

All Shippers & Interested Parties

17 January 2019

Dear Industry Participant

Notice of Revised NTS Entry Capacity QSEC Reserve and Step Prices

The next annual auctions for Quarterly System Entry Capacity (QSEC) will be held in March 2019. National Grid is publishing this notice of revised NTS transportation charges two months in advance of the next QSEC auction, consistent with our Licence and Uniform Network Code (UNC) obligations.

Our Transportation model has been updated to reflect changes in demand levels, the pipeline network, supply patterns, and the cost of investment through the expansion constant, all of which may affect the charges. Step prices have been recalculated in accordance with the methodology set out in the latest approved Entry Capacity Release Methodology Statement (ECR)¹

Attached is an update to Appendix D of the NTS Gas Transportation Charges Statement 1 October 2018, which details the reserve and step prices for use in the March 2019 QSEC auction and replaces any previous versions of this appendix. **Table 1** below summarises the change in reserve prices at each NTS Aggregate System Entry Point (ASEP).

The main points to note compared to the QSEC 2018 are as follows:

- Forecast peak day demand has increased by 2.5%. We have continued to use the 'Updated Forecast' data given in the Gas Ten Year Statement 2018, which is National Grid's shorter term view of the current trajectory of energy supply and demands.
- Total gas supply has been increased to match demand using the supply balancing rules detailed in the UNC Section Y Charging Methodologies 2.5.1 (c).
- The expansion constant, which represents the average cost of investment in pipe and
 compression, has been updated in line with inflation forecasts and has increased by 3.1%. Those
 ASEPs furthest away from centres of demand are more sensitive to changes in the expansion
 constant as an increase in supply from these ASEPs would require greater investment in order to
 transport gas to demand.
- In general, ASEPs have seen an increase in their reserve price. Forecast supply and demand changes have resulted in higher adjustment factors. The average Exit costs have increased and so the adjustment factor that is used to achieve a 50:50 split of equal costs between Entry and Exit users, has increased on the Entry side.

¹ https://www.nationalgridgas.com/capacity/capacity-methodology-statements

• Barrow and Isle of Grain have seen a decrease in their Long Run Marginal Costs (LRMC) due to the forecast supply and demand changes causing their reserve prices to decrease.

For all Entry points an **Estimated Project Value** (£m) has also been calculated for each Incremental Capacity level and this information has been added to this notice. This is also available in Appendix E of the <u>Transportation Charging Statement</u>. The net present value (NPV) of the revenues from incremental bids is required to be at least 50% of the estimated project value in order to trigger the release of incremental obligated Entry Capacity (as given in Chapter 6 of the ECR Methodology Statement²).

Please note that details of the **NTS Entry Capacity retention charge** are available in the Transportation Charging Statement and remain unchanged. The statement can be found on our website at https://www.nationalgridgas.com/charging/transmission-system-charges

Please be aware that on the 20 December 2018, Ofgem rejected **UNC Modification 0621 (and all its alternatives)** 'Amendments to Gas Transmission Charging Regime'. Ofgem set out its reasons for the rejection³ in its decision letter which can be found at this link https://www.gasgovernance.co.uk/0621.

A new modification is expected to be proposed by National Grid during January 2019. There is therefore the potential for the payable prices associated to capacity allocated in this QSEC auction (for GB Non-Interconnection Entry points) to be impacted by such a modification.

Market participants should keep up to date and engage with how the Tariff Network Code will be reflected in the UNC via the Joint Office (http://www.gasgovernance.co.uk/livemods).

If you have any questions or feedback relating to this notice, or NTS charges in general, please contact Karin Elmhirst on 01926 655540 karin.elmhirst@nationalgrid.com or Dave Bayliss on 01926 656853 karin.elmhirst@nationalgrid.com or email our charging team at box.transmissioncapacityandcharging@nationalgrid.com.

Yours sincerely

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² https://www.nationalgridgas.com/capacity/capacity-methodology-statements

