



Gas DSR Webinar

23rd August 2023



Welcome and who we are

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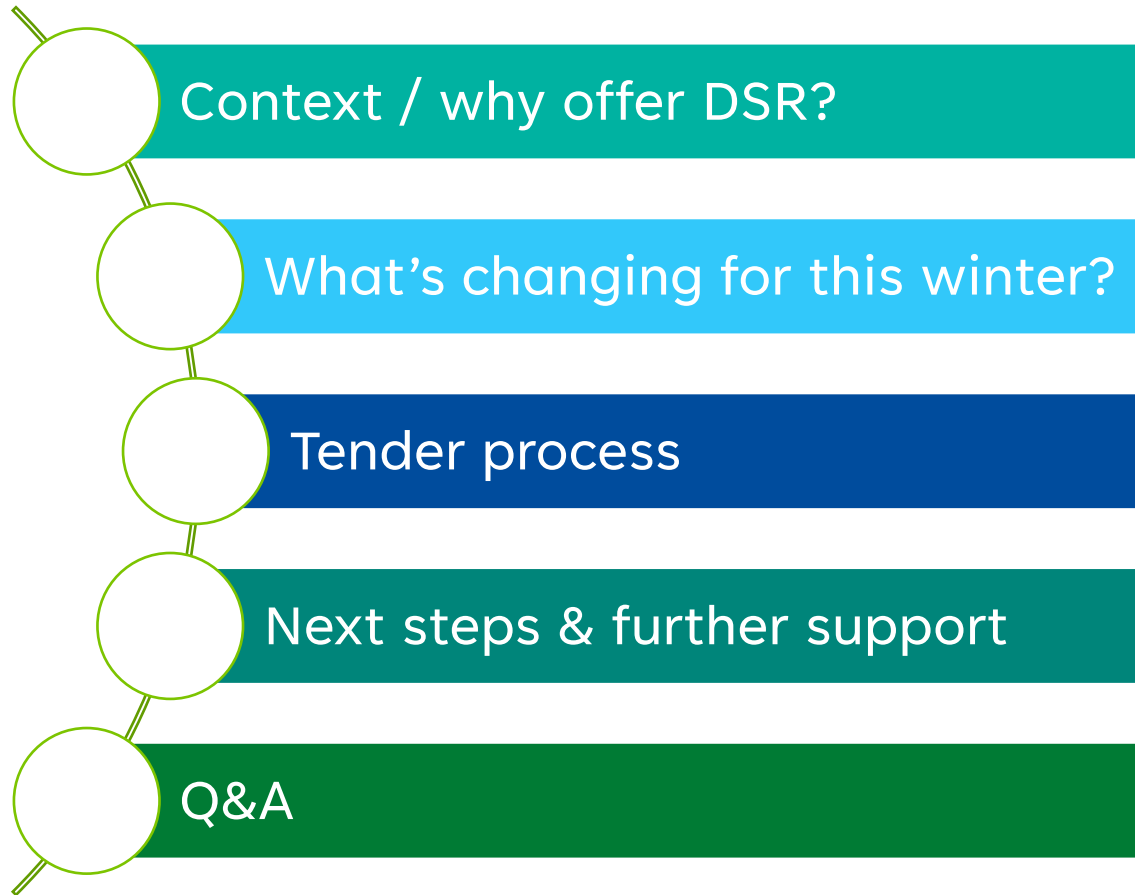
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Introduction

