

**Gas System
Operator**

Gas Operational Forum

London Radisson Grafton
27th September 2018

nationalgrid



**Gas System
Operator**

Gas Prices, Transporter Actions and Neutrality

September 2018

nationalgrid



Summary Report

YEAR TO DATE PERCENTAGES AGAINST BUYS AND SELLS FOR JUNE - AUGUST (2017 - 2018)

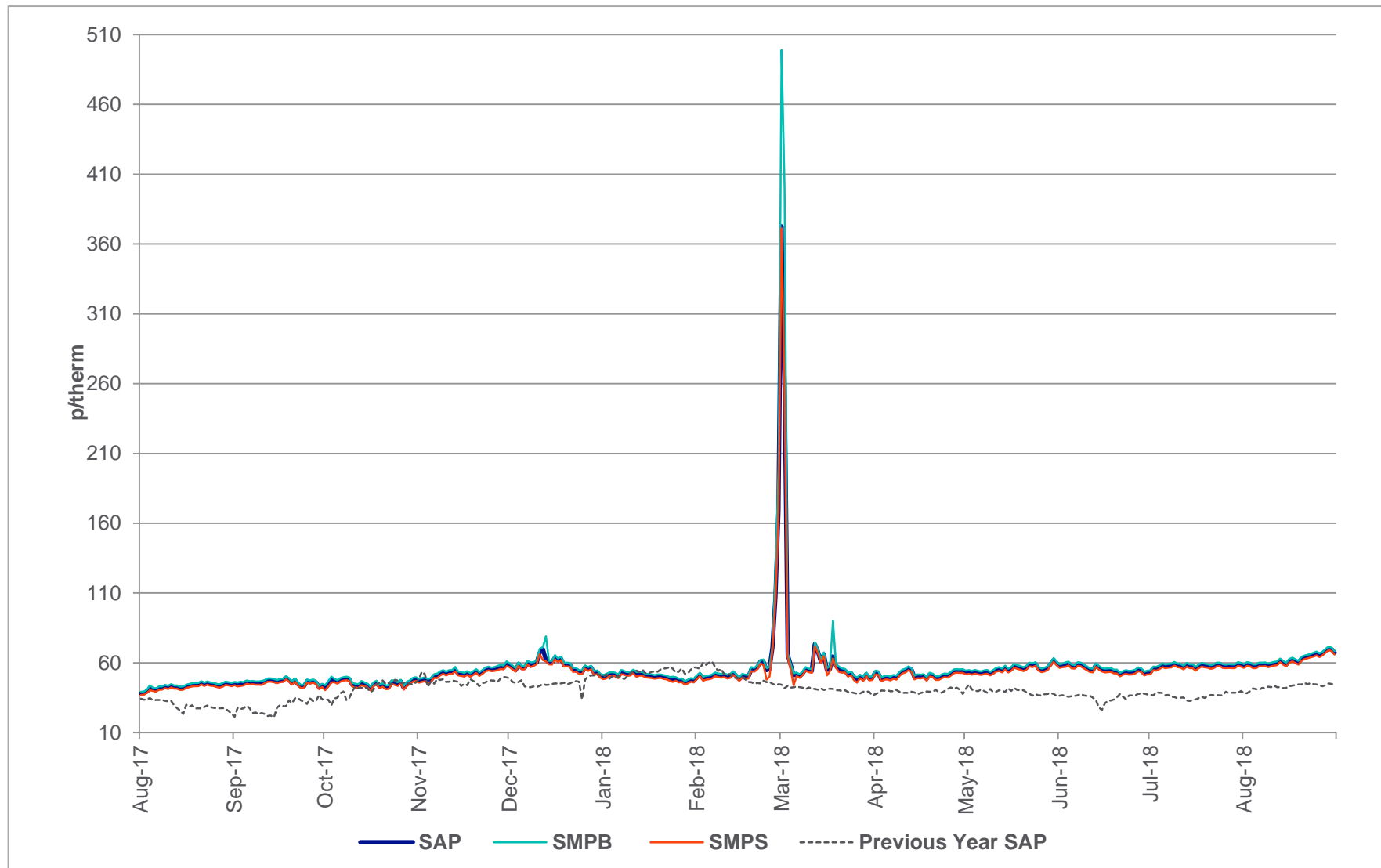
| Jun-17 | | | Jun-18 | | |
|------------------------------|-----------|------------|------------------------------|------------|------------|
| No. of Balancing Actions YTD | 76 | Percentage | No. of Balancing Actions YTD | 137 | Percentage |
| Buys | 40 | 53% | Buys | 63 | 46% |
| Sells | 36 | 47% | Sells | 74 | 54% |

| Jul-17 | | | Jul-18 | | |
|------------------------------|-----------|------------|------------------------------|------------|------------|
| No. of Balancing Actions YTD | 92 | Percentage | No. of Balancing Actions YTD | 143 | Percentage |
| Buys | 56 | 61% | Buys | 63 | 44% |
| Sells | 36 | 39% | Sells | 80 | 56% |

| Aug-17 | | | Aug-18 | | |
|------------------------------|------------|------------|------------------------------|------------|------------|
| No. of Balancing Actions YTD | 115 | Percentage | No. of Balancing Actions YTD | 160 | Percentage |
| Buys | 79 | 69% | Buys | 68 | 43% |
| Sells | 36 | 31% | Sells | 92 | 57% |

