

All Shippers & Interested Parties

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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 2016. 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 2015, which details the reserve and step prices for use in the March 2016 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 changes to note compared to the QSEC 2015 are as follows:

- Forecast peak day demand has decreased by approximately 11%.
- Total gas supply has been decreased to match demand using the supply balancing rules detailed in the UNC Section Y Charging Methodologies 2.5.1 (c).
- In general, ASEPs have seen an increase in their reserve price. Forecast supply and demand changes have resulted in a higher adjustment factor. 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, causing Entry Capacity reserve prices to rise, compared to the QSEC 2015 prices.

¹ <http://www2.nationalgrid.com/UK/Industry-information/Gas-capacity-methodologies/Entry-Capacity-Release-Methodology-Statement/>

- 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 3.3%. 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.

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 and is also available in Appendix E of the Transportation Charging Statement. 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 Statement).

Please note that details of the **NTS Entry Capacity retention charge** are available in the Transportation Charging Statement page 5, and remain unchanged. The statement can be found on our website at <http://www2.nationalgrid.com/UK/Industry-information/System-charges/Gas-transmission/Charging-Statements/>.

A more detailed description of the changes will be made available on our website at <http://www2.nationalgrid.com/UK/Industry-information/System-charges/Gas-transmission/Tools-and-Models>.

If you have any questions or feedback relating to this notice, or NTS charges in general, please contact Karin Elmhirst on 01926 655540 or karin.elmhirst@nationalgrid.com.

Yours sincerely

Steve Fisher
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Table 1 - Change in Reserve Price by ASEP compared to QSEC 2015

p/kWh/day	QSEC15	QSEC 16	Change
Avonmouth	0.0001	0.0001	0.0000
Bacton UKCS	0.0089	0.0112	0.0023
Barrow	0.0006	0.0001	-0.0005
Barton Stacey	0.0001	0.0001	0.0000
Burton Point	0.0001	0.0001	0.0000
Canonbie	0.0025	0.0040	0.0015
Caythorpe	0.0128	0.0131	0.0003
Cheshire	0.0001	0.0001	0.0000
Dynevor Arms	0.0078	0.0023	-0.0055
Easington & Rough	0.0122	0.0142	0.0020
Fleetwood	0.0008	0.0013	0.0005
Garton	0.0122	0.0155	0.0033
Glenmavis	0.0131	0.0135	0.0004
Hatfield Moor	0.0036	0.0051	0.0015
Hole House Farm	0.0001	0.0001	0.0000
Hornsea	0.0125	0.0123	-0.0002
Isle of Grain	0.0001	0.0017	0.0016
Milford Haven	0.0216	0.0231	0.0015
Partington	0.0001	0.0001	0.0000
St Fergus	0.0451	0.0475	0.0024
Teesside	0.0082	0.0099	0.0017
Theddlethorpe	0.0118	0.0137	0.0019
Wytch Farm	0.0001	0.0001	0.0000

