

NATIONAL GRID

NTS Shrinkage Incentive Ex-Ante Baseline Values Statement For 2015/16

July 2016

ABOUT THIS DOCUMENT

This document sets out baseline value targets that National Grid Gas plc (“National Grid”) in its role as holder of the Gas Transporter Licence in respect of the NTS (“the Licence”) is required to publish in accordance with the NTS Shrinkage Incentive Methodology Statement for Formula Year 2015/16.

This document will be updated and published five times for 2015/16:

- June 2014 (Initial Publication)
 - UAG baseline volumes for Q2 2015
 - CFU baseline volumes for all quarters in Formula Year 2015/16
 - CV shrinkage baseline volumes for all quarters in Formula Year 2015/16

- September 2014 (Update)
 - UAG baseline volumes for Q3 2015

- December 2014 (Update)
 - UAG baseline volumes for Q4 2015

- March 2015 (Update)
 - UAG baseline volumes for Q1 2016

- July 2016 (Update)
 - Adjusted target volume
 - CFU adjusted target volume
 - CV shrinkage adjusted target volume

A separate document will exist for each incentive year.

An electronic version of this publication can be found at the following internet page: <http://www2.nationalgrid.com/uk/industry-information/gas-system-operator-incentives/nts-shrinkage>

If you require further details about any of the information contained within this document or have comments on how this document might be improved please contact Tom Lane, Gas Incentives team on 01926 6549087 or at tom.lane@nationalgrid.com or at:

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NTS Shrinkage Incentive Ex-Ante Baseline Values Statement

For

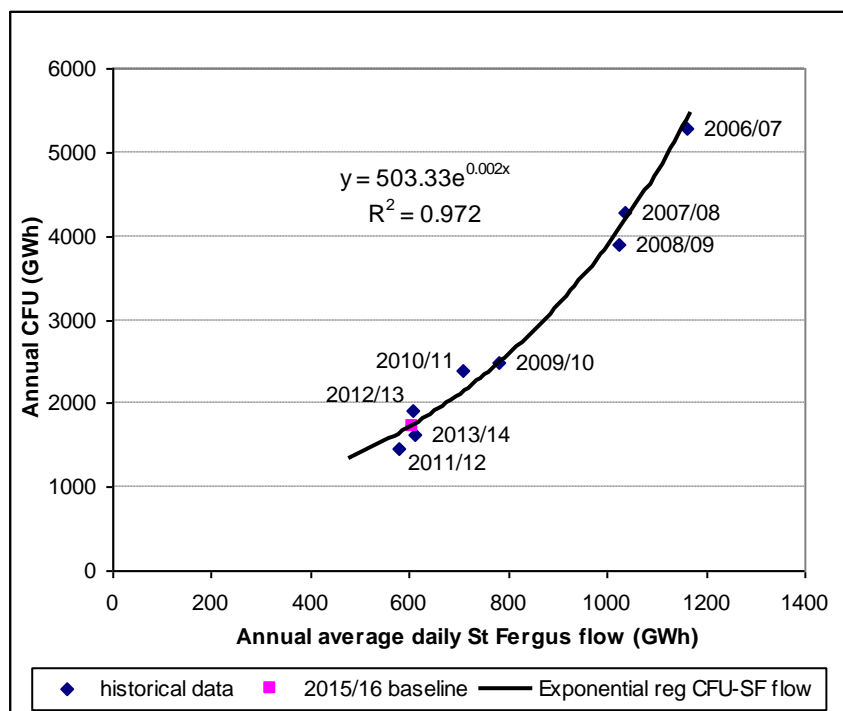
Incentive Year 2015/16

BASELINE VOLUMES - CFU

STEP 1

The relationship between flow at the St Fergus ASEP and total CFU, using data from 2006/7 to 2013/14 inclusive, is:

(A) Total CFU (GWh) = $503.33 \cdot \exp^{0.002041 \cdot \text{Daily Average St Fergus Flow}}$



STEP 2

The forecast flow at the St Fergus ASEP for 2015/16 is:

(B) **606 GWh/day**

Inserting the forecast flow at St Fergus ASEP into equation (A) gives a total CFU baseline volume of:

(C) **1732 GWh**

STEP 3

The quarterly CFU volumes for 2013/14 were:

	Q2 Apr-Jun	Q3 Jul-Sep	Q4 Oct-Dec	Q1 Jan-Mar	TOTAL
GWh	338	187	525	573	1623
%	21%	12%	32%	35%	100%

Applying the above quarterly percentages to the total CFU baseline volume (C) gives the following quarterly CFU baseline volumes for 2015/16:

	Q2 Apr-Jun	Q3 Jul-Sep	Q4 Oct-Dec	Q1 Jan-Mar	TOTAL
GWh	361	199	561	611	1732

STEP 4

Applying the prevailing view of electric compressor replacement, along with historical information of the split between gas and electric compressor usage, gives the following split of quarterly CFU baseline volumes between electricity and gas for 2015/16:

	Q2 Apr-Jun	Q3 Jul-Sep	Q4 Oct-Dec	Q1 Jan-Mar	TOTAL
Gas GWh	251	121	444	487	1303
Elec GWh	37	26	39	41	143

Note – electricity usage is one third of the electricity (gas equivalent) usage

BASELINE VOLUMES - CALORIFIC VALUE SHRINKAGE

The quarterly CV shrinkage baseline volumes for 2015/16 are as follows:

	Q2 Apr-Jun	Q3 Jul-Sep	Q4 Oct-Dec	Q1 Jan-Mar	TOTAL
GWh	28	28	28	28	112

BASELINE VOLUMES – UNACCOUNTED FOR GAS (UAG)

The quarterly UAG baseline volumes for 2015/16 are:

	Q2 Apr-Jun	Q3 Jul-Sep	Q4 Oct-Dec	Q1 Jan-Mar	TOTAL
GWh	548	686	656	367	2257

ENERGY EFFICIENCY VOLUMES – COMPRESSOR FUEL USE

The annual CFU energy efficiency target, outturn and variance for 2015/16 are:

	Target	Outturn	Variance
GWh	2092.8	1738.8	354.0

ENERGY EFFICIENCY VOLUMES – CALORIFIC VALUE SHRINKAGE

The annual CVS energy efficiency target, outturn and variance for 2015/16 are:

	Target	Outturn	Variance
GWh	-95.1	70.9	-166.0