



Gas DSR Workshop

17th July 2023



Introduction

- Our Gas DSR reform proposals for winter 2023/24 in UNC Modifications [0844](#) and [0845](#) have been developed at pace
- We recognise that interested parties may not have had opportunity to study all the detail
- It was therefore suggested at the July Transmission Workgroup meeting that NGT arranges an extra session to explain some of the detail with some worked examples for both shipper and consumer contracted DSR
- Both shipper and consumer representatives have therefore been invited to this call

Agenda

- Key Terms
- Exercise triggers
- DSR Exercise: Shipper Options
 - Within-day
 - D-1
 - D-5
 - First day and subsequent days
- DSR Exercise: Consumer Options
 - Within-day
 - D-1
 - D-5
- Next Steps
- Q&A

Key Terms

| Term | Definition |
|-----------------------------|--|
| DSR Participant | A shipper or a consumer that enters into a DSR Option arrangement with NGT |
| DSR Reduced Quantity | The level of offtake expressed as a daily kWh quantity that is not exceeded if NGT exercises a DSR Option |
| DSR Reduced Rate | The DSR Reduced Quantity divided by 24 |
| Winter Average Demand (WAD) | The daily average demand at a supply point in the previous winter (01 Nov – 30 Apr) excluding any days of DSR exercise or days on which demand was reduced due to an emergency |
| Option Quantity | Winter Average Demand minus the DSR Reduced Quantity |

Exercise Triggers

Within-day and D-1 DSR Options

- Either a Margins Notice or Gas Balancing Notification is in force

D-5 DSR Options

- Where NGT projects on D-5 that total system demand will exceed expected available supply by at least 14 mcm; and
- Where NGT decides to issue a notice (via ANS) to all shippers by 17:00 on D-5 that it intends to exercise D-5 DSR Options

Exercise Quantities

| Option | Shipper DSR | Consumer DSR |
|------------|--|--|
| Within-day | Not less than the relevant prevailing output nomination minus DSR Reduced Quantity, multiplied by number of hours left in the gas day divided by 24* | Option Quantity multiplied by number of hours remaining in the gas day divided by 24 |
| D-1 | Not less than the relevant prevailing output nomination minus DSR Reduced Quantity* | Option Quantity |
| D-5 | Not less than the Option Quantity | Option Quantity |

* If the prevailing nomination is below the DSR Reduced Quantity or minimum OCM trade size then the option is not exercised

In both cases, the DSR Participant is paid its Option Fee based on the Option Quantity

