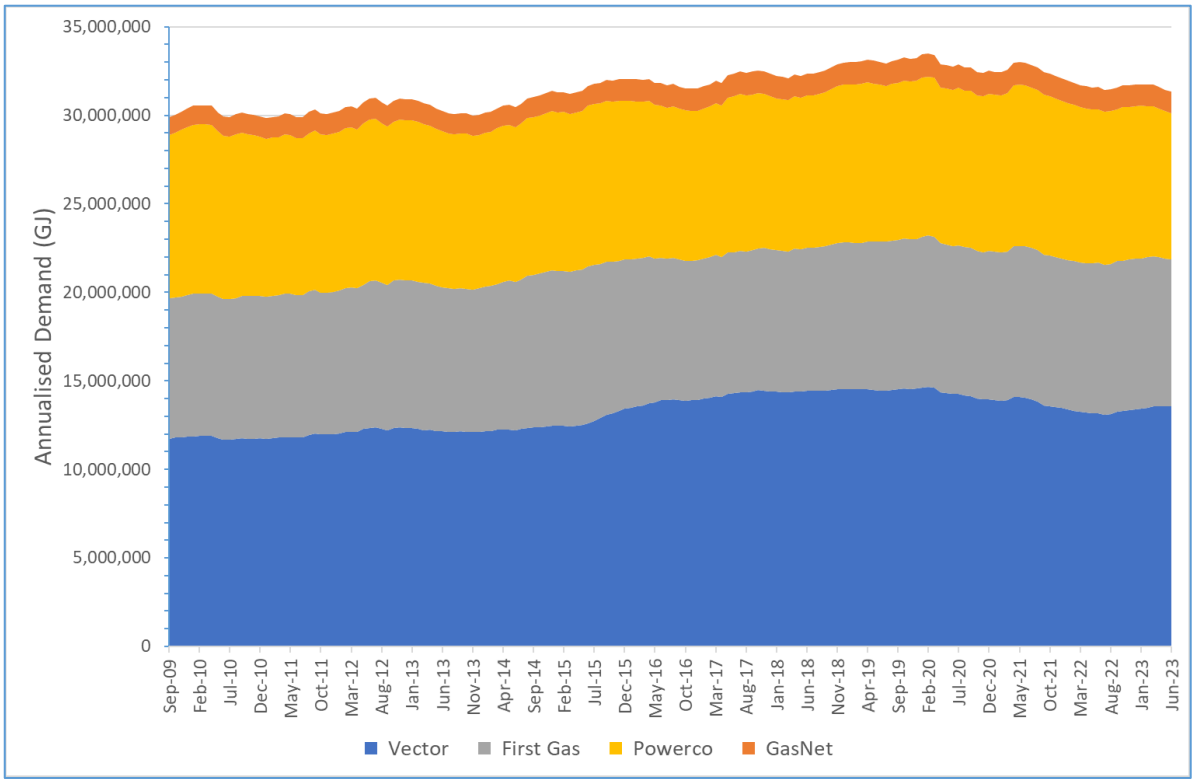

Figure 2: GDB Annualised Demand (source: Oatis)

[21] Our snapshot is of Vector since they have been most active in applying policies that might disincentivise connections. The pattern of ICP growth for other GDBs has appeared in our submission to the draft advice.

