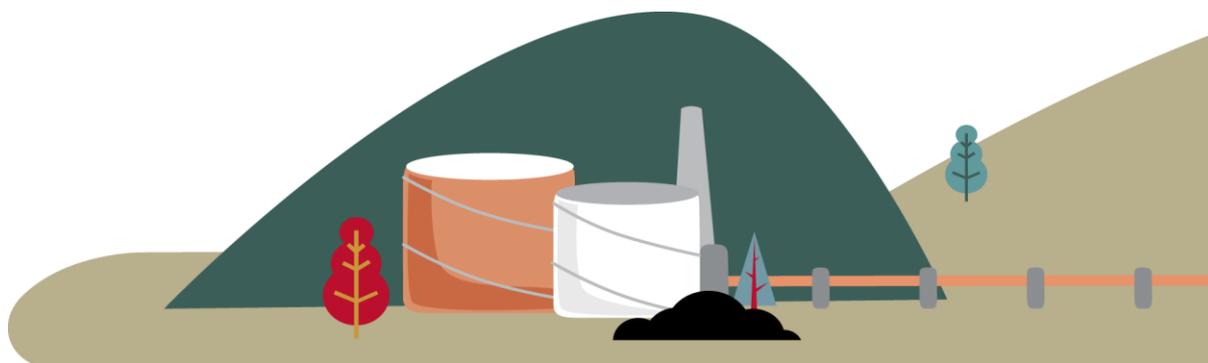


Gas pipeline default price-quality path reset 2017

Gas stakeholder meeting (Constant price revenue growth) – 25 May 2016

Summary of views

Date of publication: 20 June 2016



Purpose

1. This paper gives an overview of the meeting the Commerce Commission held with gas pipeline stakeholders on 25 May 2016, at the offices of the Commerce Commission. The paper summarises the issues Commission staff and stakeholder representatives discussed, and attendees' views.

Purpose of the workshop

2. The purpose of the workshop was to:
 - 2.1. inform gas industry stakeholders about constant price revenue growth (CPRG) principles;
 - 2.2. inform gas industry stakeholders about the Commission's emerging views of constant price revenue growth (CPRG) for the 2017 gas default price-quality path (DPP) reset;
 - 2.3. provide an overview of the gas demand study undertaken by Concept Consulting on behalf of the Gas Industry Company (GIC); and
 - 2.4. highlight the forecasting challenges faced in an uncertain environment.
3. The meeting was intended to encourage open discussion and exchange of information between all parties. As such, the views Commission staff expressed represented only preliminary views for the purpose of promoting discussion, rather than a formal Commission position.
4. Specific topics addressed in the workshop included:
 - 4.1. a look back at the previous approach taken by the Commission in forecasting CPRG for the 2013 Gas DPP;
 - 4.2. the challenges of forecasting in uncertain environments;
 - 4.3. an overview of the gas demand study undertaken by Concept Consulting on behalf of the Gas Industry Company (GIC); and
 - 4.4. potential options for CPRG forecasting in the next gas DPP, including regional tailoring.

Summary of views

5. This section summarises attendees' views and largely follows the course of the meeting. However, because of the interrelated nature of the topics and the open structure of the meeting, some of the views may have been raised in different parts of the meeting.

6. The agenda did not include other cross-sectoral topics that the Commission is considering as part of the IM review (such as the form of control), as they are being reviewed as part of a separate process.

Previous CPRG approach

7. To forecast CPRG for the 2013 gas DPP the Commission followed different approaches for distribution and transmission. Forecasts for distribution suppliers were calculated separately for residential, industrial and commercial users using a combination of historical data from information disclosure (ID) and demand forecasts from a Concept Consulting report looking at gas demand.
8. The transmission forecasting model was aligned with the way transmission businesses bill customers using ID data, looking at quantity of gas billed as well as supplier-centric information on reserved capacity for Vector and distance transported for Maui.
9. Forecast error analysis was limited by data availability and the level of assumption required. Analyses produced showed no reason to suggest the current approach was not fit for purpose.
10. Maui Developments Limited (MDL) asked about the categorisation of industrial and commercial demand which the Commission noted was captured in the ID requirements. However the Major Gas Users Group (MGUG) noted that there is a category overlap and while residential is straightforward the commercial and industrial sectors are not so clear cut. Review of how user groups are classified was recommended.
11. There was a general discussion on demand and a query by MGUG about quantities being revenue quantities or physical quantities which was noted as the latter by the Commission.
12. The Commission presented results to show how the previous forecast performed and while the delta D appeared to be quite accurate it was hard to tell how CPRG had performed over the previous DPP period.

Uncertainty

13. Gas demand is more volatile than that of electricity which, coupled with limited historical data, makes CPRG forecasting difficult. Electricity demand has a large effect on gas demand. Academic literature generally states that ex ante forecast accuracy can be substantially improved through a method of combining individual forecasts.
14. The Commission highlighted modelling principles that may create fit for purpose forecasts in the next DPP, these included:

- overly complex model can be poor predictors;
 - assessing forecast performance can improve future forecasts;
 - acknowledgement of uncertainty and limitations.
15. The Commission provided commentary on how it might change the CPRG forecasting approach and made a number of key points including:
- there are data limitations in the sector at this stage;
 - it would be preferable to adopt a type of tailoring to supplier specific circumstances;
 - use of regional based forecasting or from supplier AMPs;
 - use of tailoring where it fits the criteria that DPPs are relatively low cost price setting approaches;
 - the Commission is seeking incremental improvements in forecasting over time but consumer behaviour is hard to predict as gas is such a discretionary fuel;
 - there is limited historical data which is a big constraint.
16. Methanex disputed the comment that gas was discretionary in its environment, which was backed up by MGUG stating that it wasn't for major users; although MDL noted that gas was discretionary for new customers so in terms of network and customer growth, which is what CPRG is largely concerned with, the term discretionary appeared applicable.
17. MGUG also noted that demand growth in the gas sector wasn't necessarily driven by (or rising in conjunction with) gross domestic product (GDP), and Vector stated that historical trends do not necessarily predict the future.
18. The Commission then discussed the use of the Producers Price Index (PPI) as a means to forecast demand growth and asked whether this was a good or the best input. MGUG suggested that the Commission derive its own gas specific index in the same way that local governments do.
19. MGUG also questioned whether forecasting over five years was appropriate. MGUG noted that most of its members wouldn't carry out five year forecasts themselves and that a 12 month forecast would be quite close to actual.
20. The Commission discussed the fact that forecast complexity didn't necessarily mean accuracy. MDL suggested that maybe there should be an annual indexing approach taken or a reset once there was updated information.

Concept Gas Demand Study

21. Concept Consulting was commissioned by the GIC to produce analysis on key medium- to long-term NZ gas sector drivers. This report included projections of demand and wholesale prices to illustrate the likely nature and potential scale of outcomes.
22. The Commerce Commission may use 2016 projections in the next DPP, and asked GIC to make regional forecasts available earlier than the rest of its study so that this could be discussed in the CPRG workshop.
23. The 2016 projections have been developed in greater detail with area-specific projections (ie, Vector, First Gas, Powerco Central & Lower North Island). More specific analysis of other drivers of gas demand, such as population growth and GDP, have been incorporated.
24. Concept noted that in its supply and demand study it had taken an upstream and downstream view and how the gas sector might be affected in the medium- to long-term. The forecasts made are more granular than in the past to support regional level forecasting. Concept noted there was some demand growth and had noted quite a change in annual quantities delivered by networks. In the gas vs coal/diesel selection in the commercial/industrial space, gas was being preferred for a variety of reasons.
25. GasNet noted that changes in demand from one large industrial/commercial user can change gas quantities delivered significantly and that this was extremely hard to forecast.

CPRG forecasting options

26. Options being explored to improve the CPRG forecasting model in line with low cost principles included:
 - using the gas demand study's regional demand forecasts to further tailor the approach;
 - further analyses of the current approach focussing on which gas demand scenario is most fit for purpose and appropriateness of the current ratio of ID to demand forecast information in the model;
 - using Asset Management Plan (AMP) forecasts.
27. Concept presented its forecasts by user segment. GDP was used as a proxy for industry growth and also population growth data from Statistics New Zealand. Concept outlined how it has attempted to align regional growth figures with the various gas regions.

28. Vector questioned whether Concept had accounted for areas in its network where there was high density and low density residential as there was little gas growth in high density residential. Concept noted that it didn't have any data to extend the forecasting approach to this level of detail.
29. MGUG asked whether Concept had tested the growth variables against history to check if these were actually good indicators of future growth. Concept noted that it was difficult to identify correlations for the growth variables used and historical trends. Concept did note that industrial consumers were less likely to change their fuel source from gas to electricity while residential consumers appeared to do so in an unpredictable manner.
30. Concept stated that its results showed that space heating appeared to be declining, there was a growth in process heating using gas, and that gas based cooling was halfway between these two. Concept's prediction of industrial demand is that this is set to rise in Auckland and set to fall elsewhere. MGUG noted that the Concept predictions, which included the high, low and central results, could equally be cast as being zero growth if error margins were included.
31. MGUG noted that suppliers' demand projections are higher than the actuals.
32. Other points made included:
 - 32.1. we should have an incentive to grow the network (Powerco);
 - 32.2. if there is form of control in distribution why not transmission? (MGUG);
 - 32.3. none of the Concept predictions appear to be statistically different to 0% growth (MDL);
 - 32.4. there needs to be consistency between distribution and transmission (MGUG).
33. The Commission wrapped up proceedings noting that forecasting options were still being explored but that there appeared to be no fundamental problem with the existing CPRG approach. The Commission would likely look at tailoring with a regional focus and explore the prospect of using supplier AMPs.
34. The meeting closed with the Commission outlining key dates relating to CPRG;
 - 34.1. policy paper due to be released in September;
 - 34.2. submissions and cross submissions thereafter;
 - 34.3. draft decision to be released in February 2017.

Attendees

Name	Representing
Ben Gerritsen	Castalia
Richie Wallace	Castalia
Joseph Highet	Commerce Commission
Rhianne Ogilvy	Commerce Commission
Graham Phelan	Commerce Commission
Simon Todd	Commerce Commission
Simon Coates	Concept Consulting
Sharon Wray	Contact Energy
Linda Thompson	Fonterra
Ian Wilson	Gas Industry Company (GIC)
Greg O'Malley	GasNet
Geoff Evans	GasNet
Len Houwers	Major Gas Users Group (MGUG)
Richard Hale	Major Gas Users Group (MGUG)
Jaime Patton	Maui Development Limited (MDL)
Jelle Sjoerdsma	Maui Development Limited (MDL)
Matt Wilson	Maui Development Limited (MDL)
Mike Hensen	NZIER
Lyndon Haugh	Oji Pulp and Paper
Lyn Taylor	Powerco
Nathan Hill	Powerco
Mark Herman	Powerco
Michael Binney	Powerco
Anna Casey	Vector
Kelvin Binning	Vector
Richard Sharp	Vector