Information disclosure for the gas transmission business

Year ending 30 September 2019

First Gas Limited
26 March 2020

Introduction

First Gas Limited (Firstgas) operates 2,500km of gas transmission pipelines (including the Maui pipeline), and more than 4,800km of gas distribution pipelines across the North Island. These gas infrastructure assets transport gas from Taranaki to major industrial gas users, electricity generators, businesses and homes, and transport around 20 percent of New Zealand's primary energy supply.

For further information on First Gas, please visit our website www.firstgas.co.nz.

First Gas Limited is part of the Firstgas Group. The Firstgas Group also owns energy infrastructure assets across New Zealand through our affiliate Gas Services NZ Limited (GSNZ), a separate business with common shareholders that owns the Ahuroa gas storage facility and Rockgas. The Ahuroa gas storage facility (trading as Flexgas Limited)[1] is a depleted gas field that has been re-purposed to store large amounts of energy for release when New Zealand energy users need it most (e.g. due to low hydro inflows or during periods of high demand). It can store up to 18PJ of gas, with expansion planned over the next two years to increase the injection and withdrawal rates of the facility. Rockgas has over 80 years' experience providing LPG to 100,000 customers throughout New Zealand[2]. Flexgas and Rockgas were both added to the Firstgas Group in the 2019 disclosure period.

Information disclosure

This document contains Firstgas' annual information disclosure for the gas transmission business, for the year ending on 30 September 2019, as required by the *Gas Transmission Information Disclosure Determination 2012* consolidating all amendments as of 3 April 2018 ("the Determination") issued by the Commerce Commission.

The following documents are provided with this compliance statement:

- Schedules 1-10: Financial and technical schedules
- Schedules 14-15: Mandatory and voluntary explanatory notes, including information on related party transactions
- Schedule 19: Director Certification
- KPMG assurance report
- KPMG independent appraiser report with respect to the valuation of related party transactions

This information disclosure was prepared on 26 March 2020.

Further information

For further information regarding this compliance statement, please contact:

Karen Collins
Regulatory Policy Manager
First Gas Limited
Karen.Collins@firstgas.co.nz
04 979 5368

[1] For further information please visit the Flexgas website www.flexgas.co.nz
[2] For further information please visit the Rockgas website www.rockgas.co.nz

Disclaimer

For presentation purposes, some numbers in the information disclosure schedules have been rounded. This may cause small discrepancies or rounding inconsistencies when aggregating some of the information presented in the information disclosure schedules. These discrepancies do not affect the overall compliance calculations which are based on the more detailed information.

GTB Information Disclosure Requirements
Information Templates
for
Schedules 1–10

Company Name	First Gas Limited (Transmission)
Disclosure Date	31 March 2020
Disclosure Year (year ended)	30 September 2019

Templates for Schedules 1–10 excluding 5f–5g
Template Version 4.1. Prepared 21 December 2017

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Company Name	**First Gas Limited (Transmission)**
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SCHEDULE 1: ANALYTICAL RATIOS

This schedule calculates expenditure, revenue and service ratios from the information disclosed. The disclosed ratios may vary for reasons that are company specific and, as a result, must be interpreted with care. The Commerce Commission will publish a summary and analysis of information disclosed in accordance with the ID determination. This will include information disclosed in accordance with this and other schedules, and information disclosed under the other requirements of the determination.

This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref				
7	**1(i): Expenditure Metrics**			
8		**Ratio of expenditure to quantity of gas delivered ($ per TJ)**	**Ratio of expenditure to system length ($ per km)**	
9	**Operational expenditure**	272	16,477	
10	Network	144	8,741	
11	Non-network	128	7,736	
12				
13	**Expenditure on assets**	344	20,844	
14	Network	269	16,267	
15	Non-network	76	4,577	
16				
17	**1(ii): Service Intensity Measures**			
18				
19	Volume density	61		*Quantity of gas delivered per km of system length (TJ/km)*
20				
21	**1(iii): Composition of Revenue Requirement**			
22		**($000)**	**% of revenue**	
23	Operational expenditure	41,420	32.44%	
24	Pass through and recoverable costs excluding financial incentives and wash-ups	(253)	(0.20%)	
25	Total depreciation	32,786	25.68%	
26	Total revaluations	12,154	9.52%	
27	Regulatory tax allowance	13,834	10.83%	
28	Regulatory profit/(loss) including financial incentives and wash-ups	52,046	40.76%	
29	Total regulatory income	127,680		
30				
31	**1(iv): Reliability**			
32				
33	Interruption rate	1.7503		*Interruptions per 100km of system length*

Company Name	**First Gas Limited (Transmission)**
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SCHEDULE 2: REPORT ON RETURN ON INVESTMENT

This schedule requires information on the Return on Investment (ROI) for the GTB relative to the Commerce Commission's estimates of post tax WACC and vanilla WACC. GTBs must calculate their ROI based on a monthly basis if required by clause 2.3.3 of the ID determination or if they elect to. If a GTB makes this election, information supporting this calculation must be provided in 2(iii). GTBs must provide explanatory comment on their ROI in Schedule 14 (Mandatory Explanatory Notes).
This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref		CY-2	CY-1	Current Year CY
7	**2(i): Return on Investment**			
8		30 Sep 17	30 Sep 18	30 Sep 19
9	**ROI – comparable to a post tax WACC**	%	%	%
10	Reflecting all revenue earned		6.49%	5.35%
11	Excluding revenue earned from financial incentives		6.49%	5.35%
12	Excluding revenue earned from financial incentives and wash-ups		6.49%	5.28%
13				
14	**Mid-point estimate of post tax WACC**	5.45%	5.18%	4.88%
15	25th percentile estimate	4.64%	4.47%	4.17%
16	75th percentile estimate	6.26%	5.89%	5.58%
17				
18				
19	**ROI – comparable to a vanilla WACC**			
20	Reflecting all revenue earned		7.02%	5.81%
21	Excluding revenue earned from financial incentives		7.02%	5.81%
22	Excluding revenue earned from financial incentives and wash-ups		7.02%	5.75%
23				
24	**WACC rate used to set regulatory price path**	7.44%	6.41%	6.41%
25				
26	**Mid-point estimate of vanilla WACC**	5.99%	5.71%	5.34%
27	25th percentile estimate	5.18%	5.00%	4.64%
28	75th percentile estimate	6.80%	6.41%	6.05%
29				

30	**2(ii): Information Supporting the ROI**		($000)	
31				
32	Total opening RAB value	829,884		
33	*plus* Opening wash-up account balance	-		
34	**Opening RIV**		829,884	
35				
36				
37	Line charge revenue	127,680		
38	*plus* Wash-up amount	(3,606)		
39	**Adjusted line charge revenue**		124,074	
40				
41	Expenses cash outflow	41,168		
42	*plus* Assets commissioned	25,819		
43	*less* Asset disposals	-		
44	*plus* Regulatory tax allowance	13,834		
45	*less* Other regulated income	-		
46	**Mid-year net cash outflows**		80,820	
47				
48	**Term credit spread differential allowance**		-	
49				
50	Total closing RAB value	834,976		
51	*less* Adjustment resulting from asset allocation	(93)		
52	*less* Lost and found assets adjustment	-		
53	*plus* Closing wash-up account balance	(761)		
54	**Closing RIV**		834,309	
55				
56				
57	**ROI – comparable to a vanilla WACC**			5.81%
58				
59	Leverage (%)			42%
60	Cost of debt assumption (%)			3.96%
61	Corporate tax rate (%)			28.0%
62				
63	**ROI – comparable to a post tax WACC**			5.35%

Company Name	**First Gas Limited (Transmission)**
For Year Ended	**30 September 2019**

SCHEDULE 2: REPORT ON RETURN ON INVESTMENT

This schedule requires information on the Return on Investment (ROI) for the GTB relative to the Commerce Commission's estimates of post tax WACC and vanilla WACC. GTBs must calculate their ROI based on a monthly basis if required by clause 2.3.3 of the ID determination or if they elect to. If a GTB makes this election, information supporting this calculation must be provided in 2(iii). GTBs must provide explanatory comment on their ROI in Schedule 14 (Mandatory Explanatory Notes).
This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref

64
65 ### 2(iii): Information Supporting the Monthly ROI

66

67	**Opening RIV**	N/A

68

sch ref	($000)	Line charge revenue	Expenses cash outflow	Assets commissioned	Asset disposals	Other regulated income	Monthly net cash outflows
71	Month 1						-
72	Month 2						-
73	Month 3						-
74	Month 4						-
75	Month 5						-
76	Month 6						-
77	Month 7						-
78	Month 8						-
79	Month 9						-
80	Month 10						-
81	Month 11						-
82	Month 12						-
83	**Total**	-	-	-	-	-	-

84

85	**Regulatory tax allowance**	N/A
86		
87	**Term credit spread differential allowance**	N/A
88		
89	**Closing RIV**	N/A
90		
91		
92	**Monthly ROI – comparable to a vanilla WACC**	N/A
93		
94	**Monthly ROI – comparable to a post tax WACC**	N/A

95
96 ### 2(iv): Year-end ROI rates for comparison purposes

97

98	**Year-end ROI – comparable to a vanilla WACC**	6.09%
99		
100	**Year-end ROI – comparable to a post tax WACC**	5.63%

101
102 ** The year-end ROI values are comparable to the ROI reported in pre 2012 disclosures by GTBs and do not represent the Commission's current view on ROI.*
103
104 ### 2(v): Financial Incentives and Wash-Ups

105

106	**Financial incentives**		-
107			
108	**Impact of financial incentives on ROI**		-
109			
110	Input methodology claw-back	-	
111	CPP application recoverable costs	-	
112	Catastrophic event allowance	-	
113	Capex wash-up adjustment	714	
114	Revenue wash-up draw down amount	-	
115	Other wash-ups	-	
116	**Wash-up costs**		714
117			
118	**Impact of wash-up costs on ROI**		0.06%

Company Name	**First Gas Limited (Transmission)**
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SCHEDULE 3: REPORT ON REGULATORY PROFIT

This schedule requires information on the calculation of regulatory profit for the GTB for the disclosure year. GTBs must complete all sections and must provide explanatory comment on their regulatory profit in Schedule 14 (Mandatory Explanatory Notes).
This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref				
7	**3(i): Regulatory Profit**			**($000)**
8		**Income**		
9		Line charge revenue		127,680
10	*plus*	Gains / (losses) on asset disposals		-
11	*plus*	Other regulated income (other than gains / (losses) on asset disposals)		-
12				
13		**Total regulatory income**		127,680
14		**Expenses**		
15	*less*	Operational expenditure		41,420
16				
17	*less*	Pass-through and recoverable costs excluding financial incentives and wash-ups		(253)
18				
19		**Operating surplus / (deficit)**		86,512
20				
21	*less*	Total depreciation		32,786
22				
23	*plus*	Total revaluations		12,154
24				
25		**Regulatory profit / (loss) before tax**		65,880
26				
27	*less*	Term credit spread differential allowance		-
28				
29	*less*	Regulatory tax allowance		13,834
30				
31		**Regulatory profit/(loss) including financial incentives and wash-ups**		52,046
32				
33	**3(ii): Pass-through and Recoverable Costs excluding Financial Incentives and Wash-Ups**		**($000)**	
34		**Pass through costs**		
35		Rates	1,555	
36		Commerce Act levies	608	
37		Industry Levies	26	
38		CPP specified pass through costs	-	
39		**Recoverable costs excluding financial incentives and wash-ups**		
40		Balancing gas costs	(3,078)	
41		Urgent project allowance	-	
42		Mokau compressor fuel gas costs	637	
43		Other recoverable costs excluding financial incentives and wash-ups	-	
44		**Pass-through and recoverable costs excluding financial incentives and wash-ups**		(253)
45				
46				
47	**3(iv): Merger and Acquisition Costs**			
48				**($000)**
49		Merger and acquisition expenditure		-
50				
51		*Provide commentary on the benefits of merger and acquisition expenditure to the gas transmission business, including required disclosures in accordance with section 2.7, in Schedule 14 (Mandatory Explanatory Notes)*		
52				
53	**3(v): Other Disclosures**			
54				**($000)**
55		Self-insurance allowance		-

Company Name	**First Gas Limited (Transmission)**
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SCHEDULE 4: REPORT ON VALUE OF THE REGULATORY ASSET BASE (ROLLED FORWARD)

This schedule requires information on the calculation of the Regulatory Asset Base (RAB) value to the end of this disclosure year. This informs the ROI calculation in Schedule 2. GTBs must provide explanatory comment on the value of their RAB in Schedule 14 (Mandatory Explanatory Notes). This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref							
7	**4(i): Regulatory Asset Base Roll Forward**		**RAB**	**RAB**	**RAB**	**RAB**	**RAB**
8		for year ended	**30 Sep 15**	**30 Sep 16**	**30 Sep 17**	**30 Sep 18**	**30 Sep 19**
9			**($000)**	**($000)**	**($000)**	**($000)**	**($000)**
10	**Total opening RAB value**		792,939	787,701	784,033	824,222	829,884
11							
12	*less* **Total depreciation**		26,310	26,666	29,058	31,148	32,786
13							
14	*plus* **Total revaluations**		2,240	5,893	15,365	15,652	12,154
15							
16	*plus* **Assets commissioned**		19,420	20,805	55,154	21,427	25,819
17							
18	*less* **Asset disposals**		821	621	1,191	79	-
19							
20	*plus* **Lost and found assets adjustment**		(96)			-	-
21							
22	*plus* **Adjustment resulting from asset allocation**		329	(3,079)	(81)	(190)	(93)
23							
24	**Total closing RAB value**		787,701	784,033	824,222	829,884	834,976
25							

26	**4(ii): Unallocated Regulatory Asset Base**				
27		**Unallocated RAB ***		**RAB**	
28		**($000)**	**($000)**	**($000)**	**($000)**
29	**Total opening RAB value**		830,513		829,884
30	*less*				
31	**Total depreciation**		32,995		32,786
32	*plus*				
33	**Total revaluations**		12,163		12,154
34	*plus*				
35	Assets commissioned (other than below)	4,572		4,407	
36	Assets acquired from a regulated supplier	-		-	
37	Assets acquired from a related party	21,411		21,411	
38	**Assets commissioned**		25,983		25,819
39	*less*				
40	Asset disposals (other than below)	-		-	
41	Asset disposals to a regulated supplier	-		-	
42	Asset disposals to a related party	-		-	
43	**Asset disposals**		-		-
44					
45	*plus* **Lost and found assets adjustment**				
46					
47	*plus* **Adjustment resulting from asset allocation**				(93)
48					
49	**Total closing RAB value**		835,664		834,976

50 ** The 'unallocated RAB' is the total value of those assets used wholly or partially to provide gas transmission services without any allowance being made for the allocation of costs to services provided by the supplier that are not gas transmission services. The RAB value represents the value of these assets after applying this cost allocation. Neither value includes works under construction.*

Company Name	**First Gas Limited (Transmission)**
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SCHEDULE 4: REPORT ON VALUE OF THE REGULATORY ASSET BASE (ROLLED FORWARD)

This schedule requires information on the calculation of the Regulatory Asset Base (RAB) value to the end of this disclosure year. This informs the ROI calculation in Schedule 2. GTBs must provide explanatory comment on the value of their RAB in Schedule 14 (Mandatory Explanatory Notes). This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref

4(iii): Calculation of Revaluation Rate and Revaluation of Assets

	CPI_4				1,039
	CPI_4^{-4}				1,024
	Revaluation rate (%)				1.46%
		Unallocated RAB *		**RAB**	
		($000)	**($000)**	**($000)**	**($000)**
	Total opening RAB value	830,513		829,884	
less	Opening value of fully depreciated, disposed and lost assets	173		171	
	Total opening RAB value subject to revaluation	830,340		829,713	
	Total revaluations		12,163		12,154

4(iv): Roll Forward of Works Under Construction

		Unallocated works under construction		**Allocated works under construction**	
	Works under construction—preceding disclosure year		13,201		13,146
plus	Capital expenditure	51,811		51,578	
less	Assets commissioned	25,983		25,819	
plus	Adjustment resulting from asset allocation				
	Works under construction - current disclosure year		39,029		38,906
	Highest rate of capitalised finance applied				4.43%

Company Name	**First Gas Limited (Transmission)**
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SCHEDULE 4: REPORT ON VALUE OF THE REGULATORY ASSET BASE (ROLLED FORWARD)

This schedule requires information on the calculation of the Regulatory Asset Base (RAB) value to the end of this disclosure year. This informs the ROI calculation in Schedule 2. GTBs must provide explanatory comment on the value of their RAB in Schedule 14 (Mandatory Explanatory Notes). This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref

76 **4(v): Regulatory Depreciation**

sch ref		Unallocated RAB *		RAB	
78		($000)	($000)	($000)	($000)
79	Depreciation - standard	27,573		27,573	
80	Depreciation - no standard life assets	5,422		5,214	
81	Depreciation - modified life assets	-		-	
82	Depreciation - alternative depreciation in accordance with CPP	-		-	
83	**Total depreciation**		32,995		32,786
84					

85 **4(vi): Disclosure of Changes to Depreciation Profiles**

($000 unless otherwise specified)

sch ref	Asset or assets with changes to depreciation	Reason for non-standard depreciation (text entry)	Depreciation charge for the period (RAB)	Closing RAB value under 'non-standard' depreciation	Closing RAB value under 'standard' depreciation
87					
88					
89					
90					
91					
92					
93					
94					

95 ** include additional rows if needed*

96 **4(vii): Disclosure by Asset Category**

97 ($000 unless otherwise specified)

sch ref			Pipes	Stations	Compressors	Main-line valves	Special crossings	Other network assets	Non-network assets	Total
99		**Total opening RAB value**	531,558	102,118	44,260	6,612	49,696	68,114	27,527	829,884
100	*less*	Total depreciation	16,777	4,617	3,910	482	1,902	1,318	3,781	32,786
101	*plus*	Total revaluations	7,828	1,497	648	97	728	996	359	12,154
102	*plus*	Assets commissioned	6,547	8,669	5,489	436	-	1,143	3,533	25,819
103	*less*	Asset disposals	-	-	-	-	-	-	-	-
104	*plus*	Lost and found assets adjustment	-	-	-	-	-	-	-	-
105	*plus*	Adjustment resulting from asset allocation	-	-	-	-	-	-	(93)	(93)
106	*plus*	Asset category transfers	2,831	77	-	-	-	-	(2,908)	-
107		**Total closing RAB value**	531,987	107,744	46,487	6,663	48,522	68,935	24,637	834,976
108										
109		**Asset Life**								
110		Weighted average remaining asset life	34.0	28.7	21.6	34.2	26.9	19.3	21.3	(years)
111		Weighted average expected total asset life	79.7	36.5	35.3	51.9	80.0	29.1	26.6	(years)

Company Name	**First Gas Limited (Transmission)**
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SCHEDULE 5a: REPORT ON REGULATORY TAX ALLOWANCE

This schedule requires information on the calculation of the regulatory tax allowance. This information is used to calculate regulatory profit/loss in Schedule 3 (regulatory profit).

GTBs must provide explanatory commentary on the information disclosed in this schedule, in Schedule 14 (Mandatory Explanatory Notes).