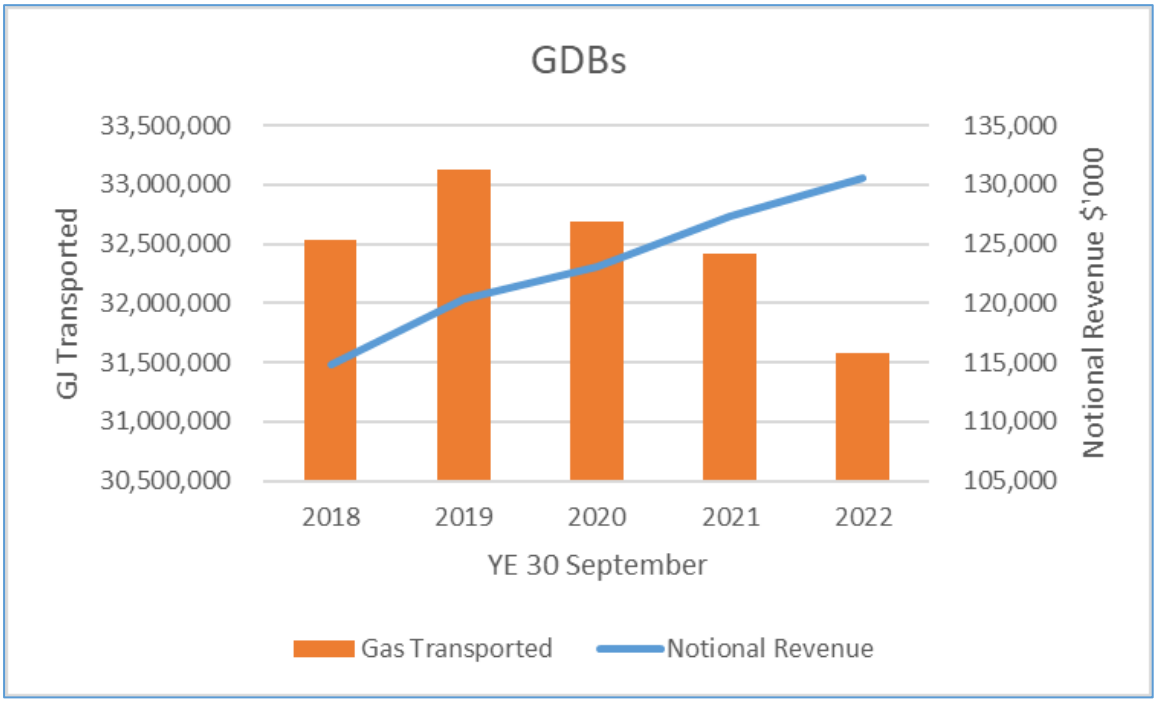

Figure 3: Regulated GDB Gas volume and Revenue - Source: OATIS and Gas Compliance Statement

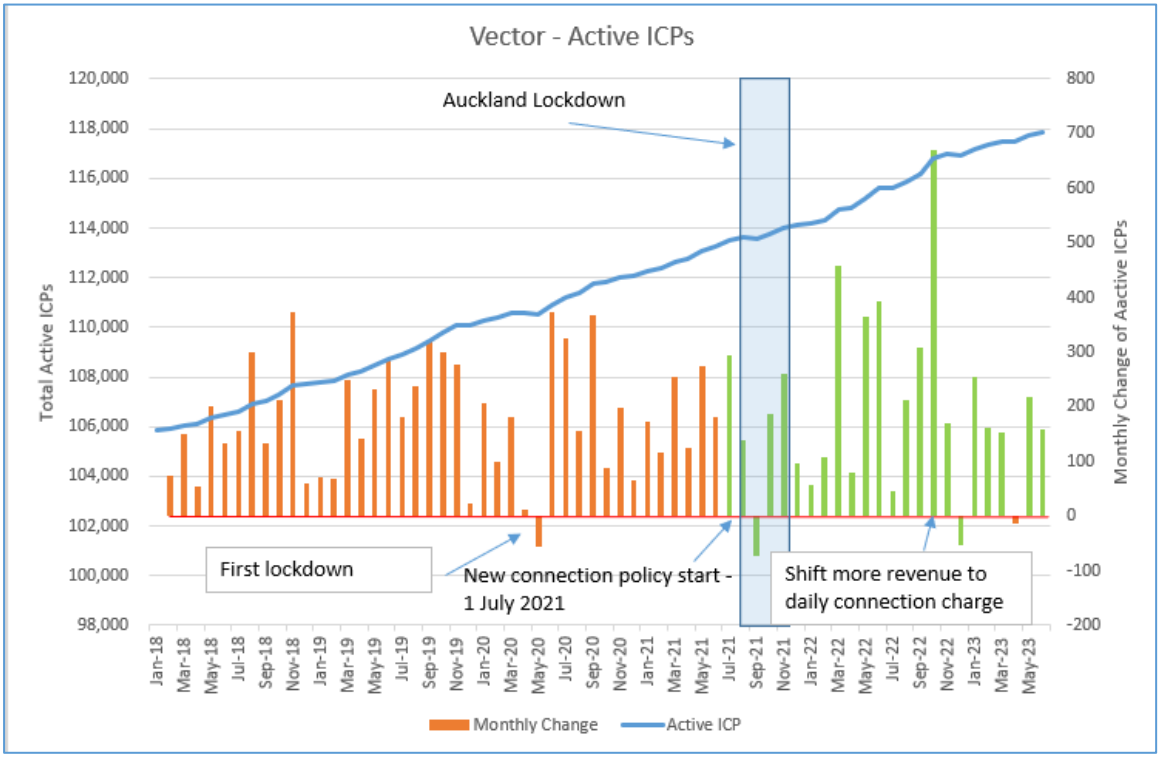

Figure 4: Vector Active ICP - source: Gas Registry

43. Because we first raised this, and did the work, in the 2022 gas IM amendment as a direct response to Vector's advocacy for a total revenue cap, we've updated this work to show why what we said in April 2022, continues to be true. We reappraised Vector's future connection growth using statistical time series modelling. This approach lets the data "speak for itself" – i.e. it is not influenced by any subjective biases including model selection which is determined only by conforming to objectively determined statistical checks (principally through model residual analysis)

