

Commerce Commission
P O Box 2351
Wellington 6140

For the Attention of: Dr Simon Todd

31 October 2016

Dear Simon

Report on GasNet distribution BAU variance checks and AMP evidence assessment

1. I am pleased to provide this report setting out Strata Energy Consulting Limited's (Strata) BAU variance checks, materiality check and AMP evidence assessment of GasNet Limited (GasNet) 2016 gas distribution Asset Management Plan (AMP) expenditure forecast.

Background and approach

2. Strata Energy Consulting has been retained by the Commerce Commission to assist in developing the Commerce Commission's framework and approach for re-setting regulated gas pipelines businesses' (GPBs) default price and quality paths (DPP) for the period effective 1 October 2017.
3. In accordance with the Commerce Commission's consultation paper - policy for setting price paths and quality standards for gas pipeline services from 1 October 2017¹, Strata has built an assessment framework and completed a business as usual (BAU) assessment and asset management plan (AMP) evidence assessment of GasNet's operating and capital expenditure performance (actual and forecast).
4. Strata has conducted its initial independent assessment against the following expenditure objective:

capital and operating expenditure should reflect the efficient costs that a prudent non-exempt business would require to meet demand in a regulatory period and over the longer term and comply with applicable regulatory obligations.
5. Through the application of the BAU variance check and AMP evidence assessment we have identified expenditure components that should be subjected to supplier evidence

evidence assessment

assessment. We recommend that our guidance on the additional information that we consider is necessary to support these expenditure components is forwarded to GasNet to give them the opportunity to provide the additional supporting information for the Commission to consider under the supplier evidence assessment step.

6. The expenditure components passed for supplier evidence assessment have been identified from our review in which:
 - 1) agreed with the Commission the applicable base years and variance margins;
 - 2) compared GasNet's expenditure data to the BAU variance margin, taking into account the contextual metrics; and
 - 3) assessed GasNet's AMP to ascertain whether items outside BAU variance margin are reasonably explained and justified.
7. We note that GasNet has stated that its 2016 AMP is compliant with the Commission's transitional provisions for the first DPP regulatory period. Under the transitional provisions the AMP may not be compliant with the full provisions of the Commission's requirements for an AMP. Because of this, it is more likely that the expenditure components subjected to AMP evidence assessment would be passed through to supplier evidence assessment, as the AMP may not provide a sufficient of explanation.
8. For expenditure components that have been identified as requiring supplier evidence assessment, we have provided guidance on the additional documented information that we consider would be needed to support the identified expenditure components.

Variance margin settings for opex and capex

9. For operating expenditure (opex), the base year was set to the average of 2013 to 2015 historical actual expenditure as this year.
10. A boundary margin of +/-5% was used for the five-year period 2018-2022. BAU opex for gas pipeline businesses is expected to be reasonably consistent and the setting used was considered to provide for some year to year variation in opex.
11. For capital expenditure (capex), the base year was set to the average of 2013 to 2015 historical actual expenditure as this year.
12. A boundary margin of +/-10% was used for capex because capex for gas pipeline businesses is expected to have some year to year variation. The 20% range was considered to provide a reasonable allowance for variation outside of which an AMP explanation would be required.

Summary of the results of applying BAU variance check and AMP evidence assessment

a) Opex

13. For total opex the expenditure for all forecast years falls within the BAU boundaries. The result is that GasNet's opex has passed through the BAU variance. Variations at the ID category level were also low materiality when compared to total opex.

Opex materiality assessment	Forecast (\$000)	Amount above average base year (\$000)	% of total opex
Service interruptions, incidents and emergencies	\$300	\$14	0.2%
Routine and corrective maintenance and inspection	\$425	\$6	0.1%
Asset replacement and renewal	\$0	\$0	0.0%
Total		\$20	0.3%
	Average forecast difference		9.0%

14. We noted that GasNet's network opex forecast is level for all forecast years and yet, due to the forecast growth capex, there is likely to be an increase in network assets to be managed. We sought explanation for this in the AMP but found that the information provided was insufficient to gain an understanding why opex remained level when assets were increasing. We recommend that the Commission informs GNet that an inclusion of this information in its AMP would be helpful.
15. We also noted the absence of any expenditure in opex R&R category. Whilst this is likely to be easily explained as an expenditure categorisation issue, an explanation from GasNet would be useful to inform the Commission on appropriate revision and development of the information disclosure schedules.

b) Capex

16. For capex, all the forecast years exceeded the BAU boundaries due to the material step change in 2017 and 2018 followed by a continuing increased level of capex above the boundary setting. Using the ID category components of the dashboard it was seen that the expenditure category that drives the step change in 2017 and 2018, is system growth but that the increase in future years is primarily driven by consumer connections and R&R capex. All other capex ID categories for capex were low materiality compared to total capex.