This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section

sch ref				
7		**5a(i): Regulatory Tax Allowance**		**($000)**
8		**Regulatory profit / (loss) before tax**		65,880
9				
10	*plus*	Total depreciation	32,786	
11	*less*	Tax depreciation	25,647	
12		**Permanent differences:**		
13	*plus*	Income not included in regulatory profit / (loss) before tax but taxable	- *	
14		Expenditure or loss in regulatory profit / (loss) before tax but not deductible	773 *	
15				
16	*less*	Total revaluations	12,154	
17		Income included in regulatory profit / (loss) before tax but not taxable	- *	
18		Expenditure or loss deductible but not in regulatory profit / (loss) before tax	- *	
19				(11,381)
20		**Temporary differences:**		
21	*plus*	Income not included in regulatory profit / (loss) before tax but taxable	- *	
22		Expenditure or loss in regulatory profit / (loss) before tax but not deductible	1,306 *	
23				
24	*less*	Income included in regulatory profit / (loss) before tax but not taxable	- *	
25		Expenditure or loss deductible but not in regulatory profit / (loss) before tax	- *	
26				1,306
27	*less*	Notional deductible interest		13,537
28				
29		**Regulatory taxable income**		49,407
30				
31	*less*	Utilised tax losses	-	
32		Regulatory net taxable income		49,407
33				
34		Corporate tax rate (%)	28%	
35		**Regulatory tax allowance**		13,834
36				
37	*	Workings to be provided in Schedule 14		
38				
39				
40		**5a(ii): Disclosure of Permanent and Temporary Differences**		
41		*In Schedule 14, Box 5 and Box 6, provide descriptions and workings of items recorded in the asterisked categories in Schedule 5a(i).*		
42				
43		**5a(iii): Reconciliation of Tax Losses**		**($000)**
44				
45		**Opening tax losses**	-	
46	*plus*	Current period tax losses	-	
47	*less*	Utilised tax losses	-	
48		**Closing tax losses**		-
49		**5a(iv): Regulatory Tax Asset Base Roll-Forward**		
50			**($000)**	
51		**Opening sum of regulatory tax asset values**	199,693	
52	*less*	Tax depreciation	25,647	
53	*plus*	Regulatory tax asset value of assets commissioned	23,245	
54	*less*	Regulatory tax asset value of asset disposals	85	
55	*plus*	Lost and found assets adjustment	-	
56	*plus*	Adjustment resulting from asset allocation	1,044	
57	*plus*	Other adjustments to the RAB tax value	-	
58		**Closing sum of regulatory tax asset values**		198,250

Company Name	First Gas Limited (Transmission)
For Year Ended	30 September 2019

SCHEDULE 5b: REPORT ON RELATED PARTY TRANSACTIONS

This schedule provides information on the valuation of related party transactions, in accordance with clause 2.3.6 of the ID determination.
This information is part of audited disclosure information (as defined in clause 1.4 of the ID determination), and so is subject to the assurance report required by clause 2.8.

sch ref			
7	**5b(i): Summary—Related Party Transactions**	**($000)**	**($000)**
8	**Total regulatory income**		24,820
9			
10	**Market value of asset disposals**		–
11			
12	Service interruptions, incidents and emergencies	632	
13	Routine and corrective maintenance and inspection	13,577	
14	Asset replacement and renewal (opex)	-	
15	Compressor fuel	-	
16	Land management and associated activity	1,609	
17	**Network opex**		15,818
18	System operations	3,595	
19	Network support	5,554	
20	Business support	-	
21	**Operational expenditure**		24,967
22	Consumer connection	3,811	
23	System growth	196	
24	Asset replacement and renewal (capex)	33,037	
25	Asset relocations	1,333	
26	Quality of supply	-	
27	Legislative and regulatory	-	
28	Other reliability, safety and environment	-	
29	**Expenditure on non-network assets**		949
30	**Expenditure on assets**		39,325
31	Cost of financing		
32	Value of capital contributions		
33	Value of vested assets		
34	**Capital expenditure**		39,325
35	**Total expenditure**		64,292
36			
37	**Other related party transactions**		–

38	**5b(iii): Total Opex and Capex Related Party Transactions**		
39	**Name of related party**	**Nature of opex or capex service provided**	**Total value of transactions ($000)**
40	Gas Services NZ	Service interruptions, incidents and emergencies	632
41	Gas Services NZ	Routine and corrective maintenance and inspection	13,577
42	Gas Services NZ	Land management and associated activity	1,609
43	Gas Services NZ	System operations	3,595
44	Gas Services NZ	Network support	5,554
45	Gas Services NZ	Consumer connection	3,811
46	Gas Services NZ	System growth	196
47	Gas Services NZ	Asset replacement and renewal (capex)	33,037
48	Gas Services NZ	Asset relocations	1,333
49	Gas Services NZ	Expenditure on non-network assets	949
50			
51			
52			
53			
54			
55	**Total value of related party transactions**		64,292
56	** include additional rows if needed*		
57			

Company Name	**irst Gas Limited (Transmission**
For Year Ended	**30 September 2019**

SCHEDULE 5c: REPORT ON TERM CREDIT SPREAD DIFFERENTIAL ALLOWANCE

This schedule is only to be completed if, as at the date of the most recently published financial statements, the weighted average original tenor of the debt portfolio (both qualifying debt and non-qualifying debt) is greater than five years.

This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref

7

8 ## 5c(i): Qualifying Debt (may be Commission only)

9

sch ref	Issuing party	Issue date	Pricing date	Original tenor (in years)	Coupon rate (%)	Book value at issue date (NZD)	Book value at date of financial statements (NZD)	Term Credit Spread Difference	Debt issue cost readjustment
11									
12									
13									
14									
15									
16	** include additional rows if needed*						-	-	-

17

18 ## 5c(ii): Attribution of Term Credit Spread Differential

19

sch ref			
20	**Gross term credit spread differential**		-
21			
22	Total book value of interest bearing debt		
23	Leverage	42%	
24	Average opening and closing RAB values		
25	**Attribution Rate (%)**		-
26			
27	**Term credit spread differential allowance**		-

Company Name	**First Gas Limited (Transmission)**
For Year Ended	**30 September 2019**

SCHEDULE 5d: REPORT ON COST ALLOCATIONS

This schedule provides information on the allocation of operational costs. GTBs must provide explanatory comment on their cost allocation in Schedule 14 (Mandatory Explanatory Notes), including on the impact of any reclassifications.

This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref

7 **5d(i): Operating Cost Allocations**

sch ref		Arm's length deduction	Gas transmission services	Non-gas transmission services	Total	OVABAA allocation increase ($000s)
8		**Value allocated ($000s)**				
10	**Service interruptions, incidents and emergencies**					
11	Directly attributable		632			
12	Not directly attributable			-	-	
13	**Total attributable to regulated service**		632			
14	**Routine and corrective maintenance and inspection**					
15	Directly attributable		15,074			
16	Not directly attributable			-	-	
17	**Total attributable to regulated service**		15,074			
18	**Asset replacement and renewal**					
19	Directly attributable		-			
20	Not directly attributable				-	
21	**Total attributable to regulated service**		-			
22	**Compressor fuel**					
23	Directly attributable		4,659			
24	Not directly attributable				-	
25	**Total attributable to regulated service**		4,659			
26	**Land management and associated activity**					
27	Directly attributable		1,609			
28	Not directly attributable				-	
29	**Total attributable to regulated service**		1,609			
30	**System operations**					
31	Directly attributable		3,595			
32	Not directly attributable				-	
33	**Total attributable to regulated service**		3,595			
34	**Network support**					
35	Directly attributable		3,458			
36	Not directly attributable			-	-	
37	**Total attributable to regulated service**		3,458			
38	**Business support**					
39	Directly attributable		1,083			
40	Not directly attributable	3,796	11,312	1,275	16,383	
41	**Total attributable to regulated service**		12,394			
42						
43	**Operating costs directly attributable**		30,109			
44	**Operating costs not directly attributable**	3,796	11,312	1,275	16,383	-
45	**Operational expenditure**		41,420			
46						

Company Name	**First Gas Limited (Transmission)**
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SCHEDULE 5d: REPORT ON COST ALLOCATIONS

This schedule provides information on the allocation of operational costs. GTBs must provide explanatory comment on their cost allocation in Schedule 14 (Mandatory Explanatory Notes), including on the impact of any reclassifications.
This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref

47 **5d(ii): Other Cost Allocations**

sch ref		Value allocated ($000s)				
		Arm's length deduction	**Gas distribution services**	**distribution services**	**Total**	**OVABAA allocation increase ($000s)**
48	**Pass through and recoverable costs**					
49	**Pass through costs**					
50	Directly attributable		2,189			
51	Not directly attributable		-	-	-	
52	**Total attributable to regulated service**		2,189			
53	**Recoverable costs**					
54	Directly attributable		(2,441)			
55	Not directly attributable				-	
56	**Total attributable to regulated service**		(2,441)			
57						

58 **5d(iii): Changes in Cost Allocations* †**

sch ref				($000) CY-1	Current Year (CY)
59					
60				**($000)**	
61	**Change in cost allocation 1**			**CY-1**	**Current Year (CY)**
62	Cost category		Original allocation		
63	Original allocator or line items		New allocation		
64	New allocator or line items		Difference	-	-
65					
66	Rationale for change				
67					
68					
69				**($000)**	
70	**Change in cost allocation 2**			**CY-1**	**Current Year (CY)**
71	Cost category		Original allocation		
72	Original allocator or line items		New allocation		
73	New allocator or line items		Difference	-	-
74					
75	Rationale for change				
76					
77					
78				**($000)**	
79	**Change in cost allocation 3**			**CY-1**	**Current Year (CY)**
80	Cost category		Original allocation		
81	Original allocator or line items		New allocation		
82	New allocator or line items		Difference	-	-
83					
84	Rationale for change				
85					
86					

87 ** a change in cost allocation must be completed for each allocator or component change that has occurred in the disclosure year. A movement in an allocator metric is not a change in allocator or component.*
88 *† include additional rows if needed*

Company Name: First Gas Limited (Transmission)
For Year Ended: 30 September 2019

SCHEDULE 5e: REPORT ON ASSET ALLOCATIONS

This schedule requires information on the allocation of asset values. This information supports the calculation of the RAB value in Schedule 4. GTBs must provide explanatory comment on their cost allocation in Schedule 14 (Mandatory Explanatory Notes), including on the impact of any changes in asset allocations. This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref

7 ## 5e(i): Regulated Service Asset Values

sch ref		Value allocated ($000s) Gas transmission services
8		
9		
10	**Pipes**	
11	Directly attributable	531,987
12	Not directly attributable	-
13	**Total attributable to regulated service**	531,987
14	**Stations**	
15	Directly attributable	107,744
16	Not directly attributable	-
17	**Total attributable to regulated service**	107,744
18	**Compressors**	
19	Directly attributable	46,487
20	Not directly attributable	-
21	**Total attributable to regulated service**	46,487
22	**Main-line valves**	
23	Directly attributable	6,663
24	Not directly attributable	-
25	**Total attributable to regulated service**	6,663
26	**Special crossings**	
27	Directly attributable	48,522
28	Not directly attributable	-
29	**Total attributable to regulated service**	48,522
30	**Other network assets**	
31	Directly attributable	68,935
32	Not directly attributable	-
33	**Total attributable to regulated service**	68,935
34	**Non-network assets**	
35	Directly attributable	16,555
36	Not directly attributable	8,083
37	**Total attributable to regulated service**	24,637
38		
39	**Regulated service asset value directly attributable**	826,894
40	**Regulated service asset value not directly attributable**	8,083
41	**Total closing RAB value**	834,976

Company Name	**First Gas Limited (Transmission)**
For Year Ended	**30 September 2019**

SCHEDULE 5e: REPORT ON ASSET ALLOCATIONS

This schedule requires information on the allocation of asset values. This information supports the calculation of the RAB value in Schedule 4. GTBs must provide explanatory comment on their cost allocation in Schedule 14 (Mandatory Explanatory Notes), including on the impact of any changes in asset allocations. This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref

5e(ii): Changes in Asset Allocations* †

Change in asset value allocation 1			($000) CY-1	Current Year (CY)
Asset category		Original allocation		
Original allocator or line items		New allocation		
New allocator or line items		Difference	-	-
Rationale for change				

Change in asset value allocation 2			($000) CY-1	Current Year (CY)
Asset category		Original allocation		
Original allocator or line items		New allocation		
New allocator or line items		Difference	-	-
Rationale for change				

Change in asset value allocation 3			($000) CY-1	Current Year (CY)
Asset category		Original allocation		
Original allocator or line items		New allocation		
New allocator or line items		Difference	-	-
Rationale for change				

** a change in asset allocation must be completed for each allocator or component change that has occurred in the disclosure year. A movement in an allocator metric is not a change in allocator or component*

† include additional rows if needed

Company Name	**First Gas Limited (Transmission)**
For Year Ended	**30 September 2019**

SCHEDULE 6a: REPORT ON CAPITAL EXPENDITURE FOR THE DISCLOSURE YEAR

This schedule requires a breakdown of capital expenditure on assets incurred in the disclosure year, including any assets in respect of which capital contributions are received, but excluding assets that are vested assets. Information on expenditure on assets must be provided on an accounting accruals basis and must exclude finance costs.
GTBs must provide explanatory comment on their expenditure on assets in Schedule 14 (Explanatory notes to templates).
This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref				
7		**6a(i): Expenditure on Assets**	**($000)**	**($000)**
8		Consumer connection		3,811
9		System growth		196
10		Asset replacement and renewal		35,552
11		Asset relocations		1,333
12		Reliability, safety and environment:		
13		Quality of supply	-	
14		Legislative and regulatory	-	
15		Other reliability, safety and environment	-	
16		**Total reliability, safety and environment**		-
17		**Expenditure on network assets**		40,891
18		Expenditure on non-network assets		11,505
19				
20		**Expenditure on assets**		52,396
21	*plus*	Cost of financing		781
22	*less*	Value of capital contributions		1,599
23	*plus*	Value of vested assets		-
24				
25		**Capital expenditure**		51,578
26		**6a(ii): Subcomponents of Expenditure on Assets(where known)**		
27		Research and development		-
28		**6a(iii): Consumer Connection**		
29		*Connection types defined by GTB**	**($000)**	**($000)**
30		Direct Connect	3,811	
31				
32				
33				
34				
35		** include additional rows if needed*		
36		**Consumer connection expenditure**		3,811
37				
38	*less*	Capital contributions funding consumer connection expenditure	-	
39		**Consumer connection less capital contributions**		3,811

Company Name	**First Gas Limited (Transmission)**
For Year Ended	**30 September 2019**

SCHEDULE 6a: REPORT ON CAPITAL EXPENDITURE FOR THE DISCLOSURE YEAR

This schedule requires a breakdown of capital expenditure on assets incurred in the disclosure year, including any assets in respect of which capital contributions are received, but excluding assets that are vested assets. Information on expenditure on assets must be provided on an accounting accruals basis and must exclude finance costs.
GTBs must provide explanatory comment on their expenditure on assets in Schedule 14 (Explanatory notes to templates).
This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref				
40		**6a(iv): System Growth and Asset Replacement and Renewal**		
41			**System Growth**	**Asset Replacement and Renewal**
42			**($000)**	**($000)**
43		Pipes	-	17,328
44		Compressor stations	6	6,277
45		Other stations	190	11,426
46		SCADA and communications	-	505
47		Special crossings	-	-
48		*Components of stations (where known)*		
49		Main-line valves	-	-
50		Heating system	-	-
51		Odorisation plants	-	-
52		Coalescers	-	-
53		Metering system	-	1
54		Cathodic protection	-	-
55		Chromatographs	-	15
56		**System growth and asset replacement and renewal expenditure**	196	35,552
57	*less*	Capital contributions funding system growth and asset replacement and renewal	-	382
58		**System growth and asset replacement and renewal less capital contributions**	196	35,170
59				
60				
61		**6a(v): Asset Relocations**		
62		*Project or programme**	**($000)**	**($000)**
63		MacKays - Peka Peka 100/600 Lns Relocate	(92)	
64		402 Line Te Rapa Realignment – POAL	230	
65		800 Pipeline Tauriko Business Estate Re-alignment	461	
66		Transmission Gully Pipeline relocations	620	
67		Manawatu/Whirokino bridge re-alignment	51	
68		** include additional rows if needed*		
69		All other projects or programmes - asset relocations	62	
70		**Asset relocations expenditure**		1,333
71	*less*	Capital contributions funding asset relocations	1,217	
72		**Asset relocations less capital contributions**		116
73		**6a(vi): Quality of Supply**	**($000)**	**($000)**
74		*Project or programme**		
75				
76				
77				
78				
79				
80		** include additional rows if needed*		
81		All other projects or programmes - quality of supply		
82		**Quality of supply expenditure**		-
83	*less*	Capital contributions funding quality of supply		
84		**Quality of supply less capital contributions**		-

Company Name	First Gas Limited (Transmission)
For Year Ended	30 September 2019

SCHEDULE 6a: REPORT ON CAPITAL EXPENDITURE FOR THE DISCLOSURE YEAR

This schedule requires a breakdown of capital expenditure on assets incurred in the disclosure year, including any assets in respect of which capital contributions are received, but excluding assets that are vested assets. Information on expenditure on assets must be provided on an accounting accruals basis and must exclude finance costs.
GTBs must provide explanatory comment on their expenditure on assets in Schedule 14 (Explanatory notes to templates).
This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref				
85	**6a(vii): Legislative and Regulatory**			
86		*Project or programme**	**($000)**	**($000)**
87				
88				
89				
90				
91				
92		** include additional rows if needed*		
93		All other projects or programmes - legislative and regulatory		
94		**Legislative and regulatory expenditure**		-
95	*less*	Capital contributions funding legislative and regulatory		
96		**Legislative and regulatory less capital contributions**		-
97				
98	**6a(viii): Other Reliability, Safety and Environment**			
99		*Project or programme**	**($000)**	**($000)**
100				
101				
102				
103				
104				
105		** include additional rows if needed*		
106		All other projects or programmes - other reliability, safety and environment		
107		**Other reliability, safety and environment expenditure**		-
108	*less*	Capital contributions funding other reliability, safety and environment		
109		**Other reliability, safety and environment less capital contributions**		-
110				
111	**6a(ix): Non-Network Assets**			
112	**Routine expenditure**			
113		*Project or programme**	**($000)**	**($000)**
114		Equipment	949	
115		ICT	8,758	
116		Vehicles	1,130	
117		Building Refurbishment	668	
118				
119		** include additional rows if needed*		
120		All other projects or programmes - routine expenditure		
121		**Routine expenditure**		11,505
122	**Atypical expenditure**			
123		*Project or programme**	**($000)**	**($000)**
124				
125				
126				
127				
128				
129		** include additional rows if needed*		
130		All other projects or programmes - atypical expenditure		
131		**Atypical expenditure**		-
132				
133		**Expenditure on non-network assets**		11,505

Company Name	**First Gas Limited (Transmission)**
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SCHEDULE 6b: REPORT ON OPERATIONAL EXPENDITURE FOR THE DISCLOSURE YEAR

This schedule requires a breakdown of operational expenditure incurred in the disclosure year. GTBs must provide explanatory comment on their operational expenditure in Schedule 14 (Explanatory notes to templates). This includes explanatory comment on any atypical operational expenditure and assets replaced or renewed as part of asset replacement and renewal operational expenditure, and additional information on insurance.

This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref			
7	**6b(i): Operational Expenditure**	**($000)**	**($000)**
8	Service interruptions, incidents and emergencies	632	
9	Routine and corrective maintenance and inspection	15,074	
10	Asset replacement and renewal	-	
11	Compressor fuel	4,659	
12	Land management and associated activity	1,609	
13	**Network opex**		21,973
14	System operations	3,595	
15	Network support	3,458	
16	Business support	12,394	
17	**Non-network opex**		19,447
18			
19	**Operational expenditure**		41,420
20	**6b(ii): Subcomponents of Operational Expenditure (where known)**		
21	Research and development		
22	Insurance		

Company Name	**First Gas Limited (Transmission)**
For Year Ended	**30 September 2019**

SCHEDULE 7: COMPARISON OF FORECASTS TO ACTUAL EXPENDITURE

This schedule compares actual revenue and expenditure to the previous forecasts that were made for the disclosure year. Accordingly, this schedule requires the forecast revenue and expenditure information from previous disclosures to be inserted.