44. All of our data is from public sources including Daily Delivery Reports from Oatis, the GIC Gas registry, and Vectors' Gas Compliance disclosures.

45. We used the monthly data for Vector Distribution from October 2018 to June 2023[22] listed as *Active ICP by Distributor* in the GIC gas registry[23].

46. We used the open-source statistical software package "R" which is used extensively by the statistics community, to develop a time series model based on the data[24]. While there are a number of statistical modelling approaches to choose from, we picked a simple exponential time series approach (ets). The model itself was assessed in terms of its validity using various statistical tests on the residuals[25]. The model we developed met the test for independent and identically distributed (iid) residuals. The model was then used to forecast to end September 2026. This provided the expected value of total ICP connections and the prediction range (95% prediction interval).

47. The following presents the outcome of the modelling work:

    a. Model fitted to the data to demonstrate model explanatory power (Figure 5)

    b. Model forecast made in April 2022 to compare against actual to June 2023 to demonstrate its predictive power. (Figure 6)

    c. Updated model and forecast to Oct 2026 (Figure 7)

    d. Time series decomposition showing error, trend, and seasonal component patterns (Figure 8)

[22] October 2018 is the first month of the distribution pricing year that falls within the 4 year window Vector is using in its assertions.
[23] https://www.gasindustry.co.nz/work-programmes/switching-and-registry/current-arrangements/reports/
[24] We can supply the R code and data on request.
[25] A good (descriptive) model would have residual values that are randomly distributed around zero, are independent, show constant variance, and ideally are also normally distributed. The model met these criteria