Capex materiality assessment	Forecast (\$000)	Amount above average base year (\$000)	% of total Capex
Consumer connection	\$525	\$59	1.3%
System Growth Planning	\$575	\$422	9.2%
Asset Replacement and Renewal	\$2,410	\$562	12.2%
Asset Relocation Planning	\$130	-\$110	-2.4%
Reliability, Safety and Environment - Planning	\$400	\$47	1.0%
Non-Network Asset Planning	\$550	\$83	1.8%
Total		\$1,063	23.2%
	Average forecast difference		5.0%

17. Accordingly, AMP evidence assessment was only applied to two issues that could not be fully explained through the BAU variance check.
- 1) Forecast growth in delivered energy and ICP connections appears to be insufficient to support the magnitude of the forecast system growth and customer connections capex.
 - 2) GasNet's assessment of the condition grade of its assets, on its own, appears insufficient to support the replacement and renewal capex forecast.

18. For system growth, consumer connections and replacement and renewal capex we found insufficient explanation and justification for the expenditure forecasts in the 2016 AMP. Accordingly, for both these capex categories, supplier evidence assessment will be required to provide GasNet with the opportunity to provide additional supporting information and justification.
19. The matters identified to be resolved through supplier evidence assessment are set out in the attached supplier evidence assessment worksheet. Whilst the GasNet dashboard records the findings from our BAU variance check and AMP evidence assessment, the worksheet provides further guidance for the Commission on the issues to be covered through supplier evidence assessment.

Concluding comments

Through the use of the dashboard, we have been able to identify that much of GasNet's expenditure forecasts can be considered to be consistent with a BAU position. The AMP evidence assessment resolved some issues on potential non-BAU components but, perhaps due to limitations in the transitional AMP, a relatively small number of expenditure components need further supplier evidence assessment.

Thank you for the opportunity to undertake this assessment of GasNet's forecast expenditure. Please contact me if you require any additional information.

Regards



Bill Heaps
Managing Director
Strata Energy Consulting Limited

Supplier evidence assessment worksheet – GasNet distribution

Opex

Item requiring evidence assessment	Resolution required	Guidance	Background information

Capex

Item requiring evidence assessment	Resolution required	Guidance	Background information
System growth capex step change in 2017 and 2018	Evidence assessment is required to establish if the step changes in the 2017, and 2018 system growth capex can be adequately explained and accepted as meeting the expenditure objective.	<p>Consideration will need to be given to the drivers of the step change in system growth capex and the business cases for major system growth projects.</p> <p>To address this issue GasNet would need to supply additional detailed supporting information on the drivers of the increased system growth capex. The information that the Commission should be provided with would be consistent with a business case justification of each major expenditure item (e.g. project or program).</p>	<p>For 2017 and 2018, there are stepped change forecasts for system growth capital investment. The 2016 AMP does not adequately explain the drivers of forecast system growth. For example, there is no increase in pipeline kilometres or customer connections that would account for the system growth capex forecast.</p> <p>In 2017-18, a substantial system growth allocated project has been forecast with its costs spread across the two years (\$315k per annum in constant \$) (2016 Information Disclosure Schedule 11a; row 35). Page 35 of the AMP contains one line under MP Main pipeline indicating a main extension to the Whanganui waste water treatment plant in 2016/17.</p>
Customer connection	Evidence assessment should establish if GasNet's forecast to increase the network by 100 ICPs per annum in its customer connection profile is reasonable.	<p>GasNet will need to provide sufficient explanation for its assumptions when establishing its forecast of consumer connection capex.</p> <p>The explanation will need to demonstrate that the forecast is based on sound analysis and is consistent with its forecast low growth on the network.</p>	<p>Customer connection capex experienced an upward step change during the 2013/14/15 years and then continues at a level above the variance margin. ICPs are forecast to increase by 100 ICPs per annum. Taking into account other metrics such as delivered gas and pipeline length, the reason for the customer connection profile is not obvious.</p> <p>Under AMP evidence assessment, no explanation of the stepped change was found.</p>

Item requiring evidence assessment	Resolution required	Guidance	Background information
			<p>Additionally, no commentary is provided in the AMP to explain the assumptions for consumer connection capex compared to the forecast low growth on the network, (2016 Information Disclosure, Schedule 12c, row 16, demonstrates flat-line customer connections year-on-year).</p>
Forecast R&R capex	<p>Explanation for:</p> <ol style="list-style-type: none"> 1. why the overall condition of the assets is in good condition; and 2. why any expenditure on replacement is forecast given GasNet's assessment of the condition of its assets. 	<p>Given the asset age profiles in the AMP, it may be expected that a significantly higher amount of the older assets would have been assessed at grade 1 or 2 levels. We also note that GasNet has graded all of its assets with no assets identified as being 'condition unknown'.</p> <p>Given that gas pipelines are predominantly buried and in accessible the reason explaining how GasNet has no 'condition unknown' assets should be considered under supplier evidence assessment .</p> <p>Additional information to support GasNet's forecast LP service pipeline (other) and LP steel service pipeline R&R categories is required to determine if the forecast meets the expenditure objective.</p>	<p>For LP service pipeline (other) R&R capex, despite the pipeline being graded identically to the LP steel service pipeline category, there is no intention to invest in this asset over the next year and no forecast for R&R capex for future years. Yet this service pipeline appears to be, on average, older than the LP steel pipeline. There is no AMP commentary that indicates why this mix of R&R choices has been made.</p>