ENDURING NTS GAS OFFTAKE ARRANGEMENTS – STRAWMAN MODEL

INTRODUCTION

1. This paper sets out a potential model for the enduring NTS gas offtake arrangements. It has been developed following discussions at Ofgem's Enduring Offtake Working Group meetings to support assessment of the relative benefits of such a model compared to the current offtake arrangements and alternatives such as the model put forward as part of the "Towards A New Industry Framework" (TANIF) consultation which concluded early 2005[1].

2. National Grid NTS is considering its position in respect of the appropriate enduring offtake arrangements. This strawman presents a potential model (with two options for the unconstrained release mechanism) in respect of such arrangements and is not a proposal to reform the current arrangements. This strawman may however form the basis of any proposal that National Grid NTS may bring forward in due course.

KEY ASSUMPTIONS

3. This strawman has been developed based on the following key assumptions underpinning the enduring NTS offtake arrangements:

- common arrangements should be implemented at all NTS Exit Points and a "pay-as-bid" release mechanism in the constrained period as means of seeking to minimise the risk of any potential undue discrimination in the allocation of capacity;
- capacity products embracing the concept of "flexibility" utilisation should be implemented that will support provision of clear signals to support efficient and economic network investment and operation;
- a "User commitment model" should be promoted requiring UNC (and non-UNC) Users to provide financially backed signals for capacity requirements to minimise the risk of investment inefficiencies and, in the extreme, asset stranding;
- the duration of the constrained period recognises factors beyond National Grid NTS's control, such as the time required to obtain required consents.

[1] The TANIF model was developed consistent with the Ofgem "Option 2a model" that was recommended in the Ofgem final decision document on DN sales (Feb 2005).

HIGH LEVEL DESCRIPTION OF EXIT ARRANGEMENTS

4. The following sub-sections describe the key attributes and characteristics of the exit capacity arrangements in this strawman.

Definition of access rights

Type	NTS Exit (Flat) Capacity
Rights:	Right to offtake a daily quantity of gas
Location:	Nodal i.e. per NTS Exit Point
Products	Annual Firm NTS Exit (Flat) Capacity Daily Firm NTS Exit (Flat) Capacity Daily Interruptible NTS Exit (Flat) Capacity

Type	NTS Exit (Flex) Capacity
Rights:	Right to use an amount of flexibility on a gas day less than the NTS Exit (Flex) Capacity holding without incurring an overrun. As described in more detail in the overrun charge section, the flexibility utilisation on a gas day will be based on the difference between the cumulative quantity of gas offtaken between 06:00 and 22:00 and 2/3 of the daily quantity (see figure 1). A User's NTS Exit (Flex) Capacity holding will be based on its "peak flex booking" plus α x (flat booking – end of day offtake), where $0<=\alpha<=2/3$ and α is common to all NTS exit points (see figure 2).
Location:	Nodal i.e. per NTS Exit Point
Products	Annual Firm NTS Exit (Flex) Capacity Daily Firm NTS Exit (Flex) Capacity

