REGULATORY DISCLOSURE

Gas transmission services: Capacity allocation methodology and transmission system capacity reservations

Year ended 30 September 2022

First Gas Limited
March 2023

Introduction

First Gas Limited (Firstgas) owns and operates 2,500 kilometres of gas transmission pipelines. These pipelines transport around 20 percent of New Zealand's primary energy supply from Taranaki across the North Island. Firstgas also owns and operates more than 4,900 kilometres of gas distribution pipelines that service approximately 66,000 consumers across the regions of Northland, Waikato, Central Plateau, Bay of Plenty, Gisborne and Kāpiti Coast.

Firstgas is part of the wider Firstgas Group. Headquartered in New Plymouth, Firstgas Group is an umbrella brand consisting of Rockgas, Firstgas, Flexgas and Gas Services NZ. Firstgas and Rockgas deliver natural gas and supply LPG respectively to over 500,000 customers through their network of high-pressure gas transmission pipelines and distribution pipelines in the North Island, as well as through LPG distribution pipelines in the South Island, 36 local LPG suppliers, and over 180 Refill & Save locations across New Zealand.

Flexgas operates the Ahuroa gas storage facility in Central Taranaki. Gas Services NZ provides operational and maintenance support to all gas infrastructure owners, including other parts of Firstgas Group.

Compliance statement

This document is a regulatory disclosure prepared pursuant to sections 2.5.3 and 2.5.4 of the *Gas Transmission Information Disclosure Determination 2012* consolidating all amendments as of 3 April 2018 issued by the Commerce Commission. The regulatory disclosure covers Firstgas' transmission business (both the Maui and Non-Maui transmission systems) for the 12-month period ending 30 September 2022.

The capacity allocation methodology and system capacity reservation information in this disclosure refers to the Non-Maui gas transmission system. The Maui transmission system is managed under the Maui Pipeline Operating Code (MPOC). The shippers on the Maui line nominate their requirements daily. This forms the capacity for that day. There is no forward commitment on a firm capacity basis and capacity is not reserved on the Maui transmission system.

This regulatory disclosure was prepared on 31 March 2023.

Further information

For further information regarding this regulatory disclosure, please contact:

Regulatory Policy Manager
First Gas Limited
compliance@firstgasgroup.co.nz
04 979 5368

Table of Contents

1. Capacity allocation methodology

1.1 Current capacity allocation methodologies (clause 2.5.3(1)(a))

Firstgas currently provides two types of firm contractual transmission capacity to Shippers[1] - Reserved Capacity and Supplementary Capacity.

Reserved Capacity is Firstgas' standard capacity product, and is allocated in accordance with the relevant provisions of the Vector Transmission Code (the Code):

(I) Prior to the start of each contract year[2] and
(II) During each contract year

in response to Shippers' specific requests, to the limit of uncommitted operational capacity.[3] The processes involved in (i) and (ii) above are separately described below. Under the current Code, a Shipper retains the right to use any Reserved Capacity allocated to it unless and until that Shipper relinquishes it.[4]

Supplementary Capacity is firm transmission capacity that Firstgas provides to a Shipper under a Supplementary Agreement, in compliance with specific provisions of the Code. Since Firstgas is under no obligation to provide Supplementary Capacity, the Reserved Capacity allocation process set out in the Code does not apply to Supplementary Capacity. Supplementary Capacity is available to a Shipper only for the term of the relevant Supplementary Agreement.

Reserved Capacity and Supplementary Capacity are equally "firm", so Firstgas must take both into account when determining uncommitted operational capacity.

1.1.1. Allocation of Reserved Capacity before the start of a contract year

Under the Code:

1) All Shippers must notify Firstgas of their Confirmed Reservation Requirements[5] by 5pm on the second Friday in September.

2) A Shipper is entitled to reserve up to the amount of Reserved Capacity it holds at any Receipt-Point-Delivery Point[6] (RP – DP) on the second Friday in September, although it may request more or less. A Shipper may request Reserved Capacity at a RP – DP irrespective of whether it currently has any capacity there.

3) Firstgas must notify Shippers of the extent to which it accepts their Confirmed Reservation Requirements by 5pm on the third Friday in September. This requires First Gas to determine the uncommitted operational capacity available, taking into account such things as:

   (I) The amounts of Reserved Capacity requested compared with the amounts currently allocated;
   (II) Changes in the distribution of Reserved Capacity, i.e. the extent to which requests for less Reserved Capacity at some RP-DPs offset requests for more at others
   (III) Changes in Supplementary Capacity (if any)
   (IV) How much capacity was allocated in prior years and where;

---

[1] A shipper is a person named in a transmission services agreement with First Gas. Only Shippers may hold transmission capacity. The Information Disclosure Determination refers to Shippers as "consumers".

