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19 January 2012

Dear Hannah,

### Notice of Revised NTS Entry Capacity Reserve and Step Prices

The next annual auctions for Quarterly System Entry Capacity (QSEC) will be held in March 2012. National Grid is publishing this notice of revised reserve and step prices two months in advance of the next QSEC auction, consistent with our Licence and Uniform Network Code obligations.

Please note the NTS Entry Capacity Retention Charge has not been changed and more details are available in the Transportation Charging Statement in Section 2.1.1, which can be found using the link below.

### Updates to charging models

Reserve and step prices have been recalculated in accordance with the methodology set out in the latest approved Incremental Entry Capacity Release Methodology Statement (IECR), which can be found on our website<sup>1</sup>. The prices are determined using a transportation model, which 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 prices. The main points to note are as follows:

- Forecast peak day LDZ demand has decreased by 5% in 2014/15 compared to that used to set 2011 QSEC prices (i.e. demand in 2013/14). Demand for Direct Connects would also have been lower by a similar amount if not for increased demand at Moffat and therefore has remained similar to 2013/14. Overall, the net effect on demand is a reduction of 2.5%.
- Supply has been matched to demand using the supply balancing rules given in GCM 16 'Supply and Demand Balancing Rules and Supply Source Data'.
- There have been no significant changes to the network.
- The expansion constant has been updated to take into account revised forecasts of investment costs and has increased by 3.1%. Those ASEPs furthest away from centres

<sup>&</sup>lt;sup>1</sup> <u>http://www.nationalgrid.com/uk/Gas/Charges/statements/</u>.

of demand are more sensitive to changes in the expansion constant as an increase in supply from these ASEPs will require greater investment in order to transport gas to the demand.

### Impact on Reserve and Step Prices

Table 1 shows the impact of these changes on reserve prices and compares these for each Aggregated System Entry Point (ASEP) in QSEC 2011 and QSEC 2012.

As demand has decreased relatively uniformly over the country, the majority of ASEPs have seen very little change in their entry capacity reserve price compared to QSEC 2011. However, in areas where demand increased / decreased more than a corresponding change supply in that area, or visa versa, larger changes in prices can be seen due to the impact on gas flows. This is the main reason why prices at Fleetwood and Milford Haven have changed more than other ASEPs. Specifically:

- at **Fleetwood** entry prices have decreased (and to a lesser extent Barrow) because demand at Moffat has increased, meaning that gas entering the system at this location uses less of the transmission system, resulting in a lower price.
- at **Milford Haven**, gas entering the system (supplies) has stayed the same but demand in South Wales and South West has dropped. This means supplies from Milford Haven flow further into the system, resulting in price rises.

A more detailed description of the changes will be made available on our website at <u>http://www.nationalgrid.com/uk/Gas/Charges/Tools/</u> and it is our intention to discuss the changes at the next NTS transportation charging methodology forum (GTCMF).

### **Estimated Project Values**

For all entry points an Estimated Project Value (£m) has been calculated for each incremental capacity level and this information has been added to this notice. It 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 paragraphs 38 and 45 of the IECR Methodology Statement 11.0).

### Update to the NTS Gas Transportation Charges Statement

Attached is an update to Appendix D of the NTS Gas Transportation Charges Statement 1 October 2011, which details the reserve and step prices for use in the QSEC auction and replaces any previous versions of this appendix. The full statement can be found on our website at <a href="http://www.nationalgrid.com/uk/Gas/Charges/statements/">http://www.nationalgrid.com/uk/Gas/Charges/statements/</a>.

If you have any questions or feedback relating to this notice, or NTS charges in general, please contact the Transmission Charging & Revenue team on 01926 654633 or <u>charging.enquiries@uk.ngrid.com</u>