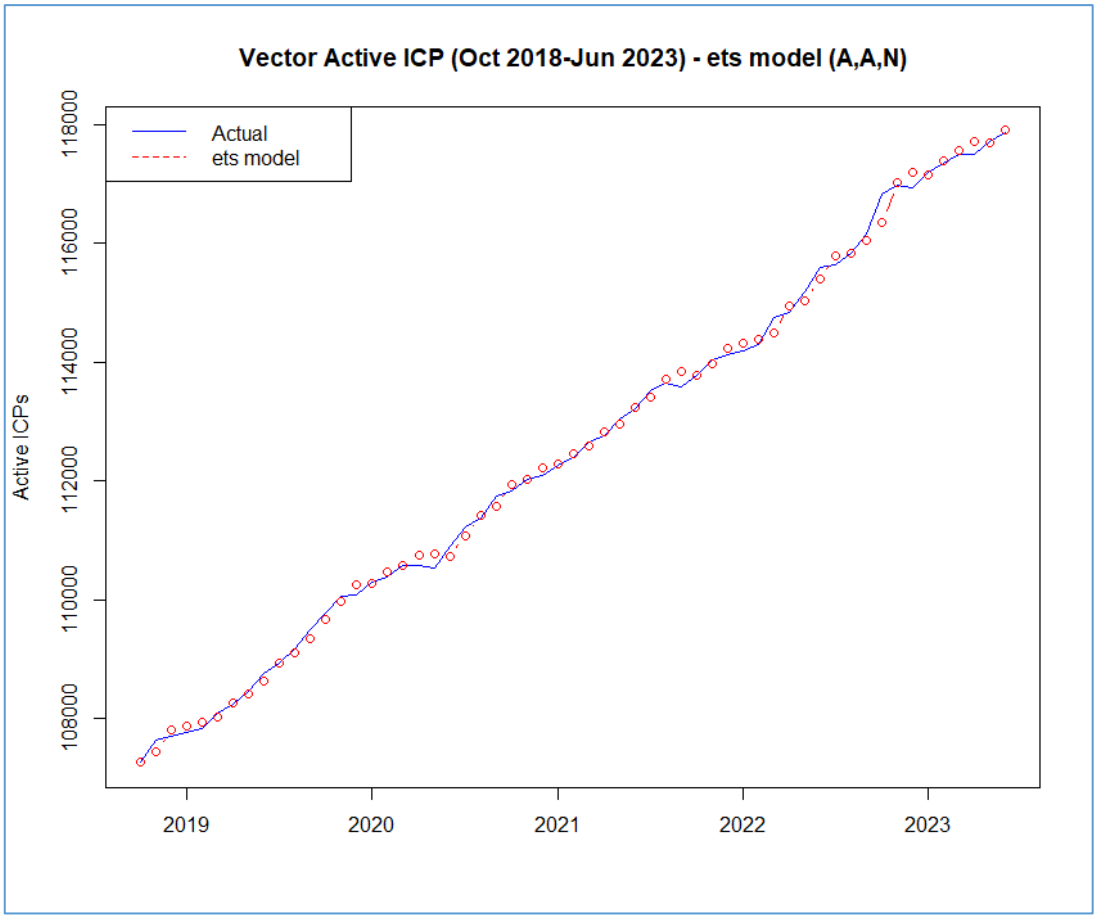

Figure 5: Actual vs Model[26]

[26] The model forecasts connection as the sum of the trend and error terms (no seasonal term). Hence the ets model is described as (A,A,N).

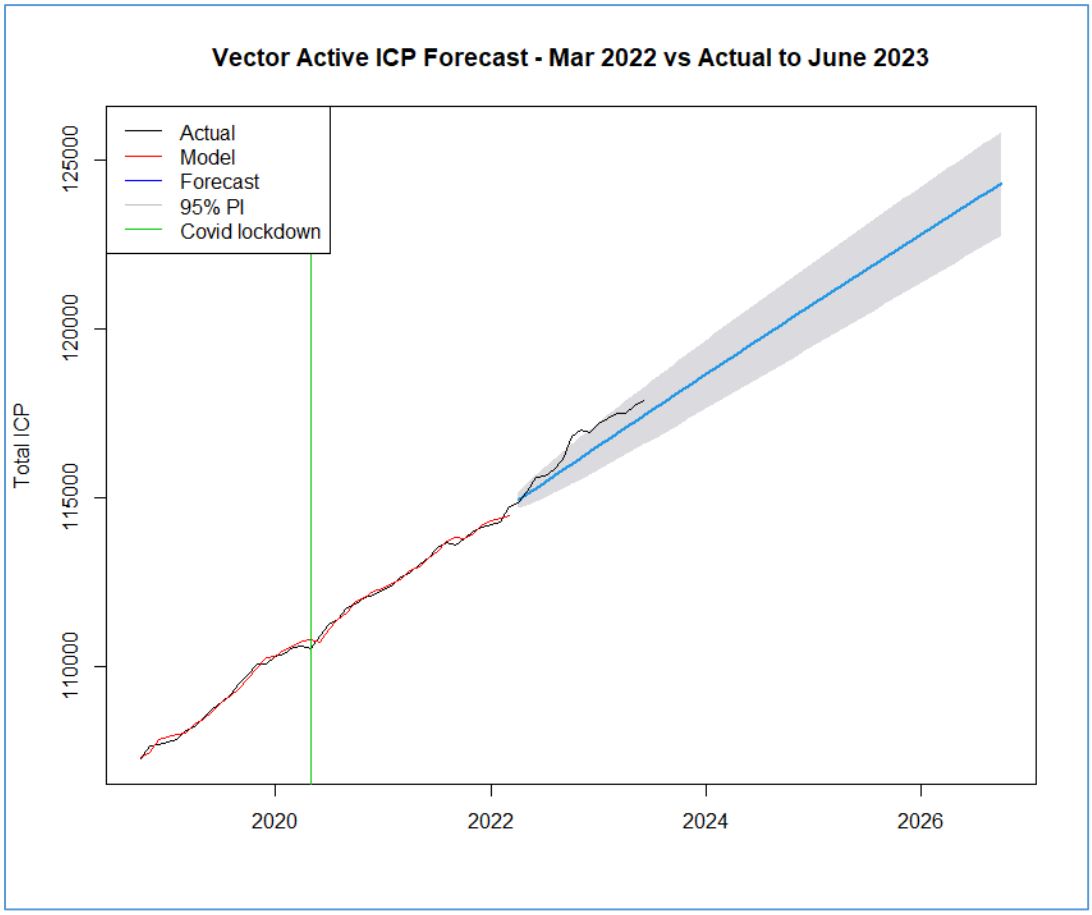

Figure 6: April 2022 Forecast vs Jun 23 Actual

48. Figure 6 demonstrates the model developed in April 2022 and its prediction accuracy from 1 April 2022 to 30 Jun 2023. The actual connections were higher than the mean forecast, but within the 95% prediction interval. As Figure 8 shows, there was a slight increase in the long-term underlying trend in 2022. Figure 7 has recalibrated the forecast model to include the data to June 2023.