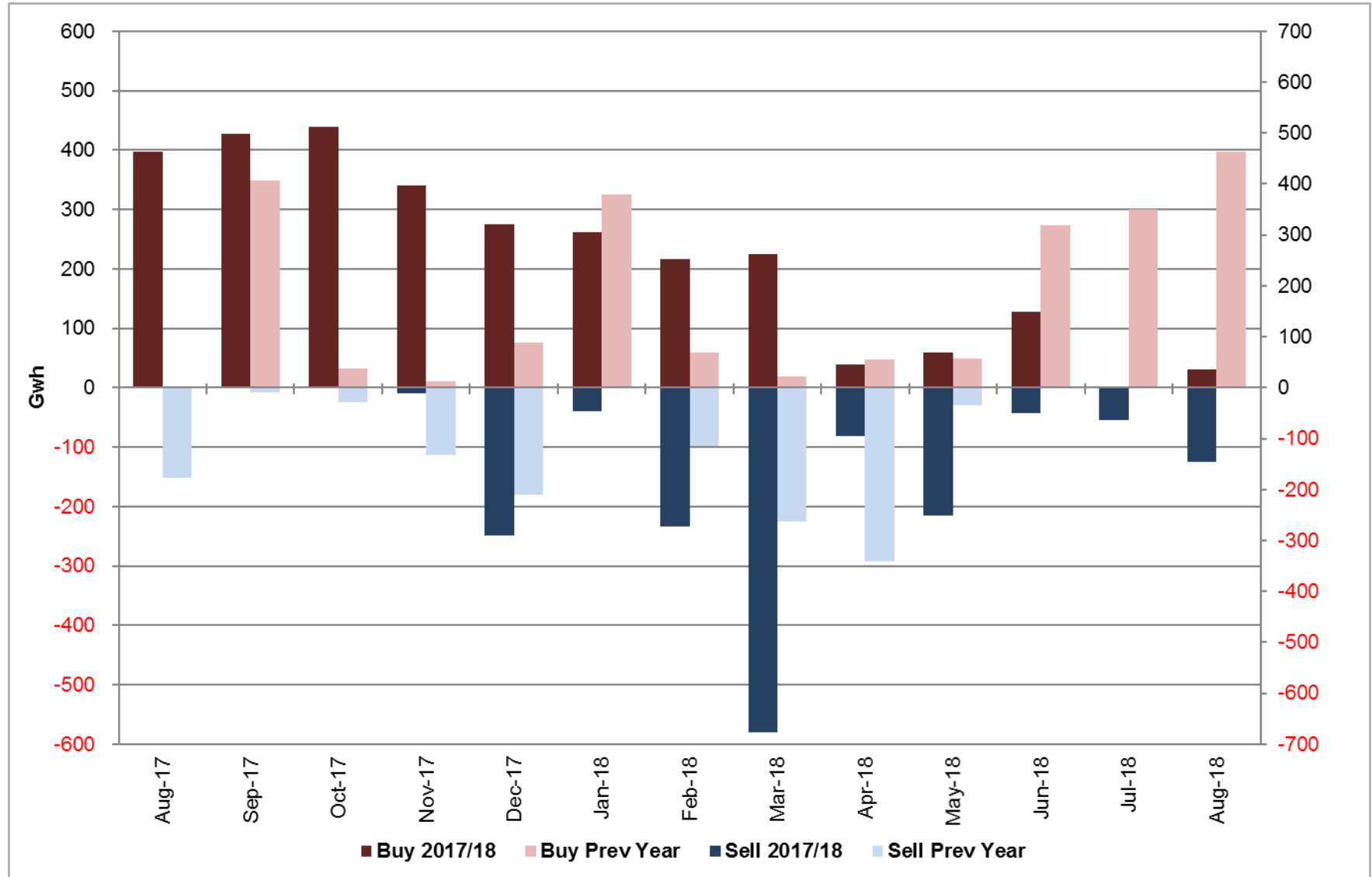
UK Gas Prices

1st August 2017 to 31 August 2018 vs Previous Year



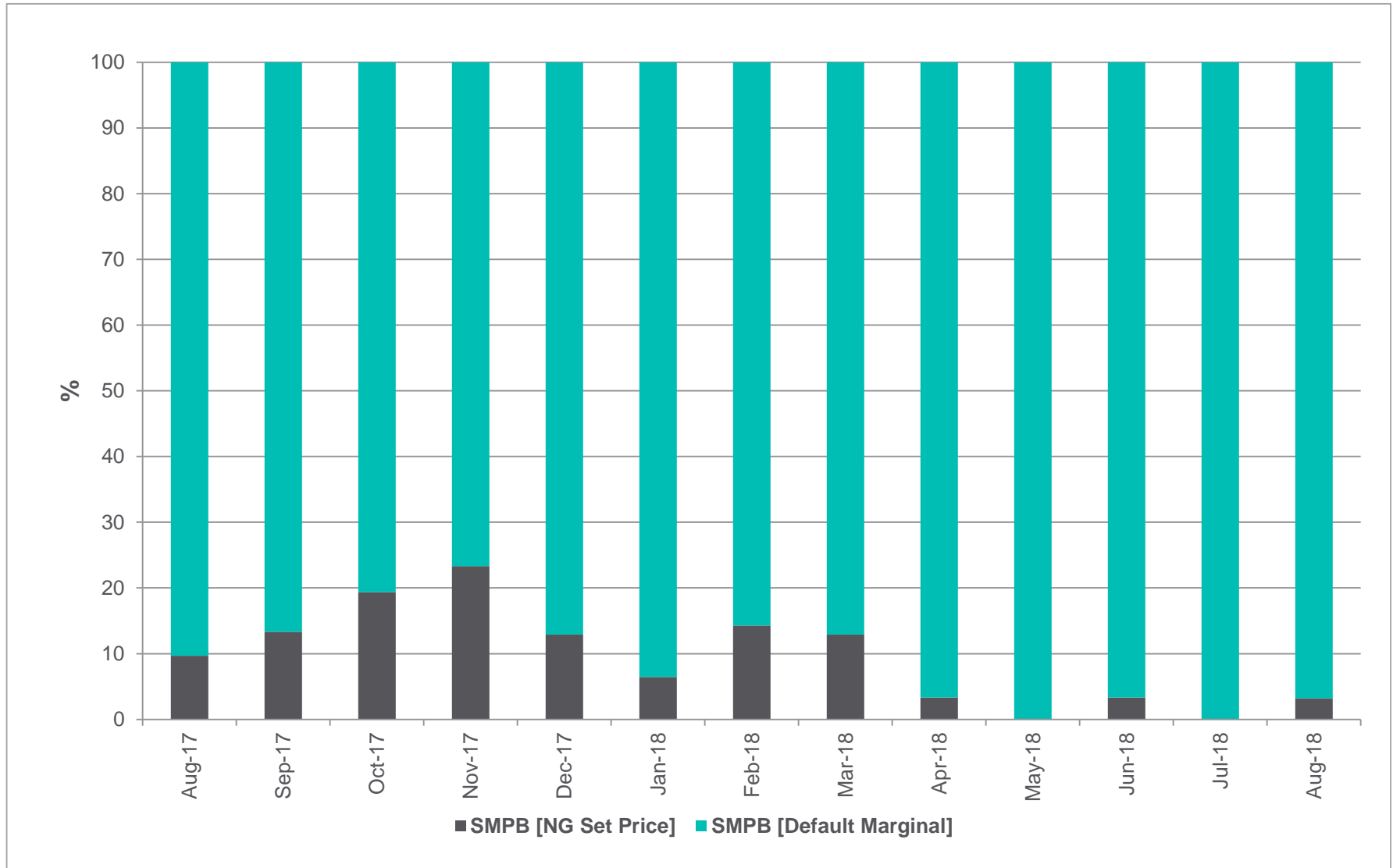
Transporter Energy Traded on the OCM

NGG Monthly Buys and Sells 1st August 2017 to 31st August 2018 vs Previous Year



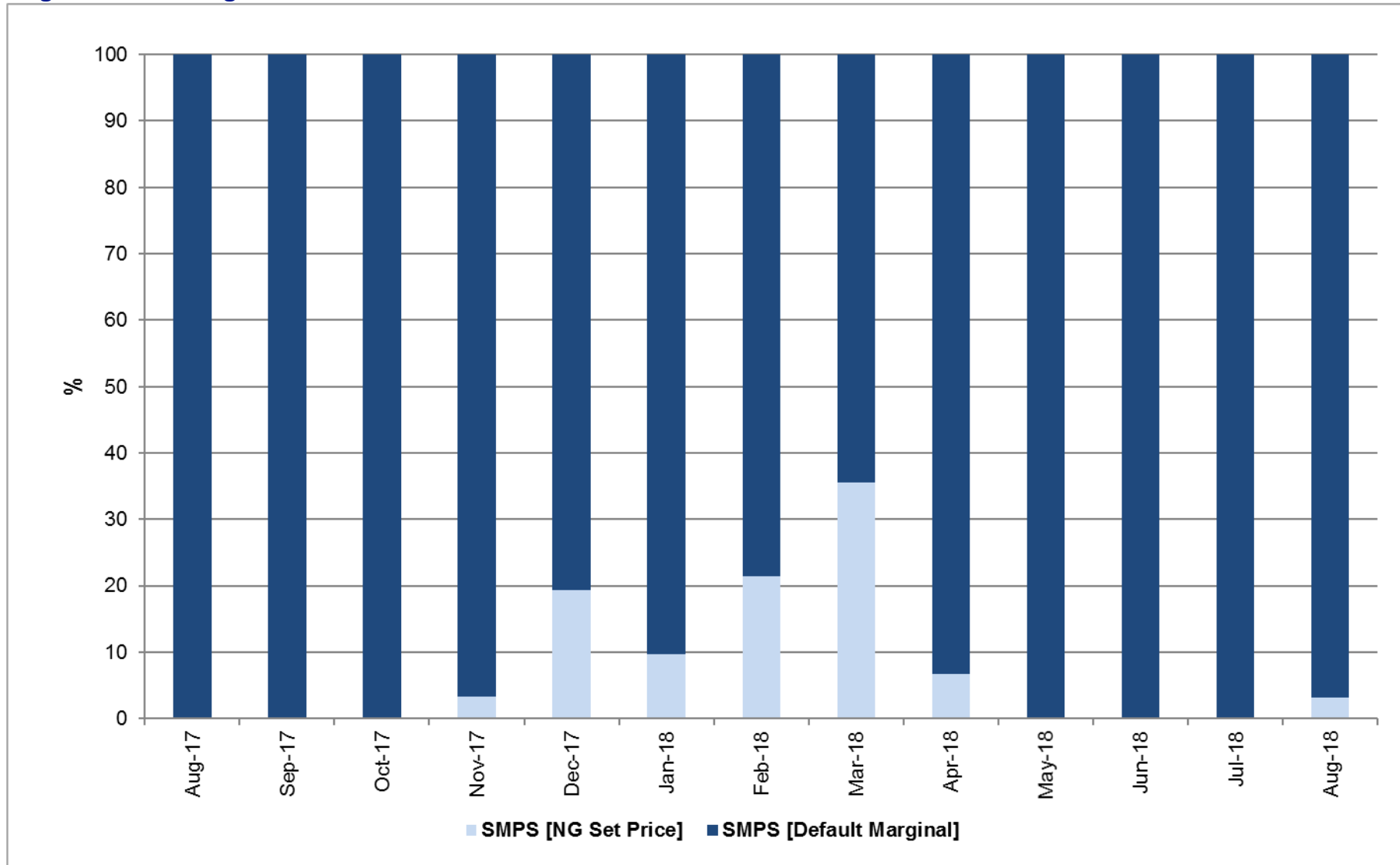
Days of Default SMP Prices (SMPB)

August 2017 to August 2018



Days of Default SMP Prices (SMPS)