Figure 1. NTS Exit (Flexibility) Capacity Utilisation

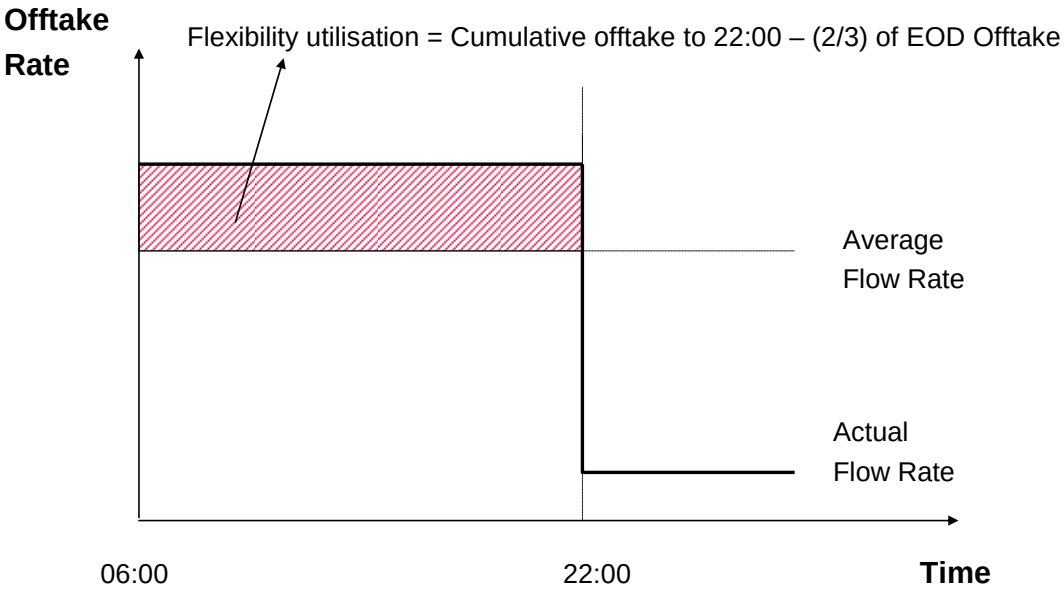
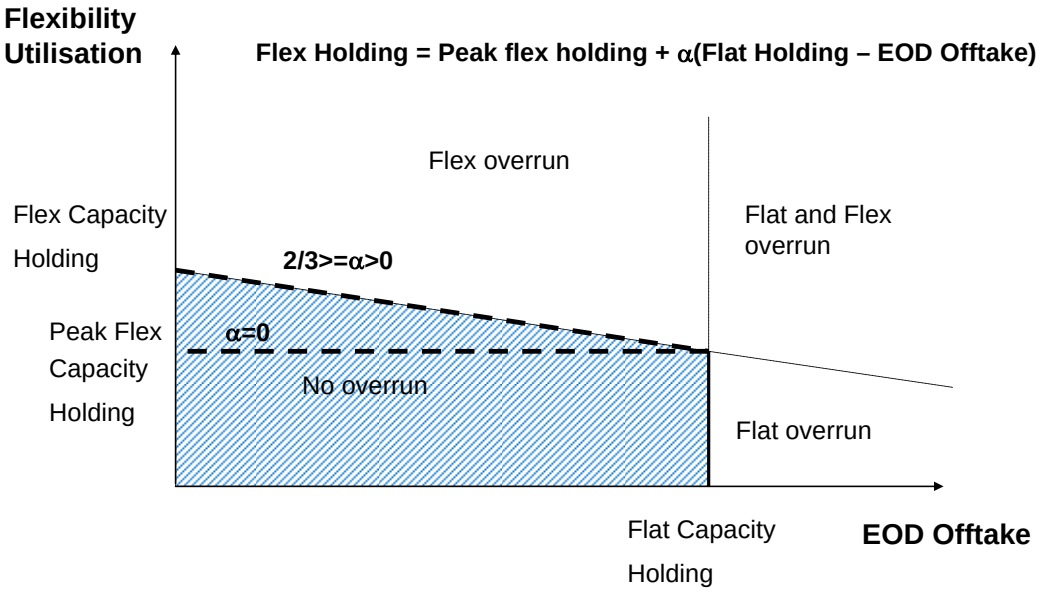


Figure 2. "Expanding" NTS Exit (Flex) Capacity Product



[Note : Analysis is being undertaken to establish the most appropriate gradient "α" of the expanding flexibility product, which could be zero.]

Registration of access rights

5. A common registration process for NTS Exit (Flat) Capacity and NTS Exit (Flexibility) Capacity is proposed for all UNC Users as summarised below.

Participants	UNC Users that have registered intent to offtake gas at an NTS Exit Point (i.e. the relevant DN for an NTS/LDZ offtake or shippers that are registered Users at supply points/CSEPs.)
Registration	**Unconstrained release (beyond investment lead-times[2])** **Option U1. Prevailing rights plus extended reduction notice period model** A User may have a "prevailing level" of capacity[3] which is booked by default for the next [2] gas years at the Annual Application Window in [April], unless the User has previously provided notice to reduce its prevailing level. This notice must be provided at least [2] years earlier at an [April] Annual Application Window[4]. A User can increase its "prevailing level" of capacity at the [April] Annual Application Window in Gas Year Y for use from Gas Year Y+[4] onwards by committing to book and pay for [4] years of its revised total prevailing level of capacity (i.e. any existing prevailing level plus any increase) (see figure 3). In the event that a User requests (with the required reduction notice period) to decrease its prevailing level for any of the 4 years for which the User has committed to book and pay for the prevailing level of capacity, National Grid NTS will consider whether it is able to re-utilise the capacity. If so, the User's commitment to pay will be reduced by the amount of capacity reduction that is able to be re-utilised. A User can obtain additional capacity over and above its prevailing committed "prevailing level" for each gas year in the constrained period through the constrained release mechanism. **Option U2. Finite rights model** A User is able to apply for annual firm NTS Exit (Flat & Flex) Capacity for any of the Gas Years Y+[4] to Y+[7] at the Annual Application Window in [April] in Gas Year Y.

