

Medway ExCS Informal Notice - Appendix 1

29th November 2019
Our Ref: 2019 – Medway ExCS

This Appendix relates to the proposed substitution of NTS Exit Capacity to Medway from Shorne DN exit point.

1. Recipient selection:

The PARCA application is in respect of Medway for Enduring Annual NTS Exit (Flat) Capacity. The request triggered the opening of a PARCA Exit Window, but no further PARCA applications were received.

2. Donor selection:

Substitution from individual donor NTS exit points were assessed by reducing the capacity at the most favourable NTS exit points that had Substitutable Capacity. The most favourable donor NTS exit points will normally be the furthest downstream NTS exit points from the recipient NTS exit point, as measured by pipeline distance.

For the purposes of the NTS Exit Capacity Substitution analysis, three donor sequences of NTS exit points were analysed to determine the best exchange rate.

The exit points identified as potential donor sites were as follows:

NTS exit Point	Type	Obligated Capacity (GWh/d)	Unsold Capacity (at 1st April 2026) (GWh/d)
Shorne	DN	67.06	42.52
Stanford Le Hope (Coryton)	DC	38.6	38.6
Barking (Horndon)	DC	58.59	58.59
Horndon	DN	46.41	13.1

The pipeline distances to the potential donor NTS exit points are:

<i>From</i>	<i>To</i>	<i>Pipeline distance (km)</i>
Medway	Shorne	20.9
	Stanford Le Hope (Coryton)	29.82
	Barking (Horndon)	33.88
	Horndon	33.88

As a result of these analyses, the final NTS exit points selected were as follows;

<i>NTS Point</i>	<i>Type</i>	<i>Recipient / Donor</i>
Medway	DC	Recipient
Shorne	DN	Donor

3. Network analysis: Supply & demand scenario

- Substitution analysis was conducted for the Gas Year 2025/26 as the first year the capacity will be required by Medway.
- The analysis starting point is our 2023/24 1-in-20 peak day demand network. From this a South East sensitivity network is created, taking the most onerous credible demand levels for power stations (and other DCs), and GDN offtakes from sold and forecast levels for the South East zone as detailed in Section 5, and with South East supplies reduced to a credible minimum.
- The substitution network is created from the South East sensitivity network, with the potential GDN NTS exit points in the area increased to obligation in accordance with the Methodology, as these were deemed to have a reasonable probability of being donors.
- Medway NTS exit point was set at the level of prevailing Obligated Exit Capacity in 2025/26 (38,120,000 kWh/d).

4. Enhanced Network

- No reinforcements were required

5. Exit points set at obligated, sold or otherwise:

- All South East DC sites are set at obligated level, with the remaining DCs being scaled back from the forecast so that the aggregate total matches the forecast total.
- Sites increased to their obligated level as part of the South East sensitivity network are the potential donors (GDN offtakes) listed above; none of these sites had already been set to their obligated level.
- All other GDN NTS exit points were at Sold level as booked through the annual NTS Exit (Flat) Capacity application processes.

6. Flow adjustments:

- Flow adjustments were made in accordance with Paragraph 45 of the Methodology.
- Flow adjustments are detailed in Section 3 above, the substitution network demand is 5622 GWh/d, which is higher than the 1 in 20 peak demand (including sold capacity levels at GDN NTS Exit Points).

7. Summary of network analysis key parameter changes:

- No significant parameter changes were required between substitution networks.

8. Exchange Rate Validation

To validate that the above donor list and the sequence of substitution provides the best exchange rate, three different donor sequences were assessed. These are listed, with their respective exchange rates, in the following tables:

Sequence 1 (selected)

<i>Donor NTS Exit Points</i>	<i>Capacity Donated (kWh/d)</i>	<i>Capacity Received (kWh/d)</i>	<i>Exchange Rate (Donor: Recipient)</i>
Shorne	39,760,000	37,644,093	1.0562:1

Sequence 2

<i>Donor NTS Exit Points</i>	<i>Capacity Donated (kWh/d)</i>	<i>Capacity Received (kWh/d)</i>	<i>Exchange Rate (Donor: Recipient)</i>
Barking (Horndon)	52,050,000	37,644,093	1.3827:1

Sequence 3

<i>Donor NTS Exit Points</i>	<i>Capacity Donated (kWh/d)</i>	<i>Capacity Received (kWh/d)</i>	<i>Exchange Rate (Donor: Recipient)</i>	<i>Total Exchange Rate (Donor: Recipient)</i>
Stanford Le Hope (Coryton)	38,600,000	30,399,958	1.2697:1	1.2244:1
Shorne	7,490,000	7,244,135	1.0339:1	