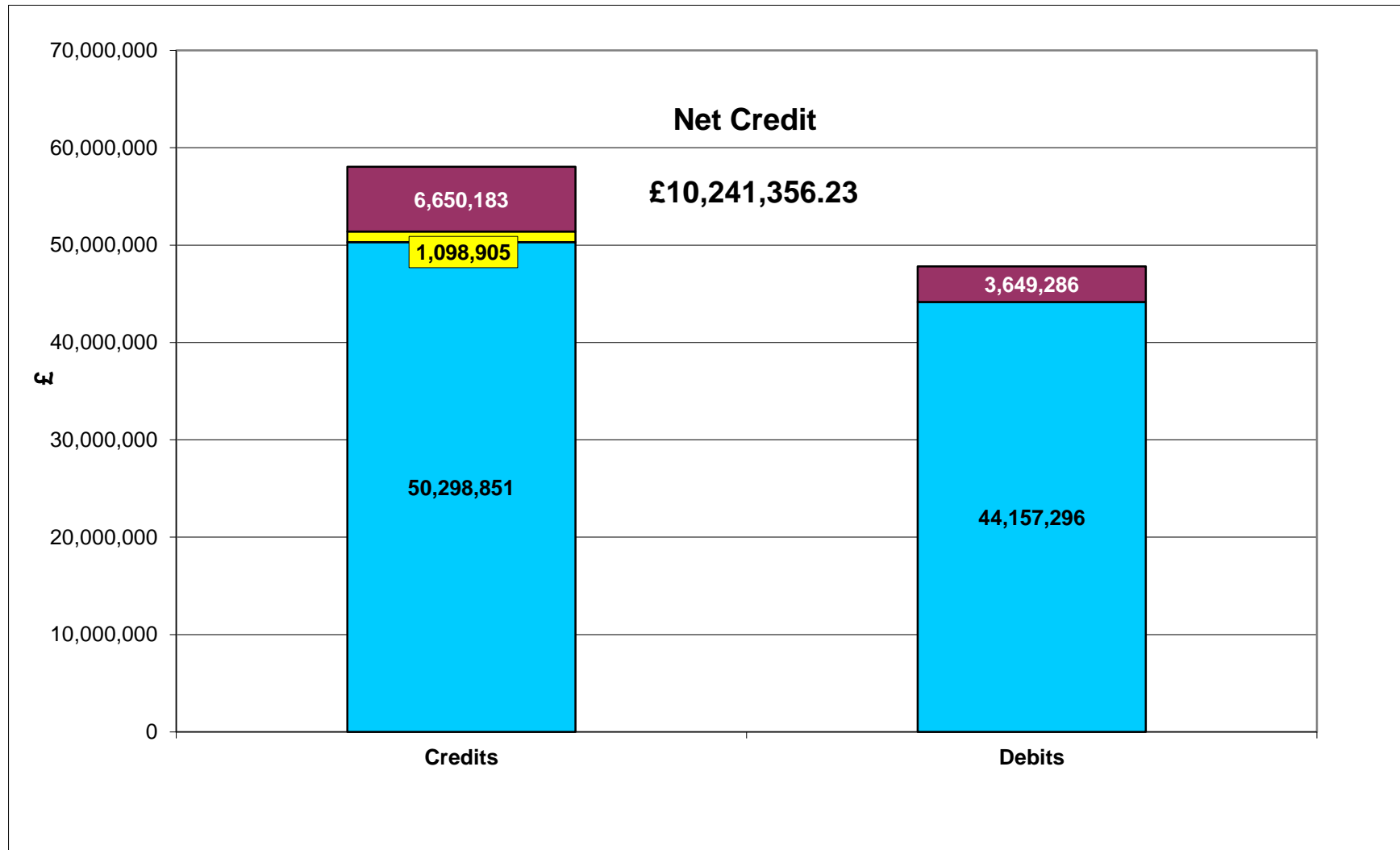
August 2017 to August 2018



Energy Balancing – Balancing Costs

Payments / Charges / Net Credit / Debit (Imbalance / Scheduling / OCM)

May - July 2018



Energy Balancing – Balancing Costs

Payments / Charges / Net Credit / Debit (Imbalance / Scheduling / OCM)

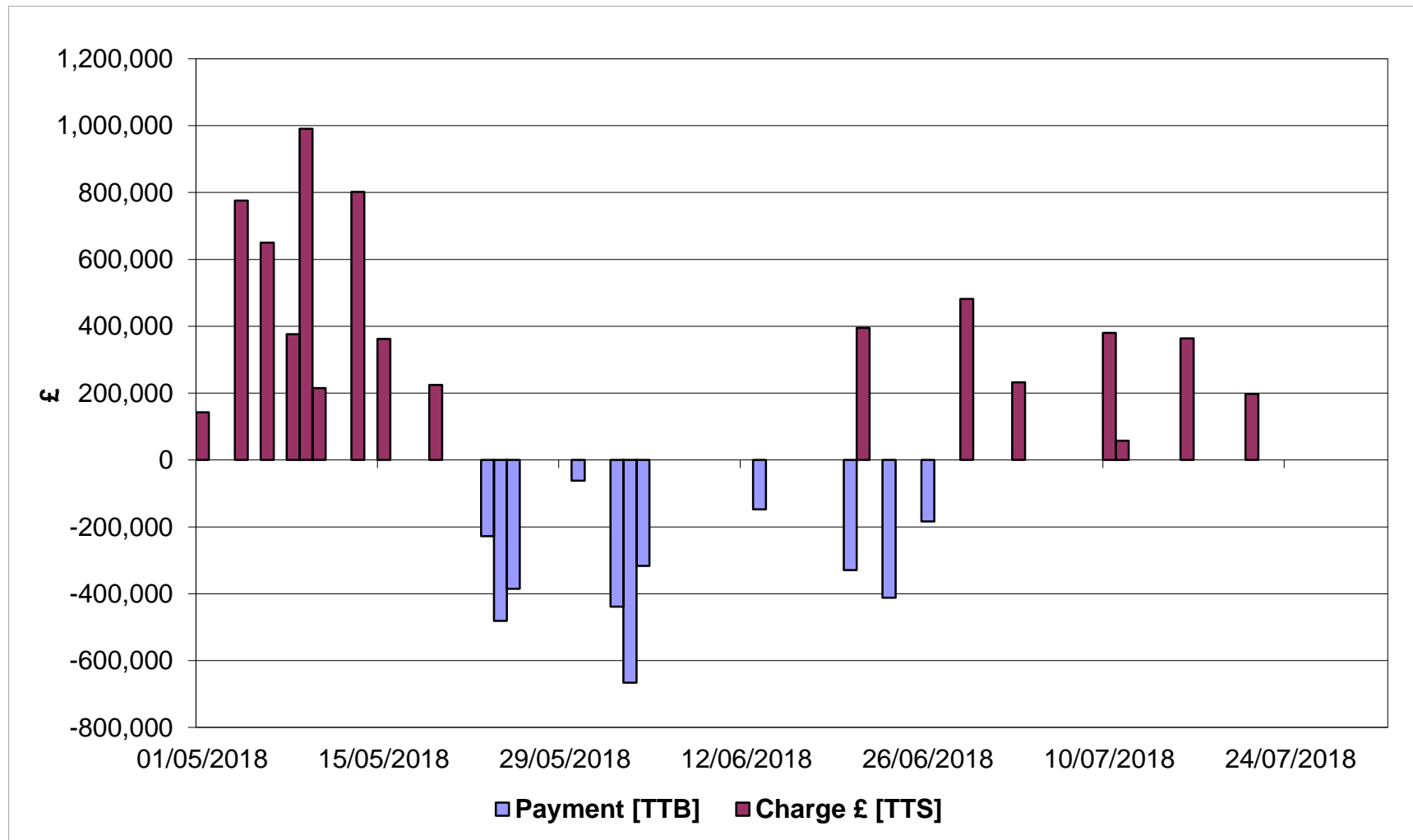
May - July 2018

| | | May-2018 | Jun-2018 | Jul-2018 |
|------------------------|----------------------|------------------|------------------|------------------|
| Imbalance | Payment £ [DCS] | -18,290,997 | -13,043,299 | -12,823,001 |
| | Charge £ [DCT] | 21,658,417 | 15,576,351 | 13,064,082 |
| Scheduling | Exit Charge £ [DXS] | 18,248 | 8,792 | 0 |
| | Exit Charge £ [EXS] | 97,305 | 85,197 | 0 |
| | Entry Charge £ [ESC] | 487,615 | 401,748 | 0 |
| OCM | Payment £ [TTB] | -1,155,777 | -2,493,509 | 0 |
| | Charge £ [TTS] | 4,540,318 | 877,657 | 1,232,208 |
| Balancing Costs | | 7,355,130 | 1,412,938 | 1,473,289 |