Appendix D QSEC Step Prices 2016

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	Theddlethorpe
Obligated Level	0.0112	0.0001	0.0001	0.0040	0.0142	0.0013	0.0155	0.0017	0.0231	0.0475	0.0099	0.0137
2.5%	0.0113	0.0002	0.0029	0.0041	0.0143	0.0023	0.0156	0.0018	0.0234	0.0491	0.0100	0.0138
5.0%	0.0114	0.0003	0.0030	0.0042	0.0144	0.0024	0.0157	0.0095	0.0247	0.0492	0.0101	0.0142
7.5%	0.0115	0.0004	0.0043	0.0043	0.0145	0.0025	0.0158	0.0104	0.0248	0.0493	0.0102	0.0143
10.0%	0.0116	0.0005	0.0048	0.0044	0.0146	0.0026	0.0159	0.0105	0.0249	0.0494	0.0105	0.0144
12.5%	0.0117	0.0006	0.0049	0.0045	0.0147	0.0029	0.0160	0.0117	0.0250	0.0502	0.0108	0.0145
15.0%	0.0118	0.0007	0.0072	0.0046	0.0155	0.0033	0.0161	0.0119	0.0251	0.0505	0.0109	0.0155
17.5%	0.0119	0.0012	0.0073	0.0047	0.0169	0.0039	0.0162	0.0120	0.0252	0.0511	0.0122	0.0156
20.0%	0.0120	0.0025	0.0080	0.0048	0.0170	0.0040	0.0163	0.0121	0.0255	0.0518	0.0123	0.0157
22.5%	0.0121	0.0026	0.0081	0.0049	0.0171	0.0041	0.0164	0.0122	0.0256	0.0520	0.0124	0.0158
25.0%	0.0122	0.0027	0.0082	0.0050	0.0172	0.0042	0.0165	0.0123	0.0257	0.0543	0.0128	0.0159
27.5%	0.0125	0.0028	0.0083	0.0051	0.0173	0.0043	0.0166	0.0124	0.0258	0.0544	0.0132	0.0160
30.0%	0.0126	0.0029	0.0084	0.0052	0.0174	0.0044	0.0167	0.0125	0.0259	0.0545	0.0142	0.0161
32.5%	0.0127	0.0030	0.0085	0.0053	0.0175	0.0045	0.0168	0.0126	0.0260	0.0546	0.0143	0.0162
35.0%	0.0138	0.0031	0.0086	0.0054	0.0176	0.0046	0.0169	0.0127	0.0261	0.0547	0.0144	0.0163
37.5%	0.0139	0.0032	0.0091	0.0055	0.0177	0.0047	0.0170	0.0128	0.0269	0.0548	0.0145	0.0164
40.0%	0.0140	0.0047	0.0095	0.0056	0.0183	0.0048	0.0171	0.0129	0.0270	0.0549	0.0146	0.0165
42.5%	0.0141	0.0048	0.0133	0.0057	0.0184	0.0052	0.0172	0.0130	0.0275	0.0550	0.0147	0.0166
45.0%	0.0142	0.0049	0.0134	0.0058	0.0185	0.0069	0.0173	0.0131	0.0282	0.0551	0.0148	0.0167
47.5%	0.0143	0.0050	0.0135	0.0059	0.0186	0.0078	0.0174	0.0132	0.0283	0.0552	0.0149	0.0168
50.0%	0.0144	0.0054	0.0136	0.0060	0.0187	0.0079	0.0175	0.0133	0.0304	0.0553	0.0150	0.0169
Obligated Level (GWh/d)	485.6	340.01	542.7	0	1407.15	650	420	699.68	950	1670.7	445.09	610.7

Pence/kWh/
day

Hole House Farm		Hornsea		Partington		Avonmouth		Barton Stacey	
Obligated Level	0.0001	Obligated Level	0.0123	Obligated Level	0.0001	Obligated Level	0.0001	Obligated Level	0.0001
5.1%	0.0002	6.4%	0.0124	7.0%	0.0002	8.4%	0.0002	8.7%	0.0071
10.1%	0.0003	12.9%	0.0125	14.0%	0.0003	16.7%	0.0003	17.4%	0.0077
15.2%	0.0015	19.3%	0.0126	20.9%	0.0004	25.1%	0.0004	26.1%	0.0091
20.2%	0.0016	25.7%	0.0127	27.9%	0.0010	33.5%	0.0005	34.8%	0.0097
25.3%	0.0021	32.2%	0.0128	34.9%	0.0016	41.8%	0.0006	43.5%	0.0098
30.3%	0.0022	38.6%	0.0129	41.9%	0.0026	50.2%	0.0007	52.1%	0.0099
35.4%	0.0023	45.0%	0.0133	48.8%	0.0031				
40.5%	0.0024	51.5%	0.0134	55.8%	0.0042				
45.5%	0.0025								
50.6%	0.0026								
Obligated Level (GWh/d)	296.6		233.1		215		179.3		172.6

Appendix D QSEC Step Prices 2016 (cont)

	Pence/kWh/day					
	Burton Point	Caythorpe	Dynevor Arms	Glenmavis	Hatfield Moor	Wytch Farm
Obligated Level	0.0001	0.0131	0.0023	0.0135	0.0051	0.0001
10%	0.0002	0.0132	0.0074	0.0165	0.0052	0.0002
20%	0.0003	0.0133	0.0075	0.0166	0.0053	0.0003
30%	0.0004	0.0134	0.0076	0.0167	0.0054	0.0004
40%	0.0005	0.0135	0.0077	0.0168	0.0055	0.0005
50%	0.0006	0.0136	0.0078	0.0169	0.0056	0.0006
Obligated Level (GWh/d)	73.5	90	49	99	25.3	3.3