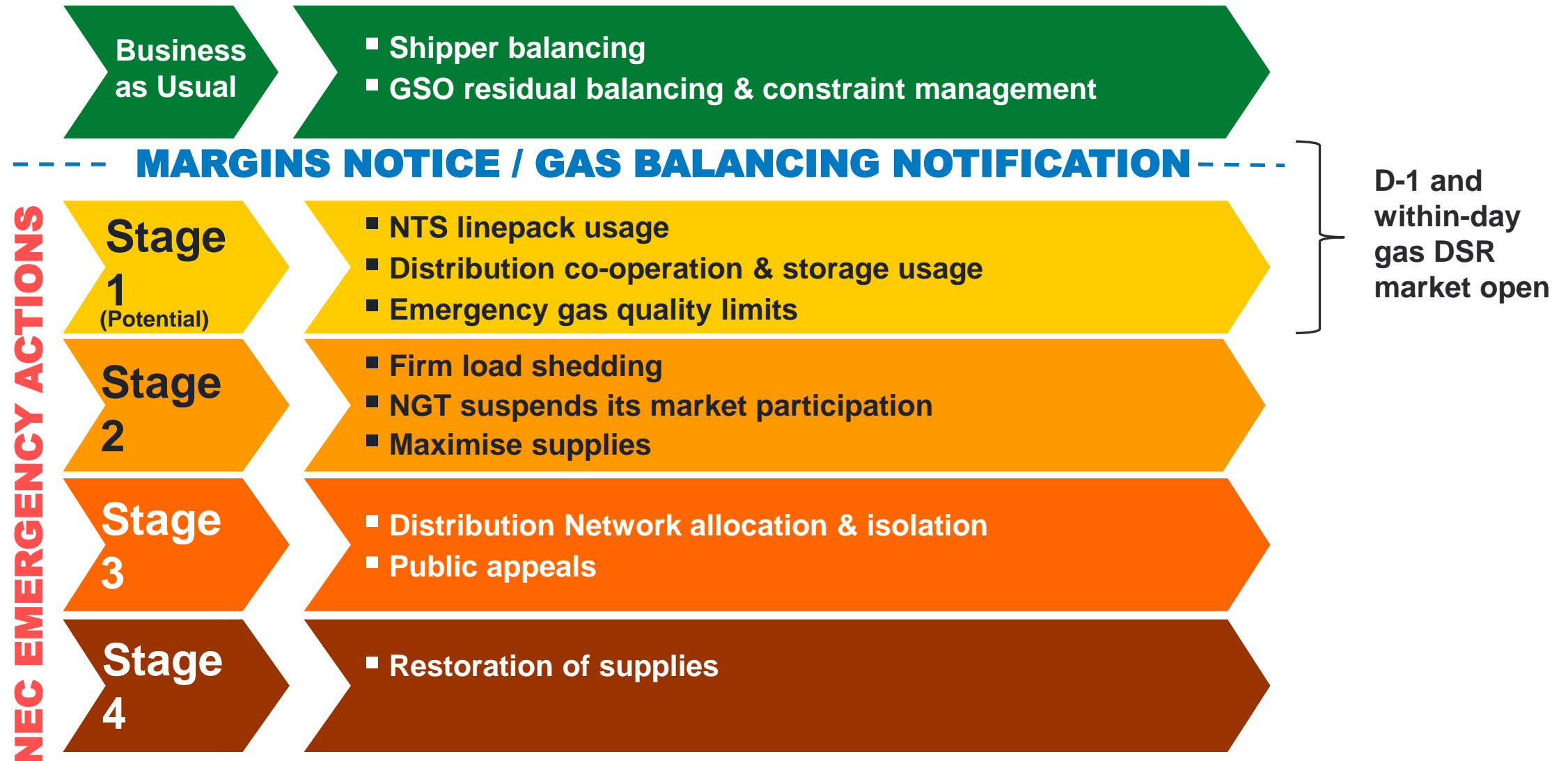
- Our annual **DSR options tender** is scheduled to be launched **tomorrow**
- This year's process will reflect our **Gas DSR reform proposals** for winter 2023/24 that have recently been approved by Ofgem
 - UNC Modifications [0844](#) and [0845](#)
 - Amendments to our [Gas DSR Methodology](#)
- These reforms introduced some **important changes** to the commercial and operational arrangements for gas DSR:
 - Enable NGT to **contract directly** with consumers
 - Introduction of a **D-5 DSR option product**
 - Broaden **eligibility**
 - Deliver other **process enhancements** based on consumer feedback
- The purpose of this session is to **summarise the key reforms** and explain **how to get involved** in gas DSR for this winter for both shippers and consumers