Energy Balancing – Balancing Costs

OCM Payments / Charges

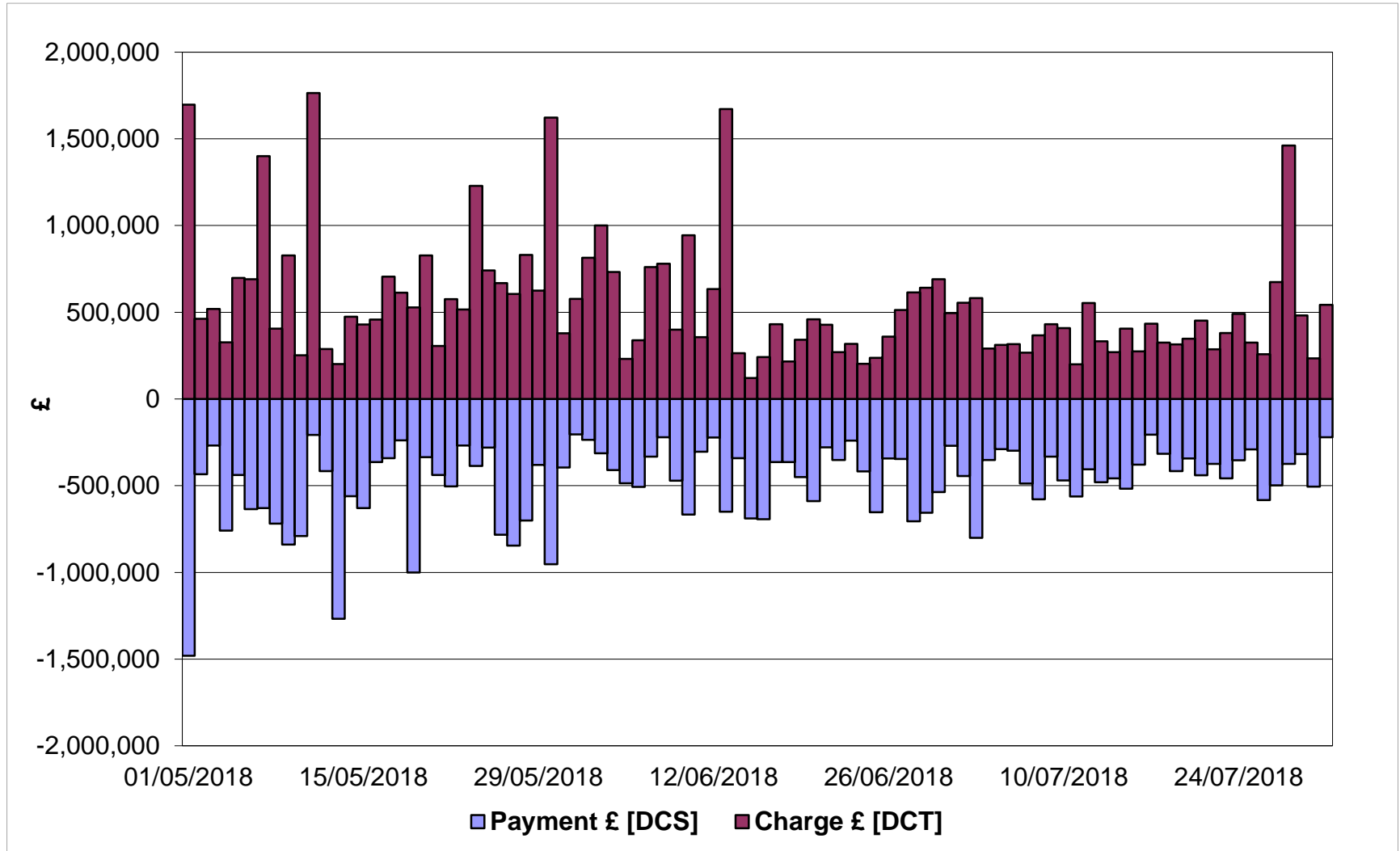
May - July 2018



Energy Balancing – Balancing Costs

Imbalance Payments / Charges

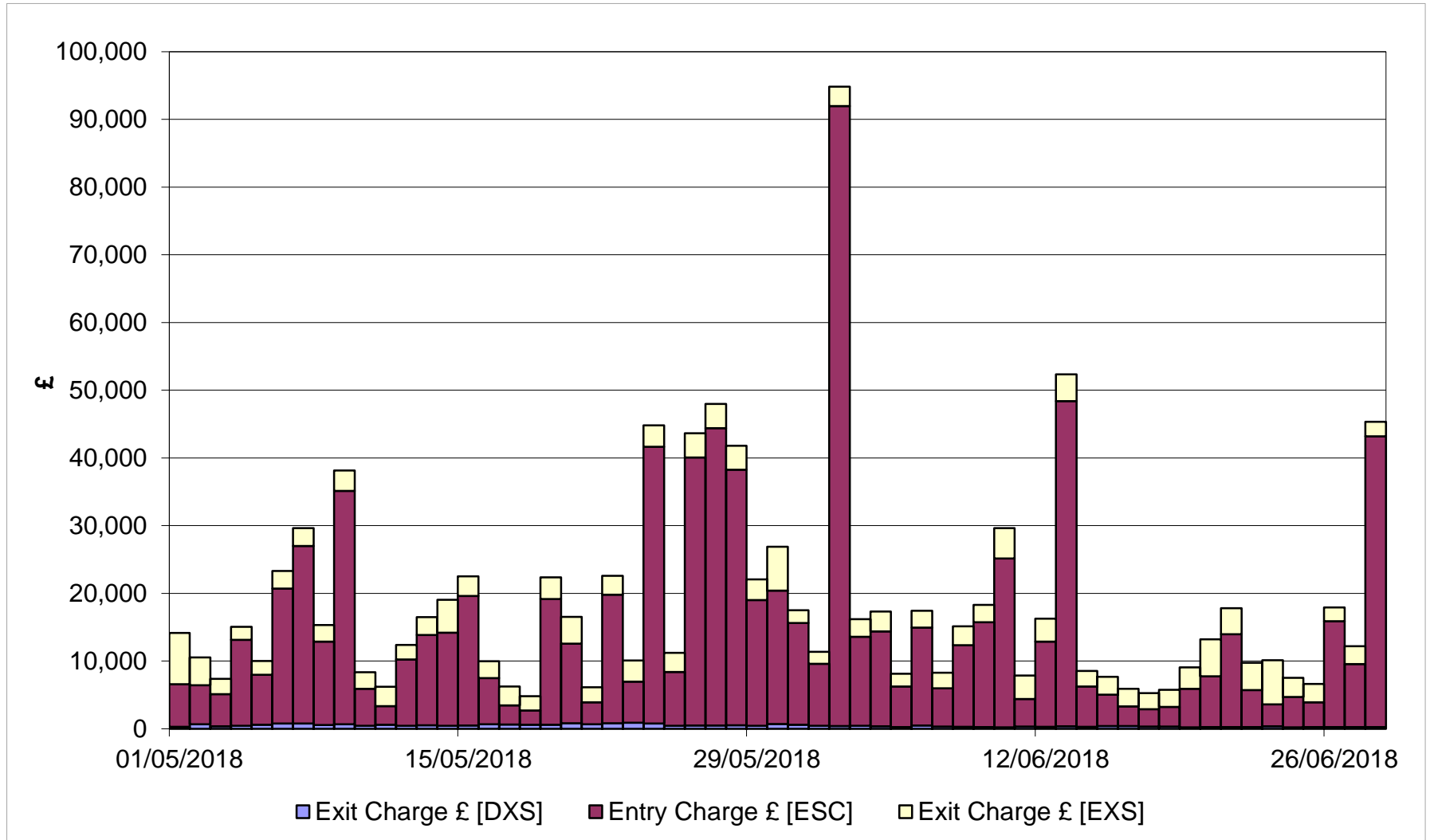
May - July 2018



Energy Balancing – Balancing Costs

Scheduling Charges

May - July 2018



Capacity Neutrality Net Cost / Revenue

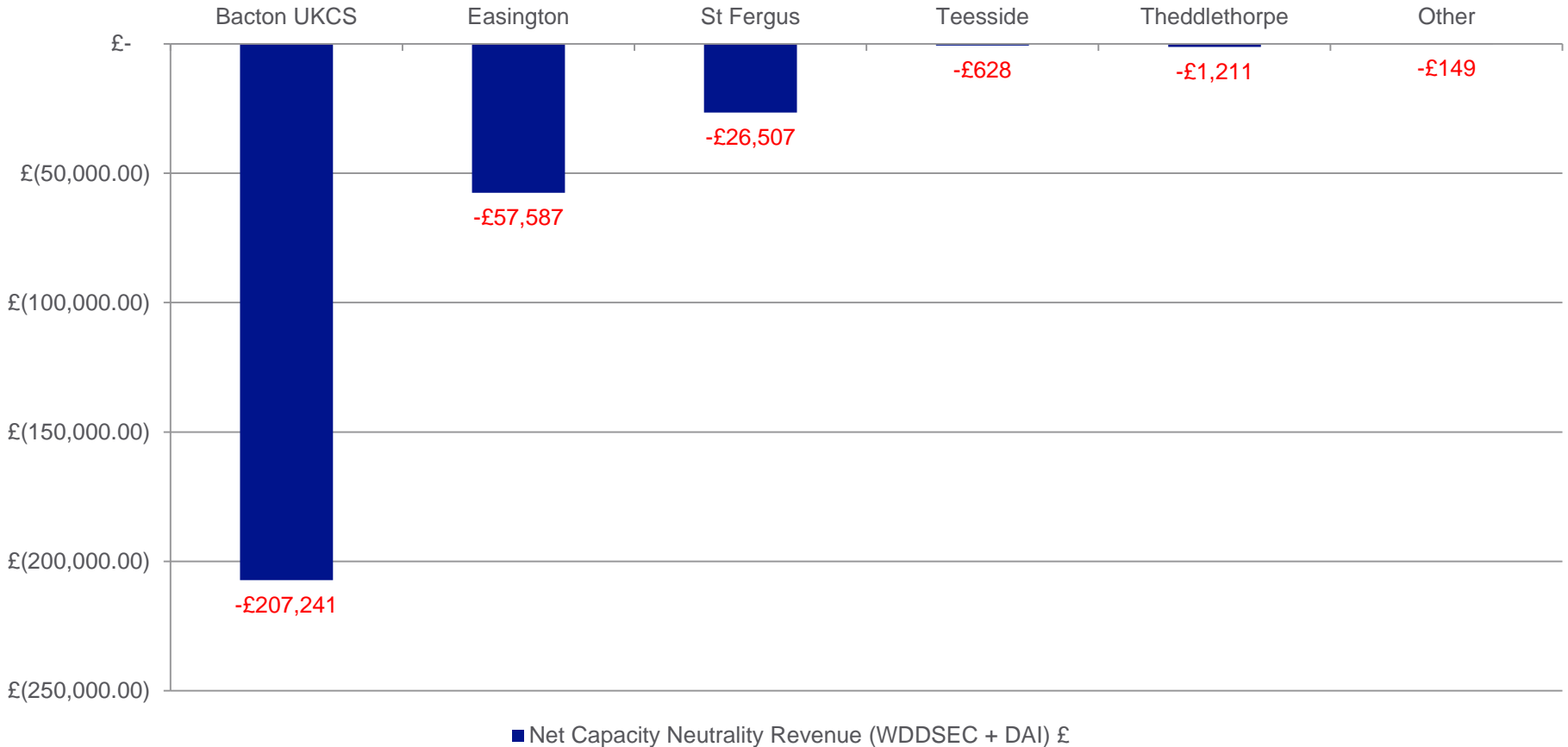
1st April 2018 to 31st August 2018

| | Revenue/Costs |
|---|-----------------|
| WDDSEC/DAI Entry Capacity Revenue | -£293,323 |
| Total Entry Constraint Management Operational Costs | £720,247 |
| Entry Capacity Overrun Revenue* | -£123,521* |
| Non-Obligated Sales Revenue (Entry only) | -£1,943 |
| Revenue from Locational Sells and PRI Charges | £0 |
| Net Revenue | £301,460 |

