



DISCLOSURE

under

**Gas Transmission Information Disclosure
Determination 2012**

of

**CAPACITY ALLOCATION METHODOLOGY
(*clause 2.5.3*)**

and

**TRANSMISSION SYSTEM CAPACITY
RESERVATIONS (*clause 2.5.4*)**

for

2015-16 Disclosure Year

CLAUSE 2.5.3: CAPACITY ALLOCATION METHODOLOGY

(1)(a)

First Gas currently provides two types of firm contractual transmission capacity to Shippers¹: Reserved Capacity and Supplementary Capacity.

Reserved Capacity is First Gas' 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 year²; and
- (ii) during each contract year,

in response to Shippers' specific requests, to the limit of uncommitted operational capacity³. 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 it⁴.

Supplementary Capacity is firm transmission capacity that First Gas provides to a Shipper under a Supplementary Agreement, in compliance with specific provisions of the Code. Since First Gas 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 First Gas must take both into account when determining uncommitted operational capacity.

Allocation of Reserved Capacity before the start of a contract year

Under the Code:

- (1) All Shippers must notify First Gas of their Confirmed Reservation Requirements⁵ by 5 pm 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 Point⁶ (*RP-DP*) on the second Friday in September, though it may request more or less. A Shipper may request Reserved Capacity at an RP-DP irrespective of whether it currently has any capacity there.
- (3) First Gas must notify Shippers of the extent to which it accepts their Confirmed Reservation Requirements by 5 pm on the third Friday in September. This requires First Gas to determine the uncommitted operational capacity available, taking into account such things as:

¹ A Shipper is a person named in a transmission services agreement with First Gas. Only Shippers may hold transmission capacity. The 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 First Gas' "Gas Transmission Asset Management Plan - 2016" (*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.

- (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;
 - (v) the most recent pipeline modelling information, e.g. in the 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 Capacity⁷, First Gas 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:

$$\text{increase} = (\text{Shipper's requested increase for an RP-DP} \div \text{All Shippers' requested increases for all RP-DPs on the pipeline}) \times \text{uncommitted operational capacity};$$
and
 - (iv) First Gas would then check that any allocated increases in Reserved Capacity could actually be delivered via the relevant Delivery Points⁸. 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.

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 OATIS⁹. First Gas must approve (or decline) any such request via OATIS.

⁷ Namely, where First Gas 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 the capacity is required would change any such number.

⁹ First Gas' "Open Access Transmission Information System", at www.oatis.co.nz.

- (3) First Gas 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, First Gas 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, First Gas would (subject to the Code and the wishes of the Shipper concerned) place the request in the capacity queue for the relevant pipeline. In the event that 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), First Gas would offer additional Reserved Capacity to Shippers in the capacity queue, in accordance with the Code.

(1)(b)

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

- (i) Confirmed Reservation Requirements for 2015-16: **approved** in full;
- (ii) requests for additional Reserved Capacity: **163**;
- (iii) requests for additional Reserved Capacity **approved in full: 162**¹⁰; and
- (iv) requests for additional Reserved Capacity **approved in part: zero**.

(1)(c)

During the disclosure year there was **no unmet demand** for Reserved Capacity, i.e.:

- (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**.

¹⁰ One request, lodged in error, was declined at the Shipper's request.

CLAUSE 2.5.4: 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 Determination, for each of First Gas' 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 \geq 2,000 GJ;
 - (ii) contractual firm capacity \geq 10,000 GJ (per day); or
 - (iii) nominal delivery pressure $>$ 20 bar gauge.

The relevant offtake points are those identified in First Gas' "Pipeline Peak Flow Disclosure¹¹" for 2015-16. 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 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 2016);
 - (ii) the first day of the new pricing year (i.e. 1 October of 2016); and
 - (iii) the first day of each system's peak flow period for the preceding pricing year (i.e. the year ending 30 September 2016).
- (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.

¹¹ Available at www.firstgas.co.nz/About-Us/Regulatory/Transmission.