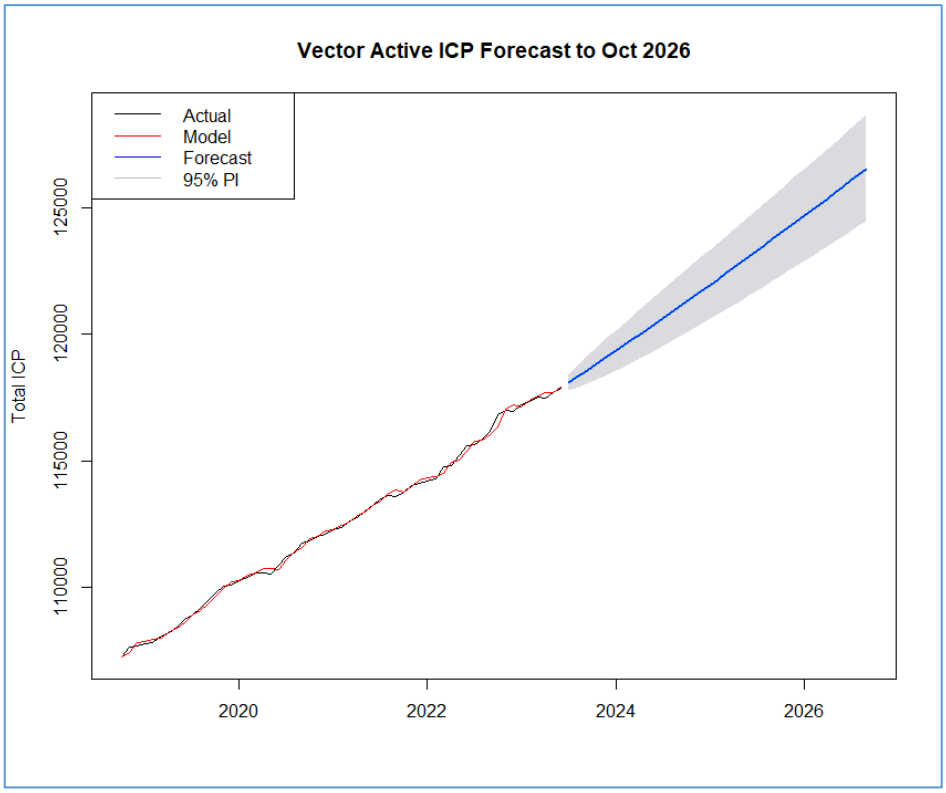

Figure 7: Vector Active ICP Forecast

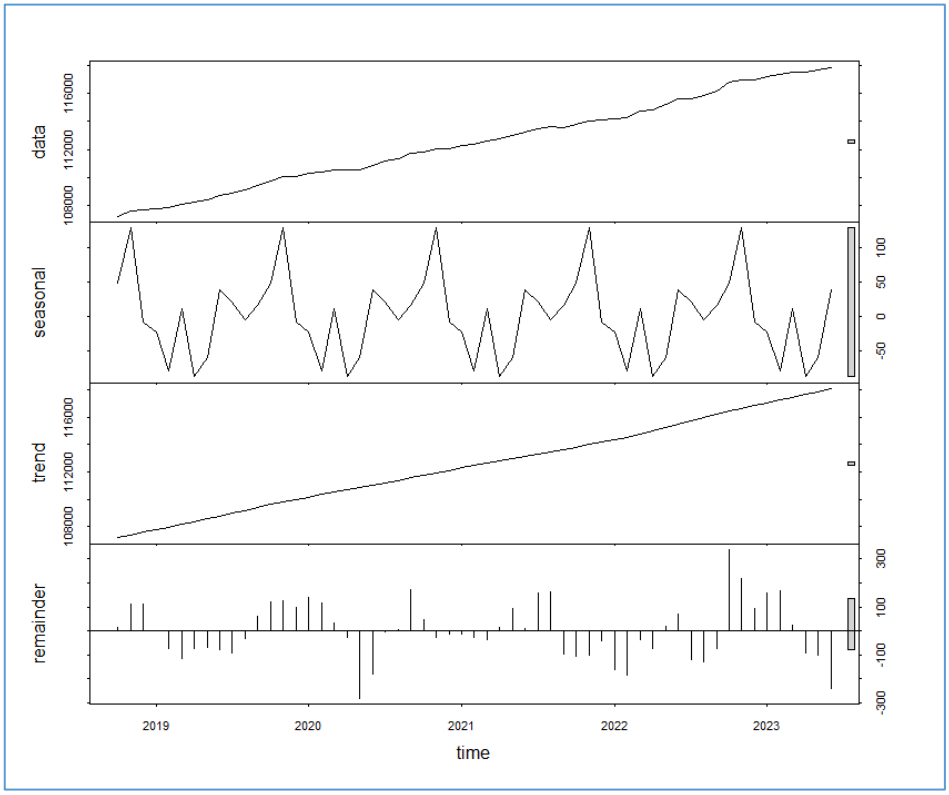

Figure 8: Time Series Decomposition

49. Based on this modelling work, the expected number of ICP connections for Vector at 30 Sep 2026 is **126,528** (95% range = 124,466-128,655) vs **117,872** total ICP connections as at end of June 2023 (hence 5.6 % - 9.1% growth within 95% prediction interval)[27].

50. We also decomposed the existing time series into underlying (secular) trend, seasonal component and remainder terms. This was to see if there is any statistical evidence of changes (particularly long-term trend) influenced by more recent events (such as the CCC advice or Vector's disconnection policy, or price methodology) that might affect the forecast. We expected this to give us an indication on consumer confidence on whether they should continue to invest in natural gas appliances given all the uncertainty created from the CCC advice and government agenda for decarbonising the economy. The data decomposition is shown in Figure 8.

51. Figure 8 can be interpreted as follows:

    a. **Data** is the actual time series as recorded in the gas registry.

    b. **Trend** is the underlying secular trend. It shows an underlying trend growth of about 185 connections per month. This trend is steady.

    c. **Seasonal** – there is also (unexpectedly perhaps) a seasonal feature to connection growth[28]. There are net disconnections from January through to June, with net positive connections from July to December.

    d. **Remainder** component. These are the differences between observed and the sum of trend and seasonal components. The random components appear to have an average of zero and equally distributed above and below the line. Note that there is an outlier in May 2020 (also shown in Figure 4). We infer that this is as a result of the first COVID lockdown measures restricting connection activities.

52. The modelling approach relies on recognising the patterns from historical data. The most obvious challenge to this is that the trajectory may alter based on "disruptions". The Climate Change report could be disruptive, but hasn't shown itself as a material influence on consumer behaviour since the CCC position on gas was announced over 2 years ago. Another possible disruption is Vector's policy on gas connection costs, although that too hasn't shown up in the data to date, despite the policy being in effect for the last 2-years. The other disruption could be the accelerated revenue proposal that might result in both a higher disconnection rate and lower new connection rate. This has been in effect since 1 October 2022 (9 months), but if that was supposed to have a chilling effect on new connections, it hasn't shown up yet.