Capacity Neutrality Revenue

1st April 2018 to 31st August 2018

Net Capacity Neutrality Revenue (WDDSEC + DAI) £



**Gas System
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Operational Overview – Supply, Demand & Storage

September 2018

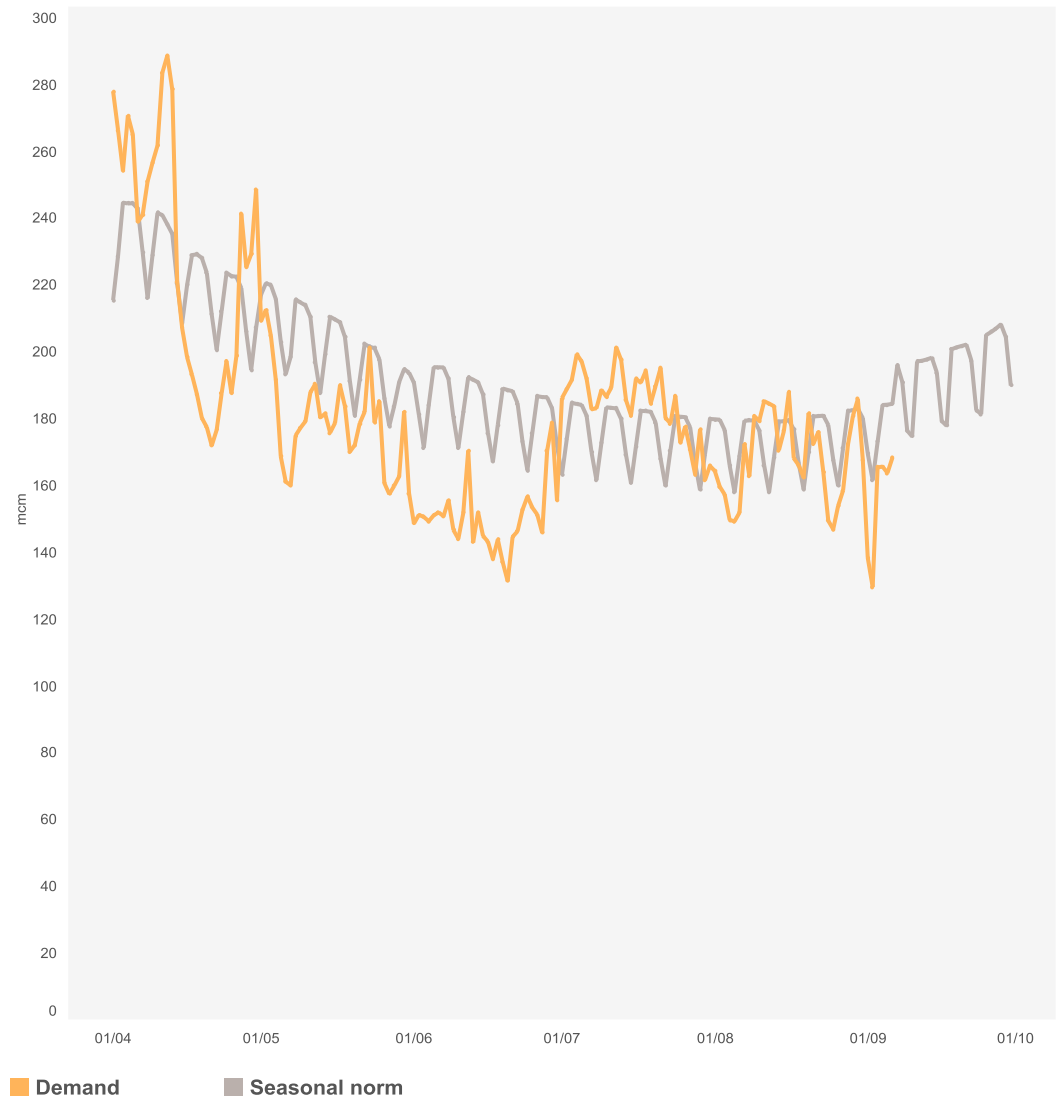
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NTS Demand

Following some periods of volatility in the first half of the Summer, **NTS demand has now returned to expected levels.**

NTS Demand versus seasonal norm

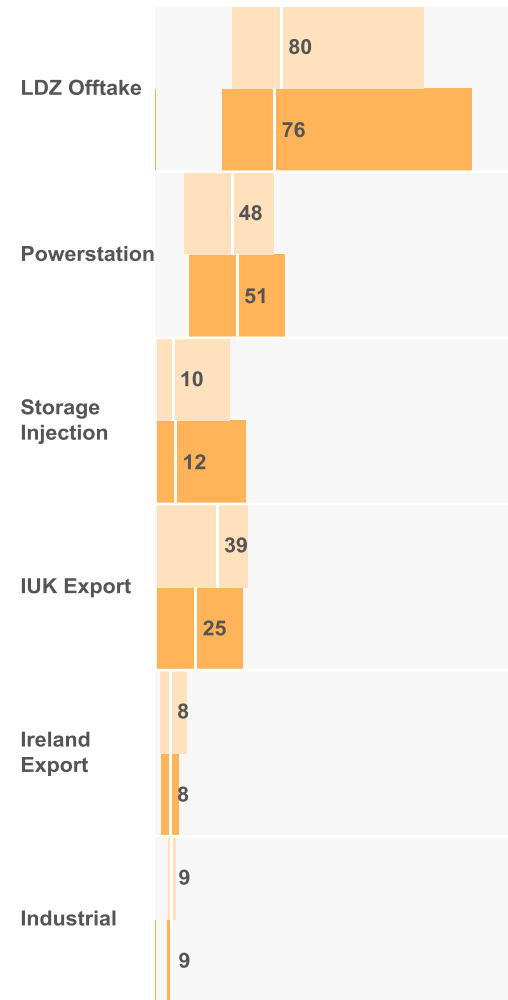


Components of NTS Demand

After the volatility at the start of Summer, LDZ demand has now returned to the same levels as last year.

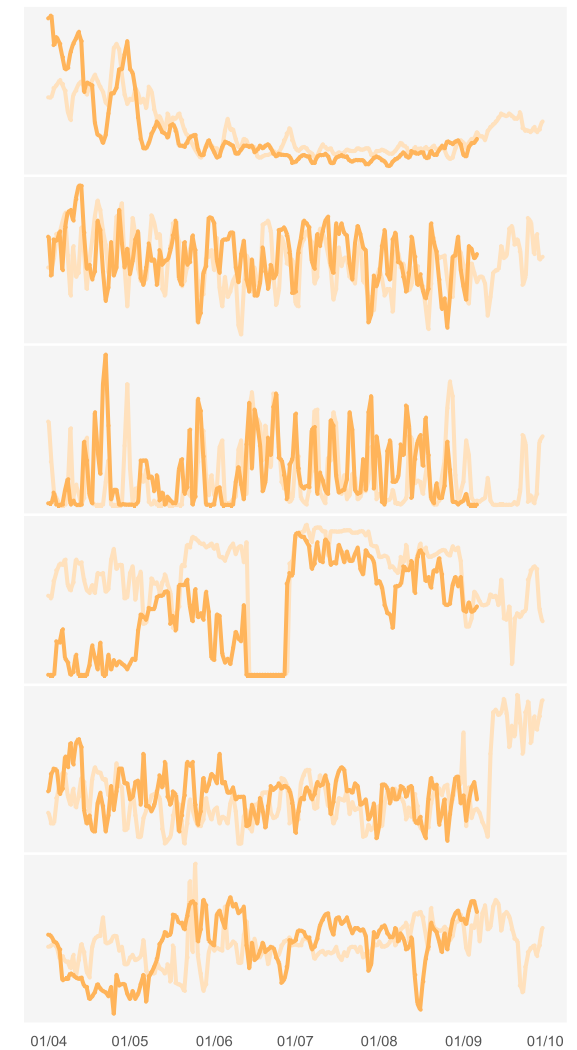
IUK exports have been lower than last year, particularly during the first half of Summer.