TABLE 1: NORTH SYSTEM

Offtake Point		Aggregate Firm Contractual Transmission Capacity (GJ) Held by All Shippers on:			Nominal Delivery Pressure > 20 bar g
		30-Sep-2016	1-Oct-2016	8-Aug-2016	
Harrisville 2	MDQ	1,539	1,189	1,855	
	MHQ	96	74	116	
Drury 1	MDQ	954	619	1,113	
	MHQ	60	39	70	
Hunua (all)	MDQ	1,118	782	1,118	note 1
	MHQ	70	49	70	
Flat Bush	MDQ	1,763	1,622	1,763	
	MHQ	110	101	110	
Greater Auckland	MDQ	48,568	46,045	49,501	note 2
	MHQ	3,015	2,858	3,074	
Marsden 1	MDQ	-	-	-	
	MHQ	-	-	-	
Kauri DF	MDQ	2,600	2,600	2,600	
	MHQ	130	130	130	
Waitoki	MDQ	475	475	481	
	MHQ	30	30	30	
Glenbrook	MDQ	6,775	6,200	6,775	
	MHQ	423	388	423	
Warkworth	MDQ	1,579	1,553	1,579	
	MHQ	80	78	80	
Tuakau 2	MDQ	2,749	1,991	2,749	
	MHQ	198	124	198	
Whangarei	MDQ	549	499	552	
	MHQ	34	31	34	
Maungaturoto DF	MDQ	2,400	2,400	1,900	
	MHQ	120	120	95	
Major Points	MDQ	71,069	65,974	71,986	
	MHQ	4,367	4,022	4,431	
All Other Points	MDQ	503	433	514	
	MHQ	31	27	32	
TOTAL SYSTEM	MDQ	71,572	66,408	72,500	
	MHQ	4,399	4,049	4,463	

note 1: Hunua (all) refers to the Hunua, Hunua (Nova) and Hunua 3 Delivery Points. At Hunua 3 First Gas delivers gas at pipeline pressure (ie unregulated)

note 2: Greater Auckland is a notional Delivery Point, comprising the actual Westfield, Papakura, Bruce McLaren, Waikumete and Henderson Delivery Points

TABLE 2: CENTRAL NORTH SYSTEM

Offtake Point		Aggregate Firm Contractual Transmission Capacity (GJ) Held by All Shippers on:			Nominal Delivery Pressure > 20 bar g
		30-Sep-2016	1-Oct-2016	8-Aug-2016	
Greater Hamilton	MDQ	7,891	6,451	7,877	note 1
	MHQ	493	403	492	
Tatuanui DF	MDQ	1,500	1,500	1,500	
	MHQ	94	94	94	
Waitoa	MDQ	1,580	1,403	1,580	
	MHQ	99	88	99	
Cambridge	MDQ	2,291	2,089	1,946	
	MHQ	143	131	122	
Kiwitahi 1 (Peroxide)	MDQ	1,030	1,000	1,030	
	MHQ	64	63	64	
Te Rapa Cogen	MDQ	23,200	23,200	23,200	22.5 bar g
	MHQ	1,092	1,092	1,092	
Morrinsville DF	MDQ	1,146	1,650	1,047	
	MHQ	72	103	65	
Major Points	MDQ	38,638	37,293	38,180	
	MHQ	2,057	1,973	2,028	
All Other Points	MDQ	715	679	835	
	MHQ	45	42	52	
TOTAL SYSTEM	MDQ	39,354	37,972	39,015	
	MHQ	2,102	2,015	2,080	
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:			Nominal Delivery Pressure > 20 bar g
		30-Sep-2016	1-Oct-2016	23-Nov-2015	
New Plymouth	MDQ	3,336	2,875	3,078	
	MHQ	208	180	192	
Pokuru	MDQ	-	-	-	note 1
	MHQ	-	-	-	
Eltham	MDQ	483	537	541	
	MHQ	30	34	34	
Major Points	MDQ	3,819	3,411	3,619	
	MHQ	239	213	226	
All Other Points	MDQ	754	649	730	
	MHQ	47	41	46	
TOTAL SYSTEM	MDQ	4,573	4,060	4,350	
	MHQ	286	254	272	
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:			Nominal Delivery Pressure > 20 bar g
		30-Sep-2016	1-Oct-2016	19-Sep-2016	
Lichfield DF	MDQ	2,143	1,950	1,593	
	MHQ	134	122	100	
Lichfield 2	MDQ	3,900	4,400	3,900	
	MHQ	222	222	222	
Edgecumbe DF	MDQ	4,686	4,705	4,486	
	MHQ	293	294	280	
Reporoa	MDQ	2,122	2,162	1,898	
	MHQ	133	135	119	
Whakatane	MDQ	2,784	2,649	2,784	
	MHQ	165	157	165	
Tirau DF	MDQ	1,578	1,543	1,451	
	MHQ	99	96	91	
Kinleith (CHH Mill)	MDQ	10,790	10,200	10,855	
	MHQ	674	638	678	
Kawerau (Tasman)	MDQ	1,710	1,800	1,710	
	MHQ	107	113	107	
Kawerau (Caxton)	MDQ	586	625	586	
	MHQ	37	39	37	
Greater Tauranga	MDQ	1,179	1,023	1,179	note 1
	MHQ	74	64	74	
Tokoroa	MDQ	540	417	545	
	MHQ	34	26	34	
Gisborne	MDQ	1,224	1,114	1,224	
	MHQ	77	70	77	
Greater Mt Maunganui	MDQ	2,515	2,463	2,499	note 2
	MHQ	157	154	156	
Rotorua	MDQ	1,756	1,420	1,756	
	MHQ	110	89	110	
Major Points	MDQ	37,514	36,472	36,466	
	MHQ	2,314	2,217	2,248	
All Other Points	MDQ	2,544	1,708	2,521	
	MHQ	159	107	158	
TOTAL SYSTEM	MDQ	40,058	38,179	38,987	
	MHQ	2,473	2,324	2,406	
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 and Papamoa Delivery Points				