Shipper DSR Exercise: Shipper Obligations

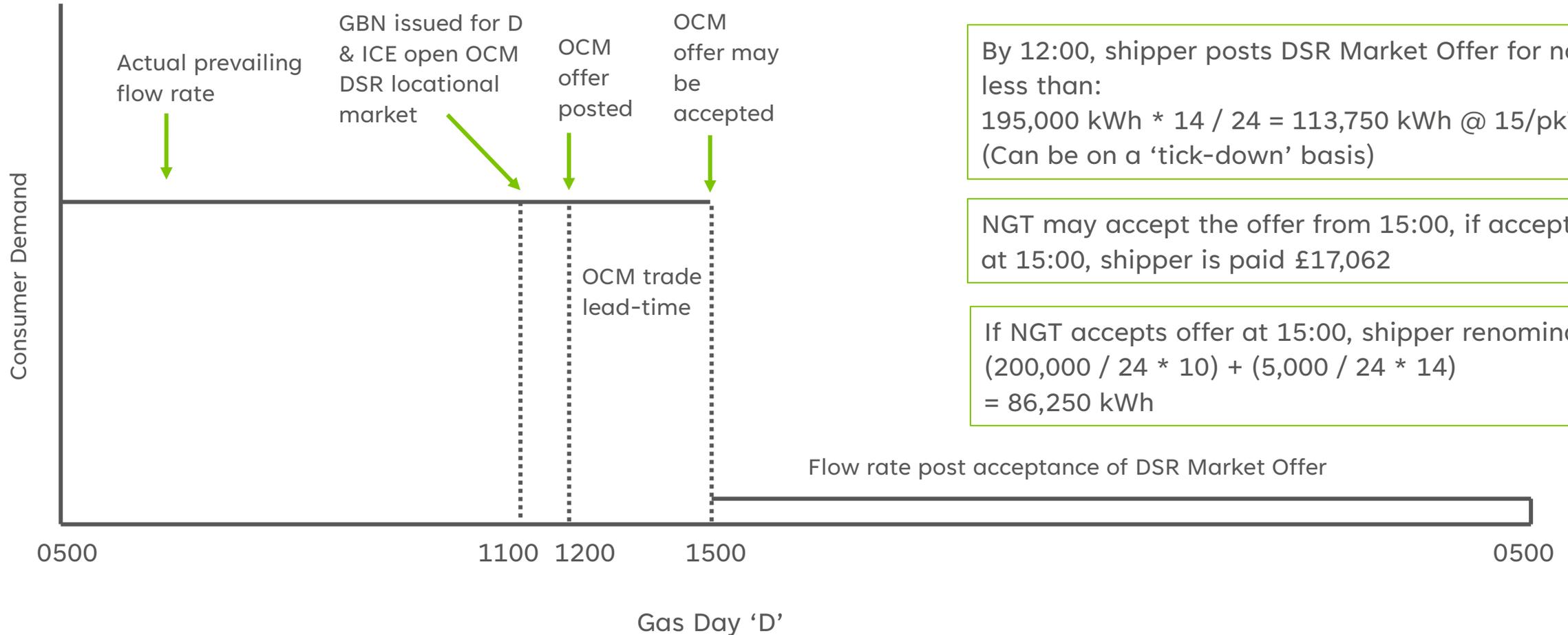
| Option held | Notification trigger | Shipper obligation - first day | Shipper obligation - subsequent days |
|-------------|--|---|---|
| Within-day | Margins Notice on D-1 | Post offer on D by 06:00 on D | Post offer on D by 06:00 on D |
| | GBN D-1 | Post offer on D by 06:00 on D | Post offer on D by 06:00 on D |
| | GBN within day | Post offer for current day within 60 mins of GBN issue | Post offer for current day by 06:00 if GBN not withdrawn |
| D-1 | Margins Notice on D-1 | Post offer on day MN issued for tomorrow within 60 mins of MN issue | Post offer on day MN issued for tomorrow within 60 mins of MN issue |
| | GBN D-1 | Post offer on day GBN issued for tomorrow within 60 mins of GBN issue | Post offer by 09:00 for tomorrow if GBN not withdrawn (OCM opens at 08:00 on D-1) |
| | GBN within day | Post offer for tomorrow within 60 mins of GBN issue | Post offer by 09:00 for tomorrow if GBN not withdrawn |
| D-5 | Demand forecast > total supplies by >14 mcm and NGT decision to exercise D-5 | Post DSR Market Offer by 10:00 on D-1 | Post DSR Market Offer by 10:00 on D-1 |

Exercise of Shipper DSR Options

Worked Examples

Shipper DSR: Exercise of Within-Day Option when GBN issued for that day

Prevailing EOD nom = 200,000 kWh
 Tendered lead-time = 3 hours
 DSR Reduced Quantity = 5,000 kWh
 Exercise Price = 15p/kWh