Average daily volume and range (mcm)



2017 2018

Trend versus previous year

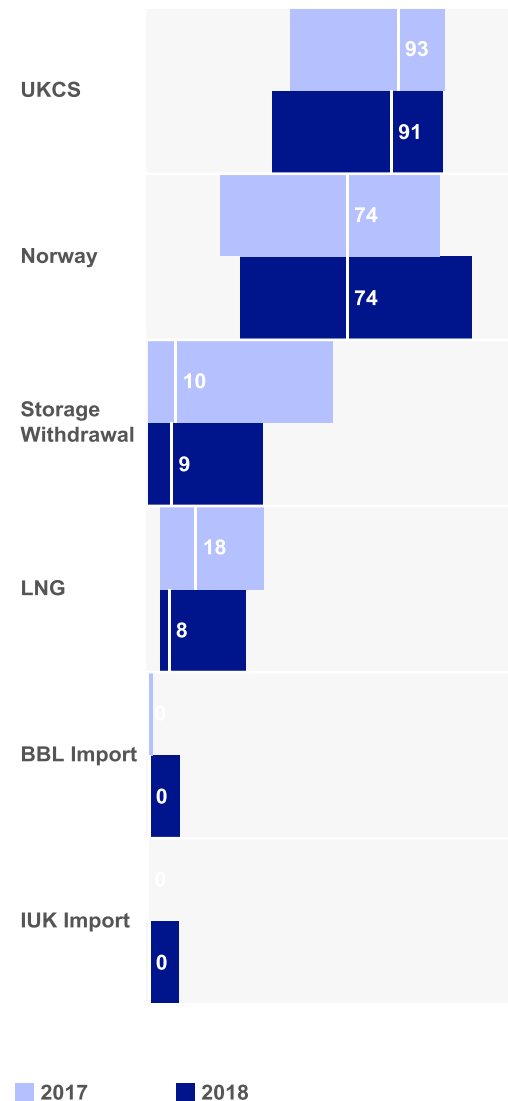


Components of NTS Supply

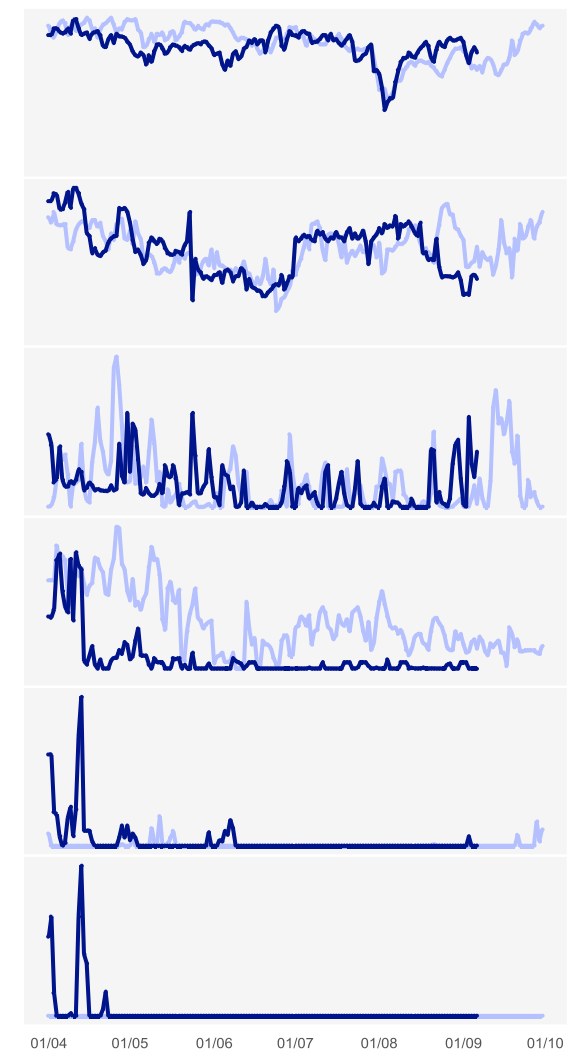
Aside from some brief fluctuations, **levels of supply from UKCS and Norway have been as expected.**

Apart from a brief period at the start of Summer, **LNG supplies have been significantly lower than last year.**

Average daily volume and range (mcm)

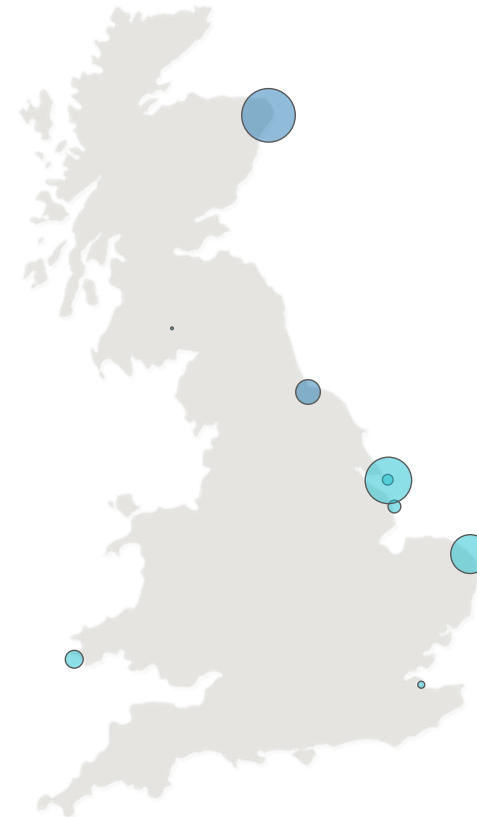
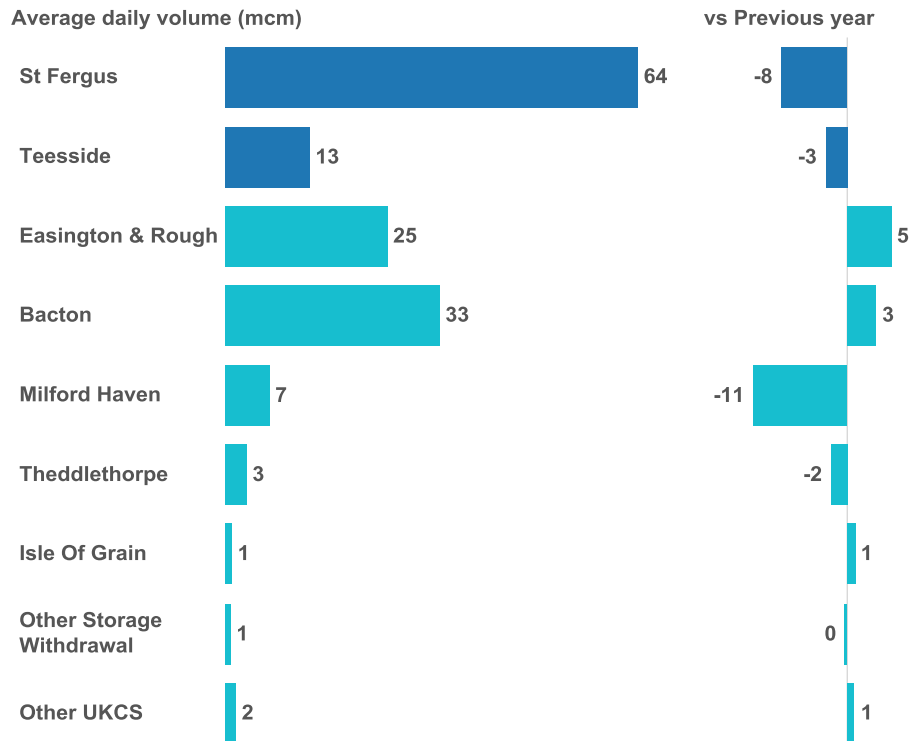


Trend versus previous year

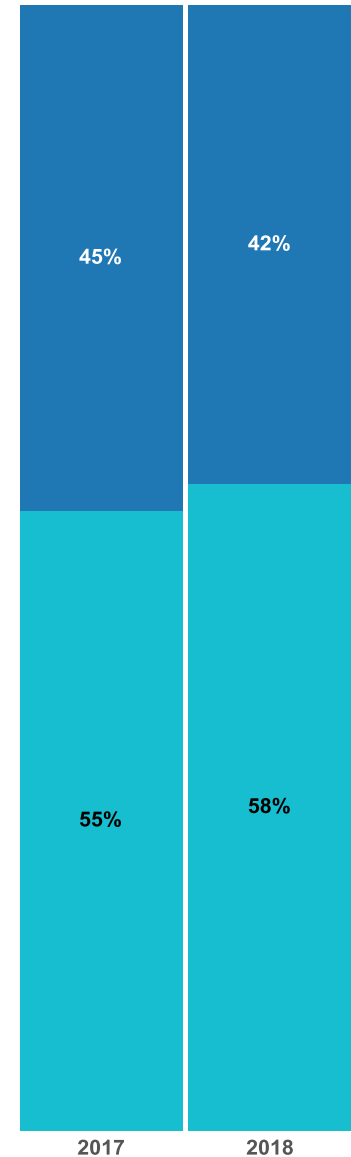


Location of NTS Supply

Proportionally, there has been **less gas supplied to the NTS in the North**, when compared to last Summer.