GTBs must provide explanatory comment on the variance between actual and target revenue and forecast expenditure in Schedule 14 (Mandatory Explanatory Notes). This information is part of the audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8. For the purpose of this audit, target revenue and forecast expenditures only need to be verified back to previous disclosures.

sch ref		Target ($000) [1]	Actual ($000)	% variance
8	**7(i): Revenue**			
9	Line charge revenue	127,887	127,680	(0%)

sch ref		Forecast ($000) [2]	Actual ($000)	% variance
10	**7(ii): Expenditure on Assets**			
11	Consumer connection	2,041	3,811	87%
12	System growth	2,138	196	(91%)
13	Asset replacement and renewal	28,928	35,552	23%
14	Asset relocations	2,394	1,333	(44%)
15	Reliability, safety and environment:			
16	Quality of supply	-	-	-
17	Legislative and regulatory	-	-	-
18	Other reliability, safety and environment	-	-	-
19	**Total reliability, safety and environment**	-	-	-
20	**Expenditure on network assets**	35,500	40,891	15%
21	Expenditure on non-network assets	10,341	11,505	11%
22	**Expenditure on assets**	45,841	52,396	14%

sch ref		Forecast ($000) [2]	Actual ($000)	% variance
23	**7(iii): Operational Expenditure**			
24	Service interruptions, incidents and emergencies	679	632	(7%)
25	Routine and corrective maintenance and inspection	16,408	15,074	(8%)
26	Asset replacement and renewal	-	-	-
27	Compressor fuel	3,621	4,659	29%
28	Land management and associated activity	1,032	1,609	56%
29	**Network opex**	21,741	21,973	1%
30	System operations	2,774	3,595	30%
31	Network support	3,740	3,458	(8%)
32	Business support	15,875	12,394	(22%)
33	**Non-network opex**	22,389	19,447	(13%)
34	**Operational expenditure**	44,130	41,420	(6%)
35				

sch ref		Forecast ($000) [2]	Actual ($000)	% variance
36	**7(iv): Subcomponents of Expenditure on Assets (where known)**			
37	Research and development	-	-	-
38				

sch ref		Forecast ($000) [2]	Actual ($000)	% variance
39	**7(v): Subcomponents of Operational Expenditure (where known)**			
40	Research and development	-	-	-
41	Insurance	-	-	-
42				

43 *1 From the nominal dollar target revenue for the pricing year disclosed under clause 2.4.3(3) of this determination*

44 *2 from the CY+1 nominal dollar expenditure forecasts disclosed in accordance with clause 2.6.6 for the forecast period starting at the beginning of the disclosure year (the second to last disclosure of Schedules 11a and 11b)*

Company Name **First Gas Limited (Transmission)**
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SCHEDULE 8: REPORT ON BILLED QUANTITIES AND LINE CHARGE REVENUES

This schedule requires disclosure of the delivered quantities and number of offtake points for each type of connection on the GTB's network, and the energy delivered to these offtake points, for the disclosure year. It also requires the billed quantities and associated line charge revenues for each contract type used by the GTB, for the disclosure year.

sch ref

8 ## 8(i): Billed quantities by contract type

9

sch ref	Contract type	Billed quantities - Gas throughput billed*	Billed quantities - Reserved capacity billed*	Billed quantities - Overrun charges billed*	Billed quantities - Approved Nominations billed**	Billed quantities - ∑(Approved Nominations x distance) billed**	Other quantities billed
10–11		TJ	TJ	TJ	TJ	TJ.km	TJ.km
12	Standard	46,742.02	57,654.07	329.70	141,080.94	15,136,906.08	-
13	Non-standard	68,268.60	107,816.06	38.29	-	-	-
14	*Add extra rows for additional contract types as necessary*						
15	**Totals for all contracts**	115,010.62	165,470.12	367.99	141,080.94	15,136,906.08	-

16

17 ## 8(ii): Line charge revenues ($000) by contract type

18

sch ref	Contract type	Total line charge revenue in disclosure year	Gas throughput revenue*	Reserved capacity revenue*	Overrun charges revenue*	Approved Nominations revenue**	∑(Approved Nominations x distance) revenue**	Other line charge revenue	Notional revenue foregone from posted discounts (if applicable)
20	Standard	$97,522	$3,883	$55,906	$3,181	$10,318	$24,234	-	n/a
21	Non-standard	$30,157	$5,984	$22,578	$104	-	-	$1,491	n/a
22	*Add extra rows for additional contract types as necessary*								
23	**Totals for all contracts**	$127,680	$9,867	$78,485	$3,285	$10,318	$24,234	$1,491	-

24 *Vector only

25 **MDL only

26

Company Name	**First Gas Limited (Transmission)**
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SCHEDULE 9a: ASSET REGISTER

This schedule requires a summary of the quantity of assets that make up the network, by asset category and asset class.

sch ref

	Asset category	Asset class	Units	Items at start of year (quantity)	Items at end of year (quantity)	Net change	Data accuracy (1–4)
7							
8	Pipes	Protected steel pipes	km	2,513	2,514	1	3
9	Pipes	Special crossings	km	8	8	-	3
10	Stations	Compressor stations	No.	9	9	-	3
11	Stations	Offtake point	No.	130	131	1	3
12	Stations	Scraper stations	No.	14	14	-	3
13	Stations	Intake points	No.	11	11	-	3
14	Stations	Metering stations	No.	5	5	-	3
15	Compressors	Compressors—turbine driven	No.	4	4	-	3
16	Compressors	Compressors—electric motor driven	No.	2	2	-	3
17	Compressors	Compressors—reciprocating engine driven	No.	18	14	(4)	3
18	Main-line valves	Main line valves manually operated	No.	75	75	-	3
19	Main-line valves	Main line valves remotely operated	No.	11	11	-	3
20	Heating systems	Gas-fired heaters	No.	109	110	1	3
21	Heating systems	Electric heaters	No.	4	4	-	3
22	Odorisation plants	Odorisation plants	No.	22	22	-	3
23	Coalescers	Coalescers	No.	40	40	-	3
24	Metering systems	Meters—ultrasonic	No.	9	9	-	3
25	Metering systems	Meters—rotary	No.	59	61	2	3
26	Metering systems	Meters turbine	No.	77	77	-	3
27	Metering systems	Meters—mass flow	No.	1	1	-	3
28	SCADA and communications	Remote terminal units (RTU)	No.	85	89	4	3
29	SCADA and communications	Communications terminals	No.	3	3	-	3
30	Cathodic protection	Rectifier units	No.	49	49	-	3
31	Chromatographs	Chromatographs	No.	10	10	-	3

Company Name **First Gas Limited (Transmission)**
For Year Ended **30 September 2019**

SCHEDULE 9b: ASSET AGE PROFILE

This schedule requires a summary of the age profile (based on year of installation) of the assets that make up the network, by asset category and asset class.

sch ref

7 **Disclosure Year (year ended)** 30 September 2019

Number of assets at disclosure year end by installation date

sch ref	Asset category	Asset class	Units	pre-1960	1960 –1964	1965 –1969	1970 –1974	1975 –1979	1980 –1984	1985-1989	1990 –1994	1995 –1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	No. with age unknown	Items at end of year (quantity)	No. with default dates	Data accuracy (1–4)
8	Asset category	Asset class	Units																																	
9	Pipes	Protected steel pipes	km	-	-	637	79	319	1,278	149	10	22	0	-	-	-	1	0	5	0	0	2	0	2	-	1	3	0	-	-	1	1	-	2,514	-	3
10	Pipes	Special crossings	km	-	-	2	1	1	3	1	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-	8	-	3
11	Stations	Compressor stations	No.	-	-	2	-	1	5	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	-	3
12	Stations	Offtake point	No.	-	-	4	9	23	56	14	4	10	-	-	-	-	-	2	-	2	-	-	-	-	-	-	1	5	-	-	-	1	-	131	-	3
13	Stations	Scraper stations	No.	-	-	3	-	3	5	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	14	-	3
14	Stations	Intake points	No.	-	-	-	-	3	1	-	1	-	-	1	-	-	-	-	1	2	-	1	-	-	-	1	-	-	-	-	-	-	-	11	-	3
15	Stations	Metering stations	No.	-	-	1	-	1	2	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	3
16	Compressors	Compressors—turbine driven	No.	-	-	-	-	-	1	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	4	-	3
17	Compressors	Compressors—electric motor driven	No.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	2	-	3
18	Compressors	Compressors—reciprocating engine driver	No.	-	-	3	-	3	4	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14	-	3
19	Main-line valves	Main line valves manually operated	No.	-	-	18	6	10	26	13	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	75	-	3
20	Main-line valves	Main line valves remotely operated	No.	-	-	-	2	4	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	-	3
21	Heating systems	Gas-fired heaters	No.	-	-	4	6	9	47	15	2	4	-	-	-	-	-	2	-	3	-	1	1	-	2	1	-	5	4	2	1	1	-	110	-	3
22	Heating systems	Electric heaters	No.	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	1	-	-	-	-	4	-	3
23	Odorisation plants	Odorisation plants	No.	-	-	1	-	2	2	-	-	1	-	-	-	-	14	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	22	-	3
24	Coalescers	Coalescers	No.	-	-	2	2	8	16	5	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	40	-	3
25	Metering systems	Meters—ultrasonic	No.	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	1	-	-	2	-	3	1	-	-	-	-	-	-	-	9	-	3
26	Metering systems	Meters—rotary	No.	-	-	-	-	-	6	6	6	-	1	1	-	-	1	1	3	3	-	1	5	3	1	3	1	5	-	1	6	7	-	61	-	3
27	Metering systems	Meters turbine	No.	-	-	-	-	-	-	1	3	7	-	-	-	-	-	-	1	2	-	7	2	8	-	-	6	8	-	9	7	16	-	77	-	3
28	Metering systems	Meters—mass flow	No.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	3
29	SCADA and communications	Remote terminal units (RTU)	No.	-	-	-	-	-	-	-	-	-	-	-	-	1	-	4	28	15	8	5	3	9	2	-	2	5	2	1	-	4	-	89	-	3
30	SCADA and communications	Communications terminals	No.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1	-	-	-	-	-	-	-	-	-	-	3	-	3
31	Cathodic protection	Rectifier units	No.	-	-	5	1	5	7	1	1	-	-	-	-	-	-	-	2	1	2	1	2	2	2	9	3	2	1	1	1	-	-	49	-	3
32	Chromatographs	Chromatographs	No.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	1	1	-	1	1	-	-	2	-	-	1	1	-	-	10	-	3

Company Name	**First Gas Limited (Transmission)**
For Year Ended	**30 September 2019**

SCHEDULE 9c: REPORT ON PIPELINE DATA

This schedule requires a summary of the key characteristics of the pipeline network.

sch ref

	Transmission system	System length (km) (at year end)	Weighted average pipe diameter (mm)	Max monthly quantity entering the system (TJ per month)	Max weekly quantity entering the system (TJ per week)	Total gas conveyed (TJ per year)	Gas conveyed for Persons not involved in the GTB (TJ per year)	Number of connection points
7								
8	South - Kapuni - Frankley Road	1,030	220	3,699	1,002	32,806	32,589	62
9	Bay of Plenty	607	156	1,009	250	9,834	9,780	34
10	North	544	189	3,161	726	30,129	29,857	39
11	Te Awamutu North	7	155	71	17	507	507	3
12	Minor	16	69	32	8	295	293	19
13	Maui Pipeline	310	747	12,226	2,830	127,372	127,138	26
14	**Total**	2,514						

15 **Length by assigned location class (km)**

		Secondary location class						
16		Sensitive Use (S)	Industrial (I)	Heavy Industrial (HI)	Common Infrastructure Corridor (CIC)	Submerged (W)	Total (km) (at year end) *	Percentage of total
17	Primary location class Rural (R1) land	2	9	6	2	3	2,234.73	88.90%
18	Primary location class Rural Residential (R2) land	8	1	0	3	1	145.78	5.80%
19	Primary location class Residential (T1) land	33	25	-	1	3	133.26	5.30%
20	Primary location class High Density (T2) land	-	-	-	-	-	-	-

21 ** The total km is not the same as the sum of the secondary location classes as a pipeline section may only have a primary location class.*

Company Name	**First Gas Limited (Transmission)**
For Year Ended	**30 September 2019**
Network	**Maui**

SCHEDULE 9d: REPORT ON DEMAND

This schedule requires a summary of the key measures of network demand for the disclosure year (number of new connections including, maximum monthly loads and total gas conveyed)

sch ref

7 ### 9d(i): New Connections

sch ref	Connection types defined by GTB	Number of new connections
9	Intake Point (excluding Bi-directional Points)	-
10	Offtake Point (excluding Bi-directional Points and Compressor Stations)	-
11	Bi-Directional Point	-
12	Compressor Station	-
13		
14	** include additional rows if needed*	
15	**Connections total**	-
16		

17 ### 9d(ii): Gas Volumes and Connections

sch ref	Connection types defined by GTB	Intake volume (TJ)	Quantity of gas delivered (TJ)	Number of connection points
19	Intake Point (excluding Bi-directional Points)	124,549	-	7
20	Offtake Point (excluding Bi-directional Points and Compressor Stations)	-	120,561	17
21	Bi-Directional Point	2,788	6,578	1
22	Compressor Station	-	-	1
23	** include additional rows if needed*			
24	**Total**	127,337	127,139	26
25				

26 ### 9d(iii): Gas conveyed

sch ref		(TJ)
27	Intake volume (TJ)	127,337
28	Quantity of gas delivered (TJ)	127,138
29	Gas used in compressor stations (TJ)	234
30	Gas used in heating systems (TJ)	-
31	Change in line pack (TJ)	(43)
32	Vented gas (TJ)	-
33	Unaccounted for gas (TJ)	(78)
34	**Total gas conveyed (TJ)**	127,372
35		

36 ### 9d(iv): Unaccounted for Gas

sch ref	Transmission system	Gas entering the system (TJ)	Unaccounted for gas (TJ)	Unaccounted for gas (%)	Intake volume (TJ)	Interconnected system intake (TJ)	Interconnected intake systems (name)
38	Maui Pipeline	127,337	(79)	(0.06%)	127,337	-	-
39	[Transmission system 2]	-		-			
40	[Transmission system 3]	-		-			
41	[Transmission system 4]	-		-			
42	[Transmission system 5]	-		-			
43	[Transmission system 6]	-		-			
44	**Total**				127,337	-	

Company Name	**First Gas Limited (Transmission)**
For Year Ended	**30 September 2019**
Network	**Non-Maui**

SCHEDULE 9d: REPORT ON DEMAND

This schedule requires a summary of the key measures of network demand for the disclosure year (number of new connections including, maximum monthly loads and total gas conveyed)

sch ref

7 **9d(i): New Connections**

sch ref	Connection types defined by GTB	Number of new connections
9	Distribution System	1
10	Direct Connect	-
11	Bi-Directional	-
12	Receipt Point	-
13		
14	* include additional rows if needed	
15	**Connections total**	1
16		

17 **9d(ii): Gas Volumes and Connections**

sch ref	Connection types defined by GTB	Intake volume (TJ)	Quantity of gas delivered (TJ)	Number of connection points
19	Distribution System	-	35,308	113
20	Direct Connect	-	31,214	23
21	Bi-Directional	8,758	6,505	4
22	Receipt Point	64,605	-	17
23	* include additional rows if needed			
24	**Total**	73,363	73,027	157
25				

26 **9d(iii): Gas conveyed**

sch ref		(TJ)
27	Intake volume (TJ)	73,363
28	Quantity of gas delivered (TJ)	73,027
29	Gas used in compressor stations (TJ)	408
30	Gas used in heating systems (TJ)	131
31	Change in line pack (TJ)	5
32	Vented gas (TJ)	5
33	Unaccounted for gas (TJ)	(203)
34	**Total gas conveyed (TJ)**	73,571
35		

36 **9d(iv): Unaccounted for Gas**

sch ref	Transmission system	Gas entering the system (TJ)	Unaccounted for gas (TJ)	Unaccounted for gas (%)	Intake volume (TJ)	Interconnected system intake (TJ)	Interconnected intake systems (name)
38	South-Kapuni-Frankley Road (SKF)	34,854	(301)	(0.86%)	34,854	-	-
39	Bay of Plenty (BOP)	9,891	54	0.55%	7,527	2,364	SKF, TAN
40	North (NORTH)	30,177	45	0.15%	30,177	-	-
41	Te Awamutu North (TAN)	510	-	-	510	-	-
42	Minor (MINORS)	295	-	-	295	-	-
43		-		-			
44	**Total**				73,363	2,364	

Company Name	**First Gas Limited (Transmission)**
For Year Ended	**30 September 2019**

SCHEDULE 9d: REPORT ON DEMAND

This schedule requires a summary of the key measures of network demand for the disclosure year (number of new connections including, maximum monthly loads and total gas conveyed)

sch ref

7 ### 9d(i): New Connections

sch ref	Connection types defined by GTB	Number of new connections
9	Distribution System	1
10	Direct Connect	-
11	Receipt Point	-
12		
13		
14	* include additional rows if needed	
15	**Connections total**	1
16		

17 ### 9d(ii): Gas Volumes and Connections

sch ref	Connection types defined by GTB	Intake volume (TJ)	Quantity of gas delivered (TJ)	Number of connection points
19	Receipt Point	152,826	-	14
20	Direct Connect	-	117,690	35
21	Distribution System	-	34,600	108
22				
23	* include additional rows if needed			
24	**Total**	152,826	152,290	157
25				

26 ### 9d(iii): Gas conveyed

sch ref		(TJ)
27	Intake volume (TJ)	152,826
28	Quantity of gas delivered (TJ)	152,290
29	Gas used in compressor stations (TJ)	642
30	Gas used in heating systems (TJ)	131
31	Change in line pack (TJ)	38
32	Vented gas (TJ)	5
33	Unaccounted for gas (TJ)	(204)
34	**Total gas conveyed (TJ)**	153,068
35		

36 ### 9d(iv): Unaccounted for Gas

sch ref	Transmission system	Gas entering the system (TJ)	Unaccounted for gas (TJ)	Unaccounted for gas (%)	Intake volume (TJ)	Interconnected system intake (TJ)	Interconnected intake systems (name)
38	Combined UFG	152,826	(280)	(0.18%)	152,826	-	-
39		-		-			
40		-		-			
41		-		-			
42		-		-			
43		-		-			
44	**Total**				152,826	-	

Company Name	**First Gas Limited (Transmission)**
For Year Ended	**30 September 2019**

SCHEDULE 10a: REPORT ON NETWORK RELIABILITY AND INTERRUPTIONS

This schedule requires a summary of the key measures of network reliability (interruptions, compressor availability) for the disclosure year
GTBs must provide explanatory comment on their network reliability for the disclosure year in Schedule 14 (Explanatory Notes to Templates).

sch ref

7 ### 10a(i): Interruptions and Reliability

sch ref		
9	Total number of planned interruptions	1
10	**Service incidents and emergencies**	
11	Number of incidents	345

13 **Unplanned interruptions in transmission systems**

sch ref	Description and cause of Interruption	Transmission systems affected	Date	Duration (hrs)
15	Unplanned gas outage to Ammonia Urea Plant	1 Delivery point	13 December 2018	1.32
16				
17				
18				
19				
20				
21				
22				

23 **Add rows as necessary*

24 Number of interruption or curtailment events:

sch ref		
25	due to insufficient capacity	16
26	due to consumer flows exceeding approved quantities	-
27	caused by equipment failure	2
28	caused by third parties	26
29	**Total**	44

30 ### 10a(ii): Compressor Availability

sch ref	Compressor station code/name	Compressor unit ID	Number of hours the compressor ran	Number of hours compressor was available for service	Number of instances where the compressor failed to start	Number of instances where a compressor was required but unavailable for service
33	Mokau	Unit #1	4,791	8,689	9	4
34	Mokau	Unit #2	2,530	6,457	2	6
35	Henderson	1	3,544	8,683	1	15
36	Henderson	2	4,824	8,675	-	11
37	Kaitoke	1	397	6,538	2	-
38	Kaitoke	2	565	7,558	-	-
39	Kapuni	2	4,224	8,341	1	-
40	Kapuni	3	1,329	8,085	3	-
41	Kapuni	5	7,199	7,632	11	-
	Kawerau	1	54	8,250	2	-
	Kawerau	2	81	8,703	1	-
	Mahoenui	1	202	8,553	1	-
	Mahoenui	2	258	8,589	-	-
	Mahoenui	3	173	2,142	8	-
	Pokuru	1	3,082	7,940	2	-
	Pokuru	2	5,594	8,738	3	-
	Rotowaro	3	5,609	7,813	10	-
	Rotowaro	4	5,603	7,683	-	-
42	Rotowaro	5	1,392	8,784	-	-
43	Rotowaro	6	1,694	8,784	-	-

44 **Add rows as necessary*

Company Name **First Gas Limited (Transmission)**
For Year Ended **30 September 2019**

SCHEDULE 10b: REPORT ON NETWORK INTEGRITY

This schedule requires a summary of the key measures of network integrity (product control, gas escapes, RTEs) for the disclosure year.

sch ref		
7	**Product control**	
8	Number of incidents relating to pressure	1
9	Number of incidents relating to gas specification	31
10	Number of incidents relating to odorisation	2
11		
12	**Response time to emergencies (RTE)**	
13	Proportion of emergencies responded to within 3 hours (%)	100%
14	Average call response time (hours)	-
15	Number of emergencies	1
16		
17	**Gas leaks**	
18	Number of confirmed public reported gas escapes per system length (escapes/1000 km)	5
19	Number of confirmed gas leaks caused by a third party per system length (escapes/1000 km)	-
20	Number of gas leaks detected by the GTB	16
21	Number of gas leaks that did not result in disruption to supply	29

Company Name	First Gas Limited (Transmission)
For Year Ended	30 September 2019

Schedule 14: Mandatory Explanatory Notes

(Guidance Note: This Microsoft Word version of Schedules 14, 14a and 15 is from the Gas Transmission Information Disclosure Determination 2012 – as amended and consolidated 3 April 2018. Clause references in this template are to that determination)

1. This schedule requires GTBs to provide explanatory notes to information provided in accordance with clauses 2.3.1, 2.4.20 and subclause 2.5.1(1)(e).
2. This schedule is mandatory—GTBs must provide the explanatory comment specified below, in accordance with clause 2.7.1. Information provided in boxes 1 to 11 of this schedule is part of the audited disclosure information, and so is subject to the assurance requirements specified in section 2.8.
3. Schedule 15 (Voluntary Explanatory Notes to Schedules) provides for GTBs to give additional explanation of disclosed information should they elect to do so.

Mandatory explanatory notes

Return on Investment (Schedule 2)

4. In the box below, comment on return on investment as disclosed in Schedule 2. This comment must include information on reclassified items in accordance with subclause 2.7.1(2).

Box 1: Explanatory comment on return on investment

In 2019, the vanilla ROI for our transmission business was 5.81% (reflecting all revenue earned). This is below the ROI of 7.02% reported for 2018. The decrease in the ROI from 2018 is substantially driven by a decrease in regulatory profit for 2019.

Our regulatory profit has reduced as a result of higher fuel gas costs and routine maintenance costs and lower revenue in 2019 compared to 2018.

2019 is the first disclosure year that includes the revenue wash-up account balance and revenue wash-up amount for the current period in the ROI calculation. The revenue wash-up amount and account balance reflects the amount we have under or over-recovered compared to the allowed revenue under the DPP Determination. The variance to the allowed revenue is a result of actual quantities or pass-through/recoverable costs being different to those forecast when setting prices. Including this in the ROI calculation has effectively reduced the reported ROI for the period by 0.55 percent compared to 2018.

Exemption to report historic ROI results

The Commerce Commission has granted Firstgas (Transmission) an exemption from reporting historic 2017 ROI results in the 2019 disclosure.

Prior to 2018, First Gas disclosed the results of the Maui and Non-Maui gas transmission businesses separately. In 2017, an amendment to the Information Disclosure determination was made to align the two networks to a September disclosure year[1]. The data collected for the separate transmission networks was difficult to convert to a meaningful ROI calculation using the 12-month period ending in September 2017.

Regulatory Profit (Schedule 3)

5. In the box below, comment on regulatory profit for the disclosure year as disclosed in Schedule 3. This comment must include-

    5.1 a description of material items included in other regulated income (other than gains / (losses) on asset disposals), as disclosed in Schedule 3(i)

    5.2 information on reclassified items in accordance with subclause 2.7.1(2).