³ https://www.gasgovernance.co.uk/0621

Table 1 - Change in Reserve Price by ASEP compared to QSEC 2019

	QSEC18	QSEC 19	Change
Avonmouth	0.0001	0.0001	0.0000
Bacton UKCS	0.0090	0.0104	0.0014
Barrow	0.0037	0.0001	-0.0036
Barton Stacey	0.0001	0.0001	0.0000
Burton Point	0.0001	0.0001	0.0000
Canonbie	0.0030	0.0001	-0.0029
Caythorpe	0.0116	0.0129	0.0013
Cheshire	0.0001	0.0006	0.0005
Dynevor Arms	0.0087	0.0096	0.0009
Easington &Rough	0.0142	0.0164	0.0022
Fleetwood	0.0001	0.0001	0.0000
Garton	0.0125	0.0137	0.0012
Glenmavis	0.0133	0.0125	-0.0008
Hatfield Moor	0.0032	0.0038	0.0006
Hole House Farm	0.0001	0.0001	0.0000
Hornsea	0.0138	0.0134	-0.0004
Isle of Grain	0.0071	0.0001	-0.0070
Milford Haven	0.0226	0.0240	0.0014
Partington	0.0001	0.0001	0.0000
St Fergus	0.0514	0.0532	0.0018
Teesside	0.0093	0.0091	-0.0002
Theddlethorpe	0.0126	0.0171	0.0045
Wytch Farm	0.0001	0.0001	0.0000
Murrow ⁴		0.0001	

⁴ Subject to Ofgem's Notice dated 12 December, Murrow Entry Point will be effective in National Grid's Gas Transporter Licence from the 7 February 2019.



Appendix D QSEC Step Prices 2019

Below are the Entry Capacity reserve prices together with the price steps for each level of Incremental Capacity for use in the auction of Quarterly System Entry Capacity (QSEC).

	Bacton Terminal UKCS	Barrow	Cheshire	Canonbie	Easington &Rough	Fleetwood	Garton	Isle of Grain	Milford Haven	St Fergus	Teesside	Theddle -thorpe
Obligated	0.0404	0.0004	0.0000	0.0004	0.0404	0.0004	0.0407	0.0004	0.0040	0.0500	0.0004	0.0474
Level	0.0104	0.0001	0.0006	0.0001	0.0164	0.0001	0.0137	0.0001	0.0240	0.0532	0.0091	0.0171
2.5%	0.0105	0.0002	0.0011	0.0019	0.0165	0.0002	0.0138	0.0002	0.0241	0.0533	0.0092	0.0172
5.0%	0.0106	0.0008	0.0017	0.0023	0.0170	0.0041	0.0144	0.0087	0.0245	0.0538	0.0093	0.0173
7.5%	0.0108	0.0009	0.0018	0.0024	0.0179	0.0042	0.0145	0.0088	0.0246	0.0550	0.0094	0.0174
10.0%	0.0114	0.0010	0.0019	0.0025	0.0180	0.0043	0.0146	0.0089	0.0247	0.0551	0.0095	0.0175
12.5%	0.0122	0.0011	0.0020	0.0026	0.0181	0.0044	0.0147	0.0090	0.0248	0.0558	0.0096	0.0176
15.0%	0.0123	0.0012	0.0026	0.0027	0.0182	0.0045	0.0148	0.0091	0.0255	0.0559	0.0097	0.0177
17.5%	0.0124	0.0013	0.0027	0.0028	0.0183	0.0046	0.0149	0.0092	0.0263	0.0560	0.0098	0.0178
20.0%	0.0126	0.0014	0.0028	0.0029	0.0184	0.0047	0.0150	0.0093	0.0264	0.0591	0.0099	0.0179
22.5%	0.0127	0.0015	0.0029	0.0030	0.0185	0.0060	0.0151	0.0100	0.0292	0.0592	0.0100	0.0180
25.0%	0.0151	0.0016	0.0030	0.0031	0.0186	0.0061	0.0152	0.0106	0.0293	0.0593	0.0101	0.0181
27.5%	0.0152	0.0017	0.0031	0.0032	0.0187	0.0069	0.0153	0.0107	0.0294	0.0594	0.0102	0.0182
30.0%	0.0153	0.0018	0.0032	0.0033	0.0188	0.0070	0.0154	0.0110	0.0295	0.0595	0.0108	0.0183
32.5%	0.0154	0.0019	0.0033	0.0034	0.0197	0.0080	0.0155	0.0135	0.0321	0.0596	0.0126	0.0184
35.0%	0.0155	0.0042	0.0034	0.0038	0.0199	0.0081	0.0156	0.0136	0.0329	0.0597	0.0129	0.0185
37.5%	0.0156	0.0043	0.0035	0.0039	0.0200	0.0082	0.0157	0.0137	0.0330	0.0598	0.0132	0.0186
40.0%	0.0160	0.0044	0.0036	0.0053	0.0201	0.0083	0.0158	0.0138	0.0331	0.0599	0.0134	0.0187
42.5%	0.0180	0.0045	0.0037	0.0054	0.0202	0.0084	0.0159	0.0148	0.0332	0.0600	0.0135	0.0188
45.0%	0.0187	0.0046	0.0038	0.0055	0.0203	0.0085	0.0160	0.0165	0.0333	0.0601	0.0139	0.0189
47.5%	0.0189	0.0047	0.0046	0.0056	0.0204	0.0086	0.0161	0.0173	0.0345	0.0602	0.0140	0.0190
50.0%	0.0190	0.0048	0.0049	0.0058	0.0205	0.0087	0.0162	0.0174	0.0352	0.0603	0.0141	0.0191
Obligated Level (GWh/d)	485.6	340.0	556.3	0	1407.15	350	420	699.68	950	1670.7	445.1	610.7