Yours sincerely,

Anne Bennett Charging and Revenue Manager UK Transmission - Commercial

|                   |           |           | p/KWh/day                   |
|-------------------|-----------|-----------|-----------------------------|
|                   | QSEC 2011 | QSEC 2012 | Change in<br>Reserve Prices |
| Avonmouth         | 0.0001    | 0.0001    | 0.0000                      |
| Bacton            | 0.0078    | 0.0086    | 0.0008                      |
| Barrow            | 0.0003    | 0.0001    | -0.0002                     |
| Barton Stacey     | 0.0001    | 0.0001    | 0.0000                      |
| Burton Point      | 0.0001    | 0.0001    | 0.0000                      |
| Canonbie          | N/A       | 0.0005    | N/A                         |
| Caythorpe         | 0.0099    | 0.0106    | 0.0007                      |
| Cheshire          | 0.0001    | 0.0001    | 0.0000                      |
| Dynevor Arms      | 0.0078    | 0.0086    | 0.0008                      |
| Easington & Rough | 0.0108    | 0.0112    | 0.0004                      |
| Fleetwood         | 0.0031    | 0.0012    | -0.0019                     |
| Garton            | 0.0118    | 0.0121    | 0.0003                      |
| Glenmavis         | 0.0106    | 0.0107    | 0.0001                      |
| Hatfield Moor     | 0.0031    | 0.0038    | 0.0007                      |
| Hole House Farm   | 0.0001    | 0.0001    | 0.0000                      |
| Hornsea           | 0.0109    | 0.0112    | 0.0003                      |
| Isle of Grain     | 0.0001    | 0.0001    | 0.0000                      |
| Milford Haven     | 0.0183    | 0.0202    | 0.0019                      |
| Partington        | 0.0001    | 0.0001    | 0.0000                      |
| St Fergus         | 0.0388    | 0.0392    | 0.0004                      |
| Teesside          | 0.0084    | 0.0088    | 0.0004                      |
| Theddlethorpe     | 0.0103    | 0.0115    | 0.0012                      |
| Wytch Farm        | 0.0001    | 0.0001    | 0.0000                      |

Table 1 Change in Reserve Price by ASEP compared to QSEC 2011

### Appendix D QSEC Step Prices 2012

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).

|                               | -      |        |          |                     |           | -      |                  |                  |           | Pen      | ce/kWh/day   |
|-------------------------------|--------|--------|----------|---------------------|-----------|--------|------------------|------------------|-----------|----------|--------------|
|                               | Bacton | Barrow | Cheshire | Easington<br>&Rough | Fleetwood | Garton | Isle of<br>Grain | Milford<br>Haven | St Fergus | Teesside | Th'dlethorpe |
| Obligated                     |        |        |          |                     |           |        |                  |                  |           |          |              |
| Level                         | 0.0086 | 0.0001 | 0.0001   | 0.0112              | 0.0012    | 0.0121 | 0.0001           | 0.0202           | 0.0392    | 0.0088   | 0.0115       |
| 2.5%                          | 0.0087 | 0.0002 | 0.0018   | 0.0113              | 0.0013    | 0.0122 | 0.0002           | 0.0203           | 0.0400    | 0.0091   | 0.0116       |
| 5.0%                          | 0.0088 | 0.0003 | 0.0045   | 0.0114              | 0.0018    | 0.0123 | 0.0003           | 0.0204           | 0.0401    | 0.0092   | 0.0117       |
| 7.5%                          | 0.0089 | 0.0004 | 0.0046   | 0.0115              | 0.0027    | 0.0124 | 0.0011           | 0.0205           | 0.0412    | 0.0093   | 0.0118       |
| 10.0%                         | 0.0109 | 0.0005 | 0.0047   | 0.0126              | 0.0028    | 0.0125 | 0.0012           | 0.0206           | 0.0421    | 0.0094   | 0.0123       |
| 12.5%                         | 0.0110 | 0.0006 | 0.0048   | 0.0134              | 0.0029    | 0.0126 | 0.0013           | 0.0207           | 0.0423    | 0.0095   | 0.0124       |
| 15.0%                         | 0.0111 | 0.0007 | 0.0066   | 0.0135              | 0.0030    | 0.0127 | 0.0024           | 0.0208           | 0.0425    | 0.0096   | 0.0125       |
| 17.5%                         | 0.0114 | 0.0008 | 0.0073   | 0.0136              | 0.0031    | 0.0128 | 0.0025           | 0.0217           | 0.0439    | 0.0097   | 0.0126       |
| 20.0%                         | 0.0115 | 0.0009 | 0.0079   | 0.0137              | 0.0032    | 0.0129 | 0.0033           | 0.0225           | 0.0440    | 0.0098   | 0.0130       |
| 22.5%                         | 0.0116 | 0.0010 | 0.0080   | 0.0138              | 0.0033    | 0.0130 | 0.0034           | 0.0226           | 0.0441    | 0.0099   | 0.0131       |
| 25.0%                         | 0.0119 | 0.0011 | 0.0081   | 0.0139              | 0.0034    | 0.0131 | 0.0035           | 0.0227           | 0.0442    | 0.0100   | 0.0132       |
| 27.5%                         | 0.0124 | 0.0012 | 0.0082   | 0.0140              | 0.0035    | 0.0132 | 0.0099           | 0.0228           | 0.0452    | 0.0101   | 0.0133       |
| 30.0%                         | 0.0151 | 0.0013 | 0.0083   | 0.0141              | 0.0036    | 0.0133 | 0.0100           | 0.0230           | 0.0453    | 0.0102   | 0.0144       |
| 32.5%                         | 0.0159 | 0.0014 | 0.0084   | 0.0142              | 0.0039    | 0.0134 | 0.0101           | 0.0231           | 0.0459    | 0.0103   | 0.0145       |
| 35.0%                         | 0.0176 | 0.0015 | 0.0085   | 0.0143              | 0.0042    | 0.0135 | 0.0104           | 0.0232           | 0.0463    | 0.0104   | 0.0146       |
| 37.5%                         | 0.0188 | 0.0016 | 0.0086   | 0.0144              | 0.0043    | 0.0136 | 0.0105           | 0.0233           | 0.0464    | 0.0105   | 0.0147       |
| 40.0%                         | 0.0203 | 0.0017 | 0.0087   | 0.0146              | 0.0044    | 0.0137 | 0.0106           | 0.0234           | 0.0465    | 0.0106   | 0.0148       |
| 42.5%                         | 0.0205 | 0.0018 | 0.0088   | 0.0147              | 0.0045    | 0.0138 | 0.0107           | 0.0235           | 0.0466    | 0.0107   | 0.0149       |
| 45.0%                         | 0.0206 | 0.0019 | 0.0089   | 0.0148              | 0.0046    | 0.0139 | 0.0108           | 0.0236           | 0.0485    | 0.0108   | 0.0150       |
| 47.5%                         | 0.0207 | 0.0020 | 0.0090   | 0.0149              | 0.0047    | 0.0140 | 0.0109           | 0.0237           | 0.0486    | 0.0109   | 0.0151       |
| 50.0%                         | 0.0208 | 0.0021 | 0.0091   | 0.0150              | 0.0048    | 0.0141 | 0.0110           | 0.0240           | 0.0487    | 0.0110   | 0.0152       |
| Obligated<br>Level<br>(GWh/d) | 1783.4 | 340.0  | 542.7    | 1407.15             | 650       | 420    | 699.68           | 950              | 1670.7    | 476      | 610.7        |