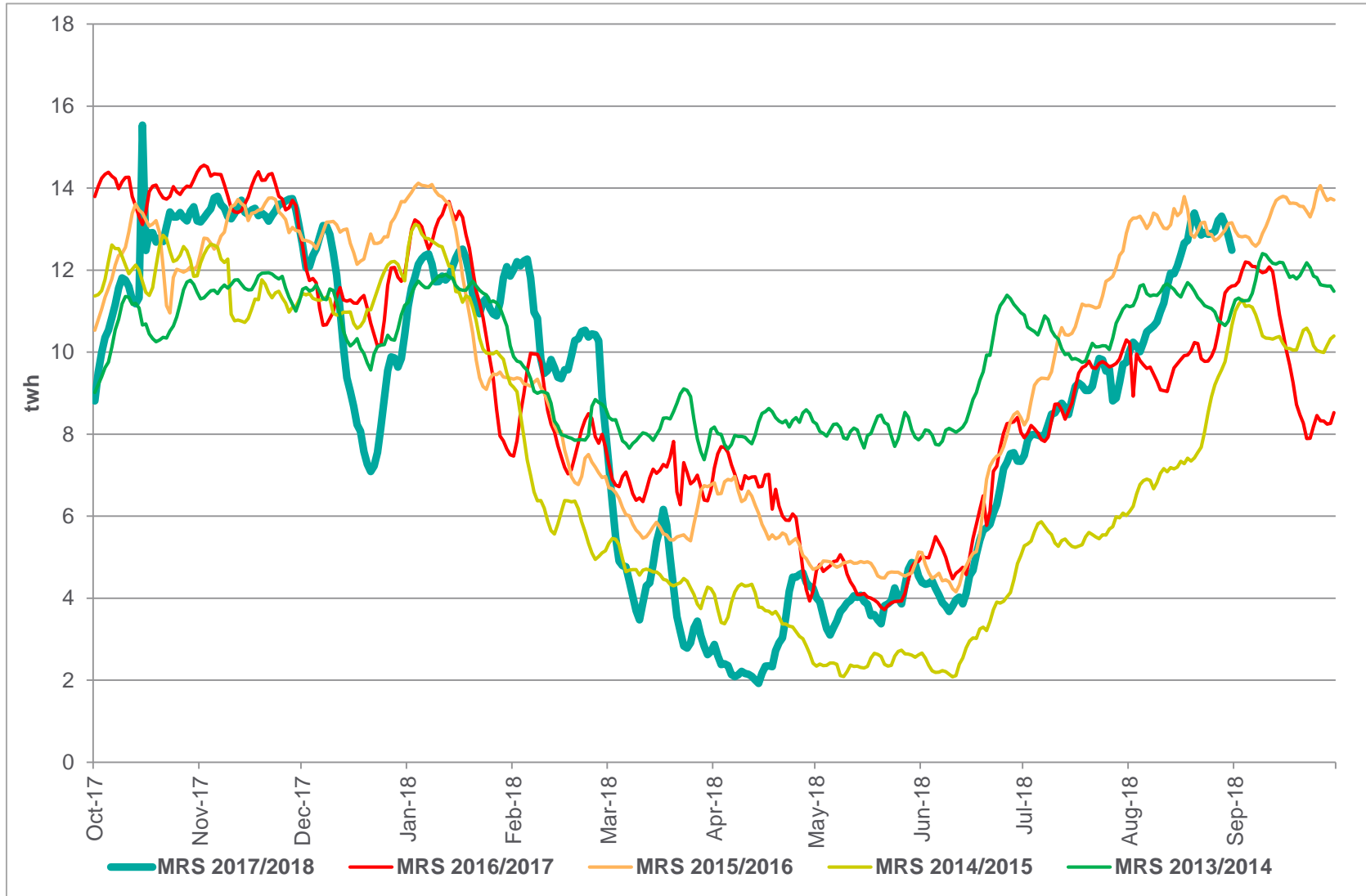


■ North of Easington
■ Easington and South of Easington



Medium Range Storage Stocks (MRS)

October-End September for last 5 years



**Gas System
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Capacity Neutrality Overview

September 2018

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Capacity Neutrality: 1st April 2018 to 31st August 2018

| Revenue / Costs | Apr 18 to Aug 18 | Apr 17 to Aug 17 | Comments |
|---|------------------|------------------|---|
| WDDSEC/DAI Entry Capacity Revenue | -£293,323 | -£377,412 | * Entry Capacity Overrun Revenue data not yet available for August 2018 |
| Total Entry Constraint Management Operational Costs | £720,247 | £2,036,738 | |
| Entry Capacity Overrun Revenue | -£123,521 | -£1,438,620 | |
| Non-Obligated Sales Revenue (Entry only) | -£1,943 | -£1,039 | |
| Revenue from Locational Sells and PRI Charges | £0 | £0 | |
| Net Revenue | £301,460 | £219,667 | |

Capacity Neutrality Net Cost / Revenue

1st April 2018 to 31st August 2018

| | Revenue/Costs |
|---|-----------------|
| WDDSEC/DAI Entry Capacity Revenue | -£293,323 |
| Total Entry Constraint Management Operational Costs | £720,247 |
| Entry Capacity Overrun Revenue* | -£123,521* |
| Non-Obligated Sales Revenue (Entry only) | -£1,943 |
| Revenue from Locational Sells and PRI Charges | £0 |
| Net Revenue | £301,460 |

Capacity Neutrality

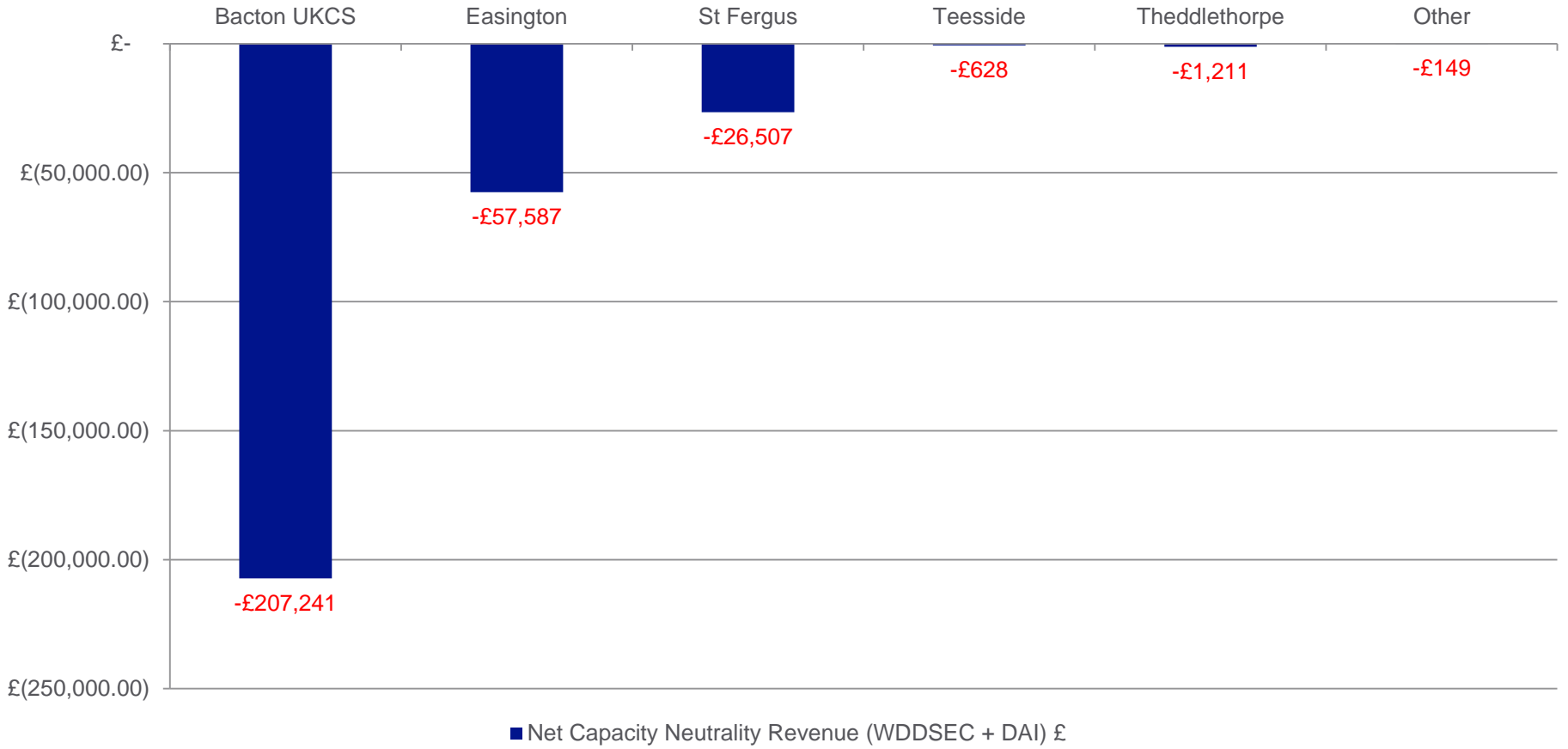
1st April 2018 to 31st August 2018

| Month | Entry Cap Overrun Revenue | Non-obligated sales revenue (entry) | Month | Locational Sells and PRI charges revenue |
|--------------|---------------------------|-------------------------------------|--------------|--|
| Apr-18 | -£11,822 | -£2 | Apr-18 | £0 |
| May-18 | -£59,465 | -£655 | May-18 | £0 |
| Jun-18 | -£22,460 | -£592 | Jun-18 | |
| Jul-18 | -£29,775 | -£534 | Jul-18 | |
| Aug-18 | | -£162 | Aug-18 | |
| Sep-18 | | | Sep-18 | |
| Oct-18 | | | Oct-18 | |
| Nov-18 | | | Nov-18 | |
| Dec-18 | | | Dec-18 | |
| Jan-19 | | | Jan-19 | |
| Feb-19 | | | Feb-19 | |
| Mar-19 | | | Mar-19 | |
| Total | -£123,521 | -£1,943 | Total | £0 (FY18/19) |