Appendix D QSEC Step Prices 2019 (cont)

Pence/kWh/day

Hole Hou	use Farm	n Hornsea		Partington		Avonmouth		Barton Stacey	
Obligated Level	0.0001	Obligated Level	0.0134	Obligated Level	0.0001	Obligated Level	0.0001	Obligated Level	0.0001
5.1%	0.0041	6.4%	0.0135	7.0%	0.0002	8.4%	0.0007	8.7%	0.0002
10.1%	0.0042	12.9%	0.0141	14.0%	0.0023	16.7%	0.0010	17.4%	0.0123
15.2%	0.0043	19.3%	0.0146	20.9%	0.0024	25.1%	0.0015	26.1%	0.0132
20.2%	0.0044	25.7%	0.0147	27.9%	0.0027	33.5%	0.0016	34.8%	0.0137
25.3%	0.0050	32.2%	0.0148	34.9%	0.0052	41.8%	0.0020	43.5%	0.0138
30.3%	0.0070	38.6%	0.0149	41.9%	0.0058	50.2%	0.0044	52.1%	0.0141
35.4%	0.0118	45.0%	0.0151	48.8%	0.0072				
40.5%	0.0119	51.5%	0.0152	55.8%	0.0073				
45.5%	0.0120								
50.6%	0.0121								
Obligated Level (GWh/d)	296.6		233.1		201.4		179.3		172.6

	Burton Point	Caythorpe	Dynevor Arms	Glenmavis	Hatfield Moor	Wytch Farm
Obligated Level	0.0001	0.0129	0.0096	0.0125	0.0038	0.0001
10%	0.0006	0.0130	0.0097	0.0126	0.0039	0.0002
20%	0.0007	0.0131	0.0098	0.0158	0.0040	0.0003
30%	0.0008	0.0132	0.0099	0.0161	0.0041	0.0004
40%	0.0009	0.0133	0.0100	0.0162	0.0042	0.0005
50%	0.0010	0.0134	0.0101	0.0163	0.0043	0.0006
Obligated Level (GWh/d)	73.5	90	49	99	25.3	3.3

Appendix D QSEC Step Prices 2019 (cont)

New Entry Point	Murrow ⁵
Obligated Level	0.0001
2.5%	0.0002
5.0%	0.0003
7.5%	0.0004
10.0%	0.0005
12.5%	0.0006
15.0%	0.0007
17.5%	0.0008
20.0%	0.0009
22.5%	0.0010
25.0%	0.0011
27.5%	0.0012
30.0%	0.0013
32.5%	0.0014
35.0%	0.0015
37.5%	0.0016
40.0%	0.0017
42.5%	0.0018
45.0%	0.0019
47.5%	0.0020
50.0%	0.0021
Obligated Level (GWh/d)	0.0

⁵Subject to Ofgem's Notice dated 12 December 2018, Murrow Entry Point will be effective in National Grid's Gas Transporter Licence from the 7 February 2019.