|                               |        |                    |        |                    |        |                    |        |                    | 1 onoo/ kinn au y |
|-------------------------------|--------|--------------------|--------|--------------------|--------|--------------------|--------|--------------------|-------------------|
| Hele Hours                    | o Form | Hor                |        | Dortin             | aton   | Avonm              | outh   | Ba                 | rton Stopov       |
| Hole Hous                     | erann  | Hori               | isea   | Partin             | gion   | Avonm              | outin  | Da                 | Tion Stacey       |
| Obligated<br>Level            | 0.0001 | Obligated<br>Level | 0.0112 | Obligated<br>Level | 0.0001 | Obligated<br>Level | 0.0001 | Obligated<br>Level | 0.0001            |
| 5.1%                          | 0.0002 | 6.4%               | 0.0115 | 7.0%               | 0.0002 | 8.4%               | 0.0004 | 8.7%               | 0.0012            |
| 10.1%                         | 0.0003 | 12.9%              | 0.0116 | 14.0%              | 0.0012 | 16.7%              | 0.0005 | 17.4%              | 0.0015            |
| 15.2%                         | 0.0007 | 19.3%              | 0.0117 | 20.9%              | 0.0013 | 25.1%              | 0.0006 | 26.1%              | 0.0016            |
| 20.2%                         | 0.0008 | 25.7%              | 0.0118 | 27.9%              | 0.0014 | 33.5%              | 0.0007 | 34.8%              | 0.0017            |
| 25.3%                         | 0.0009 | 32.2%              | 0.0119 | 34.9%              | 0.0015 | 41.8%              | 0.0008 | 43.5%              | 0.0018            |
| 30.3%                         | 0.0010 | 38.6%              | 0.0120 | 41.9%              | 0.0016 | 50.2%              | 0.0009 | 52.1%              | 0.0019            |
| 35.4%                         | 0.0011 | 45.0%              | 0.0121 | 48.8%              | 0.0017 |                    |        |                    |                   |
| 40.5%                         | 0.0012 | 51.5%              | 0.0122 | 55.8%              | 0.0018 |                    |        |                    |                   |
| 45.5%                         | 0.0019 |                    |        |                    |        |                    |        |                    |                   |
| 50.6%                         | 0.0022 |                    |        |                    |        |                    |        |                    |                   |
| Obligated<br>Level<br>(GWh/d) | 296.6  |                    | 233.1  |                    | 215    |                    | 179.3  |                    | 172.6             |