Agenda



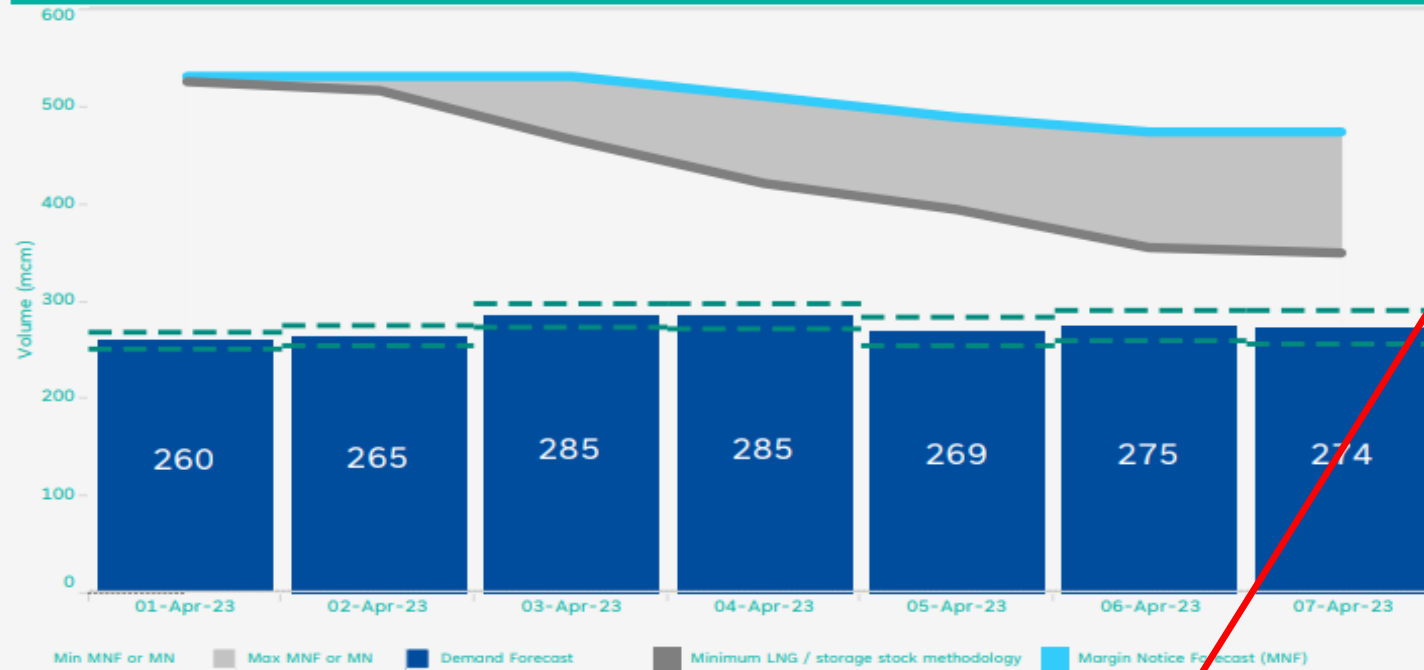
Gas DSR in Context

DSR and Emergency Arrangements



D-5 Product: Trigger assessment

Margin Notice Forecast Trigger Levels



If the D-5 value is in deficit by >14 mcmd then the trigger for exercise is satisfied

NGT decision whether to exercise D-5 options

Forecast Surplus

The remaining balance based on the Margin Notice Forecast (MNF) and the Demand Forecast
Surplus > 50 (Green) | Surplus <=50 and >20 (Orange) | Surplus <= 20 (Red)



Why offer DSR?

Why Offer DSR?

Strengthens GB energy security by giving NGT an additional tool to balance the network at times of system stress

Reduces the likelihood, severity and duration of a gas deficit emergency

Enables large gas consumers to receive **greater financial compensation** by **voluntarily reducing demand** than if they were **involuntarily curtailed** in an emergency.