[2] It is assumed that National Grid NTS is able to complete any required investments within 3.5 years of investment signals being received in [April].

[3] A User's initial "prevailing level" of capacity will need to be considered as part of the initialisation of the enduring regime.

[4] This implies that a User must pay at least [2] years of charges for its prevailing level of capacity. With notifications of capacity reductions in [April], this provides [2.5] years notice of any reductions.

	National Grid NTS will accept requests if this would result in a User holding [4] continuous years of the same level of capacity (see figure 4). Following the allocation of any such requests for [4] continuous years, any User will be allocated its request for capacity for the first year of the unconstrained period Y+[4] only if, in aggregate, holdings for that year would not more than the baseline (see figure 5)[5]. A User can obtain additional capacity to that which it has booked through the unconstrained release mechanism for each gas year in the constrained period through the constrained release mechanism. **Constrained release (within investment lead-times)** *Medium term - "annual pay-as-bid auction":* A User is able to apply for annual firm NTS Exit (Flat & Flex) Capacity for any of the Gas Years Y+1, Y+2 and Y+[3] via a "pay-as bid" capacity auction held in [August] in Gas Year Y. Quantity to be made available for each year will be: ➢ the remaining unsold capacity i.e. relevant "baseline" – (capacity booked through the unconstrained release mechanism or previous annual auctions for that year) ➢ plus any non-obligated capacity (to be sold at National Grid NTS discretion and in response to offered prices). A further "pay-as-bid" auction will be undertaken in [Sept] allowing Users at a node to obtain "spare" capacity at other nodes for the following gas year only, subject to exchange rates between the nodes. *Short term – "daily pay-as-bid auction":* A User is able to apply through a number of daily "pay-as bid" auctions held day ahead and on the day, for -daily firm NTS (Flat) Exit capacity -daily firm NTS (Flex) Exit capacity -daily interruptible NTS (Flat) Exit capacity Quantity of daily firm NTS Exit (Flat & Flex) capacity to be made available: ➢ before the start of each gas day will be the remaining unsold capacity (i.e. relevant "baseline" – capacity sold

[5] This allows users to obtain any "spare" existing capacity up to a baseline level for the first year of the unconstrained period.

	through the unconstrained release or previous annual/daily auctions) plus any additional "non-obligated" capacity that National Grid NTS releases at its discretion (subject to risk assessment). ➢ within the gas day will be at National Grid NTS discretion (subject to risk assessment) Quantity of daily interruptible NTS Exit (Flat) capacity to be made available before the start of each gas day will be: ➢ the amount of Use-it-or-lose-it (UIOLI) capacity, determined as flat capacity holding – average of previous 30 day capacity utilisation at the exit point; and ➢ any non-obligated capacity. **Note.** Under option U1, for the avoidance of doubt, any capacity obtained through the constrained period will not become or add to a User's "prevailing level" of capacity.
Trading/ transfers/	There will be facilitated trading and transfers within the constrained period: ➢ Users to be able to trade capacity holdings at a node. ➢ Users will be able to transfer the entirety of their capacity holding at a node to another User at the same node, subject to credit checks. NB. "Trade" – no change of primary capacity holder and liability for payment of capacity charge, but traded quantity included for overrun determination purposes "Transfer" - change of primary capacity holder and liability for payment of capacity charge.

Figure 3. Unconstrained capacity registration mechanism – Option U1

In this example, a User has a "prevailing level" of 10 units and requests at the [April] Application Window to increase its prevailing level by 20 units from Y+[4]. The User is committed to book 30 units of capacity for years Y+[4] to Y+[7] and pay the prevailing capacity charge. The User's "prevailing level" is increased to 30 units from Y+[4] onwards.