[27] NB when we did this exercise in our cross submission for the DPP3 draft decision based on actual data to Feb 2022, the forecast for 30 Sep 2026 was for 123,913 active ICP connections with a 95% range of 122,370-125,437. Since Feb 2022 actual active ICPs increased by 3,578

[28] It is relatively minor, and the model itself doesn't pick it up as an important feature. There is no obvious reasons why connections should follow a seasonal pattern but it's possible that in winter months people see a greater value in the lower marginal cost of gas connection for space heating and decide to connect, whereas in summer months, when households use little gas but still have to pay a fixed charge each month for the connection, they may perceive that a gas connection isn't delivering the same value.

53. None of gas connection policy, accelerated pricing, or pricing methodology shifting more demand risk onto consumers appears to us to be a systemic risk given that these are policy choices being made by GPBs.

54. The conclusions that we would draw from this analysis are:

    a. Gas demand for GDBs is remarkably stable and resilient despite the policy upheavals since April 2018.

    b. Connection growth on Vector's network has also demonstrated the same resilience in the face of policy uncertainty. The statistical forecasting model is robust and the deviations from the overall trend produce a remarkably tight 95% confidence interval for the mean forecast to the end of DPP3. In our view the difficulty in the forecasting environment isn't supported by the data and modelling[29]

    c. Vector maybe trying to limit its growth opportunities via its connection policy, or anticipating net disconnections as a result of accelerated pricing and then argue for a Total Revenue Cap to protect their downside risk. The decisions to limit their own growth opportunities are entirely within their own discretion. It doesn't justify a switch in the form of control.

    d. As MGUG has consistently noted, gas demand and pipeline revenue aren't directly correlated. Inspection of Figure 3 strongly suggests that revenue isn't closely correlated with gas volume transported.

