Appendix 4 – Actual Flows 2014/15

This appendix describes annual and peak flows during the calendar year 2014 and gas year 2014/15.

Annual forecasts are based on average weather conditions. Therefore, when comparing actual demand with forecasts, demand has been adjusted to take account of the difference between the actual weather and the seasonal normal weather. The result of this calculation is the weather-corrected demand.

Actual demands incorporate a reallocation of demand between 0–73.2MWh/y and >73.2MWh/y firm load bands to allow for reconciliation, loads crossing between thresholds, etc. The load band splits shown in Table A4.1 are slightly different from those incorporated in the National Grid Accounts.

Table A4.1 provides a comparison of actual and weather-corrected demands during the 2014 calendar year with the forecasts presented in the 2014 Ten Year Statement. Annual demands are presented in the format of LDZ and NTS load bands/categories, consistent with the basis of system design and operation.

Table A4.1
Annual demand for 2014 (TWh) – LDZ / NTS split

	Actual Demand (TWh)	Weather-Corrected Demand (TWh)	GTYS (2014) GG Demand
0–73.2MWh	298	318	328
73.2–732MWh	43	45	43
>732MWh Firm	167	171	179
Total LDZ Consumption	**508**	**534**	**551**
NTS Industrial	23	23	30
NTS Power Generation	176	176	173
Exports	115	115	113
Total NTS Consumption	**314**	**314**	**316**
Total Consumption	**823**	**849**	**867**
Shrinkage	8	8	8
Total System Demand	**831**	**857**	**875**

Table A4.1 indicates that our 1-year ahead forecast for 2014 was accurate to 3.1% at an LDZ level. The combined forecasts of the NTS Industrial, NTS Power Generation and Exports were accurate to 0.6%. Total system demand was accurate to 2.1%.

Appendix 4 – Actual Flows 2014/15

4.1 Peak and minimum flows

4.1.1 System entry – maximum day flows

For the 2014/15 gas year, the day of highest supply to the NTS was 19 January 2015 (364.1mcm), whilst the day of highest demand for the same period was 2 February 2015 (364.9mcm). These are both higher than the highest supply and demand days in the 2013/14 gas year (327mcm, both supply and demand). The day of lowest supply and demand for the gas year 2014/15 was 12 September 2015 (142mcm), which is higher than the lowest supply and demand days in the 2013/14 gas year (135mcm and 138mcm, respectively).

Table A4.2
IGMS M+15 physical NTS entry flows: 19 January 2015 (mcm/d)

Terminal	Maximum Day	GTYS (2014) GG Supply Capability	Highest Daily (per terminal)
Bacton inc. IUK and BBL	66	150	75
Barrow	3	8	7
Easington inc. Rough & Langeled inc. incRoughRLLanaLangeled	122	122	126
Isle of Grain (excl. LDZ inputs)	0	59	22
Milford Haven	39	86	60
Point of Ayr (Burton Point)	1	0	3
St Fergus	86	96	87
Teesside	13	35	25
Theddlethorpe	10	9	12
Sub-total	382	566	416
MRS & LNG Storage	24	102	52
Total	**364**	**667**	**468**

Notes
- The maximum supply day for 2014/15 refers to NTS flows on 19 January 2015
- This was the overall highest supply day, but individual terminals may have supplied higher deliveries on other days
- Supply Capability refers to that published in the 2014 Gas Ten Year Statement. Conversions to mcm have been made using a CV of 39.6MJ/m3
- Due to linepack changes, there may be a difference between total demand and total supply on the day
- Figures may not sum exactly due to rounding.

4.1.2 System entry – minimum day flows

Table A4.3
IGMS M+15 physical NTS entry flows: 12 September 2015 (mcm/d)

Terminal	Minimum Day
Bacton inc. IUK and BBL	14
Barrow	0
Easington inc. Rough & Langeled inc. incRoughRLLanaLangeled	35
Isle of Grain (excl. LDZ inputs)	0
Milford Haven	32
Point of Ayr (Burton Point)	3
St Fergus	43
Teesside	16
Theddlethorpe	0
Sub-total	142
MRS & LNG Storage	0
Total	**142**

Notes
- The minimum supply day for 2014/15 refers to NTS flows on 12 September 2015. This was the overall lowest supply day, but individual terminals may have supplied lower deliveries on other days
- Due to linepack changes, there may be a difference between total demand and total supply on the day
- Figures may not sum exactly due to rounding.

Appendix 4 – Actual Flows 2014/15

4.1.3 System exit – maximum and peak day flows

Table A4.4 shows actual flows out of the NTS on the maximum demand day of gas year 2014/15 compared to the forecast peak flows.

Table A4.4
IGMS D+5 physical LDZ demand flows: 2 February 2015 (mcm/d)

LDZ	Maximum Day	GTYS (2014) 1 in 20 Undiversified GG Peak
Eastern	23	33
East Midlands	30	39
North East	19	24
Northern	15	21
North Thames	28	42
North West	34	47
Scotland	23	30
South East	29	45
Southern	22	33
South West	16	25
West Midlands	25	34
Wales (North & South)	15	22
LDZ Total	**278**	**395**
NTS Total	**87**	**169**
Compressor Fuel Usage (CFU)	**1**	
Total	**365**	**594**

Notes
- The maximum day for gas year 2014/15 refers to 2 February 2015. This was the overall highest demand day, but individual LDZs may have seen higher demands on other days
- NTS actual loads include interconnector demand
- Due to linepack changes, there may be a difference between total demand and total supply on the day
- The Gone Green 1-in-20 Peak Day Firm Demand forecast was published in the 2014 Gas Ten Year Statement. Conversions to mcm have been made using a CV of 39.6MJ/m3
- Figures may not sum exactly due to rounding.

4.1.4 System exit – minimum day flows

Table A4.5
IGMS D+5 physical LDZ demand flows: 12 September 2015

Terminal	Minimum Day
Eastern	5
East Midlands	6
North East	5
Northern	5
North Thames	6
North West	8
Scotland	8
South East	4
Southern	4
South West	3
West Midlands	5
Wales (North & South)	4

LDZ Total	**63**
NTS Total	**79**
Compressor Fuel Usage (CFU)	**0**

Total	**142**

Notes
- The minimum day for gas year 2014/15 refers to 12 September 2015. This was the overall lowest demand day, but individual LDZs may have seen lower demands on other days
- NTS actual loads include interconnector demand
- Due to linepack changes, there may be a small difference between total demand and total supply on the day
- Figures may not sum exactly due to rounding.