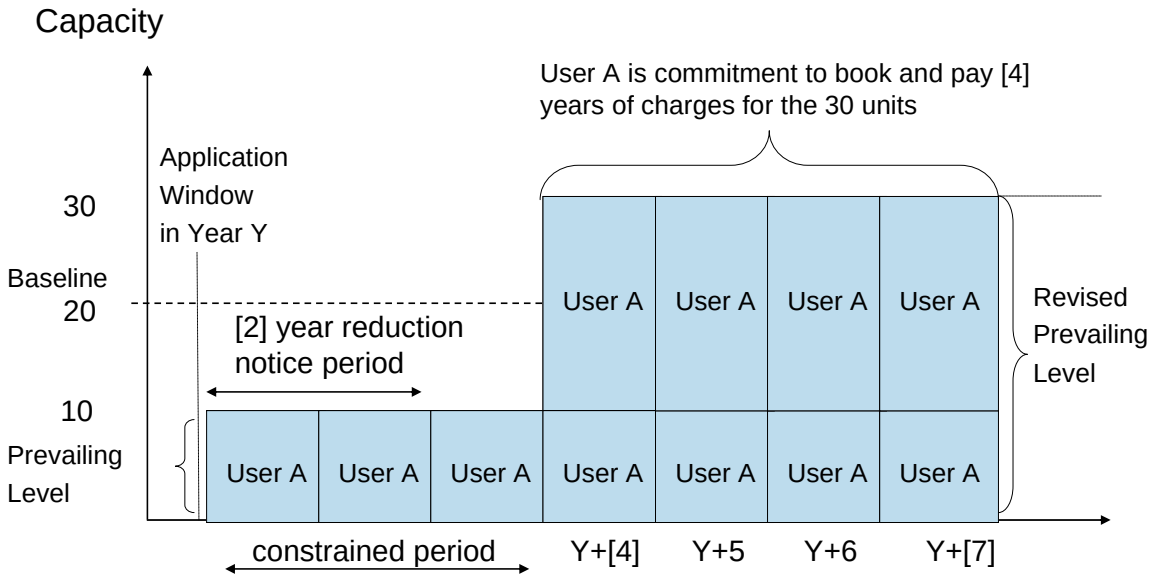


Figure 4. Unconstrained capacity registration mechanism – Option U2.

In this example, a User has not previously been allocated any capacity and requests at the April Application Window 30 units for [4] continuous years. The User is allocated the 30 units of capacity for years Y+[4] to Y+[7], and pays the prevailing capacity charge.