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%	4.83	0.03	1.40	2.19	17.75	1.33	5.78	1.06	19.75	72.87	3.91	7.43
5.0%	9.66	0.06	2.80	4.37	35.50	2.66	11.57	11.81	41.69	145.74	7.83	15.41
7.5%	14.49	0.09	6.22	6.56	53.25	3.98	17.35	19.39	62.79	218.62	11.86	23.11
10.0%	19.33	0.12	9.26	8.74	71.00	5.54	23.13	25.86	83.72	291.49	16.61	30.81
12.5%	24.16	0.45	11.57	10.93	91.25	8.37	28.92	36.36	105.49	372.52	21.35	38.79
15.0%	28.99	1.27	20.83	13.11	116.25	11.43	34.70	44.38	126.59	449.70	25.62	50.45
17.5%	33.82	2.54	24.64	15.30	147.88	15.76	40.48	51.78	147.69	530.88	33.77	58.86
20.0%	38.65	6.04	30.85	17.48	169.00	18.02	46.27	59.67	172.16	615.03	38.59	67.27
22.5%	43.48	6.80	34.71	19.67	191.25	20.27	52.05	67.13	193.68	694.58	44.13	76.17
25.0%	50.47	7.55	38.57	21.85	212.50	22.52	57.83	74.59	215.20	805.89	50.61	84.63
27.5%	59.31	8.31	42.96	24.04	233.75	24.77	63.61	82.05	236.72	886.48	57.41	93.09
30.0%	64.71	9.06	46.86	26.22	255.01	27.02	69.40	89.50	258.24	967.07	67.37	101.56
32.5%	71.22	9.82	50.77	34.65	276.26	29.28	75.18	101.00	285.25	1047.66	72.99	110.02
35.0%	83.34	10.57	54.67	37.31	306.26	31.53	80.96	108.77	307.19	1128.25	78.60	118.48
37.5%	89.94	11.33	65.81	39.98	328.13	33.78	86.75	116.54	340.52	1208.84	84.22	126.95
40.0%	95.94	22.71	73.28	42.64	366.01	36.03	92.53	124.31	361.87	1289.43	89.83	135.41
42.5%	101.93	24.13	109.00	45.31	391.01	51.04	101.48	132.08	394.53	1370.01	96.12	146.64
45.0%	107.93	26.10	115.42	47.97	414.01	71.72	107.45	139.85	428.37	1450.60	101.77	155.27
47.5%	113.93	27.55	121.83	50.64	437.01	85.57	113.42	147.62	452.17	1531.19	107.43	165.95
50.0%	121.65	32.62	128.24	54.37	460.01	90.08	119.39	162.85	513.10	1614.75	115.45	174.69
Obligated Level (GWh/d)	485.6	340.01	542.7	0	1407.15	650.0	420.0	699.7	950.0	1670.7	445.09	610.7

£m

Hole House Farm		Hornsea		Partington		Avonmouth		Barton Stacey	
Obligated Level		Obligated Level		Obligated Level		Obligated Level		Obligated Level	
5.1%	0.05	6.4%	6.56	7.0%	0.05	8.37%	0.05	8.7%	3.78
10.1%	0.32	12.9%	13.11	14.0%	0.11	16.73%	0.11	17.4%	8.21
15.2%	2.40	19.3%	19.67	20.9%	0.16	25.10%	0.16	26.1%	14.55
20.2%	3.20	25.7%	26.22	27.9%	2.13	33.46%	0.21	34.8%	20.68
25.3%	5.60	32.2%	33.31	34.9%	4.26	41.83%	0.27	43.5%	25.85
30.3%	6.72	38.6%	41.25	41.9%	8.32	50.20%	0.32	52.1%	31.02
35.4%	8.58	45.0%	49.62	48.8%	11.57				
40.5%	9.81	51.5%	56.71	55.8%	17.91				
45.5%	11.03								
50.6%	12.26								
Obligated Level (GWh/d)	296.6		233.1		215.0		179.3		172.6

Appendix E Estimated Project Value, £m (cont)

£m

	Burton Point	Caythorpe	Dynevor Arms	Glenmavis	Hatfield Moor	Wytch Farm
Obligated Level						
10%	0.03	4.19	1.29	5.80	0.46	0.001
20%	0.05	8.38	2.61	11.61	0.92	0.002
30%	0.08	12.57	3.92	17.41	1.38	0.004
40%	0.10	16.76	5.22	23.22	1.83	0.005
50%	0.13	20.95	6.53	29.02	2.47	0.006
Obligated Level (GWh/d)	73.5	90.0	49.0	99.0	25.3	3.3