#### Pence/kWh/day

|                               |                 |           |                 |           |                  | Pence/kWh/day |
|-------------------------------|-----------------|-----------|-----------------|-----------|------------------|---------------|
|                               | Burton<br>Point | Caythorpe | Dynevor<br>Arms | Glenmavis | Hatfield<br>Moor | Wytch Farm    |
| Obligated<br>Level            | 0.0001          | 0.0106    | 0.0086          | 0.0107    | 0.0038           | 0.0001        |
| 10%                           | 0.0003          | 0.0107    | 0.0087          | 0.0108    | 0.0039           | 0.0002        |
| 20%                           | 0.0027          | 0.0108    | 0.0088          | 0.0135    | 0.0040           | 0.0003        |
| 30%                           | 0.0028          | 0.0109    | 0.0089          | 0.0136    | 0.0041           | 0.0004        |
| 40%                           | 0.0029          | 0.0110    | 0.0090          | 0.0137    | 0.0042           | 0.0005        |
| 50%                           | 0.0030          | 0.0111    | 0.0091          | 0.0138    | 0.0043           | 0.0006        |
| Obligated<br>Level<br>(GWh/d) | 73.5            | 90        | 49              | 99        | 25.3             | 3.3           |

# Appendix D QSEC Step Prices 2012 (cont)

### Pence/kWh/day

| New Entry Point               |          |  |  |  |  |
|-------------------------------|----------|--|--|--|--|
|                               |          |  |  |  |  |
|                               | Canonbie |  |  |  |  |
| Obligated<br>Level (GWh)      | 0.0005   |  |  |  |  |
| 5                             | 0.0006   |  |  |  |  |
| 10                            | 0.0007   |  |  |  |  |
| 15                            | 0.0008   |  |  |  |  |
| 20                            | 0.0009   |  |  |  |  |
| 25                            | 0.0010   |  |  |  |  |
| 30                            | 0.0011   |  |  |  |  |
| 35                            | 0.0012   |  |  |  |  |
| 40                            | 0.0013   |  |  |  |  |
| 45                            | 0.0014   |  |  |  |  |
| 50                            | 0.0015   |  |  |  |  |
| 55                            | 0.0016   |  |  |  |  |
| 60                            | 0.0017   |  |  |  |  |
| 65                            | 0.0018   |  |  |  |  |
| 70                            | 0.0019   |  |  |  |  |
| 75                            | 0.0020   |  |  |  |  |
| 80                            | 0.0021   |  |  |  |  |
| 85                            | 0.0022   |  |  |  |  |
| 90                            | 0.0023   |  |  |  |  |
| 95                            | 0.0024   |  |  |  |  |
| 100                           | 0.0025   |  |  |  |  |
| Obligated<br>Level<br>(GWh/d) | 0        |  |  |  |  |

| Appendix E | Estimated | Project | Value, | £m |
|------------|-----------|---------|--------|----|
|------------|-----------|---------|--------|----|