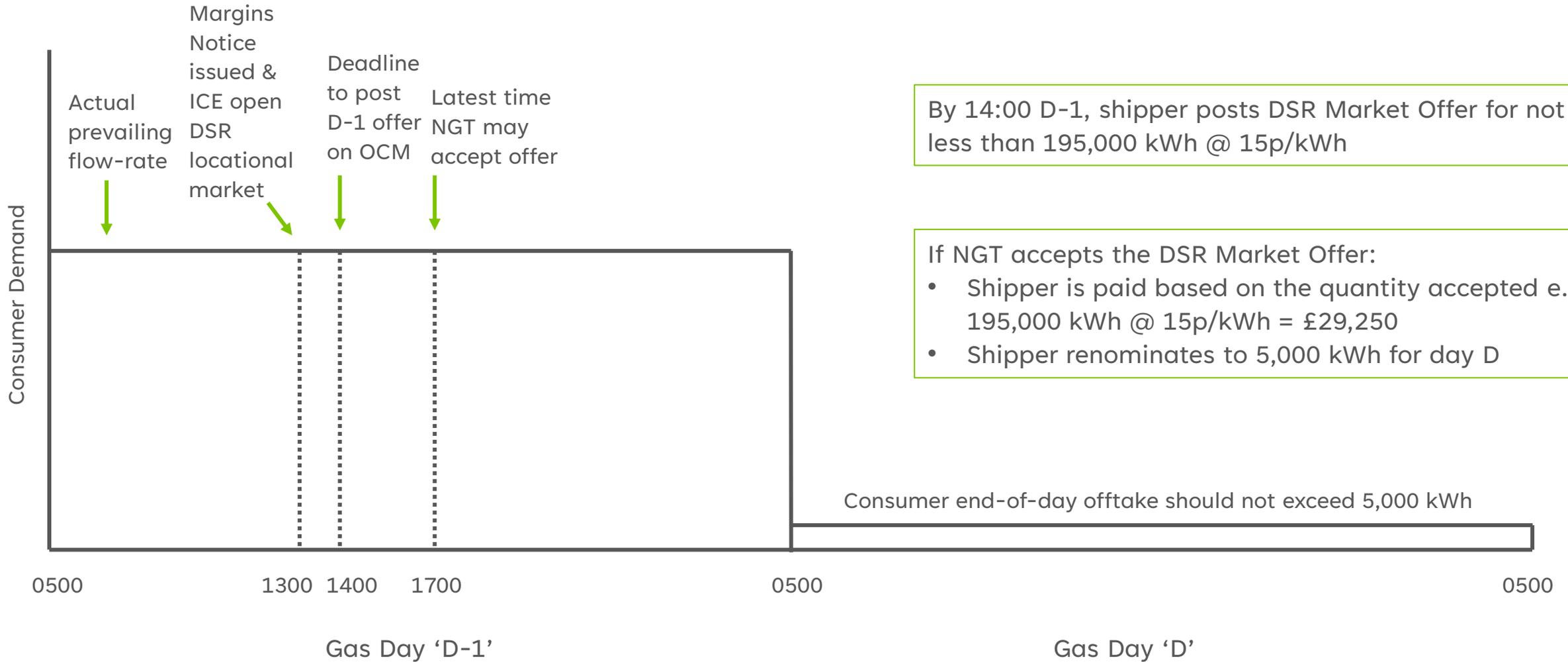
By 12:00, shipper posts DSR Market Offer for not less than:
 $195,000 \text{ kWh} * 14 / 24 = 113,750 \text{ kWh @ } 15/\text{pkWh}$
 (Can be on a 'tick-down' basis)

NGT may accept the offer from 15:00, if accepted at 15:00, shipper is paid £17,062

If NGT accepts offer at 15:00, shipper renominates to
 $(200,000 / 24 * 10) + (5,000 / 24 * 14)$
 $= 86,250 \text{ kWh}$

Shipper DSR: Exercise of D-1 Option when a Margins Notice is issued

D-1 nomination for D = 200,000 kWh
 DSR Reduced Quantity = 5,000 kWh
 Exercise Price = 15p/kWh