Box 2: Explanatory comment on regulatory profit

There are no items of other regulated income and no reclassified items.

Merger and acquisition expenses (3(iv) of Schedule 3)

6. If the GTB incurred merger and acquisitions expenditure during the disclosure year, provide the following information in the box below-

    6.1 information on reclassified items in accordance with subclause 2.7.1(2)

    6.2 any other commentary on the benefits of the merger and acquisition expenditure to the GTB.

[1] Prior to 2017 the Non-Maui network had a June reporting year end and the Maui Network had a December year end. To align the two networks into a single disclosure in 2017, the disclosure period for the Non-Maui network was 15 months and for the Maui network was 9 months.

Box 3: Explanatory comment on merger and acquisition expenditure

No merger and acquisition expenditure has been included during the disclosure year.

Value of the Regulatory Asset Base (Schedule 4)

7. In the box below, comment on the value of the regulatory asset base (rolled forward) in Schedule 4. This comment must include information on reclassified items in accordance with subclause 2.7.1(2).

Box 4: Explanatory comment on the value of the regulatory asset based (rolled forward)

The value of the regulated asset base (RAB) has been determined by rolling forward the combined initial RAB's of both the Non-Maui transmission system and the Maui transmission system, with adjustments made for additions, disposals, depreciation and revaluation in accordance with the applicable Input Methodologies.

<u>Exemptions applied to the RAB</u>

In 2018, the Commerce Commission agreed Firstgas would add together the historic disclosed results for each of the transmission businesses for the years prior to 2018. This exemption continues to be applied in the 2019 disclosure period. There was no adjustment to recognise the different reporting year ends in 2015 and 2016 or the different reporting periods in 2017. Further information on this exemption is provided in the voluntary notes.

<u>Re-categorised items</u>

There were $2.9 million of assets included in the non-network category in 2018 that should have been included in the Pipes and Stations category. These assets have been re-categorised in 2019 as shown in Schedule 4a. This has had an impact on the weighted average lives disclosure for non-network assets in 2019, as the lives of the assets incorrectly included were much longer than other assets in this category.

Regulatory tax allowance: disclosure of permanent differences (5a(i) of Schedule 5a)

8. In the box below, provide descriptions and workings of the material permanent differences included in the following items, as recorded in the asterisked categories in 5a(i) of Schedule 5a:

    8.1 Income not included in regulatory profit / (loss) before tax but taxable

    8.2 Expenditure or loss in regulatory profit / (loss) before tax but not deductible

    8.3 Income included in regulatory profit / (loss) before tax but not taxable

    8.4 Expenditure or loss deductible but not in regulatory profit / (loss) before tax

Box 5: Regulatory tax allowance: permanent differences

Permanent differences consist of immaterial non-deductible professional and entertainment expenses.

Regulatory tax allowance: disclosure of temporary differences (5a(i) of Schedule 5a)

9. In the box below, provide descriptions and workings of the material temporary differences included in the following items, as recorded in the asterisked categories in 5a(i) of Schedule 5a:

9.1 Income not included in regulatory profit / (loss) before tax but taxable

9.2 Expenditure or loss in regulatory profit / (loss) before tax but not deductible

9.3 Income included in regulatory profit / (loss) before tax but not taxable

9.4 Expenditure or loss deductible but not in regulatory profit / (loss) before tax

Box 6: Temporary differences

Temporary differences include immaterial movements in provisions and accruals.

Cost allocation (Schedule 5d)

1. In the box below, comment on cost allocation as disclosed in Schedule 5d. This comment must include information on reclassified items in accordance with subclause 2.7.1(2).

Box 7: Cost allocation in schedule 5d

Approach to cost allocation

The accounting-based allocation approach (ABAA) has been applied in accordance with the applicable Input Methodologies determination to allocate not-directly attributable costs (shared costs) between Firstgas' transmission and distribution businesses and our unregulated businesses.

Causal cost allocators have been used where a cost driver has led to the cost being incurred.

Where a single causal allocator cannot be established for a shared cost, a proxy allocator has been used. The rationale behind the use of each proxy allocator is based on an analysis of the cost drivers for each cost item that is not directly attributable. The key allocator that can be used as a proxy allocator is determined by management. This is based on management's experience and knowledge, and an analysis of each of the cost areas.

Only one allocation method is used for each area.

Treatment of costs

Business support costs that are not directly attributable arise in the areas of:

- Legal and consulting fees, which has a causal cost allocator of management's estimate of time spent
- Employee-related costs such as phones, stationery, travel, information technology hardware and software, and advertising for positions, which have a causal cost allocator of employee numbers
- General expenses such as sponsorship and professional fees for audit, tax, information and technology and treasury functions which have a proxy cost allocator of the Regulatory Asset Base (RAB)
- Directors fees which has a proxy cost allocator of RAB
- Insurance costs which has a proxy cost allocator of RAB.

Reclassification of costs

In 2019, Firstgas reviewed the pool of not-directly attributable (or shared) costs. We found that in 2018 we had included $0.787 million of directly attributable costs for the distribution commercial team in the shared cost pool. Consequently, in the 2018 disclosure year these costs were allocated to the distribution and transmission businesses, with 93% of the costs being allocated to the transmission business. In 2019, these costs relating to the distribution commercial team were $0.718 million and were fully allocated to the distribution business.

Asset allocation (Schedule 5e)

10. In the box below, comment on asset allocation as disclosed in Schedule 5e. This comment must include information on reclassified items in accordance with subclause 2.7.1(2).

Box 8: Commentary on asset allocation in schedule 5e

<u>Approach to asset cost allocation</u>

The accounting-based allocation approach (ABAA) has been applied in accordance with the applicable Input Methodologies determination to allocate not-directly attributable shared asset values between Firstgas' transmission and distribution businesses.

Non-network assets that are not directly attributable have been allocated across all Firstgas regulated businesses based on head count.

These assets comprise:

- Software
- Computer equipment
- Building equipment and assets.

Headcount is considered an appropriate allocator as employee numbers tend to drive the need for building assets, computer and office equipment and software.

Capital Expenditure for the Disclosure Year (Schedule 6a)

11. In the box below, comment on expenditure on assets for the disclosure year, as disclosed in Schedule 6a. This comment must include-

    11.1 a description of the materiality threshold applied to identify material projects and programmes described in Schedule 6a;

    11.2 information on reclassified items in accordance with subclause 2.7.1(2)

Box 9: Explanation of capital expenditure for the disclosure year

A project or programme is considered material if the estimated total project cost is equal to or exceeds $0.5 million

There have been no re-classified items.

Focus for capital expenditure

Our focus continues to be on maintaining and improving the resilience of the gas transmission network and security of supply. At the same time, we continue to expand and upgrade the network to meet customer's needs. We support the Government's desire to transition to a low carbon future and believe that gas networks can help make that happen.

These focus areas are reflected in the work programme that was undertaken this year. Major works include:

- Upgrading the Mokau Compressor Station. This upgrade provides a pressure increase to the transmission system north of Mokau.
- Completing design and construction reviews for the Gilbert Stream realignment project with the main works expected to be completed in 2020.
- Replacing station regulators. This is part of a continuing works programme to replace our fleet of obsolete Grove 80 regulators. This programme of work is expected to complete in 2020.
- In-line-inspection (pigging) of the transmission system. This is an ongoing programme of work. The frequency the individual pipelines are intelligently pigged is driven by our Pipeline Integrity Management Plan. To maintain our certificate of fitness for the network, our pipeline certifier (Lloyds) requires that we conduct the pigging at our specified intervals across all our piggable pipelines.
- Installing a temporary by-pass at Pariroa in Northern Taranaki to address the pipeline defect identified from pigging the Maui pipeline. This workstream was prioritised over other projects to address the pipeline strain caused by land movement and the bypass installation was completed in a planned interruption in December 2018. The second phase of this project to repair the initial pipeline and remove the bypass will occur in 2020.
- Constructing the new Mangorei delivery point to supply a new electricity peaking power station being built near New Plymouth.
- Re-development of the Waiuku delivery point to meet increased demand on the distribution network driven by Gourmet Waiuku, a capsicum growing operation in the Waiuku area.

We have also continued to upgrade our IT systems in anticipation of implementing the Gas Transmission Access Code (GTAC) in 2020. The GTAC will be supported by a new IT system from Tieto, a supplier to gas infrastructure markets in 35 countries. The new system, the Transmission Access Commercial Operating System (TACOS), will provide efficiencies in managing the commercial operations of the transmission pipeline system through automated nominations, approvals and scheduling systems.

Further detail on our expenditure for this period, and our future work programme is available in our 2018 Asset Management Plan (AMP) and 2019 AMP update published on the Firstgas website here: http://firstgas.co.nz/aboutus/regulatory/transmission/

Operational Expenditure for the Disclosure Year (Schedule 6b)

12. In the box below, comment on operational expenditure for the disclosure year, as disclosed in Schedule 6b. This comment must include-

    12.1 Commentary on assets replaced or renewed with asset replacement and renewal operational expenditure, as reported Schedule 6b(i)

    12.2 Information on reclassified items in accordance with subclause 2.7.1(2)

    12.3 Commentary on any material atypical expenditure included in operational expenditure disclosed in Schedule 6b, a including the value of the expenditure the purpose of the expenditure, and the operational expenditure categories the expenditure relates to.

Box 10: Explanation of operational expenditure for the disclosure year
There was no asset replacement and renewal expenditure this year. There has been no re-classified items in the disclosure year. Business support costs have reduced due to a change in allocation percentage as noted in Box 7. Firstgas has not incurred atypical expenditure in 2019.

Variance between forecast and actual expenditure (Schedule 7)

13. In the box below, comment on variance in actual to forecast expenditure for the disclosure year, as reported in Schedule 7. This comment must include information on reclassified items in accordance with subclause 2.7.1(2).

Box 11: Explanatory comment on variance in actual to forecast expenditure

In 2019 we applied the new related party rules to our information disclosure reporting for the first time. The valuation approach for related party transactions has changed from a prescriptive approach that applied until 2018 to a principles-based approach to establishing value equivalent to an arm's length transaction. The forecast expenditure in the 2018 Asset Management Plan (AMP) for 2019 was based on the prior prescriptive rules.[2] The change in valuation rules has led to an increase in Capex compared to the forecast, and a decrease in Opex compared to forecast for this disclosure period.

Capital expenditure

Overall, our capital works programme was broadly aligned with the Asset Management Plan (AMP) for the period. While total Capex of $52 million is broadly aligned with total expenditure forecast in the AMP for this period of $46 million, there has been some movement in expenditure between categories. The major contributors to the variances are:

- The unplanned remediation and repair of the pipeline defect at Pariroa
- Construction of the Mangorei delivery point and re-establishment of the Waiuku delivery point (not included in the 2018 AMP). These projects were not known with any certainty when the 2018 AMP was completed
- A reduction in expenditure on station upgrades for capacity growth from the amount forecast in the 2018 AMP. Further review and analysis conducted by our engineers determined the upgrades would not be required as early as 2019 but may still occur within this regulatory period
- Lower relocation requests from third parties for the period. We generally have several infrastructure relocation projects in various stages of execution. These projects are driven by requests from third parties who fully fund the relocation costs and the timelines are therefore driven by needs of the customer. Schedules for the projects may change and this is outside of our control
- A provision for decommissioning costs for the Gilbert Stream project

Operational expenditure

Network operating expenditure is $0.2 million (less than 1% above) that forecast for the 2019 disclosure period. While the new valuation approach for related party transactions has reduced network Opex, this reduction has been offset by increased compressor fuel costs in 2019, with wholesale gas prices increasing since the publication of the 2018 AMP.

Non-network operating expenditure is $2.9 million (13%) below that forecast for the 2019 disclosure period. This reduction in costs compared to forecast is largely due to:

- The new valuation approach for related party Opex reducing system operations and network support costs
- Business support costs benefitting from the expansion of the Firstgas Group, which was not included in the AMP forecast. In 2019, our related party GSNZ purchased Rockgas and Flexgas. Rockgas is a major supplier of LPG services and Flexgas owns and operates the gas storage facility at Ahuroa. Firstgas provides business support services to GSNZ. Costs

[2] In 2018 Firstgas applied clause 2.3.6(2)(b) of the [Fast Track] Gas Transmission Services Information Disclosure Amendments Determination (No1 2017) when disclosing related party Opex transactions. Opex services supplied by GSNZ included a mark-up on direct costs of 17%. In 2018 Firstgas applied clause 2.2.11(5)(e) of the Gas Transmission Services Input Methodologies Amendments Determination 2016 to value Capex services provided by GSNZ. Capex was valued at its inventory value on the day before acquisition by Firstgas determined in accordance with GAAP.

associated with this service are excluded from the regulated accounts, reducing the costs allocated to Firstgas' transmission and distribution businesses

- A reduction in business support costs due to a correction in allocation as discussed in box 7 above.

Information relating to revenues and quantities for the disclosure year

14. In the box below, please explain reasons for any material differences between target revenue disclosed before the start of the pricing year in accordance with clause 2.4.1 and subclause 2.4.3(3), and total billed line charge revenue for the disclosure year as disclosed in Schedule 8.

Box 12: Explanatory comment relating to revenue for the disclosure year

Our actual revenue of $127.68 million is closely aligned with our target (forecast) revenue of $127.89 million for the 2019 disclosure period.

Target revenue is forecast when setting prices for the period. Firstgas forecasts quantities, pass-through and recoverable costs for the year. Any over or under recovery of revenue due to variances to forecast is included in prices via a wash-up in a future period.

Further information on how we forecast target revenue is available from our transmission pricing methodology and ex-ante price setting compliance statements. These documents are available on the Firstgas website at https://firstgas.co.nz/about-us/regulatory/transmission/

KPMG

15. If prices or price category codes (as applicable) have been changed in a disclosure year, please explain in the box below the effect of this on the allocation of quantities and revenues between connection types or contract types (as applicable) disclosed in Schedule 9d(ii) and Schedule 8.

Box 13: Explanatory comment relating to changed prices or price category codes

There have been no changes to price category codes. However, prices were changed on 1 October 2018, in line with the price path calculation specified in the *Default Price-Quality Path Determination for transmission services*, *2017* – 2022.

The change of price does not affect the allocation of quantities between connection or contract types as disclosed in Schedule 8 and Schedule 9d(ii).

For the 2019 disclosure period we have continued to operate under the Maui Pipeline Operating Code (MPOC) and the Vector Transmission Code (VTC) for the Maui and Non-Maui pipelines respectively.

Network Reliability for the Disclosure Year (Schedule 10a)

16. In the box below, comment on network reliability for the disclosure year, as disclosed in Schedule 10a.

Box 14: Commentary on network reliability for the disclosure year

Incidents and interruptions

A total of 342 incidents were recorded on the gas transmission system during the 2019 disclosure period. Most of the incidents in this disclosure period relate to near miss events, station equipment failures, natural gas odour reported in vicinity of pipelines and unauthorised work over the pipeline.

An interruption is a subset of incidents and occurs when gas supply to a consumer stops for at least one minute. There was one planned interruption in this disclosure period. In December 2018, Firstgas installed a bypass pipeline to address a defect in the Maui pipeline at Pariroa in Northern Taranaki. To safely install the bypass, we closed off part of the Maui pipeline for approximately 30 hours. Firstgas worked with our customers during the lead up to the planned outage in order to minimise the effect of constrained gas availability during the outage period. Several customers elected to stop taking gas for the outage period.

One unplanned interruption occurred at the Ammonia Urea Delivery Point in South Taranaki resulting in a loss of supply at the Ammonia Urea Plant for 1.5 hours in December 2018. This interruption occurred when an Emergency Shutdown occurred at the Kapuni Gas Treatment Plant and cut off supply. This proved to be a false alarm and supply was quickly restored.

Curtailments

There were 44 curtailment or interruption events recorded in the 2019 disclosure period. 43 events were curtailments and one event was an unplanned interruption.

26 were curtailments caused by third parties, a 41% reduction in curtailments from 2018. Firstgas has no control over these curtailments and their number is affected by the number of production station outages, or mis-match between nominated and actual gas flows by system users.

One curtailment was caused by equipment failure. A compressor failure on the Maui line in August 2019 resulted in high pressure on the network and a curtailment placed on producers for a short period.

The remaining 16 were curtailments of nominations in line with established contracts. The number of curtailments is in line with previous years. In some instances, customers on the Non-Maui transmission system may nominate for additional supply above the guaranteed contract amounts based on the pipeline capacity. However, the ability of a customer to take additional gas is dependent on other users, and their contract arrangements allow for curtailment when the additional gas is unavailable. Individual contracts may also permit gas supply to be curtailed in the event a power interruption affects compressor station availability. Curtailment provisions and procedures for the Maui network are described in section 15 of the Maui Pipeline Operating Code (MPOC).[3]

Compressor stations and performance

In Schedules 9a and 9b we have disclosed 20 compressors situated at 9 compressor stations. In Schedule 10a we have reported operating data for 20 compressors at 8 stations. The reason for the difference is that Schedules 9a and 9b account for all stations owned by Firstgas, whereas Schedule 10 accounts for all stations and compressors currently operational.

The number of instances when a compressor was required but unavailable for service has decreased in this disclosure period (from 55 instances in 2018 to 36 in 2019). The cause of this decrease is primarily due to the Mokau compressors becoming more reliable following recent project works. The availability of the Henderson compressors when required continues to be affected by the availability of

[3] The MPOC is available on the First Gas website: https://firstgas.co.nz/wp-content/uploads/Maui-Pipeline-Operating-Code-4-Jan-2018-1.pdf

electrical supply. If the electrical supply fails, then the compressors may be unavailable when required. There was a small increase in the unavailability of these compressors this year due to electrical supply issues in the geographical area of the compressor station.

Firstgas is considering options to provide a back-up electricity supply in the event of an interruption on the electricity network, although customer contracts make allowance for provisioning of gas in the event of electrical supply failure at this station.

Emergency events

There was one emergency event during this disclosure period. During a routine excavation of pipeline near Waikanae, some damage to the pipeline was found. Initially this was believed to be serious and potentially affecting the integrity of the pipeline.

Pressure was reduced in the pipeline while Firstgas personnel investigated. Further review and tests confirmed there were no issues to pipeline integrity and pipeline pressure was returned to normal

The event was immediately reported to the Firstgas Control Room by Firstgas personnel who were on site carrying out the excavation work. As Firstgas personnel were on site when the event started, the response time between the notification of the event and personnel on site was zero minutes.

Insurance cover

17. In the box below, provide details of any insurance cover for the assets, including-

    17.1 The GTB's approaches and practices in regard to the insurance of assets, including the level of insurance;

    17.2 In respect of any self-insurance, the level of reserves, details of how reserves are managed and invested, and details of any reinsurance.

Box 15: Explanation of insurance cover

Insurance cover is in place for all assets in the gas transmission system, including policies for material damage, business interruption and contract works insurance.

Insurance costs are allocated to the Transmission business based on the businesses share of total RAB forecasts.

Amendments to previously disclosed information

18. In the box below, provide information about amendments to previously disclosed information disclosed in accordance with clause 2.12.1 in the last 7 years, including:

    18.1 a description of each error; and

    18.2 for each error, reference to the web address where the disclosure made in accordance with clause 2.12.1 is publicly disclosed.

Box 16: Disclosure of amendment to previously disclosed information

No amendments have been made to previously disclosed information.

Company Name	First Gas Limited (Transmission)
For Year Ended	30 September 2019

Schedule 15: Voluntary Explanatory Notes

(In this Schedule, clause references are to the Gas Transmission Information Disclosure Determination 2012 – as amended and consolidated 3 April 2018.)

1. This schedule enables GTBs to provide, should they wish to-

    1.1 additional explanatory comment to reports prepared in accordance with clauses 2.3.1, 2.4.20, 2.5.1, and 2.5.2;

    1.2 information on any substantial changes to information disclosed in relation to a prior disclosure year, as a result of final wash-ups.

2. Information in this schedule is not part of the audited disclosure information, and so is not subject to the assurance requirements specified in section 2.8.

3. Provide additional explanatory comment in the box below.

Box 1: Voluntary explanatory comment on disclosed information

Exemptions

From 2018, Firstgas has been completing a single disclosure for the Maui and Non-Maui transmission networks. To facilitate the merged reporting, in 2019 Firstgas received two exemptions for reporting historic information. These exemptions are consistent with those applied in the 2018 disclosures:

- **Schedule 2: Exemption from reporting ROI for the CY-2 periods**.

  In CY-2 (2017) our two transmission businesses were aligning to a September year end. They had different disclosure periods, with the Non-Maui disclosure covering a 15-month period and the Maui disclosure covering a nine-month period. Merging the data would be difficult and not provide a reliable trend.

  Tables 1 provides the 2017 disclosed results for the two transmission systems.

Table 1: 2017 disclosure results for the Maui and Non-Maui transmission system

ROI	Maui (CY-2)[4]	Non-Maui (CY-2)[5]
ROI-comparable to a post-tax WACC	7.47%	7.09%
ROI-comparable to a vanilla WACC	8.02%	7.63%

- **Schedule 4: Historical RAB roll-forward is summed from the previously disclosed results**.

  Section 4(i) requires that Firstgas rolls forward the Regulated Asset Base (RAB) on an annual basis from 30 September 2014. However, from 2015 – 2016 the two separate businesses had different year ends and neither of them were September.