Appendix E Estimated Project Value, £m

£m

	Bacton Terminal UKCS	Barrow	Cheshire	Canonbie	Easington &Rough	Fleetwood	Garton	Isle of Grain	Milford Haven	St Fergus	Teesside	Theddlethorpe
Obligated Level												
2.5%	4.49	0.03	0.54	1.01	20.50	0.03	5.11	0.06	20.25	78.96	3.60	9.33
5.0%	8.97	0.48	1.68	2.45	42.50	2.55	10.75	10.82	41.35	159.69	7.20	18.66
7.5%	13.98	0.73	2.52	3.68	67.13	3.82	16.12	16.22	62.03	244.88	10.79	27.99
10.0%	19.67	0.97	3.36	4.90	89.00	5.10	21.49	21.63	82.70	327.11	14.39	37.33
12.5%	26.31	1.66	4.20	6.40	112.50	6.37	26.86	27.04	103.38	414.08	17.99	46.66
15.0%	31.58	1.99	7.71	7.68	134.25	7.65	32.68	32.45	129.12	497.78	22.06	55.99
17.5%	36.84	2.33	8.99	8.95	156.63	8.92	38.13	37.85	155.37	580.75	25.74	65.32
20.0%	43.48	2.66	10.28	10.23	180.00	10.20	43.58	45.25	177.56	701.70	29.42	74.65
22.5%	48.92	2.99	11.56	12.47	204.75	16.79	49.03	55.94	221.78	789.42	33.09	83.98
25.0%	65.14	3.32	13.34	13.86	230.00	18.66	54.47	65.88	246.43	878.61	36.77	94.94
27.5%	71.65	3.66	14.68	15.24	254.38	23.60	59.92	72.47	271.07	968.11	40.45	104.43
30.0%	78.17	3.99	16.01	16.63	277.51	25.74	65.37	82.05	297.74	1056.12	51.24	114.58
32.5%	84.68	5.50	17.35	21.48	320.13	32.34	70.82	109.08	352.17	1144.13	64.77	124.13
35.0%	91.19	17.76	18.68	28.36	348.26	34.82	76.26	117.47	388.71	1232.14	71.41	133.67
37.5%	99.00	19.03	20.01	31.18	375.01	37.31	81.71	125.86	416.48	1320.15	78.29	144.04
40.0%	110.43	20.30	21.35	45.20	400.01	39.80	90.74	137.24	446.94	1408.16	84.77	153.64
42.5%	132.00	21.57	22.68	48.02	425.01	42.29	96.41	156.38	474.87	1501.21	90.07	163.24
45.0%	145.20	22.83	24.02	50.85	450.01	44.77	102.08	184.60	502.81	1589.52	98.93	172.84
47.5%	154.91	24.10	43.19	53.67	477.38	47.26	107.75	204.30	553.19	1677.83	104.42	190.69
50.0%	163.06	25.37	48.43	61.83	507.51	50.99	113.42	215.06	594.12	1766.13	109.92	206.15
Obligate d Level (GWh/d)	485.6	340.0	556.3	0	1407.2	350.0	420.0	699.7	950.0	1670.7	445.1	610.7



Appendix E Estimated Project Value, £m (cont)

£m

Hole Hou	Hole House Farm Hornsea		Parti	Partington		Avonmouth		Barton Stacey	
Obligated		Obligated		Obligated		Obligated		Obligated	
Level		Level		Level		Level		Level	
5.1%	2.19	6.4%	7.14	7.0%	0.053	8.37%	0.37	8.7%	0.05
10.1%	4.37	12.9%	15.03	14.0%	2.452	16.73%	1.07	17.4%	13.11
15.2%	6.56	19.3%	23.35	20.9%	3.678	25.10%	2.40	26.1%	21.11
20.2%	9.17	25.7%	31.13	27.9%	5.756	33.46%	3.20	34.8%	29.21
25.3%	13.33	32.2%	38.91	34.9%	13.858	41.83%	5.33	43.5%	36.51
30.3%	22.39	38.6%	46.69	41.9%	18.548	50.20%	14.07	52.1%	45.09
35.4%	44.03	45.0%	56.34	48.8%	26.863				
40.5%	50.32	51.5%	64.39	55.8%	30.701				
45.5%	56.61								
50.6%	63.43								
Obligated Level (GWh/d)	296.6		233.1		201.4		179.3		172.6

£m

	Burton Point	Caythorpe	Dynevor Arms	Glenmavis	Hatfield Moor	Wytch Farm
Obligated Level						
10%	0.16	4.13	1.67	4.40	0.34	0.001
20%	0.31	8.25	3.34	11.12	0.68	0.002
30%	0.47	12.38	5.01	16.99	1.03	0.004
40%	0.63	16.50	6.69	22.66	1.37	0.005
50%	0.78	20.95	8.36	28.32	1.89	0.006
Obligated Level (GWh/d)	73.5	90.0	49.0	99.0	25.3	3.3

Appendix E Estimated Project Value, £m (cont)

New Entry Point	Murrow ⁶
Obligated Level	
2.5%	0.02
5.0%	0.04
7.5%	0.05
10.0%	0.07
12.5%	0.09
15.0%	0.11
17.5%	0.12
20.0%	0.14
22.5%	0.32
25.0%	0.36
27.5%	0.39
30.0%	0.43
32.5%	0.46
35.0%	0.50
37.5%	0.53
40.0%	1.99
42.5%	2.11
45.0%	2.24
47.5%	2.36
50.0%	2.49
Obligated Level (GWh/d)	0.0

⁶ Subject to Ofgem's Notice dated 12 December 2018, Murrow Entry Point will be effective in National Grid's Gas Transporter Licence from the 7 February 2019.