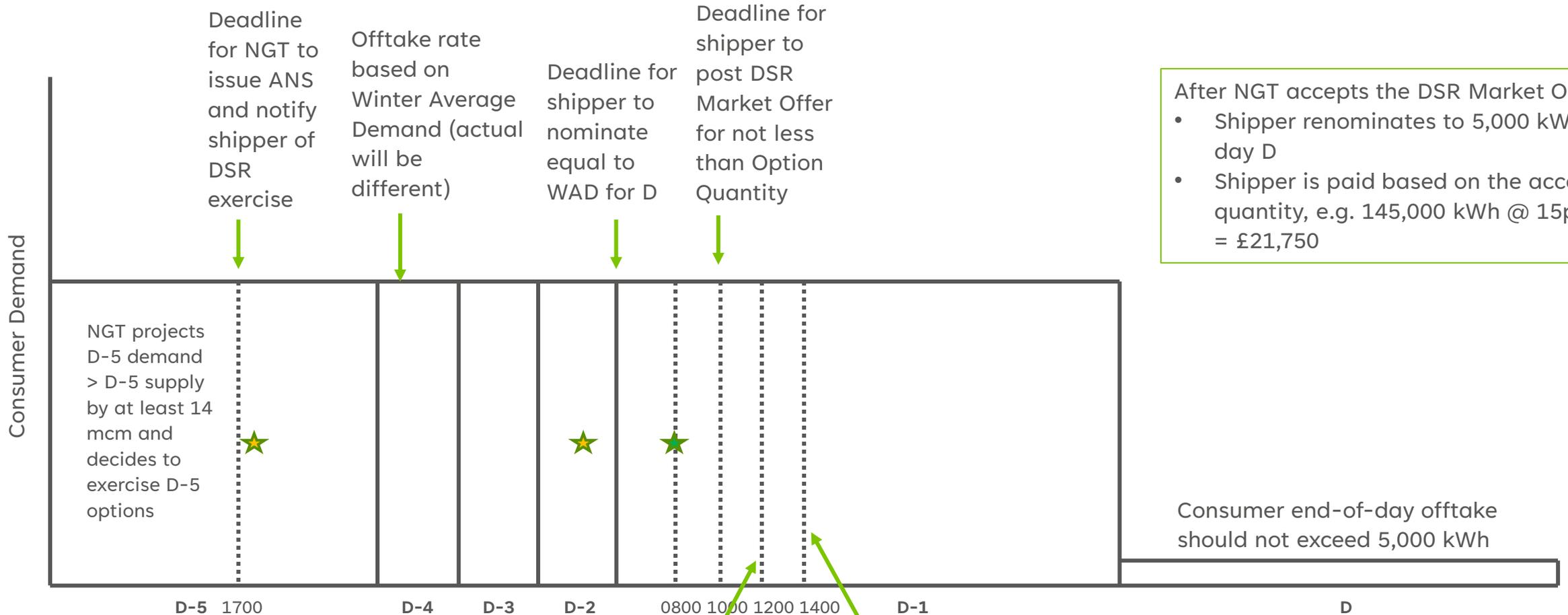


By 14:00 D-1, shipper posts DSR Market Offer for not less than 195,000 kWh @ 15p/kWh

- If NGT accepts the DSR Market Offer:
- Shipper is paid based on the quantity accepted e.g. 195,000 kWh @ 15p/kWh = £29,250
 - Shipper renominates to 5,000 kWh for day D

Shipper DSR: Exercise of D-5 Option

Winter Average Demand = 150,000 kWh
 DSR Reduced Quantity = 5,000 kWh
 Option Quantity = 145,000 kWh
 Exercise Price = 15p/kWh



After NGT accepts the DSR Market Offer:

- Shipper renominates to 5,000 kWh for day D
- Shipper is paid based on the accepted quantity, e.g. 145,000 kWh @ 15p/kWh = £21,750

NGT must accept DSR Market Offer on OCM by 1200

NGT must accept by 1400 if an OTC trade

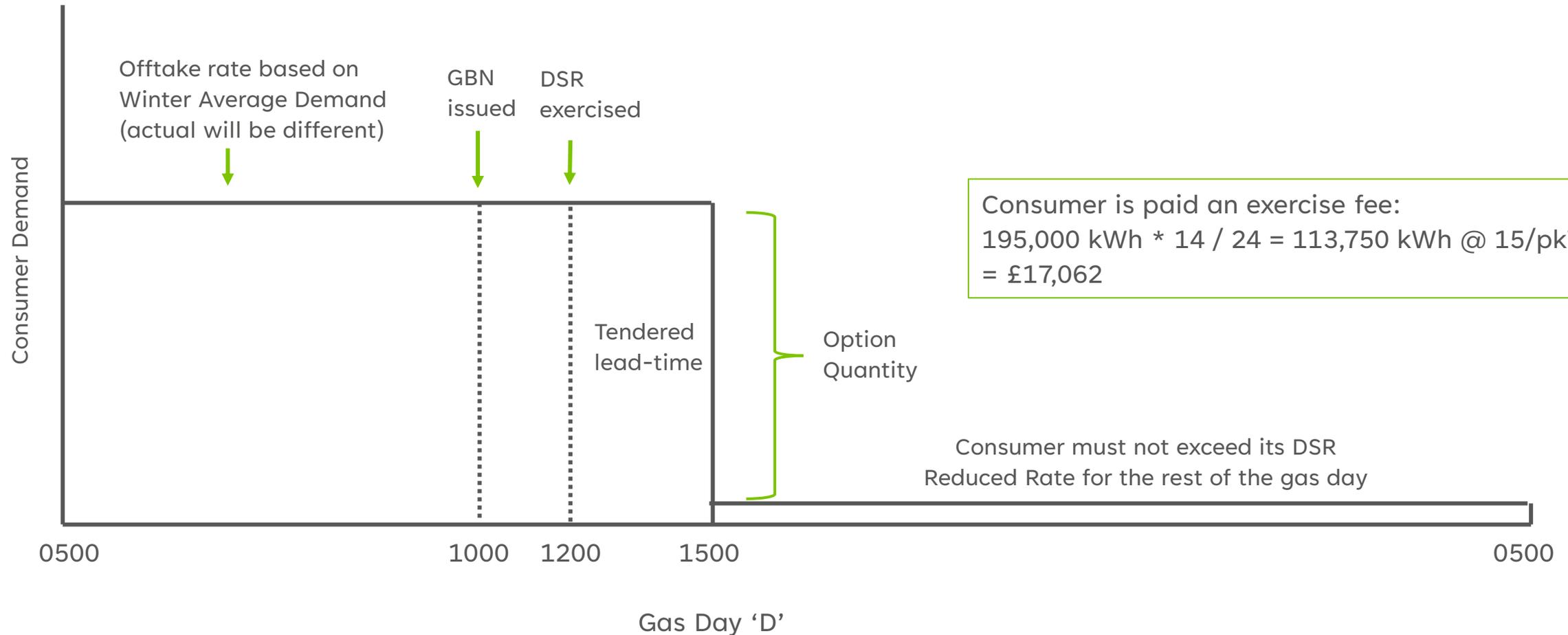
- ★ NGT request to ICE to open OCM DSR locational market
- ★ ICE open OCM DSR locational market