[2] Being the year commencing on 1 October in year "n" and ending on 30 September in year "n+1".

[3] Uncommitted operational capacity is the amount of a pipeline's physical capacity available to be allocated to Shippers, and is equal to: operational capacity – aggregate contractual (firm) capacity. The determination of operational capacity is described in Firstgas' "Gas Transmission Asset Management Plan – 2022" (*AMP*), available at www.firstgas.co.nz/About-Us/Regulatory/Transmission.

[4] Either by not reserving it again, trading it to another Shipper or cancelling it in accordance with the Code.

[5] Under the Code, Shippers must lodge non-binding Provisional Reservation Requirements earlier each year.

[6] In this disclosure, Code terms are used, i.e.: Receipt Point = intake point; Delivery Point = offtake point.

(V) The most recent pipeline modelling information, e.g. in the Asset Management Plan (AMP) and
(VI) The maximum capacity of individual Receipt and Delivery Points.

4) If it believes there is insufficient uncommitted operational capacity for it to approve all Shippers' requests for Reserved Capacity,[7] Firstgas must apply the capacity allocation procedure set out in the Code. Briefly, that process would work as follows:

(I) Any Shipper requesting the same amount of, or less Reserved Capacity than it currently holds at an RP-DP would be allocated that amount
(II) First Gas would then determine the extent of uncommitted operational capacity available by referencing the AMP or any other relevant pipeline modelling information or, if necessary, undertaking additional modelling
(III) First Gas would then allocate increased Reserved Capacity to the relevant Shippers in accordance with the following formula:

increase = (Shipper's requested increase for an RP-DP ÷ All Shippers' requested increases for all RP-DPs on the pipeline) × uncommitted operational capacity and

(IV) Firstgas would then check that any allocated increases in Reserved Capacity could actually be delivered via the relevant Delivery Points.[8] If not, capacity above the maximum that could be delivered would be re-allocated to other RP-DPs by a further iteration of the above formula.

1.1.2. Allocation of Reserved Capacity during a year

Under the Code:

1) A Shipper may request Reserved Capacity, or additional Reserved Capacity during a year, e.g., if it acquires new customers, or if one or more existing customers increase their load.

2) A Shipper must apply for additional Reserved Capacity using the appropriate screen on OATIS.[9] Firstgas must approve (or decline) any such request via OATIS.

3) Firstgas must approve any such request (subject to the conditions set out in the Code) where it believes there is sufficient uncommitted operational capacity. To ascertain that, Firstgas considers:

(I) the relevant matters listed in paragraph (3) of the previous section; and
(II) any capacity transfer requests (to or from the RP-DP in question, or any other RP-DP relevant to the request) approved but not yet effective; and
(III) existing queued requests for capacity (if any).

4) Should it decline a request for additional capacity, Firstgas would (subject to the Code and the wishes of the Shipper concerned) place the request in the capacity queue for the relevant pipeline. If capacity subsequently became available, e.g., if a Shipper applied to cancel Reserved Capacity or to transfer Reserved Capacity elsewhere (including out of the pipeline altogether), Firstgas would offer additional Reserved Capacity to Shippers in the capacity queue, in accordance with the Code.

---

[7] Namely, where Firstgas reasonably believed that a breach of its Security Standard (e.g. by the pressure at a critical point in a pipeline falling below the acceptable minimum) could result.
[8] This would be necessary because a Shipper might request a "disproportionate" amount of additional capacity at the far end of a pipeline. The first pass of the allocation formula could then produce an unsustainable outcome. This reflects the reality that it is unrealistic to represent the uncommitted operational capacity of a pipeline by a single number: where capacity is required would change any such number
[9] Firstgas' "Open Access Transmission Information System", at www.oatis.co.nz.