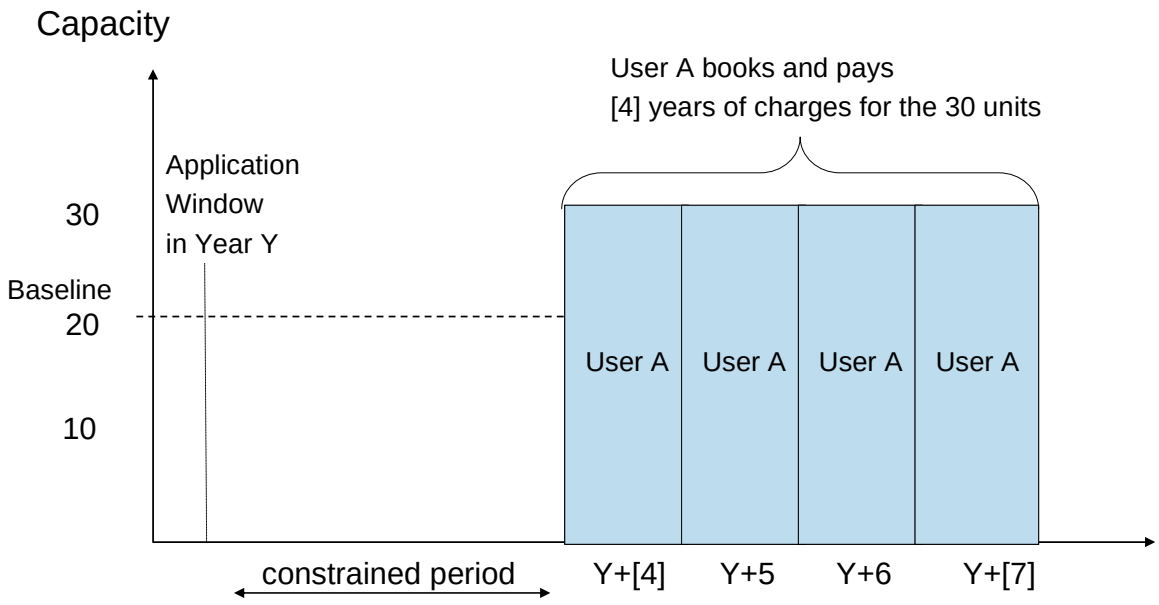
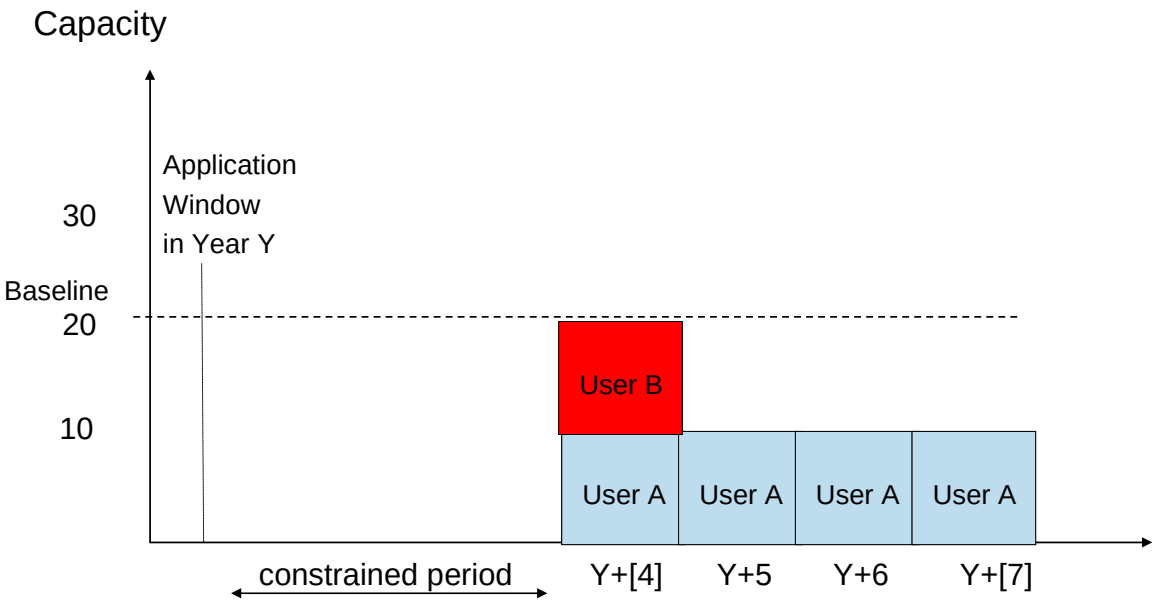


Figure 5. Unconstrained capacity registration mechanism – Option U2.

In this example, User A and B have not previously been allocated any capacity. User A requests at the April Application Window 10 units for [4] continuous years and is allocated the 10 units for years Y+[4] to Y+[7], and pays the prevailing capacity charge. In addition User B requests at the same April Application Window 10 units for Gas Year Y+4. As the aggregate amount of holding for Y+4 is not more than the baseline, User B is allocated the 10 units for Gas Year Y+4.



In addition, non-UNC parties are able to "reserve" capacity via reservation agreement which its nominated User(s) can then later book via the UNC registration process.

Participants:	Non-UNC parties
Reservation	Party able to "reserve" annual firm NTS Exit (Flat & Flex) Capacity for Gas Years Y+[4] to Y+[7] at the Annual Application Window in [April] in Gas Year Y. National Grid NTS will enter into a "reservation agreement" with the party with following obligations: ➢ party commits to pay the NTS Exit (Flat/Flex) Capacity charges for each of the [4] years of reserved capacity associated with the proportion of capacity which might not be booked by its nominated User(s). ➢ National Grid NTS allows the nominated User(s) to register the "reserved" capacity for each of the [4] years at any time up to the annual auction ahead of the gas year. Prior to the registration, the "reserved" capacity is treated as if it were sold capacity in respect of determination of quantities of capacity to

	be made available. (Under option U1, any part of the reserved capacity that is booked becomes part the User's prevailing level of capacity and therefore requires [2] years of notice for reductions.)