TABLE 5: SOUTH SYSTEM

Offtake Point		Aggregate Firm Contractual Transmission Capacity (GJ) Held by All Shippers on:			Nominal Delivery Pressure > 20 bar g
		30-Sep-2016	1-Oct-2016	8-Aug-2016	
Paraparaumu	MDQ	644	535	694	
	MHQ	40	33	43	
Hawera (all)	MDQ	1,719	1,949	1,343	note 1
	MHQ	107	122	84	
Wanganui	MDQ	4,622	4,457	4,085	
	MHQ	289	279	255	
Okaiawa	MDQ	1,680	1,680	1,680	
	MHQ	70	70	70	
Marton	MDQ	795	781	835	
	MHQ	50	49	52	
Palmerston North	MDQ	4,116	3,763	4,289	
	MHQ	257	235	268	
Longburn	MDQ	846	886	978	
	MHQ	53	55	61	
Levin	MDQ	1,103	1,014	1,209	
	MHQ	69	63	76	
Belmont	MDQ	6,300	4,612	6,500	
	MHQ	394	288	406	
Feilding	MDQ	895	716	1,045	
	MHQ	56	45	65	
Hastings (all)	MDQ	6,180	6,347	7,659	note 2
	MHQ	386	397	479	
Tawa (A+B)	MDQ	9,854	9,482	10,235	
	MHQ	616	593	640	
Greater Waitangirua	MDQ	1,522	1,353	1,532	note 3
	MHQ	95	85	96	
Pahiatua DF	MDQ	3,634	3,634	3,634	
	MHQ	165	165	165	
Major Points	MDQ	43,913	41,210	45,721	
	MHQ	2,647	2,478	2,760	
All Other Points	MDQ	2,813	2,316	3,170	
	MHQ	176	145	198	
TOTAL SYSTEM	MDQ	46,726	43,526	48,890	
	MHQ	2,823	2,623	2,959	
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 Waitangirua is a notional Delivery Point, comprising the actual Waitangirua and Pauatahanui 1 Delivery Points				

TABLE 6: FRANKLEY ROAD SYSTEM

Offtake Point		Aggregate Firm Contractual Transmission Capacity (GJ) Held by All Shippers on:			Nominal Delivery Pressure > 20 bar g
		30-Sep-2016	1-Oct-2016	6-Jun-2016	
Frankley Road-Bi	MDQ	217,000	215,000	217,000	note 1
	MHQ	9,433	9,333	9,433	
Kaimiro	MDQ	-	-	-	
	MHQ	-	-	-	
Stratford 2	MDQ	50,000	50,000	50,000	note 2
	MHQ	2,500	2,500	2,500	
Ammonia-Urea	MDQ	22,500	22,500	22,500	note 3
	MHQ	1,010	1,010	1,010	
Kapuni GTP	MDQ	25,390	25,000	27,128	
	MHQ	1,274	1,250	1,383	
Stratford 3	MDQ	56,000	56,000	56,000	note 4
	MHQ	2,333	2,333	2,333	
TCC	MDQ	64,000	64,000	64,000	31.0 bar g
	MHQ	2,840	2,840	2,840	
Major Points	MDQ	434,890	432,500	436,628	
	MHQ	19,391	19,267	19,500	
All Other Points	MDQ	167	-	176	
	MHQ	10	-	11	
TOTAL SYSTEM	MDQ	435,057	432,500	436,804	
	MHQ	19,401	19,267	19,511	
note 1:	First Gas is required to deliver gas at sufficient pressure for it to enter the Maui Pipeline				
note 2:	Stratford 2 is for the Stratford "peaker" power station. First Gas delivers gas there at pipeline pressure (ie unregulated)				
note 3:	Ammonia-Urea comprises the Ballance 8201 and 9626 Delivery Points. First Gas endeavours to deliver gas at both points at not less than 29 bar g				
note 4:	Stratford 3 is for the Ahuroa underground gas storage facility				