1.2 Approved requests for capacity (clause 2.5.3(1)(b))

During the disclosure year there was **sufficient uncommitted operational capacity** to meet all Shippers' requests for Reserved Capacity:

(I) Confirmed Reservation Requirements for 2021-22: **approved in full**
(II) Requests for additional Reserved Capacity: **41**
(III) Requests for additional Reserved Capacity **approved in full: 41** and
(IV) Requests for additional Reserved Capacity **approved in part: zero.**

1.3 Unmet demand for capacity (clause 2.5.3(1)(c))

During the disclosure year there was no unmet demand for Reserved Capacity:

(I) Requests for Reserved Capacity **declined: zero**
(II) Maximum daily quantities associated with requests **declined: zero** and
(III) Reasons for requests not being approved in full: **not applicable.**

2. Transmission system capacity reservations

1) Tables 1 – 6 below set out the information required to be disclosed in accordance with clause 2.5.4 of the Information Disclosure Determination, for each of Firstgas' Non- Maui transmission pipeline systems.

2) The named offtake points (= Delivery Points) for each pipeline system are those which, in the system peak flow period, satisfied one or more of the criteria set out in clause 2.5.4(3)(a) – (c); i.e.:

   (I) Throughput ≥ 2,000 GJ
   (II) Contractual firm capacity ≥ 10,000 GJ (per day) or
   (III) Nominal delivery pressure > 20 bar gauge.

   The relevant offtake points are those identified in Firstgas' "Pipeline Peak Flow Disclosure"[10] for 2021. That disclosure refers to actual offtake points, whereas for commercial/contractual reasons some such points are aggregated into "notional" offtake points. An example is "Greater Auckland", which currently comprises 5 actual offtake points. Since this capacity disclosure is concerned with contractual capacity, Tables 1 – 6 show data for notional/contractual offtake points.

3) For all offtake points on a pipeline system that did not satisfy any of the criteria set out in clause 2.5.4(3)(a) – (c), data was aggregated in accordance with clause 2.5.4(3)(d) of the Information Disclosure Determination and appears in the tables on the line labelled "All Other Points".

4) Data is given for the three dates specified in clause 2.5.4(4), i.e.:

   (I) The last day of the preceding pricing year (i.e., 30 September 2022);
   (II) The first day of the new pricing year (i.e., 1 October of 2022); and
   (III) The first day of each system's peak flow period for the preceding pricing year (i.e., the year ending 30 September 2022).

5) Firm contractual transmission capacity in respect of each offtake point comprises Reserved Capacity plus Supplementary Capacity (if any).

6) The MDQ (maximum daily quantity) and MHQ (maximum hourly quantity), respectively, for each offtake point correspond to the aggregate amount of firm contractual transmission capacity in each case. For Reserved Capacity, the MHQ is currently 1/16th of MDQ. For Supplementary Capacity, the MHQ can be a different fraction of MDQ, hence actual MHQs were obtained from the actual contracts.

7) MDQ and MHQ values have been rounded up to the nearest GJ.

[10] Available at https://firstgas.co.nz/wp-content/uploads/Transmission-disclosure-Peak-Flows_YE-30-Sept-2022_FINAL.pdf

TABLE 1: North system

Offtake Point		Aggregate Firm Contractual Transmission Capacity (GJ) Held by All Shippers on:			
		30 Sep 2022	1 Oct 2022	24 Jun 2022	> 20 bar g
Harrisville 2	MDQ	1,552	1,244	1,580	
	MHQ	97	78	99	
Drury 1	MDQ	1,078	840	1,057	
	MHQ	67	53	66	
Hunua (all)	MDQ	846	836	1,206	Note 1
	MHQ	53	52	75	
Flat Bush	MDQ	1,603	1,487	1,603	
	MHQ	100	93	100	
Greater Auckland	MDQ	43,829	42,450	45,437	Note 2
	MHQ	2,739	2,653	2,840	
Marsden 1	MDQ	-	-	-	
	MHQ	-	-	-	
Kauri DF	MDQ	2,500	2,500	2,500	Note 3
	MHQ	130	130	130	
Waitoki	MDQ	907	839	880	
	MHQ	57	52	55	
Glenbrook	MDQ	6,154	6,000	6,809	
	MHQ	308	300	340	
Warkworth	MDQ	1,572	1,552	1,572	
	MHQ	98	97	98	
Tuakau 2	MDQ	2,183	2,056	1,939	
	MHQ	136	129	121	
Whangarei	MDQ	596	538	529	
	MHQ	37	34	33	
Maungaturoto DF	MDQ	2,500	2,500	2,500	Note 3
	MHQ	130	130	130	
Major Points	**MDQ**	**65,319**	**62,842**	**67,611**	
	MHQ	**3,953**	**3,800**	**4,088**	
All Other Points	MDQ	592	45	- 2,014	
	MHQ	90	55	- 73	
Total	**MDQ**	**65,911**	**62,887**	**65,597**	
	MHQ	**4,043**	**3,855**	**4,015**	