Exercise of Consumer DSR Options

Worked Examples

Consumer DSR: Exercise of Within-Day Option

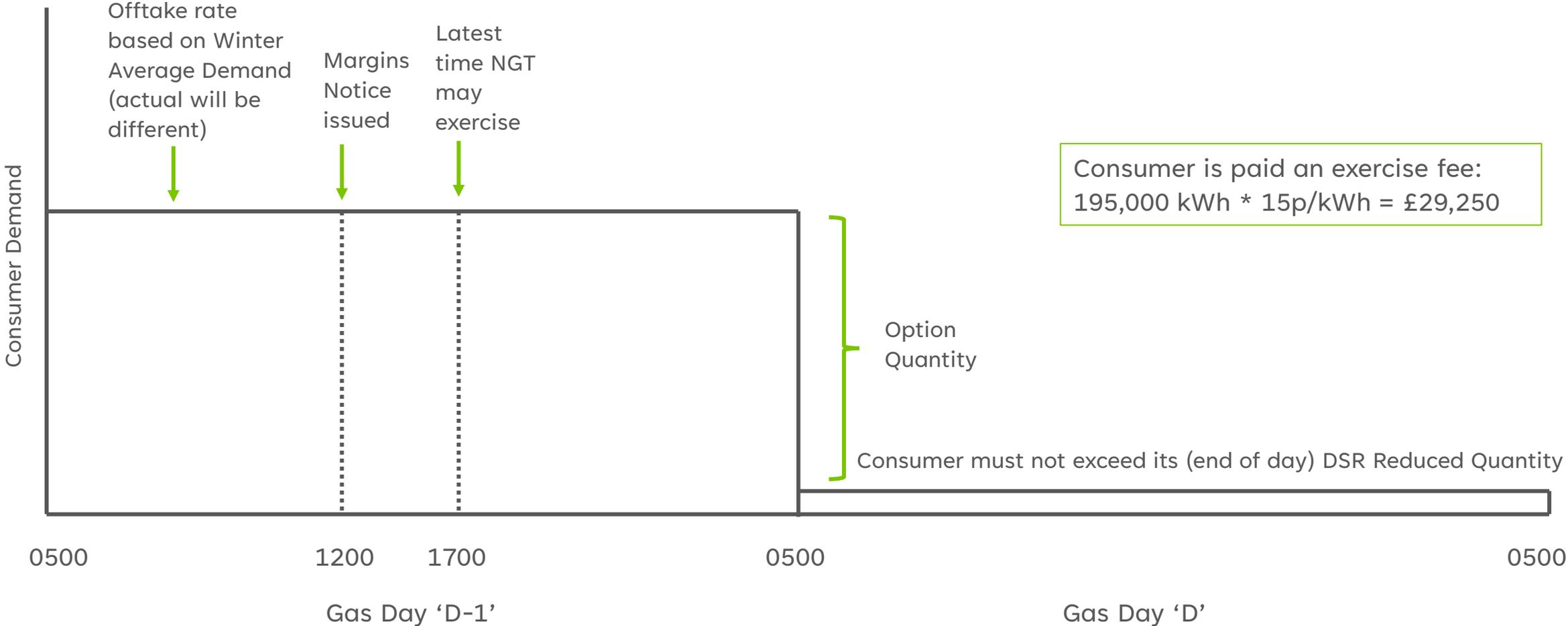
WAD = 200,000 kWh
DSR Reduced Quantity = 5,000 kWh
Option Quantity = 195,000 kWh
Tendered lead-time = 3 hours
Exercise Price = 15p/kWh



Consumer is paid an exercise fee:
 $195,000 \text{ kWh} * 14 / 24 = 113,750 \text{ kWh @ } 15/\text{pkWh}$
 $= \text{£}17,062$