  For the historic roll-forward of RAB, we have added the annual disclosed results together. No adjustment has been made for the different year ends (2015 – 2016) or the different disclosure period in 2017.

Separate schedules for demand

In 2019, Firstgas has disclosed separate demand schedules (Schedule 9d) for the Maui and Non-Maui systems, and a third schedule for the full gas transmission business (GTB). This is the first disclosure that includes a Schedule 9d disclosure for the full GTB.

The Maui and Non-Maui transmission systems operated under separate access codes for the 2019 disclosure period – the Maui Pipeline Operating Code (MPOC) and Vector Transmission Code (VTC). Whilst disclosing separate schedules for demand provides greater transparency, it does not provide the amalgamated amount of gas conveyed for the single transmission business. Quantities of gas are transferred between the systems under the access codes, therefore adding the demand quantities together is not accurate.

In completing the 2019 information disclosure, Firstgas has continued to provide information on the separate systems and has included a third version of Schedule 9d reflecting the amalgamated demand across the entire transmission business. The amalgamated schedule for the GTB removes the quantities of gas transferred between the systems under the separate access codes. The ratios in schedule 1 where the quantity of gas delivered (TJs) is used, refers to the TJs disclosed in the amalgamated GTB schedule.

Related party transactions

The 2019 disclosure is the first disclosure under the recently amended Information Disclosure Determination. Firstgas works closely with other companies in the Firstgas Group. As required under the new disclosure requirements, the following pages outline Firstgas' interactions and relationships with its related parties for the 2019 disclosure year.

[4] CY-2 for the Maui network refers to the period 1 January 2017 to 30 September 2017
[5] CY-2 for the Non-Maui network refers to the period 1 July 2016 to 30 September 2017

REGULATORY DISCLOSURE

Gas transmission services: Information disclosure for related parties

For the year ended 30 September 2019

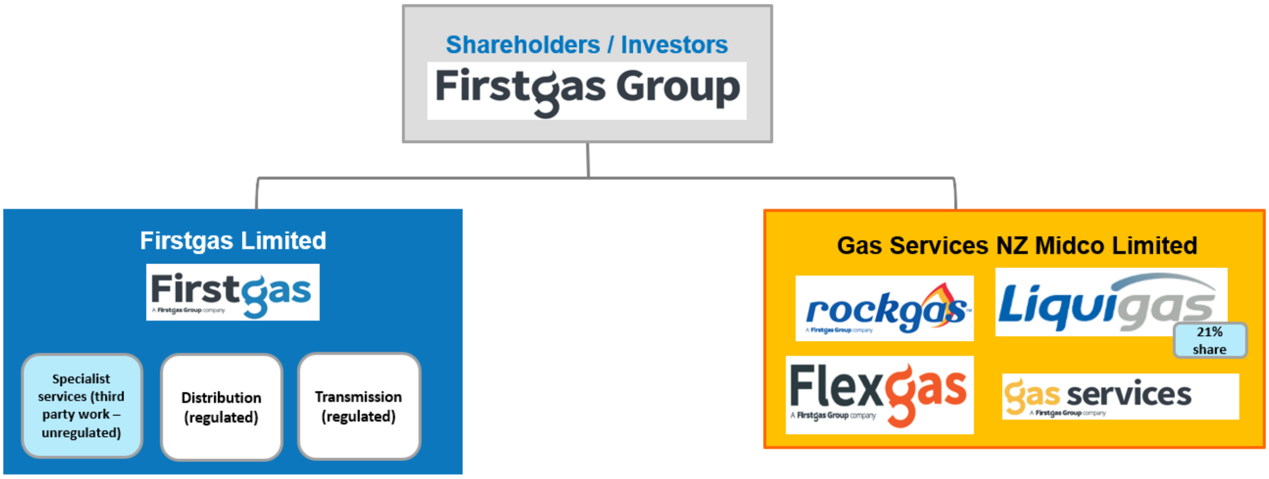
First Gas Limited
March 2020

Introduction

First Gas Limited (Firstgas) operates 2,500 kilometres of gas transmission pipelines, and more than 4,700 kilometres of gas distribution pipelines across the North Island. These gas infrastructure assets transport gas from Taranaki to major industrial gas users, electricity generators, businesses and homes, and transport around 20 percent of New Zealand's primary energy supply.

First Gas Limited is part of the wider Firstgas Group. As illustrated in Figure 1, the Firstgas Group also owns Gas Services, Rockgas and Flexgas. Gas Services provides operations and maintenance contracting services to a range of pipeline owners, including Firstgas. Flexgas owns and operates New Zealand's only open-access underground gas storage facility at Ahuroa. Rockgas has over 80 years' experience providing LPG to approximately 100,000 customers throughout New Zealand.

Figure 1: Structure of the Firstgas Group for disclosure year 2019[1]



For further information on Firstgas, please visit our website www.firstgas.co.nz.

Information disclosure requirements

This disclosure is made on behalf of Firstgas' transmission business. Firstgas (transmission) procures operations and maintenance (O&M) services from its related party, Gas Services New Zealand Midco Limited (GSNZ). The extent of these and other purchases from the wider Firstgas Group means that Firstgas (transmission) procures more than 65% of its operating expenditure (OPEX) and capital expenditure (CAPEX) from a related party.

Firstgas (transmission) is subject to the full disclosure requirements for related parties under the *Gas Transmission Information Disclosure Determination 2012* consolidating all amendments as of 3 April 2018 (ID Determination) issued by the Commerce Commission.

[1] The structure of the Firstgas Group and companies has been truncated to facilitate understanding of the related party relationship.

The related party information disclosed on the following pages has been prepared in accordance with sections 2.3.8, 2.3.10, 2.3.12 and 2.3.13 of the ID Determination. It:

- Provides a summary of related party relationships and transactions
- Provides a summary of the Firstgas Group procurement policy and describes how this policy is applied in practice by Firstgas (transmission)
- Describes policies and procedures that require consumers to purchase goods or services from related parties
- Provides representative examples of how the procurement policy has been applied for related party purchases and how arm's length terms were tested
- Provides a map of anticipated network expenditure and constraints

This disclosure was prepared on 26 March 2020 and where required has been audited as part of the annual information disclosure process.

A copy of the full procurement policy and associated guidelines has been provided to the Commerce Commission as required under section 2.3.11 of the ID Determination.

Further information

For further information regarding this disclosure, please contact:

Karen Collins
Regulatory Policy Manager
First Gas Limited
Karen.Collins@firstgas.co.nz
04 979 5368

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1. Summary of Firstgas' related party relationships and transactions

Clause 2.3.8 of the ID Determination requires that:

> "*if a GTB has had related party transactions involving a procurement from a related party during that disclosure year, the GTB must publicly disclose a diagram or a description that shows the connection between the GTB and the related parties with which it has had related party transactions in the disclosure year, including for each of those related parties-*
>
> *(1) the relationship between the GTB and the related party*
> *(2) the principal activities of the related party*
> *(3) the total annual expenditure incurred by the GTB with the related party.*

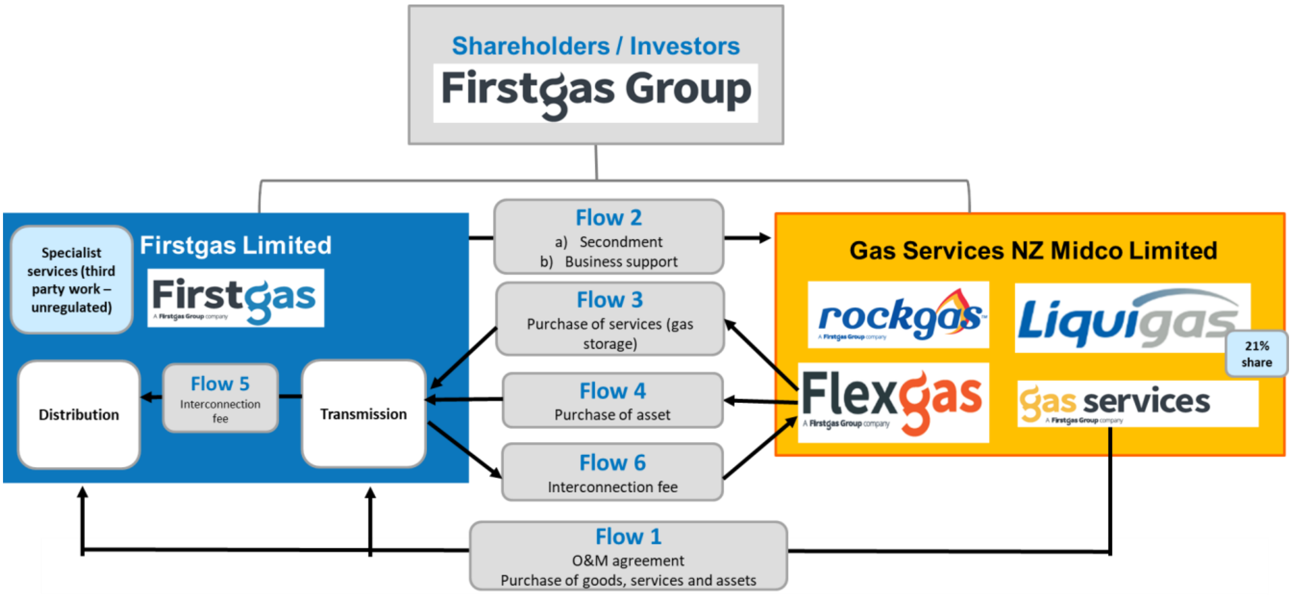
Firstgas (transmission) procures operations and maintenance (O&M) services from its related party, Gas Services New Zealand (Midco) Limited (GSNZ). Further, in 2019:

- Firstgas (transmission) purchased temporary gas storage services from Flexgas
- Firstgas (transmission) purchased an asset from Flexgas
- Firstgas (transmission) supplied interconnection services to Flexgas and Firstgas (distribution).[2]

Firstgas provides unregulated services to GSNZ. In the 2019 disclosure period, Firstgas provided seconded staff and business support services to GSNZ under a Corporate Functions and Secondment Services Agreement (CFSA). The supply of these unregulated services was valued on an arm's length basis.

These transaction flows are illustrated in Figure 2.

Figure 2: Related party transactions in disclosure year 2019



The following table describes the connection between Firstgas (transmission) and its related parties with which it has had transactions with during the 2019 disclosure year. A breakdown of these transactions is also provided in schedule 5b of our Information Disclosure schedules.

[2] The Firstgas transmission business and Firstgas distribution business are considered related parties for regulatory reporting purposes.

Table 1: The nature and extent of related party transactions in disclosure year 2019

Related Party	Nature of relationship	Principle activities of the related party	FY2019 expenditure/revenue between Firstgas (transmission) and its related party
Gas Services (a division of GSNZ) **(Flow 1)**	Firstgas (transmission) and Gas Services have the same ultimate shareholders	Gas Services provides operations and maintenance (O&M) services. Services are provided principally to Firstgas under an O&M agreement between Firstgas and GSNZ.[3] Costs are directly attributable to Firstgas (transmission).	Network CAPEX $38.133 million Non-Network CAPEX $0.949 million Network OPEX $15.818 million System operations OPEX $3.595 million and network support OPEX $5.554 million
GSNZ **(Flow 2)**	Firstgas and GSNZ have the same ultimate shareholders	GSNZ owns and operates Rockgas, Flexgas and Gas Services, which purchases corporate services and employee time from Firstgas under a Corporate Functions and Secondment Services Agreement (the CFSA).	Unregulated income of $24.705 million is included in Schedule 5b for the provision of these services. This unregulated income is included in *total regulatory income* in schedule 5b (and is not included in Schedule 2 or Schedule 3).[4]
Flexgas **(Flow 3, Flow 4)**	Firstgas (transmission) and Flexgas have the same ultimate shareholders	Flexgas provides gas storage facilities to contracted third parties.	Network CAPEX $0.244 million. Asset Replacement and Renewal CAPEX • Includes the purchase of gas storage facilities to provide security of supply during a planned network interruption from Flexgas • The purchase of a cooler asset at the cost incurred by Flexgas.

[3] Whilst the O&M agreement is between First Gas Limited and GSNZ, Gas Services is the party providing the services on behalf of GSNZ.

[4] Costs directly attributable to the provision of the unregulated services are removed from the Firstgas regulated accounts. This reduces the level of business support costs remaining that are subsequently allocated to the regulated transmission and distribution businesses.

Related Party	Nature of relationship	Principle activities of the related party	FY2019 expenditure/revenue between Firstgas (transmission) and its related party
Firstgas (distribution) **(Flow 5)**	Firstgas (transmission) and Firstgas (distribution) are separate regulated businesses both owned by Firstgas	Firstgas (distribution) provides gas distribution services across the central North Island.	Other income received of $0.102 million for interconnection fees. Firstgas (distribution) connects to the gas transmission network.
Flexgas **(Flow 6)**	Firstgas (transmission) and Flexgas have the same ultimate shareholders	Flexgas provides gas storage facilities to contracted third parties.	Other income received of $0.013 million for interconnection fees. Flexgas' gas storage facility at Ahuroa connects to the gas transmission network.

Gas Services (Midco) New Zealand Limited

Gas Services (Midco) New Zealand Limited (GSNZ) and Firstgas are part of the wider Firstgas Group and have the same ultimate shareholders. GSNZ owns Gas Services, a contracting company providing operations and maintenance services. GSNZ also owns Flexgas, which operates the gas storage facility at Ahuroa, and Rockgas.

In the 2019 disclosure year, GSNZ provided 75% of the Firstgas (transmission) total expenditure on assets and 60% of all Operating Expenditure (Opex) under an Operations and Maintenance agreement (O&M agreement).

Services provided under the O&M agreement include:

- Management of the gas transmission business operations
- Asset management
- Health, Safety and environment management
- Land and planning management
- Design and engineering services
- Scheduling and completing field works
- Incident and emergency response
- Gas control services
- Provision of non-network assets such as plant and equipment (if required).

Firstgas provides business support services (executive management, finance, HR, IT and procurement services) to GSNZ under the CFSA. With the addition of Rockgas and Flexgas to the Firstgas Group in the 2019 disclosure year, the scope of business support services provided to GSNZ has increased.

The O&M agreement and CFSA both expire on 30 September 2022.

Operations and Maintenance (O&M) Agreement

Firstgas incurs almost all of it network capital expenditure, most of its network OPEX, and all its system operations and network support expenditure from GSNZ. These services are provided by Gas Services in accordance with the terms and conditions of the O&M agreement between Firstgas and GSNZ.

While Firstgas owns the network and non-network assets and provides the gas transmission services across the North Island, under the O&M agreement GSNZ manages the operation of the assets, carries out an agreed Capital and Maintenance works programme, responds to incidents and emergencies and provides system operations and network support services to Firstgas.

When Firstgas' shareholders purchased the gas transmission and distribution businesses in 2016, they wanted to blend specific gas pipeline expertise within the company with fresh thinking from outside. The goal was to ensure a continuing development of best practice, efficiency improvements and cost control. A Joint Venture (JV) structure was adopted between GSNZ[5] and Australian gas pipeline services provider OSD (the Gas Services JV) to provide O&M services to Firstgas under an O&M agreement.

The O&M agreement was negotiated an arms' length basis with an independent party (OSD). While the Gas Services JV was still considered a related party (due to the involvement of GSNZ), the role of OSD as operator of the Gas Services JV overcame many of the usual concerns about the discipline on related parties to negotiate balanced arrangements.

The O&M agreement has allowed Firstgas to access a broader range of experience and capability for operating our gas pipeline businesses, drawing on the expertise of staff within Firstgas with the international expertise of OSD (particularly in adopting best practices from Australia).

In 2018, GSNZ released OSD from the joint venture. This decision was made to reflect that Firstgas had emerged from the transition phase and significant improvements had been made in project delivery and putting robust processes in place. While this brought an end to the involvement of an independent party in delivering O&M services for Firstgas, the O&M service contract has remained in place (incorporating amendments to reflect the release of OSD).

Costs incurred under the O&M agreement are directly attributable to either the gas transmission or the gas distribution business.

[5] Gas Services New Zealand Limited is the owner of Gas Services New Zealand (Midco) Limited

2. Summary of Firstgas' procurement policy

Clause 2.3.10 of the ID Determination requires that:

> "*if a GTB has had related party transactions involving a procurement from a related party during that disclosure year, the GTB must publicly disclose:*
>
> *(1) a summary of its current policy in respect of the procurement of assets or goods or services from any related party; or*
>
> *(2) a summary of alternative documentation which is equivalent to a procurement policy in respect of the procurement of assets or goods or services from any related party.*

Pursuant to clause 2.3.10(2), this section provides a summary of our procurement policy and guidelines.[6]

Firstgas operates 2,500 kilometres of gas transmission pipelines (including the Maui pipeline), and more than 4,700 kilometres of gas distribution pipelines across the North Island. We require specialist personnel, contractors and materials to operate and manage this extensive network in a safe and reliable manner.

To maximise our cost efficiency while managing our networks, the Firstgas Group has an overarching procurement policy. This policy requires we "*source, engage and manage suppliers in a professional and transparent manner within a consistent framework to achieve best value for Firstgas [Group]."* This Policy provides guiding principles for all procurement by, or on behalf of Firstgas Group.[7]

In this section, we summarise the procurement principles that underpin the procurement policy and the procurement methods employed by the Firstgas Group. Procurement of goods and services made by GSNZ under the O&M agreement must abide by the Firstgas Group procurement policy.

Procurement principles

Anyone procuring goods and services for Firstgas must be familiar with and apply the following procurement principles:

• Health & Safety First	The health and safety of staff and suppliers must be taken into consideration when procuring goods and/or services.
• Open and Effective Competition	Firstgas purchasing must be conducted in a manner that encourages competition amongst suppliers.
• Get the best for Firstgas	Making quality decisions that consider the life of the contract (or whole-of-life cost) not just selecting the lowest price.
• Play by the Rules	Building trust and relationships with suppliers and keeping a reputation as a fair buyer.

These principles all contribute to producing efficient and effective infrastructure for the long-term benefit of our business and our customers. While we seek competitive outcomes, we believe consumers equally value least-cost over the lifetime of the asset and Firstgas always places the health and safety of our employees and contractors above other criteria. For example, we may not select the lowest price quote or tender if the supplier cannot meet our safety and quality standards or if the life-cycle cost of the asset is higher than other options.

[6] Document 08843 Firstgas Group procurement policy and document 09410 Firstgas Group procurement guidelines

[7] The Firstgas Group referred to in the Procurement policy includes First Gas Limited and those companies fully owned by GSNZ.

The competitive process

Whilst the Firstgas Group encourages competition amongst suppliers through our procurement process, to some extent this is governed by the value of the goods/services to be supplied and the availability of suppliers to meet our needs. This includes being suitably qualified to work on the gas networks.

Low cost purchases will be supported, at a minimum, with quotations from several suppliers[8]. High value works will be supported by an open competitive process such as a request for proposal or invitation to tender where possible. This process is undertaken by GSNZ to meet the requirements under its O&M agreement with Firstgas.

The Policy recognises that in some instances sole sourcing may be the only procurement option available. “Sole sourcing” refers to where a competitive procurement process, such as a tender or quote requests, cannot be used or there would be no benefit from going through a competitive process. This will generally be because only one supplier, to the best of our knowledge and belief, can deliver the required good(s) and/or service(s). In our relatively specialised field, this is not an uncommon situation. For example, in the 2019 disclosure period, Firstgas (transmission) purchased gas storage at the Ahuroa gas storage facility from Flexgas. The Ahuroa facility is the only storage facility for natural gas in the North Island.

Other typical reasons for selecting sole sourcing include:

- **Availability / workload within pool of approved suppliers**: Particularly with professional services where we have already negotiated rates and have a pool of 3 – 5 suppliers. In order to ensure that work is allocated to avoid resource conflict, it may be acceptable to sole source smaller projects
- **Exclusivity:** Where Firstgas is already committed to an exclusive contract for the procurement of such goods or services (for example the O&M Agreement with GSNZ)
- **OEM / Warranty arrangement:** Where sole source is required contractually.

The sole sourcing procurement option requires formal justification and approval in line with delegated authorities.

<u>Monitoring and compliance</u>

The Firstgas Group procurement team is responsible for monitoring compliance with this Policy for Firstgas and reporting any breaches of this Policy to the Executive. The procurement team will undertake reviews of Firstgas’ procurement activity especially around the compliance with this policy and the application of procurement processes. Reviews may include review of the procurement process undertaken by GSNZ acting on the behalf of Firstgas under the O&M agreement.

Failure within the Firstgas Group to comply with the provisions of the procurement policy is a breach of an employee’s Code of Conduct & Performance & Conduct Policy. Any instances of reported non-compliance will be investigated and may lead to disciplinary action.

Firstgas has a whistle blower policy that provides an avenue for employees to raise concerns about misconduct or wrongdoing. Misconduct or wrongdoing includes failure to abide by the procurement policy and the whistle blower policy enables anyone to report identified breaches of the procurement policy.

[8] If the purchase is less than $1000only one quote need be obtained.