Note 1:	Hunua (all) includes the Hunua, Hunua (Nova) and Hunua 3 Delivery Points. At Hunua 3 Firstgas delivers gas at pipeline pressure (i.e., unregulated)
Note 2:	Greater Auckland is a notional Delivery Point, comprising the actual Westfield, Papakura, Bruce McLaren, Waikumete and Henderson Delivery Points
Note 3:	Transmission capacity is provided to Kauri DF and Maungaturoto DF under a single non-standard agreement. The MDQ for the 2 Delivery Points varies seasonally between 2,500 and 5,000 GJ. The MHQ at either Delivery Point is limited to 130 GJ

Table 2: Central north system

Offtake Point		Aggregate Firm Contractual Transmission Capacity (GJ) Held by All Shippers on:			
		30 Sep 2022	1 Oct 2022	12 Aug 2022	> 20 bar g
Greater Hamilton	MDQ	7,327	6,739	7,290	Note 1
	MHQ	458	421	456	
Tatuanui DF	MDQ	1,500	1,500	1,500	
	MHQ	94	94	94	
Waitoa	MDQ	1,723	1,580	1,723	
	MHQ	1,200	1,191	1,200	
Cambridge	MDQ	2,074	2,016	2,046	
	MHQ	130	126	128	
Kiwitahi 1 (Peroxide)	MDQ	1,000	950	1,000	
	MHQ	63	59	63	
Te Rapa Cogen	MDQ	23,200	23,200	23,200	22.5 bar g
	MHQ	1,092	1,092	1,092	
Morrinsville DF	MDQ	950	950	950	
	MHQ	59	59	59	
Major Points	**MDQ**	**37,774**	**36,935**	**37,709**	
	MHQ	**3,095**	**3,042**	**3,091**	
All Other Points	MDQ	1,748	1,704	1,736	
	MHQ	467	464	466	
TOTAL SYSTEM	**MDQ**	**39,522**	**38,639**	**39,445**	
	MHQ	**3,562**	**3,507**	**3,557**	
Note 1:	Greater Hamilton is a notional Delivery Point, comprising the actual Hamilton (Te Kowhai) and Hamilton (Temple View) Delivery Points.				

Table 3: Central south system

Offtake Point		Aggregate Firm Contractual Transmission Capacity GJ) Held by All Shippers on:			
		30 Sep 2022	1 Oct 2022	28 Jan 2022	> 20 bar g
New Plymouth	MDQ	3,164	3,023	3,013	
	MHQ	198	189	188	
Pokuru	MDQ	-	-	-	Note 1
	MHQ	-	-	-	
Major Points	**MDQ**	**3,164**	**3,023**	**3,013**	
	MHQ	**198**	**189**	**188**	
All Other Points	MDQ	1,416	1,420	1,489	
	MHQ	89	89	93	
TOTAL SYSTEM	**MDQ**	**4,580**	**4,443**	**4,503**	
	MHQ	**286**	**278**	**281**	
Note 1:	Pokuru refers to the Pokuru 2 Delivery Point				

Table 4: Bay of Plenty system

Offtake Point		Aggregate Firm Contractual Transmission Capacity (GJ) Held by All Shippers on:			
		30 Sep 2022	1 Oct 2022	23 Sep 2022	> 20 bar g
Lichfield DF	MDQ	1,900	1,900	1,900	
	MHQ	119	119	119	
Lichfield 2	MDQ	3,850	3,850	3,850	
	MHQ	241	241	241	
Edgecumbe DF	MDQ	4,189	4,000	4,189	
	MHQ	262	250	262	
Reporoa	MDQ	1,928	1,904	1,928	
	MHQ	120	119	120	
Whakatane	MDQ	3,679	3,668	3,679	
	MHQ	8	8	8	
Tirau DF	MDQ	1,450	1,450	1,450	
	MHQ	91	91	91	
Kinleith (CHH Mill)	MDQ	10,849	10,650	10,000	
Kinleith (CHH Mill)	MHQ	678	666	625	
Kawerau (Tasman)	MDQ	1,789	1,750	1,789	
Kawerau (Tasman)	MHQ	112	109	112	
Kawerau (Caxton)	MDQ	625	680	625	
Kawerau (Caxton)	MHQ	39	43	39	
Greater Tauranga	MDQ	1,495	1,300	1,495	Note 1
	MHQ	93	81	93	
Gisborne	MDQ	1,296	1,470	1,296	
	MHQ	81	92	81	
Greater Mt Maunganui	MDQ	2,515	2,654	2,529	Note 2
	MHQ	157	166	158	
Rotorua	MDQ	1,667	1,495	1,692	
	MHQ	104	93	106	
Major Points	MDQ	**37,234**	**36,772**	**36,424**	
	MHQ	**2,105**	**2,077**	**2,054**	
All Other Points	MDQ	2,719	2,499	2,705	
	MHQ	170	156	169	
TOTAL SYSTEM	MDQ	**39,953**	**39,271**	**39,129**	
	MHQ	**2,275**	**2,233**	**2,223**	