Consumer DSR: Exercise of D-1 Option

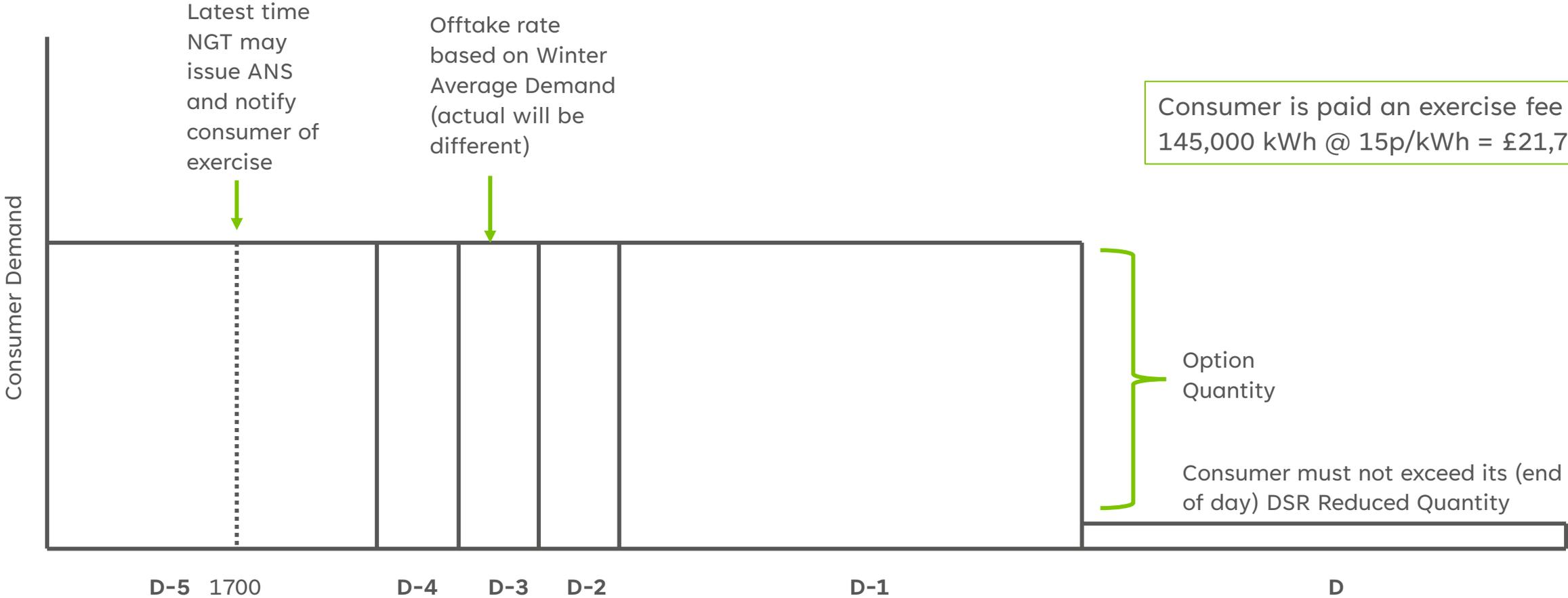
Winter Average Demand = 200,000 kWh
DSR Reduced Quantity = 5,000 kWh
Option Quantity = 195,000 kWh
Exercise Price = 15p/kWh



Consumer is paid an exercise fee:
 $195,000 \text{ kWh} * 15\text{p/kWh} = \text{£}29,250$

Consumer DSR: Exercise of D-5 Option

Winter Average Demand = 150,000 kWh
DSR Reduced Quantity = 5,000 kWh
Option Quantity = 145,000 kWh
Exercise Price = 15p/kWh



Consumer is paid an exercise fee of 145,000 kWh @ 15p/kWh = £21,750

Next Steps

- UNC Panel meeting on 20th July to consider the consultation responses and Final Modification Reports for the 0844 and 0845 proposals
- NGT to consider responses to the draft [DSR Consumer Contract](#)
- NGT to consider responses to the DSR methodology [DSR Methodology Consultation](#)
 - Consultation report to be sent to Ofgem early next week
- NGT to send Licence derogation requests to Ofgem, should Ofgem approve the reforms
- Ofgem decisions expected in early August
- DSR Options tender
 - Pre-tender communication in mid-August
 - Tender opens for 15 business days not later than 31st August

Questions



NGT contacts: Philip.Hobbins@nationalgas.com and matthew.newman2@nationalgas.com