Net Capacity Neutrality Revenue

1st April 2018 to 31st August 2018

Net Capacity Neutrality Revenue (WDDSEC + DAI) £



**Gas System
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National Grid Balancing Actions

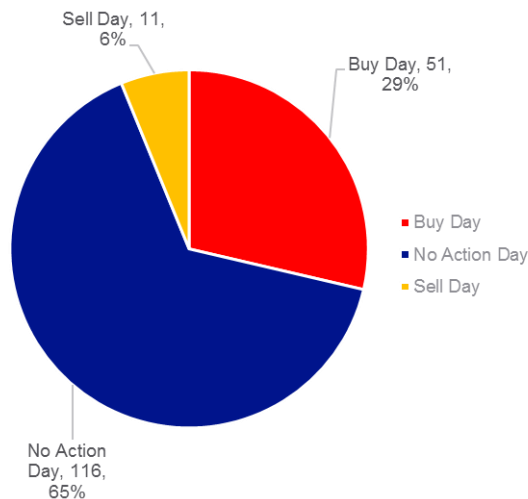
September 2018

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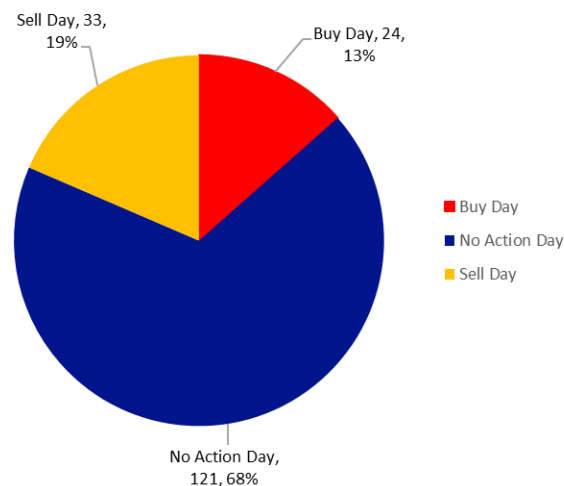


National Grid Balancing Actions – FY17/18 and FY18/19

National Grid Balancing Actions April 2017- Sept 2017 (2017/18)

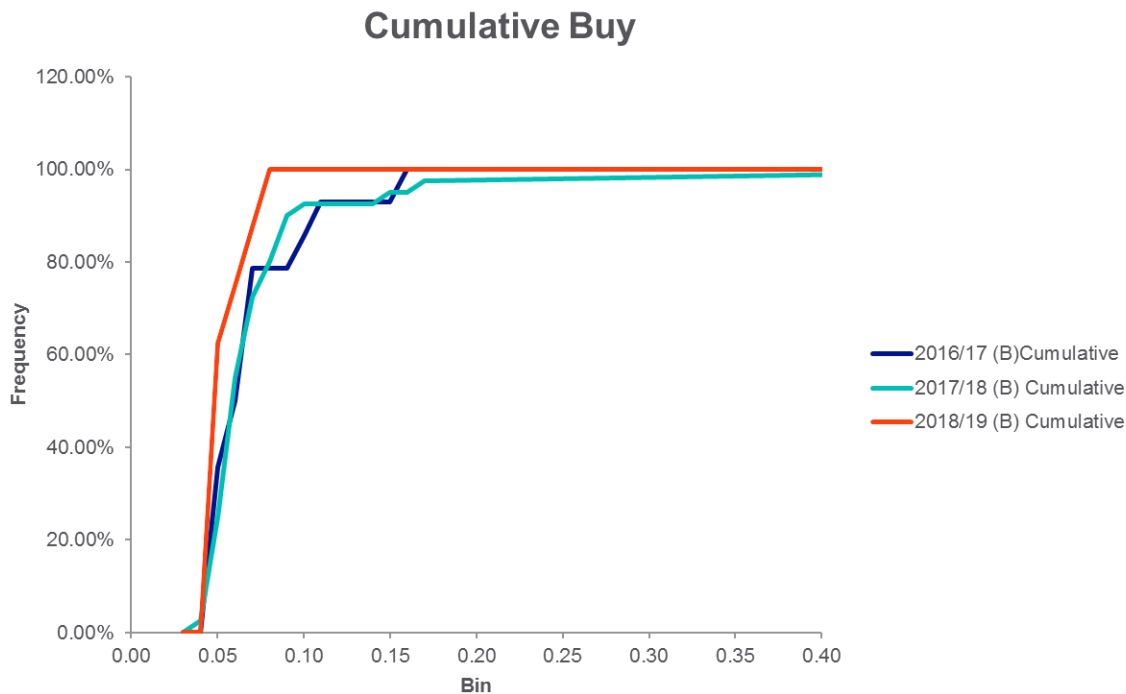


National Grid Balancing Actions (2018/19)



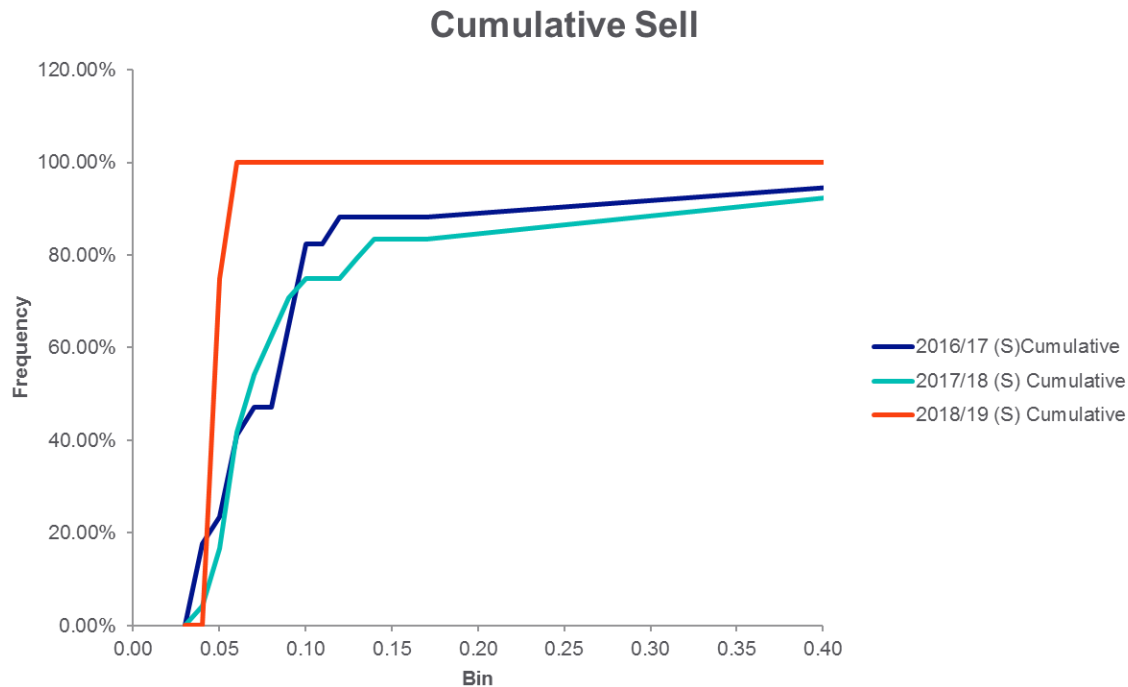
- Chart shows the % of Gas Days where National Grid took residual Buy Days, Sell Days and no action for current YTD and Previous Year to same date.
- For same period for both years (April – 26th September):
 - NG has taken more Sell Actions in FY18/19 (33) compared to 11 for FY17/18
 - And Less Buy Actions in FY18/19 (24) compared to 52 in FY17/18.
 - Overall % of No Actions day similar (120 in FY17/18 compared to 121)

SMP Buy Difference from Default Price



- Chart shows the distribution of difference (in p) of SMP Buy Prices from default SMP(S) for FY 16/17 to 18/19
- Charts show NG has not drastically changed practices and impacting market prices with actions.
- However insufficient data for 18/19 as NG has set SMP (B) on only 8 occasions so far this year.

SMP Sell Difference from Default SMP



- Chart shows the distribution of difference (in p) of SMP Sell Prices from default SMP(S) for FY 16/17 to 18/19
- Charts show NG has not drastically changed practices and impacting market prices with actions.
- However insufficient data for 18/19 as NG has set SMP sell on only 4 occasions so far this year.