What would better serve the long-term interest of consumers?

55. It is not apparent that any GPBs have consulted with consumers on what they consider to be in their long-term interests. But they all express their submissions in terms that make that the highest purpose.

56. We acknowledge as consumers ourselves, that our best long-term interests (both for gas and electricity) is served by confidence that the price/quality path will reflect and send the right signals about efficiency, including signals we should act on, in relation to our own investment in gas dependant assets. That is likely to lie in maintaining a viable gas network over the long term. But it does not mean maintaining it, if the only way to do so is to assure suppliers that they will not experience losses from their own sunk investments. It means that the regime should offer reasonable assurance of policy stability in relation to FCM based on the bet or gamble at the time of the investment. But it does not mean assuring them that the odds of the bet will be constantly updated to ensure a winning bet, as events unfold. So, we ask that suppliers be told clearly the limits of ex ante, what is meant by denying that there is a regulatory compact (the phrase previously used by the Commission) and that as set out in S52A, a) to d):

    a. Incentives to innovate and invest in include for repurposing of gas pipelines for carriage of low carbon gases as well as natural gas.

[29] Frontier - 1.3 Key findings

b. Incentives to improve efficiency and provide services at a quality that reflects consumer demands by keeping gas as an energy choice and by avoiding overspend on EDB infrastructure.

c. share with consumers the benefits of efficiency gains in the supply of the regulated goods or services, including through lower prices by resuming normal -economic lives on gas pipeline assets and avoiding high investment charges on electricity transport infrastructure.

d. Limit ability to extract excessive profits by pricing both EDB and GPB investment at efficient cost.

57. While we haven't focused on EDB issues in this process, they are connected with GDB issues. It seems to us that the Commission has not addressed the conflict of interests that arise for integrated EDB and GDB providers. We have seen nothing to protect gas consumers from an EDB preference to move gas customers onto electricity (as appears to be the case for Vector[30]). This could be without reference to the efficient use of sunk assets of consumers, and the suppliers, when they face no risk of losing the customers.

58. Of note are the anxieties about funding a "$22 billion" transition to electrifying the economy. The origin of this figure appears to be the BCG report, "*The Future is Electric*"[31]. It appears to refer to the $22 billion estimated for distribution investment in the "2020s" based on modelling work done by Concept Consulting Ltd[32]. It is important that its purpose and limitations are put in proper perspective.

59. BCG wrote this report for the electricity sector, including for Vector and Powerco, as well as major generators and other EDBs. Its focus is on how the electricity sector can contribute to New Zealand's decarbonisation objectives. It is scenario based, not a forecast. This distinction seems to be an ongoing area of confusion with commentators. The cost estimate based on a scenario is also not a forecast. It is a number that might be considered consistent with the development of a specific scenario. For example, when we looked at the AMPs of the "big six"[33], the cumulative investment for these as *forecast* for the period up to 31 Mar 2030 was just under half this number ($10.9 billion). This was for *all* expenditure on network assets[34] . Notably we could only find WEL assuming that it would be switching 55,000 residential gas connections to electricity within this timeframe[35]. The other North Island EDBs with gas consumers (Powerco, Unison) are taking a wait and see approach.

[30] As judged by their policy priorities; not funding new gas connections, shifting their pricing methodology to ensure greater revenue from unavoidable fixed charges, advocacy for total revenue form of control, and lower participation in pipeline repurposing initiatives)
[31] BCG – October 2022
[32] Ibid – p14
[33] Vector, Powerco, Unison. Wellington Electricity Lines, Orion, and Aurora
[34] Source: Schedule 11a, comprising; Consumer connections, system growth, asset replacement and renewal, asset relocations, and reliability safety and environmental
[35] https://www.welectricity.co.nz/disclosures/asset-management-plan/document/318 p13

60. While the $22 billion is not a forecast, appears overstated, and specific to a set of scenario assumptions, we can assume that it appears to assume switching gas customers to electricity. The corollary is that if gas pipelines remain part of the energy future, consumers (both Electricity and gas) benefit from the avoidance of investing in electricity network peak demand reinforcement.