3. Application of the procurement policy

Clause 2.3.12 of the ID Determination requires that:

> "*if a GTB has had related party transactions involving a procurement from a related party during that disclosure year, the GTB must publicly disclose-*
>
> *(1) a description of how the GTB applies its current policy for the procurement of assets or goods or services from a related party in practice;*
>
> (2) *a description of any policies or procedures of the GTB that require or have the effect of requiring a consumer to purchase assets or goods or services from a related party that are related to the supply of the gas transmission services;*
>
> *(3) subject to subclause (5), at least one representative example transaction from the disclosure year of how the current policy for the procurement of assets or goods or services from a related party is applied in practice;*
>
> *(4) for each representative example transaction specified in accordance with subclause (3), how and when the GTB last tested the arm's-length terms of those transactions; and*
>
> *(5) separate representative example transactions where the GTB has applied the current policy for the procurement of assets or goods or services from a related party significantly differently between expenditure categories.*

Pursuant to clause 2.3.12 (1), the following section describes how Firstgas (transmission) has applied the Firstgas Group procurement policy in respect of the procurement of goods or services from a related party.

In the 2019 disclosure period, Firstgas (transmission) has procured goods and services from:

- GSNZ under the O&M agreement
- Flexgas under a standard contract for storage services
- Flexgas at cost of the goods and services provided.

Firstgas has contracted GSNZ as the sole provider of operations and maintenance services. GSNZ acts on behalf of Firstgas when project managing and purchasing required goods and services in the course of carrying out its responsibilities under the O&M agreement.

Firstgas has further procured goods and services from Flexgas, as the sole provider of those goods and services.

The section considers the procurement of goods and services under the O&M contract and the purchase of goods and services from Flexgas.

3.1 Purchase of OPEX and CAPEX services from our related party GSNZ

Under the O&M agreement, Firstgas has contracted GSNZ to manage the operational functions, maintain the network assets, implement and feed into the Asset Management Plan (AMP), and provide system operations and network support functions. From time to time, Firstgas may also procure non-network assets from GSNZ. These assets are provided under the service agreement as they relate to the ongoing maintenance of the transmission network or management of the assets on the transmission network. GSNZ acts on behalf of Firstgas when project managing and purchasing required goods and services in the course of carrying out its responsibilities under the O&M agreement.

The procurement policy puts emphasis on making decisions to achieve the best outcomes for Firstgas and its customers whilst keeping our staff, contractors and assets free from harm. We manage long-life assets and require specialist personnel, contractors and materials to operate and manage this extensive network in a safe and reliable manner.

As discussed above, our first step in ensuring we are achieving the best for our customers and businesses was to enter into an Operations and Maintenance (O&M) agreement.

The O&M agreement, first with the GSNZ Joint Venture and now with GSNZ provides a range of expertise and experience guiding and supporting our transmission business. This expertise and experience is vital in maintaining and expanding the network and also in the planning process both annually and long-term.

Provisions within the O&M agreement align with Firstgas procurement principles to ensure on-going value of the agreement to our customers. These include:

- Planning to ensure O&M works plans align with Firstgas requirements efficiently and in a cost-effective manner. This may include benchmarking of costs to ensure the O&M agreement continues to meet efficiency targets and is compliant with the related party rules for regulated businesses
- Service level agreements including a range of key performance indicators that are linked to payments
- Provisions around meeting stringent safety standards.

The O&M agreement has been provided to independent appraisers and to our auditors to confirm the terms are consistent with an arm's length transaction and to facilitate the audit of this section of our information disclosure.

To give an idea of how the O&M agreement works in practice, we consider the annual process:

- Planning
- Challenge and benchmarking process
- Execution of works including monitoring and reporting
- Completion of works

Planning

Planning is an important part of the procurement process. It determines the anticipated work plan for the year and highlights resource requirements, whether they be personnel or materials.

Each year Firstgas management work with the Chief Operations Officer (COO) of GSNZ to develop and update the long-term Asset Management Plan (AMP)[9]. The AMP provides the asset management framework for Firstgas' transmission network and includes guidance on the expected annual works plan. The AMP is reviewed and approved by Firstgas management and Board of Directors.

The AMP is part of the long-term planning for the transmission network. It supports the Firstgas business plan and the operations and maintenance (O&M) plan. GSNZ provides Firstgas with the long-term O&M plan to meet the network development and maintenance section of the business plan. The O&M plan includes indicative resourcing and costings and works plans. This must be agreed by both parties and the O&M agreement outlines the resolution process.

The COO of GSNZ provides a budget to Firstgas to complete the annual works plan as required under the O&M agreement.

[9] Firstgas (transmission) publishes an AMP or AMP update annually. These documents are available from our website https://firstgas.co.nz/about-us/regulatory/transmission/

Challenge and benchmarking process

While GSNZ is a related party of Firstgas, the O&M agreement is a commercial arrangement structured as if two separate legal entities, with different ownership interests, and operating on an arm's length basis. Each party acknowledges that a key objective of Firstgas in appointing GSNZ to deliver the O&M is to ensure value for money and continuous improvement in delivery and value.

In practice, this means that Firstgas may accept in full or challenge any part of the budget provided by GSNZ. Firstgas may subject all or part of the annual budget to a benchmarking procedure undertaken by an independent expert.[10]

The Benchmarker will:

- Compare the O&M Services and Service Fee, including the component parts of the Service Fee, with the services, charges and margins being obtained under other similar service contracts in New Zealand and/or good international market services, charges and margins for third parties;
- Assess, in light of this comparison, whether:
  - The scope of the O&M Services being provided is necessary to meet the Service Standards; and
  - The Service Fee, including the component parts of the Service Fee, is market competitive and otherwise meets the Information Disclosure Determination requirements.

As part of preparing our related party disclosures for 2019, Firstgas engaged an independent expert to complete a benchmarking exercise for our gas transmission business. Benchmarking confirmed that the costs charged by GSNZ were consistent with similar organisations in Australia.

Execution of works including monitoring and reporting

Once the O&M budget has been agreed, GSNZ undertake responsibility to complete the works to the service level required. Significant large-scale projects are managed by the GSNZ projects team. Projects of this nature often require additional resources and expertise. GSNZ will source services and materials as required and in line with the Firstgas procurement policy.

The COO of GSNZ will report monthly to Firstgas on progress against the works plan and budget for services provided under the O&M agreement. From time to time works may be required by Firstgas that are outside of the budgeted plan. Any change to the annual work plan is negotiated between GSNZ and Firstgas. Any additional remedial works GSNZ recommend are either included in the current year's workplan, with agreement from Firstgas or included in the annual works budget for following years.

The costs GSNZ incurs undertaking the responsibilities of the O&M agreement are charged to Firstgas monthly and include a commercial mark up to enable a modest commercial profit. Benchmarking undertaken in 2019 has confirmed the mark-up applied is aligned with those of providers of similar services within Australasia, the United Kingdom and United States.

Completion of works

The completion of works is managed within GSNZ. GSNZ will process any project close out documentation and update maintenance records within Firstgas information systems. If the project was a CAPEX project, Firstgas will capitalise the project once GSNZ notifies that the assets have been commissioned.

[10] FY2019 was the third year of the O&M contract. In FY2019, as part of validating the charges from GSNZ to Firstgas were no more than would be charged on an arm's length basis, Firstgas undertook a benchmarking exercise of total costs and the margin applied by GSNZ under the O&M contract.

3.2 Purchase of goods and services from Flexgas

In 2019, Firstgas (transmission) purchased gas storage services and a cooler asset from Flexgas. In both instances, these were direct purchases from Flexgas. Flexgas was considered the sole available supplier of both the service and asset under our procurement process.

Purchase of gas storage services

Firstgas (transmission) purchased gas storage services from Flexgas during the Pariroa temporary bypass installation in December 2018. The Pariroa pipeline bypass project was a priority project for Firstgas, responding to the discovery of a crease in the Maui transmission pipeline. To prioritise long-term pipeline security, Firstgas took a collaborative approach with stakeholders and installed a temporary bypass in December 2018 during a planned two-day outage. During this period, consumers operated from linepack and supply was curtailed. The purchase of gas storage services meant we could mitigate the risk of supply interruptions in the event the outage tool longer than expected.

The purchase of the gas storage services was completed in line with the sole supplier provisions in our procurement policy. Our procurement policy allows for the use of a sole supplier if there is only a single supplier able to provide the goods or services. Flexgas is the only business in the North Island that provides gas storage facilities. It has the capacity for injection and withdrawal that was required by First Gas (transmission) for the works and is connected to First Gas' transmission network.

Flexgas provided the storage facilities to Firstgas on the same basis as it charges third parties accessing the storage facilities.

Purchase of a cooler unit

In July 2019, Firstgas (transmission) purchased a redundant cooler unit from Flexgas. The cooler unit was only partway through its life and has been temporarily installed at the Kapuni Gas Treatment Plant (KGTP) compression facility. Flexgas was the sole supplier available to provide a cooler unit to cover the critical winter period and through to the installation of the new unit later in the year.

Firstgas has security of supply standards that require our specific levels of redundancy at sites and this includes compressor availability. The cooling unit on the KGTP was scheduled for replacement[11] but the earliest the replacement unit could be received and installed was late 2019/early 2020.

A leasing option from a third party to cover the critical winter period and through to the installation of the new asset was considered as a short-term option. This was an expensive option but considered valid if no alternative could be found.

In 2019, Flexgas undertook a major expansion of Ahuroa's surface facilities. The expansion will significantly increase the rate at which gas can be injected for storage or withdrawn for consumption. As part of the project, an assessment of the existing plant at Ahuroa was undertaken and redundant assets were identified. The redundant assets included a wellstream cooler.

Firstgas took the opportunity to purchase the used cooler unit to install at the KGTP compressor site to cover the winter period and through to when the new cooler unit can be installed.

The solution to source from our related party was driven by it providing the goods at the least cost. This meets our procurement principle of getting the best for Firstgas (and its customers). Firstgas transmission purchased the asset at a lower cost than the leasing alternative, and it provides the option to eventually hold this asset as a critical spare that can be used elsewhere on the network if required. Further, having access to

[11] Page 44 of the 2018 AMP discusses the need for cooler replacement in greater detail. https://firstgas.co.nz/wp-content/uploads/First-Gas-Gas-Transmission-AMP-2018-Appendices.pdf

this asset has allowed Firstgas to maintain security of supply over the critical winter period. Our customers have told us that security of supply is an important issue for them.

4. Policies that require consumers to purchase goods or services from Firstgas' related parties

Section 2.3.12 of the ID Determination requires that:

> *within 6 months after the end of each disclosure year, if a GTB has had related party transactions involving a procurement from a related party during that disclosure year, the GTB must publicly disclose-*
>
> *(2) a description of any policies or procedures of the GTB that require or have the effect of requiring a consumer to purchase assets or goods or services from a related party that are related to the supply of the gas transmission services;*

Firstgas operates 2,500 kilometres of gas transmission pipelines (including the Maui pipeline), and more than 4,700 kilometres of gas distribution pipelines across the North Island.

To work on or near Firstgas' transmission network, a contractor must be deemed competent and authorised to complete the work undertaken to meet operating standard requirements. This is very specialised work and we require any work up to the delivery point on the transmission network be completed by Gas Services (a part of GSNZ).

Customers that contribute to the cost of new developments or upgrades on our network are therefore required to use Gas Services to complete the works. Our capital contribution policy is available at https://firstgas.co.nz/about-us/regulatory/transmission/.

5. Representative examples of how the procurement policy is applied

5.1 Regulatory requirements

Section 2.3.12 of the ID Determination for our GTB specify that:

> *within 6 months after the end of each **disclosure year**, if a **GTB** has had **related party transactions** involving a procurement from a **related party** during that **disclosure year**, the **GTB** must **publicly disclose**-*
>
> *(3) subject to subclause (5), at least one representative example transaction from the **disclosure year** of how the current policy for the procurement of assets or goods or services from a **related party** is applied in practice;*
>
> *(4) for each representative example transaction specified in accordance with subclause (3), how and when the **GTB** last tested the arm's-length terms of those transactions; and*
>
> *(5) separate representative example transactions where the **GTB** has applied the current policy for the procurement of assets or goods or services from a **related party** significantly differently between expenditure categories.*

5.2 Representative examples

Firstgas sources a range of services from GSNZ to manage the network operations and complete the work plan. GSNZ applies the Firstgas Group procurement policy for all expenditure under the O&M agreement. This is summarised in the table below followed by a separate representative example of the procurement process.

Procurement from Flexgas has also been completed under the Firstgas Group procurement policy but a different approach to testing the arm's length terms and is included separately in Table 2.

All agreements, methodologies and models, and reports from external parties have been provided to our auditors and independent appraiser to facilitate their review of our related party transactions and this disclosure.

Table 2: Representative example transactions of costs in Schedule 5b

Expenditure category	Representative example	Procurement method	How and when were the arm's length terms last tested
All network CAPEX categories All network OPEX categories excluding the purchase of fuel gas System operations and network support Non-network assets	Network OPEX and CAPEX and system operations and network support across the network. We provide examples below of procurement undertaken by GSNZ on our behalf under the O&M agreement	Direct procurement from a 'sole supplier' under the existing O&M agreement.	The arm's length terms were tested as part of a benchmarking process that was undertaken during the 2019 disclosure year. Firstgas engaged an independent expert to benchmark: • The margins applied to the costs of O&M services provided by Gas Services to Firstgas • Total service costs against comparable businesses. The margin benchmarking compared services supplied by GSNZ to companies providing similar services across the United Kingdom, United States, Australia and New Zealand. Total costs were compared to similar companies in Australia. Benchmarking was undertaken with the permission of GSNZ. Benchmarking is allowed for under the O&M agreement. From time to time Firstgas will procure non-network assets from GSNZ. Such assets will relate to the ongoing maintenance and management of the network. They are procured under the terms of the O&M agreement. Terms of the O&M agreement were provided to the independent appraiser and our auditors as part of their review of the related party valuation requirements.
Asset replacement and renewal CAPEX	Purchase of a used cooler unit	Direct procurement from a 'sole supplier.'	The purchase was at the cost incurred by Flexgas. The cost is assessed to be the equivalent of an arm's length transaction under clause 2.2.11(6) of the *Gas Transmission Services Input Methodologies.* The value must be: • Fair and reasonable to the GTB • Substantially the same as that cost that has been incurred or would be incurred by the related party in providing the same type of asset to third parties. External and internal experts determined these conditions were met prior to purchase of the asset by Firstgas (transmission).
Asset replacement and renewal CAPEX	Purchase of gas storage facilities	Direct procurement from a 'sole supplier.'	Firstgas used comparable pricing to test the arm's length terms in November 2018. The fees charged by Flexgas were on the same basis as those charged to other unrelated users of the storage facilities receiving the same service.

5.3 Examples of procurement undertaken by GSNZ on our behalf

Firstgas procures a range of services from GSNZ. These services may have different characteristics and involve different procurement choices within the policy to suit the work undertaken. The process will remain consistent with the project management and reporting requirements within GSNZ and with monthly reporting against the budget and works plan provided to the Firstgas executive team. The following examples of projects or works undertaken by GSNZ for Firstgas illustrates the procurement process.

Major construction projects

All projects are managed by GSNZ. The project delivery manager is responsible for delivering project work from the project approval and front-end engineering design (FEED) through to the final delivered and commissioned project.

GSNZ will develop the initial FEED including the scope and expected cost of the project for approval by the Chief Operating Officer (COO). Projects outside of the budget or with significant cost may require further approval from Firstgas' Chief Executive and Board.

Major projects are often long term in nature, complex in design and may require more extensive procurement requirements. Due to the typically large amount of dedicated and varied resources required, segments of the project may be subcontracted by GSNZ. Larger projects generally are higher in costs and may require more extensive procurement processes under the Firstgas Group procurement policy. For example, there may be several tenders of work for different stages or requirements of the project.

A GSNZ project manager will be assigned to oversee the project, manage the flow of work, work orders and purchase orders used to track expenditure. The project manager will also ensure suppliers are paid in the time frame specified in any procurement contract for materials or services. Progress is reported to GSNZ management. Progress on major projects may be reported to Firstgas at established intervals.

A formal project close-out process occurs on completion of the project.

We have provided two examples to illustrate the delivery of major projects by GSNZ under the O&M contracts:

- The construction of a new delivery point
- The replacement of a pigging launcher and receiver.

Example 1: Construction of a new delivery point at Mangorei Road in Taranaki

The following example is provided to illustrate the procurement process followed by GSNZ for a major project to construct a new delivery point.

Project name:	Mangorei DP Customer Connection
Project date	August 2018 to October 2019 with final close out and gas flow to the customer scheduled to occur in February 2020.
Project or work order number:	MEI39001/P10170
Project expenditure (estimated)	$2.4 million from initial scoping and design through to commissioning of the assets and project close-out.
Project cost type	Customer connection CAPEX
Project managed by:	GSNZ under the O&M agreement
Subcontractors:	Several sub-contractors were required to deliver the project including OSD for the detailed design, Energyworks for the civil works and ENTEC provided instrument and electrical works

New connections are customer driven whether from a direct connection to the transmission network or as a request from a distribution network. Connections to the transmission network tend to be reasonably complex and the project will be over many months and often take more than a year to complete to gas on status if a new delivery point is required. These are major construction projects for us and the Firstgas commercial team will work closely with GSNZ's management, engineering team and project delivery teams to meet the customer's requirements and timing.

Planning:

In 2018 the Firstgas commercial team was approached by a prospective customer. The customer was investigating the feasibility of building a gas fired peaker power station near New Plymouth. If the project were to go ahead, a new dedicated delivery point would be required.

GSNZ assigned engineering personal to develop a scope for the project and estimated costs. GSNZ engineers and the Firstgas commercial team worked with the customer to consider the potential sites for the delivery point and the specifications the customer would require. Funds to develop the scope and a certain amount of customer connection work are included in the business plan each year. GSNZ can complete works up to that level under the terms of the O&M agreement.

While the practical engineering scope, requirements and estimated costs of the project were being developed, the commercial team continued to negotiate the interconnection agreement with the customer. With the agreement on high-level scope and commercial terms, the development of the delivery point moved from the engineering specialists in GSNZ to the project management and delivery group also within GSNZ.

The scope and negotiations for this project meant that it was still being negotiated when we completed the 2018 Asset Management Plan (AMP) and it was not specifically included in the AMP. Connection CAPEX has a high level of uncertainty and the AMP is based on historical costs and any certain connections for the period above historical levels. When the project continued to proceed with growing certainty the project was included within the annual plan with estimated costs.

The project management team were tasked with completing the business case including the scope of the project and more detailed cost development. The business case was subject to review and challenge within the GSNZ operations management team before proceeding to Firstgas management and Board for approval. The Firstgas Board approved the business case with projected costs of $2.5 million.

Completion of works:

With the approval of the business case, the project management team could begin procurement of long-lead items, proceed to the FEED stage and begin the planning required to ensure the delivery point was completed on time. GSNZ outsourced the detailed design work. The detailed design and FEED highlighted the size and complexity of the project. It was determined that GSNZ would need to outsource most of the construction to external suppliers. Procurement of materials not part of the construction contracts was undertaken by GSNZ following the Firstgas Group procurement policy. Multiple quotes were requested for most items with the exception being where there was only a single supplier. A minimum of two quotes was required for large value items.

The external suppliers were selected post a closed tender process. Requests to Quote on the statement of works were made to suppliers that had previously worked with Firstgas and GSNZ and were considered to have the raft of experience and knowledge required to complete the works to the standard required and in the time frame specified.

Once the project began, project costs were paid and tracked within the financial system after being approved by the project manager. Project costs and progress were monitored by the GSNZ project team and reported to the Chief Operating Officer for GSNZ and the Firstgas executive team on a monthly basis.

Market testing:

Most of works for the design and development of the new delivery point were outsourced. Closed tenders were issued for:

- The detailed design
- Civil works (structural and mechanical)
- Instrument and electrical construction work

For each of these separate sections of work, at least three companies were requested to tender. Working with gas pipes and structures is specialised work. The companies that were offered the request to tender were considered to have the raft of experience and knowledge required to complete the scope of works. Most had worked with GSNZ and Firstgas to complete similar projects and were considered to be aligned with our high expectations around safety.

In all instances each company provided a valid quote for the job indicating they could meet the standards and outputs required including the timing specified. The successful company was chosen foremost on their experience on similar projects. A second consideration was the cost quoted and our previous experience of the company keeping to that quoted price.

Outcomes:

The new delivery point was commissioned, on-time and slightly under the original budgeted cost. The estimated costs for the project are $2.4 million compared to the Board approved business case of $2.5 million.

The final close out of the project documentation and invoices will occur in the 2020 disclosure period. Gas will flow to the new connection in early February 2020.

Example 2: Replacement of the lateral receiver at Glenbrook

The following example is provided to illustrate the procurement process followed by GSNZ for a major project to replace a pigging launcher and receiver.

Project name:	Replacement of the lateral launcher and receiver at Glenbrook
Project date	July 2018 to September 2019 with final close out in November 2020.
Project or Work order number:	P10034
Project expenditure (estimated)	$0.438 million from initial scoping and design through to commissioning of the assets and project close-out
Project cost type	Asset replacement and renewal CAPEX
Project managed by:	GSNZ under the O&M agreement
Subcontractors:	FEED and Detailed Design was completed by OSD and Fitzroy Engineering completed the construction of mechanical works

PIG launchers and receivers facilitate the use of In Line Inspection (ILI) survey tools for pipeline condition monitoring and internal cleaning tools. PIG receivers also act to contain and facilitate safe disposal of debris which is removed from the pipeline by PIGs. A PIG is a device which fits into the pipeline and is pushed along by the gas flow. PIGs can be used for internal cleaning (or scraping) of pipelines. Inline inspection (ILI) survey tools can also be equipped with sophisticated sensors to examine the pipeline for corrosion, geometry and spatial positioning.