|                               |        |        |          |                     |           |        |                  |                  |           |          | £m           |
|-------------------------------|--------|--------|----------|---------------------|-----------|--------|------------------|------------------|-----------|----------|--------------|
|                               | Bacton | Barrow | Cheshire | Easington<br>&Rough | Fleetwood | Garton | Isle of<br>Grain | Milford<br>Haven | St Fergus | Teesside | Th'dlethorpe |
| Obligated<br>Level            |        |        |          |                     |           |        |                  |                  |           |          |              |
| 2.5%                          | 13.78  | 0.03   | 0.87     | 14.00               | 0.69      | 4.52   | 0.06             | 17.13            | 59.37     | 3.85     | 6.24         |
| 5.0%                          | 27.57  | 0.06   | 4.34     | 28.00               | 2.08      | 9.03   | 0.12             | 34.26            | 119.03    | 7.70     | 12.48        |
| 7.5%                          | 41.35  | 0.09   | 6.51     | 42.00               | 4.68      | 13.54  | 2.05             | 51.40            | 183.44    | 11.54    | 18.72        |
| 10.0%                         | 69.07  | 0.12   | 8.68     | 63.00               | 6.24      | 18.06  | 2.74             | 68.53            | 249.93    | 15.39    | 26.69        |
| 12.5%                         | 86.34  | 0.15   | 10.85    | 83.75               | 7.80      | 22.57  | 3.42             | 85.66            | 313.90    | 19.45    | 33.36        |
| 15.0%                         | 103.61 | 0.18   | 19.09    | 100.50              | 9.35      | 27.09  | 8.95             | 102.79           | 378.46    | 23.34    | 40.04        |
| 17.5%                         | 126.42 | 0.42   | 24.64    | 117.25              | 10.91     | 31.60  | 10.88            | 128.19           | 456.08    | 27.23    | 46.71        |
| 20.0%                         | 144.49 | 0.48   | 30.47    | 134.00              | 12.93     | 36.12  | 16.41            | 151.91           | 521.23    | 31.12    | 56.42        |
| 22.5%                         | 162.55 | 1.36   | 34.28    | 150.75              | 14.55     | 40.63  | 18.46            | 170.89           | 587.72    | 35.01    | 63.47        |
| 25.0%                         | 188.53 | 2.72   | 38.09    | 167.50              | 16.17     | 45.15  | 20.51            | 189.88           | 653.02    | 38.90    | 71.61        |
| 27.5%                         | 216.09 | 2.99   | 42.43    | 184.25              | 17.79     | 49.66  | 67.69            | 208.87           | 737.92    | 42.79    | 78.77        |
| 30.0%                         | 287.07 | 3.26   | 46.28    | 201.00              | 20.79     | 54.17  | 73.84            | 232.92           | 806.78    | 46.68    | 93.75        |
| 32.5%                         | 327.47 | 3.53   | 50.14    | 217.75              | 29.28     | 58.69  | 79.99            | 252.33           | 885.59    | 50.57    | 101.56       |
| 35.0%                         | 390.36 | 3.81   | 54.00    | 234.50              | 33.95     | 63.20  | 90.50            | 271.74           | 962.02    | 54.46    | 109.37       |
| 37.5%                         | 446.76 | 4.08   | 57.85    | 260.63              | 36.38     | 70.52  | 96.96            | 291.15           | 1030.74   | 58.35    | 117.18       |
| 40.0%                         | 514.57 | 4.35   | 61.71    | 292.01              | 38.80     | 75.22  | 103.43           | 310.56           | 1101.83   | 62.24    | 126.73       |
| 42.5%                         | 552.12 | 4.62   | 65.57    | 310.26              | 41.23     | 79.92  | 109.89           | 329.97           | 1173.22   | 66.13    | 135.57       |
| 45.0%                         | 587.44 | 4.89   | 69.42    | 330.76              | 43.65     | 84.62  | 116.35           | 356.98           | 1295.66   | 70.02    | 143.55       |
| 47.5%                         | 620.08 | 5.17   | 73.28    | 349.13              | 46.08     | 89.32  | 122.82           | 376.81           | 1367.64   | 73.91    | 151.52       |
| 50.0%                         | 652.72 | 7.85   | 79.07    | 367.51              | 48.50     | 94.02  | 129.28           | 405.08           | 1439.62   | 80.34    | 159.50       |
| Obligated<br>Level<br>(GWh/d) | 1783.4 | 340.0  | 542.7    | 1407.2              | 650.0     | 420.0  | 699.7            | 950.0            | 1670.7    | 476.0    | 610.7        |