Case Study: Beast from the East

- The closest GB has come to a gas supply emergency was the ‘Beast from the East’ event on 1st March 2018
- High gas demand coincided with a number of offshore supply failures, causing a material national supply shortage
- A Gas Balancing Notification (then known as a ‘Gas Deficit Warning’) was issued to the market
- Declaration of an emergency was avoided by NGT actions and market response with significant within-day supply increases on both LNG and the EU interconnectors
- If a ‘stage 2’ emergency had been declared and large industrial consumers were instructed to cease using gas, compensation would have been based on the average System Average Price from the previous 30 days (‘30 day SAP’)

The Beast bites



■ Schools, nurseries shut ■ Lorries block roads
■ Rail and bus disruption ■ Weather alert in place

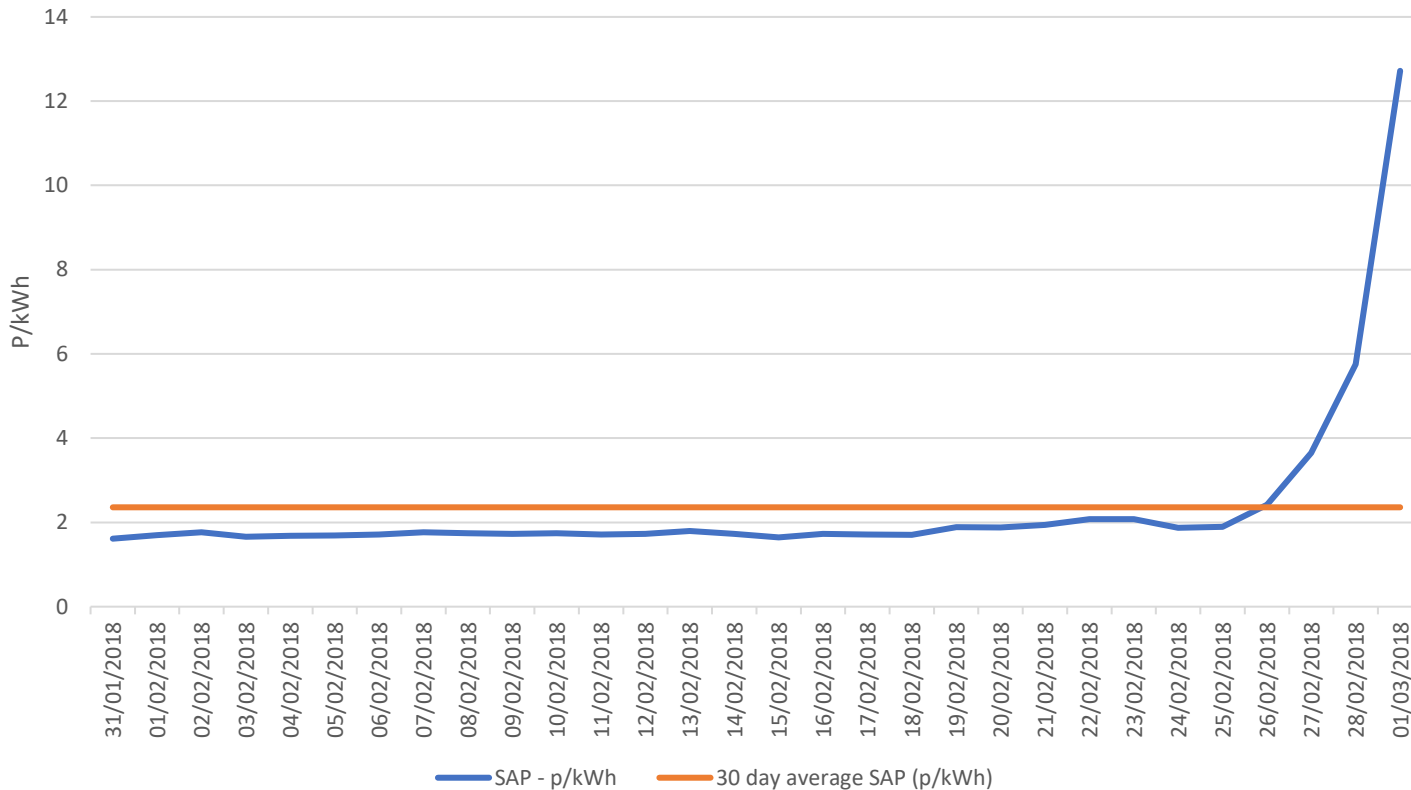


The National Grid has warned that we are running out of gas as demand grows due to the icy temperatures brought on by the Beast from the East.

It issued a ‘gas deficit warning’ as fears mount that supplies could run empty amid the extreme weather conditions across Britain.

Case Study: Beast from the East

SAP vs 30 day average up to 1 March 2018



Whilst gas prices rose considerably leading up to event, the 30 day SAP price was relatively modest at 2.4 p/kWh

Accepted DSR option offers in 2022/23:
Option price (weighted average): 0.63p/kWh
Exercise prices: 9.3p/kWh and 20p/kWh

NBP forward price for Q1 '24 is currently trading at ~5p/kWh

DSR Regime: Key changes for this winter

DSR Regime: Key Changes for this Winter

- **Direct contracting**
 - NGT can now contract for DSR options **directly with large consumers** as well as with shippers
 - Terms and conditions on our DSR webpage [here](#), which we have consulted on but are now non-negotiable with individual parties
 - An eligible consumer may therefore submit a DSR offer **directly to NGT or its shipper may do so**, requiring a change to the consumer's supply contract
- **New D-5 Product**
 - Designed for consumers that need **longer than a 1 day lead-time** to reduce consumption
- **Extension of eligibility**