A PIG launcher or receiver contains the following main equipment items:

- PIG launcher or receiver vessel both of which incorporate quick-release closure doors.
- Kicker lines, valves and pipework to equalise pressure and vent the launcher or receiver.

ILI tooling has become longer over recent years to accommodate the latest technology developments and Firstgas has identified that modifications to PIG receivers and launchers will be required to accommodate the latest tooling. This is an ongoing project and discussed in more detail in our 2018 AMP.[12] In 2019, the upgrade of the pig launching and receiving facilities of the 405 Lateral at Glenbrook was undertaken.

Planning:

The upgrade of the fleet was signalled in the 2018 AMP, as part of the asset replacement and renewal programme for the AMP planning period. The AMP development was led by GSNZ with fleet plans developed within the GSNZ asset management and engineering team. The renewal of the fleet is staged over several years with replacement of the pigging receivers and launchers at each point targeted to occur in the year before the pigging of the line is to occur.

The replacement of the launcher and receivers is treated as a separate project within the overall programme of fleet replacement. Each project will be slightly different in requirements. The Glenbrook project required a new launcher and receiver, and also required the installation of a balance/equalisation line. The installation of this line reduces the risk of trapped pressure during pigging operations.

[12] https://firstgas.co.nz/wp-content/uploads/First-Gas-Gas-Transmission-AMP-2018-Appendices.pdf. Section C

The AMP was subject to challenge from the GSNZ Chief Operating Officer before being presented to the Firstgas executive team. After further review and challenge from the Firstgas team and subsequently the Firstgas Board of Directors, the AMP is approved.

The AMP becomes disaggregated into long-term plans and annual workplans. The annual workplans are presented to Firstgas and once approved, form the work plan and budget for the year. The GSNZ project management team responsible for the upgrade at Glenbrook developed the business case specifying the requirements for the upgrade and the costs. This information was used in developing the 2019 AMP and workplan. The business case and costs of $0.584 million were approved under the GSNZ financial authorities and by the Chief Executive of Firstgas.

Completion of works:

With the approval of the budget, the project management team could proceed to the front end engineering design (FEED) and begin the detailed planning required to ensure the receiving and launching points were completed on time (i.e. prior to being needed for the pigging programme). GSNZ outsourced the FEED work and most of the construction of the mechanical works required. Procurement of materials not part of the construction contracts was undertaken by GSNZ following the Firstgas Group procurement policy. Multiple quotes were requested.

The external suppliers were selected post a closed tender process. Requests to Quote on the statement of works were made to suppliers that had previously worked with Firstgas and GSNZ and were considered to have the raft of experience and knowledge required to complete the works to the standard required and in the time frame specified.

Once the project began, project costs were paid and tracked within the financial system after being approved by the project manager. Project costs and progress were monitored by the GSNZ project team and reported to the Chief Operating Officer for GSNZ and the Firstgas executive team on a monthly basis.

Market testing:

The FEED, detailed design and most of the mechanical construction works for the replacement launcher and receiver points were outsourced. Closed tenders were issued for the:

- FEED
- Construction

A sole source approach was taken when GSNZ selected OSD as the supplier of the detailed design work.

Where a closed tender was used, at least two companies were requested to tender. Working with gas pipes and structures is specialised work. The companies that were offered the request to tender were considered to have the raft of experience and knowledge required to complete the scope of works. Most had worked with GSNZ and Firstgas to complete similar projects and were considered to be aligned with our high expectations around safety.

The request to tender for the FEED work was made to four companies. All four companies provided a valid quote for the job indicating they could meet the standards and outputs required including the timing specified. Prices tendered were similar between the four companies. OSD was selected as they were the lead provider for the Glenbrook delivery point upgrade. It was considered prudent to award the FEED for the launcher and receiver at the Glenbrook site to the same consultant in order to maximise the outcome for the project and reduce the costs.

The request to tender for the construction works was made to two companies. The construction works were extensive and the request to tender was made to mechanical contractors previously approved to work on Firstgas sites. The two companies provided valid tenders and the skills and experience of the companies was similar. In the end, with no other factors to indicate one company was a better choice than the other, the tender was let to Fitzroy Engineering based on a slightly lower tender price.

From time to time GSNZ may choose to proceed with a sole supplier rather than going through a competitive process. For this project, it was considered prudent to use the same company for the FEED and the detailed design as it would provide synergies and lower cost. OSD had completed the FEED within the scheduled time frame and on budget. OSD had provided an estimate of the cost to complete the detailed design which was less than the cost used to set the business case. It was not considered necessary to go through the cost of a competitive process when we were guaranteed the skills and outcomes at a cost lower than planned. A sole source form was completed and approved as required under the procurement policy and guidelines.

Outcomes:

The assets were commissioned on-time and slightly under the original budgeted cost. The next pigging run of this line can now proceed as scheduled. The final close out of the project documentation and invoices will occur in the 2020 disclosure period.

6. Map of anticipated network expenditure and constraints

Section 2.3.13 of the ID Determination requires that:

within 6 months after the end of each disclosure year, where a GTB has had related party transactions involving a procurement from a related party during that disclosure year, the GTB must publicly disclose a map of its gas transmission service territory, which includes-

(1) subject to clause 2.3.15, a brief explanatory description of the 10 largest forecast operational expenditure projects in the AMP planning period and the likely timing, value and location of the projects;

(2) subject to clause 2.3.15[13], a brief explanatory description of the 10 largest forecast capital expenditure projects in the AMP planning period and the likely timing, value and location of the projects;

(3) subject to clause 2.3.16, a brief explanatory description of possible future network or equipment constraints and their location, where the responses to the constraints would involve one of the 10 largest future operational expenditure projects in the AMP planning period; and

(4) subject to clause 2.3.16, a brief explanatory description of possible future network or equipment constraints and their location, where the responses to the constraints would involve one of the 10 largest future capital expenditure projects in the AMP planning period.

Section 2.3.14 further specifies the map must:

(1) identify whether the forecast or possible operational expenditure or capital expenditure is-

(a) already subject to a contract and, if so, whether that contract is with a related party;

(b) forecast to require the supply of assets or goods or services by a related party; or

(c) currently not indicated for supply by a related party; and

(2) be consistent with the AMP information specified in-

(a) clause 14.4.4 of Attachment A on network or equipment constraints; and

(b) clause 14.6 of Attachment A on the network development programme.

The largest OPEX activities and CAPEX projects in the AMP planning period are provided below. Further information is available in the annual AMP or AMP update available on the Firstgas website.[14]

Largest OPEX activities

Figure 3 sets out the location of the largest ten activities in the AMP planning period (FY2020-FY2029), with greater detail in *Table 3*. All network OPEX, except for the purchase of compressor fuel, is forecast to be completed by our related party, Gas Services New Zealand Midco Limited (GSNZ) under the Operations and Management (O&M) agreement between Firstgas and GSNZ. This agreement will be reviewed by

[13] Sections 2.3.15 and 2.3.16 of the ID Determination recognises that there may be less than 10 forecast Opex or Capex projects in the AMP planning period. If this occurs, all projects must be included.

[14] https://firstgas.co.nz/about-us/regulatory/transmission/

September 2022. GSNZ manages a number of third-party contractors to deliver this network OPEX. All activities are network related works, and none are a result of future network or equipment constraints.

Figure 3: Largest Opex projects in the AMP planning period

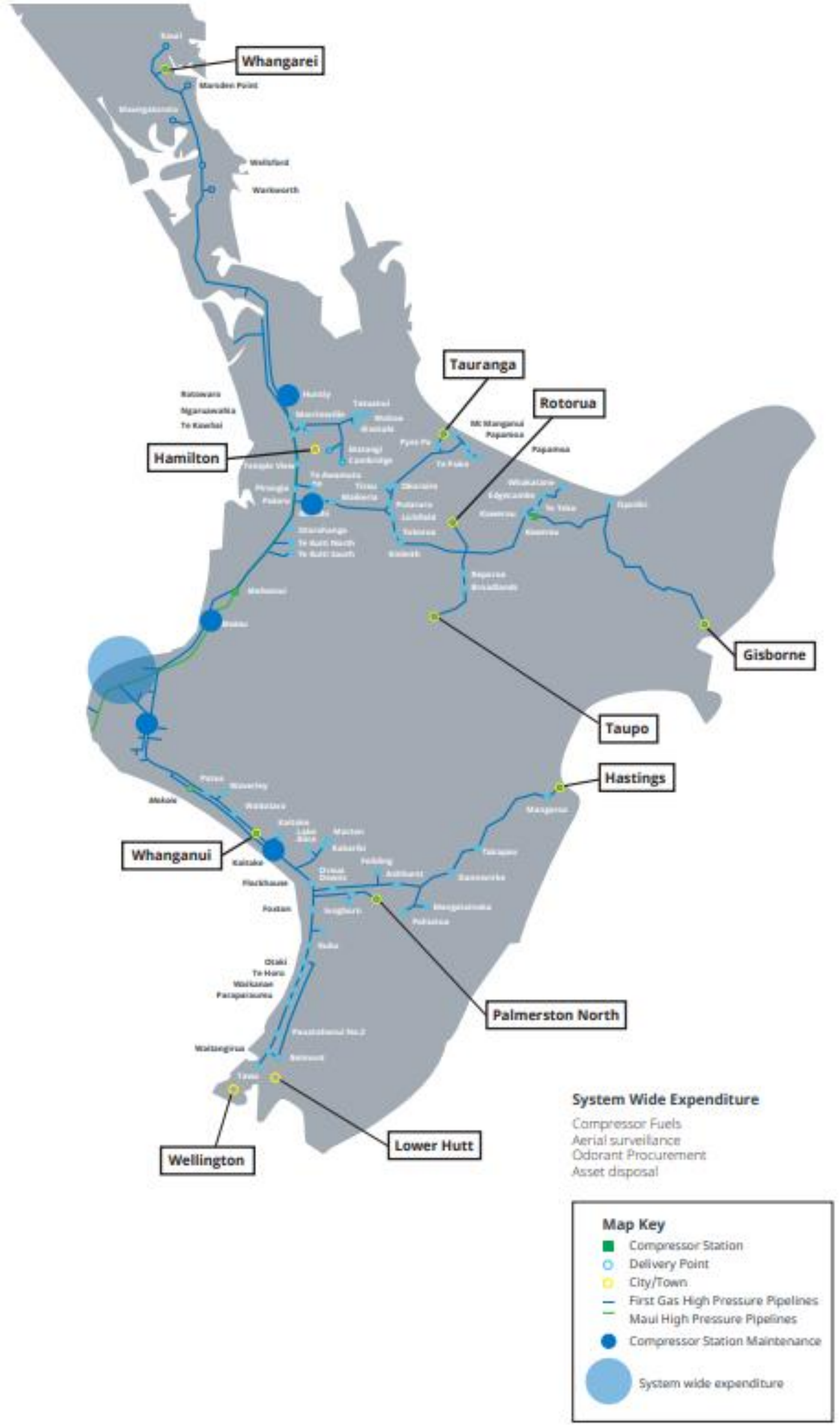


Table 3: Description of the largest Opex projects in the AMP planning period

Activity	Description	Region	Cost (constant $)	Period
Kapuni Gas Treatment Plant maintenance	Ongoing maintenance costs associated with assets at KGTP	Taranaki	$12.0 million	FY2020 – FY2029
Rotowaro Compressor Station maintenance	Ongoing maintenance costs associated with assets onsite	Northern System	$2.9 million	FY2020 – FY2029
Mokau Compressor Station maintenance	Ongoing maintenance costs associated with assets onsite	Taranaki	$3.0 million	FY2020 – FY2029
Kaitoke Compressor Station maintenance	Ongoing maintenance costs associated with assets onsite	Southern system	$2.5 million	FY2020 – FY2029
Pokuru Compressor Station	Ongoing maintenance costs associated with assets onsite	Bay of Plenty system	$1.8 million	FY2020 – FY2029
Bulk odorant purchasing	Procurement of odorant	System wide	$1.8 million	FY2020 – FY2029
Odorant systems maintenance	Ongoing maintenance costs associated with assets onsite	System wide	$3.4 million	FY2020 – FY2029
Aerial surveillance	Helicopter and fixed wing aerial surveillance costs	System wide	$5.8 million	FY2020 – FY2029
Compressor fuel costs	Procurement of fuel to run compressors	Compressor stations	$40.0 million	FY2020 – FY2029
Asset decommissioning	End of lifecycle costs to decommission assets.	System wide	$10.0 million	FY2023 – FY2029

Largest CAPEX projects

The high-level heat map provided in *Figure 4* shows the largest CAPEX projects we have planned for the next ten years (FY2020 to FY2029) with greater detail in Table 4. The identified projects are all network CAPEX. Network CAPEX is forecast to be completed by our related party, Gas Services New Zealand Midco Limited (GSNZ) under an operations and management (O&M) agreement between Firstgas and GSNZ. This O&M agreement was entered into with the change in ownership of the transmission business in 2016 and will be reviewed before September 2022. GSNZ manages a number of third-party contractors to deliver this network CAPEX.

Figure 2 depicts our anticipated significant planned expenditure during the planning period. It is a snapshot in time, with the information we have available, and may change. As we progress into the ten year plan, we will develop the activities according to our processes to develop more accurate forecasts and delivery schedules. Where the identified projects include some reinforcement work, there may be possible future network or equipment constraints.

Figure 4: Largest Capex projects in the AMP planning period

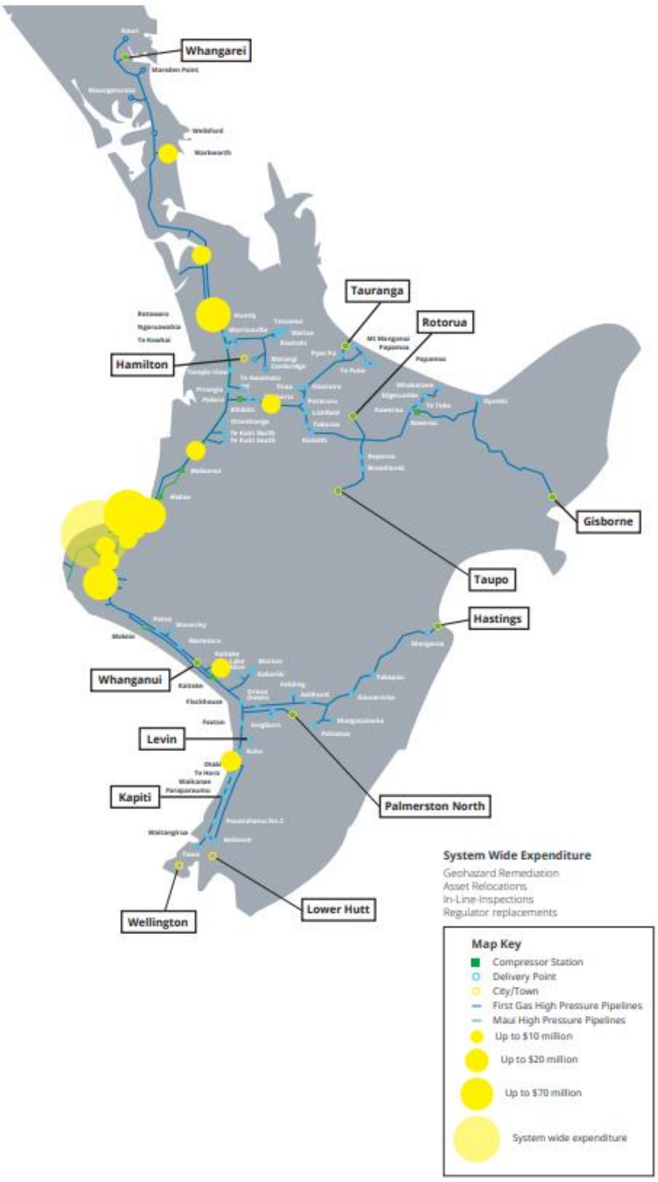


Table 4: Description of the largest Capex projects in the AMP planning period

Project	Description	Region	Cost	Period
Geohazard management	Risk remediation projects resulting from geotechnical hazards	System wide	$57 million	FY2020 – FY2029
Compression strategy	Upgrade and standardisation of ageing fleet of compressors	Strategic compression sites	$20 million	FY2020 – FY2029
Gilbert Stream realignment	Geohazard risk remediation from coastal erosion	North Taranaki	$10 million	FY2018 – FY2020
Heating systems	Replacement of ageing fleet of water bath heaters	System wide	$30 million	FY2020 – FY2029
Warkworth expansion	Increasing pipeline capacity to meets increase in demand	Northern system	$5 million	FY2021 – FY2022
Pipeline inline inspections	Pipeline pigging operations undertaken on piggable lines	System wide	$5 million	FY2020 – FY2029
Scada and communications	Upgrade and replacement of SCADA master server	North Taranaki	$10 million	FY2023 – FY2029
White Cliffs project	Geohazard risk remediation from coastal erosion	North Taranaki	$70 million	FY2020 – FY2025
Pariroa defect	Pipeline defect repair and land stabilisation	North Taranaki	$7.5 million	FY2019 – FY2021
Asset relocations	Relocation of infrastructure	System wide	$20 million	FY2020 – FY2029
Customer connections	Supporting system growth and new customers	System wide	$40 million	FY2020 – FY2029

INFORMATION DISCLOSURE CERTIFICATE FOR GTB

We, Philippa Jane Dunphy and Euan Richard Krogh, being directors of First Gas Limited certify that, having made all reasonable enquiry, to the best of our knowledge:

a) the information, prepared for the purposes of clauses 2.3.1, 2.3.2, 2.4.20, 2.5.1 and 2.7.1 of the *Gas Transmission Information Disclosure Determination 2012* in all material respects complies with that determination;

b) the historical information used in the preparation of Schedules 8, 9a, 9b, 9c, 9d, 10a, 10b and 14 has been properly extracted from the First Gas Limited's accounting and other records sourced from its financial and non-financial systems, and that sufficient appropriate records have been retained; and

c) In respect of information concerning assets, costs and revenues valued or disclosed in accordance with clause 2.3.6 of the *Gas Transmission Information Disclosure Determination 2012* and clauses 2.2.11(1)(g) and 2.2.11(5) of the *Gas Transmission Services Input Methodologies Determination 2012*, we are satisfied that:

    i. the costs and values of assets or goods or services acquired from a related party comply, in all material respects, with clauses 2.3.6(1) and 2.3.6(3) of the *Gas Transmission Information Disclosure Determination 2012* and clauses 2.2.11(1)(g) and 2.2.11(5)(a)-2.2.11(5)(b) of the *Gas Transmission Services Input Methodologies Determination 2012*; and

    ii. the value of assets or goods or services sold or supplied to a related party comply, in all material respects, with clause 2.3.6(2) of the *Gas Transmission Information Disclosure Determination 2012.*

Philippa Jane Dunphy
Director

Euan Richard Krogh
Director

26 March 2020
Date

26 March 2020
Date

Independent Reasonable Assurance Report to the Directors of First Gas Limited and to the New Zealand Commerce Commission

Opinion

Our reasonable assurance opinion has been formed on the basis of the matters outlined in this report.

In our opinion, in all material respects, Schedules 1, 2, 3, 4, 5 (a-g), 6 (a-b), 7, and 14 (boxes 1 – 12) of the First Gas Limited Gas Transmission Information Disclosure Requirements Information Templates (the 'schedules'), have been prepared, in accordance with the Commerce Commission Gas Transmission Information Disclosure Determination 2012 (amended as of 3 April 2018) and the related Reasons Paper and Input Methodologies (together 'the determination') for the year ended 30 September 2019.

In our opinion, in all material respects, First Gas Limited's basis for valuation of related party transactions in the year ended 30 September 2019 has complied, with clause 2.3.6 of the Gas Transmission Information Disclosure Determination 2012 (amended as of 3 April 2018) and clauses 2.2.11(1)(g) and 2.2.11(5) of the related Input Methodologies.

In our opinion, in all material respects, First Gas Limited's additional disclosure information for related parties for the year ended 30 September 2019 has complied with clauses 2.3.8, 2.3.10, 2.3.11 and 2.3.12 of the Gas Transmission Information Disclosure Determination 2012 (amended as of 3 April 2018).

We have also concluded that, as far as appears from an examination of them:

— proper records to enable the complete and accurate compilation of the schedules and additional disclosure information for related parties as at 30 September 2019 have been kept by First Gas Limited; and

— the information used in the preparation of the schedules and additional disclosure information for related parties as at 30 September 2019 has been properly extracted from First Gas Limited's accounting and other records and has been sourced, where appropriate, from First Gas Limited's financial and non-financial systems.

Information subject to assurance

We have performed an engagement to provide reasonable assurance in relation to First Gas Limited's schedules and additional disclosure information for related parties for the year ended 30 September 2019.

Criteria

We have performed an engagement to provide reasonable assurance in relation to the schedules 1, 2, 3, 4, 5 (a-g), 6 (a-b), 7, 14 (boxes 1 – 12) and the Information Disclosure for related parties that have been prepared in accordance with the determination for the year ended 30 September 2019.