Note 1:	Greater Tauranga is a notional Delivery Point, comprising the actual Tauranga and Pyes Pa Delivery Points.

Note 2:	Greater Mt Maunganui is a notional Delivery Point, comprising the actual Mt Maunganui, Papamoa and Papamoa 2 Delivery Points.

Table 5: South system

Offtake Point		Aggregate Firm Contractual Transmission Capacity (GJ) Held by All Shippers on:			
		30 Sep 2022	1 Oct 2022	12 Aug 2022	> 20 bar g
Paraparaumu	MDQ	-	-	-	
	MHQ	-	-	-	
Hawera (all)	MDQ	1,646	1,502	1,217	Note 1
	MHQ	103	94	76	
Wanganui	MDQ	4,593	4,182	4,407	
	MHQ	287	261	275	
Greater Kapiti	MDQ	859	839	859	Note 4
	MHQ	54	52	54	
Marton	MDQ	814	729	743	
	MHQ	51	46	46	
Palmerston North	MDQ	3,782	3,180	3,805	
	MHQ	236	199	238	
Longburn	MDQ	843	824	801	
	MHQ	53	51	50	
Levin	MDQ	1,098	1,001	1,134	
	MHQ	69	63	71	
Belmont	MDQ	6,010	5,331	6,310	
	MHQ	376	333	394	
Pahiatua DF	MDQ	3,300	3,300	3,000	
	MHQ	206	206	188	
Feilding	MDQ	769	794	835	
	MHQ	48	50	52	
Hastings (all)	MDQ	6,782	6,817	7,294	Note 2
	MHQ	424	426	456	
Tawa (A+B)	MDQ	11,177	9,625	11,180	
	MHQ	699	602	699	
Greater Waitangirua	MDQ	1,910	1,693	1,910	Note 3
	MHQ	119	106	119	
Major Points	MDQ	**43,582**	**39,819**	**43,495**	
	MHQ	**2,724**	**2,489**	**2,718**	
All Other Points	MDQ	2,286	2,184	2,289	
	MHQ	143	136	143	
TOTAL SYSTEM	MDQ	45,868	42,002	45,784	
	MHQ	2,867	2,625	2,862	

Note 1:	Hawera (all) refers to the Hawera and Hawera (Nova) Delivery Points
Note 2:	Hastings (all) refers to the Hastings and Hastings (Nova) Delivery Points
Note 3:	Greater Waitiangirua is a notional Delivery Point, comprising the actual Waitangirua and Pauatahanui 1 Delivery Points
Note 4:	Greater Kapiti is a notional Delivery Point, comprising the actual Waikanae 2 and Paraparaumu. Effective 01/10/2019

Table 6: Frankley Road system

Offtake Point		Aggregate Firm Contractual Transmission Capacity (GJ) Held by All Shippers on:			
		30-Sep-2022	1-Oct-2022	22-Jul-2022	> 20 bar g
Frankley Road-Bi	MDQ	49,700	36,500	49,700	Note 1
	MHQ	2,242	2,242	2,238	
Kapuni GTP	MDQ	25,000	25,000	25,000	39 bar g
	MHQ	2,485	1,825	2,485	
Major Points	MDQ	74,700	61,500	74,700	
	MHQ	4,727	4,067	4,723	
All Other Points	MDQ	-	-	-	
	MHQ	-	-	-	
TOTAL SYSTEM	MDQ	**74,700**	**61,500**	**74,700**	
	MHQ	**4,727**	**4,067**	**4,723**	
Note 1:	The pressure at Frankley Road equals the pressure in the Maui Pipeline.				