|                               |          |                    |       |                    |       |                    |       |                    | £M    |
|-------------------------------|----------|--------------------|-------|--------------------|-------|--------------------|-------|--------------------|-------|
| Hole Hou                      | use Farm | Hornsea            |       | Parti              | ngton | Avonmouth          |       | Barton Stacey      |       |
| Obligated<br>Level            |          | Obligated<br>Level |       | Obligated<br>Level |       | Obligated<br>Level |       | Obligated<br>Level |       |
| 5.1%                          | 0.05     | 6.4%               | 6.13  | 7.0%               | 0.11  | 8.37%              | 0.21  | 8.7%               | 0.64  |
| 10.1%                         | 0.11     | 12.9%              | 12.26 | 14.0%              | 1.28  | 16.73%             | 0.43  | 17.4%              | 1.60  |
| 15.2%                         | 1.12     | 19.3%              | 18.55 | 20.9%              | 1.92  | 25.10%             | 0.64  | 26.1%              | 2.40  |
| 20.2%                         | 1.49     | 25.7%              | 24.73 | 27.9%              | 2.56  | 33.46%             | 0.85  | 34.8%              | 3.20  |
| 25.3%                         | 1.87     | 32.2%              | 30.91 | 34.9%              | 3.20  | 41.83%             | 1.07  | 43.5%              | 4.00  |
| 30.3%                         | 2.24     | 38.6%              | 37.10 | 41.9%              | 3.84  | 50.20%             | 1.28  | 52.1%              | 4.80  |
| 35.4%                         | 2.61     | 45.0%              | 43.28 | 48.8%              | 4.48  |                    |       |                    |       |
| 40.5%                         | 2.99     | 51.5%              | 49.46 | 55.8%              | 7.25  |                    |       |                    |       |
| 45.5%                         | 9.11     |                    |       |                    |       |                    |       |                    |       |
| 50.6%                         | 11.73    |                    |       |                    |       |                    |       |                    |       |
| Obligated<br>Level<br>(GWb/d) | 296.6    |                    | 233 1 |                    | 215.0 |                    | 179 3 |                    | 172 6 |

£m

|                               |              |           |                 |           |                  | £m         |
|-------------------------------|--------------|-----------|-----------------|-----------|------------------|------------|
|                               | Burton Point | Caythorpe | Dynevor<br>Arms | Glenmavis | Hatfield<br>Moor | Wytch Farm |
| Obligated<br>Level            |              |           |                 |           |                  |            |
| 10%                           | 0.08         | 3.39      | 1.50            | 3.76      | 0.34             | 0.001      |
| 20%                           | 1.41         | 6.78      | 3.00            | 9.50      | 0.68             | 0.002      |
| 30%                           | 2.12         | 10.17     | 4.49            | 14.35     | 1.03             | 0.004      |
| 40%                           | 2.82         | 13.82     | 5.99            | 19.14     | 1.37             | 0.005      |
| 50%                           | 3.53         | 17.27     | 7.49            | 23.92     | 1.84             | 0.006      |
| Obligated<br>Level<br>(GWh/d) | 73.5         | 90.0      | 49.0            | 99.0      | 25.3             | 3.3        |

## Appendix E Estimated Project Value, £m (cont)

|                               | £m    |  |  |  |  |  |
|-------------------------------|-------|--|--|--|--|--|
| New Entry Poir                | nt    |  |  |  |  |  |
|                               |       |  |  |  |  |  |
| Cano                          | onbie |  |  |  |  |  |
|                               |       |  |  |  |  |  |
| Obligated<br>Level (GWh)      | ·     |  |  |  |  |  |
| 5                             | 0.09  |  |  |  |  |  |
| 10                            | 0.18  |  |  |  |  |  |
| 15                            | 0.27  |  |  |  |  |  |
| 20                            | 0.36  |  |  |  |  |  |
| 25                            | 0.71  |  |  |  |  |  |
| 30                            | 0.96  |  |  |  |  |  |
| 35                            | 1.12  |  |  |  |  |  |
| 40                            | 1.28  |  |  |  |  |  |
| 45                            | 1.44  |  |  |  |  |  |
| 50                            | 1.60  |  |  |  |  |  |
| 55                            | 1.76  |  |  |  |  |  |
| 60                            | 1.92  |  |  |  |  |  |
| 65                            | 2.77  |  |  |  |  |  |
| 70                            | 4.48  |  |  |  |  |  |
| 75                            | 4.80  |  |  |  |  |  |
| 80                            | 5.12  |  |  |  |  |  |
| 85                            | 6.34  |  |  |  |  |  |
| 90                            | 6.72  |  |  |  |  |  |
| 95                            | 7.09  |  |  |  |  |  |
| 100                           | 7.46  |  |  |  |  |  |
| Obligated<br>Level<br>(GWh/d) | 0     |  |  |  |  |  |