Liabilities in the event of non-availability of capacity

6. Late delivery of capacity (i.e. capacity can only be made available by investment)

   In the event that a User has nominated to flow against all or any part of its holdings, and is not able to do so as National Grid NTS is unable to provide any part of the required capacity due to late delivery of any required investments, National Grid NTS will only be exposed to costs due to events under its control.[6]

7. Under operational circumstances (i.e. after capacity has been made available)

   In the event that a User has nominated to flow against all or any part of its holdings, and is not able to do so as National Grid NTS is unable to provide the required capacity, despite seeking to utilise any system management tools, the User may claim financial compensation. The amount of compensation paid will be based on the amount of the desired quantity of gas that could not be offtaken on the gas day multiplied by a market based charge rate (based on various relevant capacity bids and offers).

Charging

8. Both Shippers and DNO Users will incur the same type of charges as summarised below:

Type	Methodology
Overrun charges	NTS Exit (Flat) Capacity Charges shall apply where there is an aggregate flat overrun quantity, determined by the extent that the aggregate end of day measured flow exceeds the aggregate end of day capacity holdings at the NTS Exit Point. Each User's overrun is then determined by prorating the aggregate quantity based on each User's individual overrun quantity determined on same basis. The overrun charge will be determined by multiplying the User's overrun quantity by the applicable charge rate, which will be based on the highest of a number of market based rates (e.g. buy back offers, reserve price, price paid for capacity through

[6] Further details to be developed.

	constrained auctions) for the gas day. NTS Exit (Flex) capacity Charges shall apply where there is an aggregate flex overrun quantity, determined by the extent that the aggregate flow over period 06:00 to 22:00 (including a tolerance of [1.5%] for measurement inaccuracies) exceeds the aggregate end of day flexibility capacity holdings at the NTS Exit Point. Each User's overrun is then determined by prorating the aggregate quantity based on each User's individual overrun quantity determined on same basis or based on a User Agent provided allocation. The overrun charge will be determined by multiplying the User's overrun quantity by the applicable charge rate, which will be based on the highest of a number of market based rates (e.g. buy back offers, reserve price, price paid for capacity through constrained auctions) for the gas day.
NTS Exit (Flat) Capacity Charge	Users will incur an NTS Exit (Flat) Capacity Charge based on sum of: ➢ amount obtained through unconstrained release at the prevailing NTS Exit (Flat) Capacity Charge rate; and ➢ amount obtained through constrained release based on the amount and price at which it obtained capacity through the relevant annual and daily capacity auction(s). The reserve price for the auctions will be based on the prevailing NTS Exit (Flat) Capacity Charge Rate[7].
NTS Exit (Flexibility) Capacity Charge	Users will incur an NTS Exit (Flex) Capacity Charge based on sum of: ➢ amount obtained through unconstrained release at the prevailing NTS Exit (Flex) Capacity Charge rate; and ➢ amount obtained through constrained release based on the amount and price at which it obtained capacity through the relevant annual and daily capacity auction(s). The reserve price for the auctions will be based on the prevailing NTS Exit (Flex) Capacity Charge Rate.
NTS Exit Capacity Neutrality charge	Revenues (On-the-day sales of Baseline NTS Exit (Flat and Flex) Capacity, Interruptible NTS Exit (Flat) Capacity sales, Non-Obligated NTS Exit (Flat and Flex) Capacity sales and Overrun Charges) and costs (system management costs) from the exit capacity regime will be credited or charged to all participants based on their proportion of the aggregate NTS

[7] Note that this will include both firm and interruptible NTS Exit (Flat) Capacity release in the constrained period.

	Exit (Flat) Capacity holdings.
NTS SO Commodity Charge	A common NTS SO Commodity charge rate will apply at all entry and exit points. [8]
NTS TO Commodity Charge	Users may incur an NTS TO Exit Commodity Charge to adjust for any under or over-recovery from NTS Exit (Flat and Flex) Capacity revenues.

System Management

9. System management tools may include:

Type	Comment
Scale back of interruptible holdings	This will be at zero cost.
"Flow swapping" agreements	This may replace the current arrangements whereby flow can be swapped between NTS/LDZ offtakes while maintaining the aggregate end of day flow into an LDZ.
Options and forward contracts	Buy back of NTS Exit (Flat) Capacity and NTS Exit (Flex) Capacity.
Annual and daily buy back auctions	Buy back of NTS Exit (Flat) Capacity and NTS Exit (Flex) Capacity via annual and daily auctions undertaken as required by National Grid NTS.

[8] There may be a requirement to separate from the SO Commodity charge rate an amount applicable to flexibility usage.