Key Assurance Matters

Key assurance matters are those matters that, in our professional judgement, were of most significance in our reasonable assurance engagement in relation to First Gas Limited's schedules in the current regulatory period. We summarise below those matters and our key procedures to address those matters in order that the directors and the New Zealand Commerce Commission may better understand the process by which we arrived at our conclusion. Our procedures were undertaken in the context of and solely for the purpose of our conclusion on the schedules and disclosures as a whole and we do not express discrete conclusions on separate elements of the schedules and additional information disclosures for related parties.

The key assurance matter	How the matter was addressed in our assurance
1. Capitalisation of assets into the regulatory assets base ('RAB'). Refer to Schedule 4 and Schedule 6a.	
Capitalisation of assets into the RAB (capital expenditure during the year of \$52 million and assets commissioned of \$26 million) is a key assurance matter due to the following significant judgements involved: — Assessment whether an asset meets the definition of network or non-network asset; — Allocation of non-directly attributable assets to the gas transmission business. Specifically this judgement relates to the selection of allocators which appropriately align to the cause of the expenditure.	Our procedures included, amongst others: — Examining the operating effectiveness of controls related to the approval of capital expenditure; — Checking a sample of costs to invoice to determine whether the description of the expenditure met the capitalisation criteria in the determination and is consistent with their presentation as either network or non-network assets; — Comparing RAB assets commissioned to those commissioned for financial reporting purposes and obtaining explanation for any significant differences; — Examining and challenging the allocators used to allocate non-directly attributable assets into the RAB. This includes an assessment of whether the allocator is an appropriate reflection of the cause of the expenditure. We found no material errors in the amounts capitalised in the period.
2. Allocation of shared and other costs into operating expenditure. Refer to Schedule 5d and Schedule 6b.	
The allocation of shared and other costs (\$11 million of not directly attributable expenditure within the total of \$41 million of operating expenditure) into operating expenditure is a key assurance matter due to: — The fact that First Gas operates across a number of businesses, both regulated services (gas transmission and gas distribution) and non-regulated services. A number of operating costs can therefore be shared across these businesses. — Allocation of shared and other costs into the gas transmission business requires judgement. Specifically this judgement relates to the selection of allocators which appropriately align to the cause of the expenditure.	The procedures we performed to evaluate the allocation of non-directly attributable costs included, among others; — Examining and challenging the allocators used to record shared and other costs into operating expenditure. This includes an assessment of whether the allocator is an appropriate reflection of the cause of the expenditure; — Comparing the total amount of shared and other costs to that recorded for financial reporting purposes and obtaining and validating explanations for any significant differences; — Examining shared and other costs and obtaining and validating explanations for any significant movement compared to historic levels or our understanding of the current business model and strategy. We found no material errors in the amounts of shared and other costs allocated to First Gas's gas transmission business in the period.

3. Valuation and identification of related party transactions. Refer to Schedule 5b.

The valuation of transactions with related parties ($25 million of unregulated income, $25 million of operating expenditure and $39 million of capital expenditure incurred with related parties in the period) is a key assurance matter due to the significant judgement in forming a view of related party pricing in the absence, or insufficiency, of publicly available information about pricing and terms of certain services; The identification of and transactions with related parties is a key assurance matter because the ownership structure of First Gas and its owners is complex and there may be a number of trading relationships that meet the definition of a related party. Transactions with a number of related parties may give rise to related party transactions with the gas transmission business.	The procedures we performed to evaluate valuation of related parties transactions included: — Comparison of the related party sales recorded by First Gas to ensure a) it is the price achieved by the gas transmission business b) the selling price is not materially lower than that charged to customers who are not related; — Comparison of the related party expenditure recorded by First Gas to ensure a) it is the price incurred by the gas transmission business b) the purchase price is not materially higher than that charged to customers who are not related; — Comparison of the terms and conditions extended by First Gas to related parties (or vice versa) to the standard terms and conditions of the customer, and investigation where a material difference exists. — Reviewing the Independent Appraiser's report; examining and considering the assumptions, testing and results of the Independent Appraiser's work (in connection with the valuation of related party transactions). — This involved reperforming some of the company's and the Independent Appraiser's work, including checking a sample of related party transactions (both sales and expenditure) to underlying evidence. The procedures we performed to evaluate completeness of related parties' transactions included: — Challenging whether all related party transactions had been included by comparing to our understanding of First Gas's operating model; — Ensuring that all related party transactions recorded for financial reporting purposes had been correctly identified and disclosed. We found no material errors in relation to the valuation or completeness of related party transactions in the period.

Standards we followed

We conducted our reasonable assurance engagement in accordance with International Standard on Assurance Engagements (New Zealand) ISAE (NZ) 3000 (Revised) *Assurance Engagements other than audits or reviews of historical financial information* and Standard on Assurance Engagements SAE 3100 (Revised) *Assurance Engagements on Compliance*. We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion. In accordance with those standards we have:

- used our professional judgement to assess the risk of material misstatement and plan and perform the engagement to obtain reasonable assurance that the schedules and Information Disclosure for Related Parties are free from material misstatement, whether due to fraud or error;
- considered relevant internal controls when designing our assurance procedures, however we do not express a conclusion on the effectiveness of these controls; and
- ensured that the engagement team possesses the appropriate knowledge, skills and professional competencies.

How to interpret reasonable assurance and material misstatement

Reasonable assurance is a high level of assurance, but is not a guarantee that it will always detect a material misstatement when it exists.

Misstatements, including omissions, within the schedules and Information Disclosure for Related Parties are considered material if, individually or in the aggregate, they could reasonably be expected to influence the relevant decisions of the intended users taken on the basis of the schedules and Information Disclosures for Related Parties.

Use of this assurance Report

Our report should not be regarded as suitable to be used or relied on by any party other than First Gas Limited and the New Zealand Commerce Commission in relation to section 2.8.1 of the Gas Transmission Information Disclosure Determination 2012 (amended as of 3 April 2018) for any purpose or in any context. Any party other than First Gas Limited and the New Zealand Commerce Commission who obtains access to our report or a copy thereof and chooses to rely on our report (or any part thereof) will do so at its own risk.

To the fullest extent permitted by law, we accept or assume no responsibility and deny any liability to any party other than First Gas Limited and the New Zealand Commerce Commission for our work, for this independent reasonable assurance report, or for the conclusions we have reached.

Our report is released to First Gas Limited and the New Zealand Commerce Commission on the basis that it shall not be copied, referred to or disclosed, in whole (save for First Gas Limited's own internal purposes) or in part, without our prior written consent.

First Gas Limited’s responsibility for the schedules

First Gas Limited is responsible for the preparation and fair presentation of the schedules and Information Disclosures for Related Parties in accordance with the Determination. This responsibility includes such internal control as First Gas Limited determine is necessary to enable the preparation of the schedules and Information Disclosures for Related Parties that is free from material misstatement whether due to fraud or error.

Our responsibility

Our responsibility is to express a conclusion to the directors and the New Zealand Commerce Commission on the preparation and presentation of the schedules and Information Disclosures for Related Parties in accordance with the Determination.

Our independence and quality control

We have complied with the independence and other ethical requirements of Professional and Ethical Standard 1 (Revised) issued by the New Zealand Auditing and Assurance Standards Board, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

The firm applies Professional and Ethical Standard 3 (Amended) and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Our firm has also provided other services to First Gas Limited such as the annual audit of the financial statements, regulatory assurance services, and other assurance services. Partners and employees of our firm may also deal with First Gas Limited on normal terms within the ordinary course of trading activities of the business of First Gas Limited. These matters have not impaired our independence as assurance providers of First Gas Limited for this engagement. The firm has no other relationship with, or interest in, First Gas Limited.

KPMG

KPMG
Auckland
26 March 2020

Independent Appraiser's Reasonable Assurance Report to the Directors of First Gas Limited and the New Zealand Commerce Commission for the Transmission Business

Opinion

Our reasonable assurance opinion has been formed on the basis of the matters outlined in this report.

In our opinion, in all material respects:

- the Information in schedule 5b of the Information Disclosure Schedules on Related Party Transactions has complied with the Gas Transmission Information Disclosure Determination 2012 section 2.3.6 and the Input Methodologies section 2.2.11(1)(g) and 2.2.11(5) (together 'the determination') for the period ending 30 September 2019; and
- the steps undertaken by First Gas Limited, as specified under "*Overall scoping and steps undertaken in testing compliance*" are considered to be, in all material respects, reasonable in the circumstances.

As far as appears from an examination of them, in all material aspects:

- proper records to enable the complete and accurate compilation of the Information Disclosure Schedules on Related Party Transactions as at 30 September 2019 have been kept by First Gas Limited; and
- the information used in the preparation of the Information Disclosure Schedules on Related Party Transactions as at 30 September 2019 has been properly extracted from First Gas Limited's accounting system and other records and has been sourced, where appropriate, from First Gas Limited's financial and non-financial systems.

Information subject to assurance and criteria

We have performed an engagement to provide reasonable assurance thatFirst Gas Limited's Information Disclosure Schedules on Related Party Transactions are in compliance with the determination for the period ending 30 September 2019 and that the steps undertaken by First Gas Limited are considered to be, in all material respects, reasonable in the circumstances.

Our procedures

Materiality

Our assurance engagement is designed to provide reasonable assurance that First Gas Limited is in compliance, in all material respects with the determination. Based on our professional judgement, we determined certain quantitative thresholds for materiality. These, together with qualitative considerations, helped us to determine the scope of our assurance engagement, the nature, timing and extent of our assurance procedures and to evaluate the effect of misstatements, both individually and in aggregate on gross related party information. Quantitative materiality level was determined as 2% of the gross related party revenue and expense transactions. Qualitative factors were also considered when assessing the arm's length valuation rules on related party transactions.

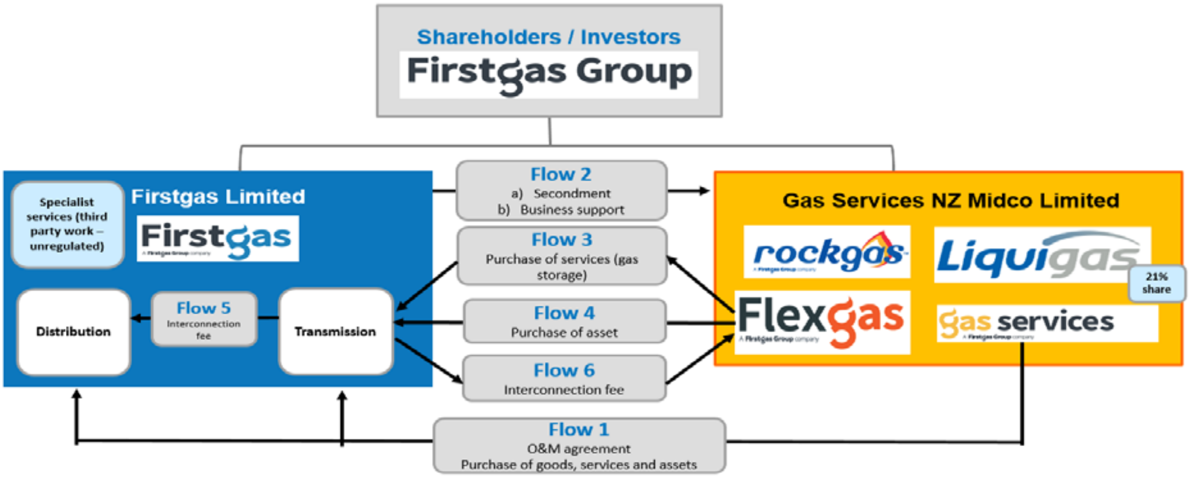
Key assumptions

In carrying out our procedures we have relied on First Gas Limited's internal controls relating to the identification of related party transactions and the valuation of related party transactions that were tested, and relied upon, during the independent audit of First Gas Limited and Gas Services NZ Midco Limited's financial statements for the year ended 30 September 2019, in relation to our work as the independent appraiser.

In building on this assumption we have carried out specific tests, to assess if First Gas Limited has identified related parties and related party transaction during the disclosure year ending 30 September 2019.

Overall scoping and steps undertaken in testing compliance

- Obtained an understanding of First Gas Limited's approach to identify all related party relationships in accordance with the determination, and disclosed these in the 2019 Information Disclosure Schedules as prepared and published;
- Obtained an understanding of all First Gas Limited's Related Party Transaction Flows and determine that each of the flows meet the definition of a related party transaction per the determination, refer to flows below;



- We independently assessed the margins applied to Related Party Flows 1 & 2;
- Compared the margins applied to each flow is consistent with the criteria and supported by either;
  - An open tendering process;
  - Comparable pricing;
  - Independent market valuations;
  - Published price lists; or a
  - Consolidation approach.
- Determined that margin applied to each flow meets the criteria of the Information Disclosure Determinations;
- For each related party who provided, or acquired a material value of goods and services to or from First Gas Limited, respectively, we assessed that each related party transaction was valued in accordance with the requirements of the determination;
- Reconciled the First Gas Limited's related party transactions to the Information Disclosure Schedules; and
- Tested an unbiased sample of invoices to ensure their classification of related party flow are appropriate and in compliance with First Gas Limited's methodology.

Each related party flow is considered a key assurance matter. Key assurance matters are those matters that, in our professional judgement, were of most significance in our reasonable assurance engagement in relation to

First Gas Limited's Disclosure Schedules on Related Party Transactions in the current regulatory period ended 30 September 2019. We summarise below those matters and our key procedures to address those matters in order that the directors of First Gas Limited and the New Zealand Commerce Commission may better understand the process by which we arrived at our opinion. Our procedures were undertaken in the context of and solely for the purpose of our providing reasonable assurance in relation to First Gas Limited's Information Disclosure Schedules on Related Party Transactions are in compliance with the determination.

The related party flow	Procedures performed
Flow 1- Operating and Maintenance Agreement	
Gas Services supplies operations and maintenance (O&M) services on behalf of GSNZ Midco to First Gas under a services agreement for the gas transmission business.	Our procedures over Related Party flow 1 included: — Obtained and understood the O&M services agreement with GSNZ Midco; — Verified the margins applied to the O&M services provided are in line with the agreement; — Recalculated the margins applied to the direct costs; — Benchmarked against comparable businesses to confirm that total costs are consistent with an arm's length transaction; — Performed sensitivity analysis over the range of margins identified; — Agreed that the Gas Services JV costs have a margin equal to the Gas Services Revenue GL codes; and — For an unbiased sample of transactions, tested the allocation of cost categories between transmission and distribution.
Flow 2- Business support and secondment staff services	
First Gas provides business support services to support the operations of GSNZ Midco (and its subsidiaries Flexgas and Rockgas) and seconds staff to GSNZ Midco to undertake O&M services.	Our procedures over Related Party flow 2 included: Business support services — Verified the margins applied to each distinct services provided and/or received are in line with the third party margins obtained; — Assessed the allocation of staff time between the regulated and unregulated businesses; — Assessed the allocation of direct costs and staff time to each service provided and/or received; — Recalculated the margins applied to the direct costs; — Benchmarked against comparable businesses to confirm that total costs are consistent with an arm's length transaction; and — Obtained a breakdown of all transactions between Gas Services JV and First Gas and reconciled it to the audited trial balance to identify any transactions not recorded. Secondment services — Verified the margin applied to secondment services are in line with the third party margin obtained;

The related party flow	Procedures performed
	— Assessed the allocation of staff time between the regulated and unregulated businesses; — Recalculated the margins applied to the direct costs; — Benchmarked against comparable businesses to confirm that total costs are consistent with an arm's length transaction; and — Obtained a breakdown of all transactions between Gas Services JV and First Gas and reconciled it to the audited trial balance to identify any transactions not recorded.
Flow 3- Gas storage services	
First Gas transmission (GTB) purchases services (gas storage) from Flexgas.	Our procedures over Related Party flow 3 included; — Obtained third party contracts where First Gas has provided gas storage rights; — Compared the commercial terms of the third-party contract to the related party flow; and — Assessed FlexGas's trial balance to identify other related party gas storages services not recognised in the information disclosures.
Flow 4- Capital expenditure	
First Gas transmission (GTB) purchases assets from Flexgas.	Our procedures over Related Party flow 4 included; — Compared the wellhead cooler transaction price to the depreciated replaced cost of an equivalent asset; — Assessed the Flexgas fixed asset register to determine if any other assets have been disposed of to a related party; and — Assessed all other disposals in Flexgas and First Gas to identify other related party asset sales not recognised in the information disclosure.
Flow 5- Interconnection fees	
First Gas transmission (GTB) charges the First Gas distribution business (GDB) interconnection fees for new connections to the transmission network.	Our procedures over Related Party flow 5 included; — Obtained interconnection contracts with third parties; — Assessed the third-party methodology to determine whether the interconnection fee in the contract was calculated using the same interconnection methodology used for all interconnecting parties; and — Assessed GTB trial balance codes to identify other related party transmission charges not recognised in the information disclosures.
Flow 6- Stratford interconnection fees	

The related party flow	Procedures performed
First Gas transmission (GTB) charges Flexgas interconnection fees for the Stratford bi-directional interconnection point to the transmission network.	Our procedures over Related Party flow 6 included; — Obtained interconnection contracts with third parties; — Assessed the third-party methodology to determine the whether the transmission fee in the contract was calculated using the same transmission methodology; and — Assessed GTB trial balance codes to identify other related party transmission charges not recognised in the information disclosures.

We summarise below the steps undertaken by First Gas Limited to test compliance with the determination.

Compliance to determination	Steps performed by First Gas
The steps undertaken by First Gas Limited, are considered to be, in all material respects, reasonable in the circumstances.	Procedures performed by First Gas included: — Identified related party relationships and transactions flows; — Outlined the intent behind the key related party contracts included the O&M services agreement with GSNZ Midco; — Assessed compliance with the definition of an arm's length transaction (in accordance with ISA (NZ) 550); and — Obtained independent and objective measures to support the arm's length principle for each related party flow. This includes management engagement of third parties (PwC and Chris Harvey Consulting) to establish benchmarks to be applied to Flow 1 and Flow 2.

Standards we followed

We conducted our reasonable assurance engagement on the related party valuation requirements as set out in the determination in accordance with International Standard on Assurance Engagements (New Zealand) 3000 (Revised) *Assurance Engagements other than audits or reviews of historical financial information* and Standard on Assurance Engagements SAE 3100 (Revised) *Assurance Engagements on Compliance*. We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinion. In accordance with those standards we have:

- used our professional judgement to assess the risk of material misstatement and plan and perform the engagement to obtain reasonable assurance that the Information Disclosure Schedules for Related Party Transactions is free from material misstatement, whether due to fraud or error;
- considered relevant internal controls when designing our assurance procedures, however we do not express an opinion on the effectiveness of these controls; and
- ensured that the engagement team possesses the appropriate knowledge, skills and professional competencies.

How to interpret reasonable assurance and material misstatement

Reasonable assurance is a high level of assurance, but is not a guarantee that it will always detect a material misstatement when it exists.

Misstatements, including omissions, within the Information Disclosure Schedules for Related Party Transactions are considered material if, individually or in the aggregate, they could reasonably be expected to influence the relevant decisions of the intended users taken on the basis of the Information Disclosure Schedules for Related Party Transactions.

Use of this assurance report

Our report should not be regarded as suitable to be used or relied on by any party's other than First Gas Limited and the New Zealand Commerce Commission in relation to the determination for any purpose or in any context. Any party other than First Gas Limited or New Zealand Commerce Commission who obtains access to our report or a copy thereof and chooses to rely on our report (or any part thereof) will do so at its own risk.

To the fullest extent permitted by law, we accept or assume no responsibility and deny any liability to any party other than First Gas Limited and New Zealand Commerce Commission for our work, for this independent reasonable assurance report, or for the opinions we have reached.

Our report is released to First Gas Limited and the New Zealand Commerce Commission on the basis that it shall not be copied, referred to or disclosed, in whole (save for First Gas Limited's own internal purposes) or in part, without our prior written consent.

Management's responsibility for compliance with the determination

The management of First Gas Limited are responsible for the preparation and fair presentation of the Information Disclosure Schedules on Related Party Transaction in accordance with the determination. This responsibility includes such internal control as the directors determine is necessary to enable the preparation of the Information Disclosure Schedules on Related Party Transaction that is free from material misstatement whether due to fraud or error.

Our responsibility

Our responsibility is to express an opinion to the directors and the New Zealand Commerce Commission on whether the preparation and presentation of the Information Disclosure Schedules on Related Party Transactions is, in all material respects, in compliance with the determination for the period ending 30 September 2019.

Our independence and quality control

We have complied with the independence and other ethical requirements of Professional and Ethical Standard 1 (Revised) issued by the New Zealand Auditing and Assurance Standards Board, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

The firm applies Professional and Ethical Standard 3 (Amended) and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

David Gates is a member of Chartered Accountants Australia and New Zealand who has 25 years of audit and commercial experience, including in identification and disclosure of related party transactions. David is supported by KPMG specialists and staff who possess a range of experience and disciplines in relevant areas such as assessing the valuation of related party transaction.

Our firm has also provided audit, other assurance and non-audit services to First Gas Limited. Subject to certain restrictions, partners and employees of our firm may also deal with First Gas Limited on normal terms within the ordinary course of trading activities of the business of First Gas Limited. These matters have not impaired our independence as assurance providers of First Gas Limited for this engagement. The firm has no other relationship with, or interest in, First Gas Limited.

KPMG

KPMG
Wellington

26 March 2020