61. We consider that GPBs would have far more rational incentives, more aligned with the incentives on suppliers in competitive markets, if they could not rely on the Commission transferring stranding losses to consumers. Instead, they should be incentivised to urgent gas pipeline repurposing. Accelerated depreciation addresses their concerns about economic stranding risk, instead of the obvious and more efficient urgent search for repurposing and defense of an extension of the use period for natural gas. Extending the use of gas (natural and green) reduces a headache on EDB investment decisions. It adds stability and predictability in the investment horizons when GPBs are returned to having the same incentives as the rest of the gas sector.

Future of Gas Networks

62. A submission was made by the Gas Infrastructure Future Working Group (GIFWG), including their report *NZ Gas Infrastructure Future Gas Transition Analysis Paper*[36] . The paper is noted as a joint submission from Firstgas, Powerco, and Vector drawing on recent Working Group projects. It notes that Commission staff have been involved in these work streams via the working group and thanks the continued involvement of the Commission Staff with the Working Group.[37]

63. MGUG is an invited observer to this GDB sponsored working group, and has observed that the agendas and workstreams have tended to align with the regulatory issues being considered by the Commission. The Commission are also invited to and attend the working group's work. We accept that the working group is primarily interested in the GPB agenda.

64. The purpose of the GIFWG paper seems more subliminal than pointed, weighing as it does towards GPB financial risks of wind-down scenario. Like all scenario work, the findings aren't forecasts, and their plausibility lies in their assumptions, which as GIFWG note:

> *This analysis is preliminary and conceptual in nature. Although care has been taken to prepare the modelling and inputs to it, the analysis is based on many assumptions and projections that are unlikely to reflect real world outcomes. The analysis has not been undertaken to a specific accounting or other standard.*

[36] https://comcom.govt.nz/__data/assets/pdf_file/0012/323130/Gas-Infrastructure-Working-Group-GIFWG-Attachment_-Gas-Transition-Analysis-Paper-13-June-2023-Submission-on-IM-Review-2023-Draft-Decisions-19-July-2023.pdf

[37] https://comcom.govt.nz/__data/assets/pdf_file/0013/323131/Gas-Infrastructure-Working-Group-GIFWG-Letter-to-the-Commission-Submission-on-IM-Review-2023-Draft-Decisions-17-July-2023.pdf

The Working Group has not sought to assess the financial performance or position of any specific gas pipeline business, nor quantify the risks that they face. ***The analysis should not be relied on to inform financial or commercial decisions***

65. Given that the IM review is entirely concerned with financial and commercial decisions, we suggest that the submission has nothing to add to the IM review.

Definition of OPEX

66. Firstgas opposed the Commission's draft position to amend the definition of OPEX to exclude costs of appeals from OPEX[38]. This appears to be on "public good grounds"

> *The ability to appeal regulatory determinations is an important feature of the regime that Parliament has provided for. The ability to appeal is intended to improve the overall quality of regulatory outcomes, in the interests of consumers as well as suppliers and their investors. Excluding the costs of appeals from opex deters regulated suppliers from exercising their statutory right of appeal*.
>
> *There is no basis under the workable competition standard in s 52A to exclude appeal costs from the costs that would be incurred by a prudent supplier operating efficiently*

67. We support the Commission's draft determination and oppose Firstgas' points against the argument.

68. Effectively Firstgas is arguing for consumers to pay for the suppliers to oppose consumer appeals. Presumably that will happen even if the suppliers lose and are ordered to pay costs (a partial award only) to consumers. In other words, the consumer will have to pay their own compensation.

69. That gives the suppliers the wrong incentives – there is no cost risk for them in opposing appeals, irrespective of the merits, so one of the main mechanisms for reducing meritless litigation is negated.

70. As current appellants against the Commission's gas IM amendment decision from 2022, MGUG, as consumers has to fund the appeal out of members' own pockets. There is no mechanism to recover costs from other consumers who would also benefit from appeal decisions. Given the costs involved, appeal is therefore a business decision, not taken lightly.

71. It would be surprising if suppliers thought any differently when considering appealing. The argument that supplier appeals are made on the basis of improving the quality of regulatory outcomes is risible. It may well be a welcome secondary public benefit outcome of such a process, but this isn't why parties make appeals. We think that the Commission is correct in its reasoning[39]

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[38] https://comcom.govt.nz/__data/assets/pdf_file/0017/323126/FirstGas-Ltd-Submission-on-IM-Review-2023-Draft-Decisions-19-July-2023.pdf 7. Other Matters, p35

[39] https://comcom.govt.nz/__data/assets/pdf_file/0027/318627/Part-4-IM-Review-2023-Draft-decision-Report-on-the-Input-methodologies-review-2023-paper-14-June-2023.pdf pp 25-27 para 3.32