 - Shippers can offer DSR options in respect of **'class 2' daily metered sites** as well as 'class 1'
- **Determination of the DSR quantity**
 - Change from a **'reduce by'** to a **'reduce to'** regime
 - 'Starting point' based on the consumer's **average daily demand** last winter
- **Greater optionality**
 - Parties can **limit the number of days** on which they are prepared to be called and offer the **same demand reduction against different products**
- **Ofgem referral threshold**
 - Threshold for aggregate option payments raised from **£5m to £36m**

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

DSR Options Tender 2023

DSR Tender Timetable

DSR Tender Process	Key Dates	Aug-23	Sep-23	Oct-23	Nov-23
Ofgem decisions on 0844, 0845, DSR methodology changes and Licence derogations	04-Aug-23	★			
NGT preparation of tender documentation & assessment tool		→			
NGT internal procedure development, working with Xoserve and ICE Endex		→			
Pre-tender market communication and timetable published	15-Aug-23	★			
DSR Options tender documentation published*	24-Aug-23		★		
Tender period (15 bus days)			→		
Tender period closes (17:00)	15-Sep-23		★		
NGT evaluation period (10 bus days)			→		
Notify tendering parties of outcomes**	29-Sep-23			★	
Publish tender outcome (quantities and prices, anonymised)	06-Oct-23			★	
DSR options available for exercise (01 Nov 2023 to 30 Apr 2024)	01-Nov-23				★ →
* Target date, could be a little later which would push subsequent dates back.					
** Plus potentially a 10 day reference to Ofgem depending on aggregate option fees.					

DSR Tender: Further support

- If any consumer (or its shipper) wishes to know its **Winter Average Demand** before submitting a DSR Option Offer, please email brendan.mullan@nationalgas.com quoting site name and Meter Point Reference Number
 - If any consumer wishes to know its **'annual contract limit'*** before submitting a DSR Option Offer (to indicate whether security may need to be provided if its option offer is accepted by NGT), please email brendan.mullan@nationalgas.com quoting site name and Meter Point Reference Number
- * See clause 8 of the [NGT-Consumer DSR Contract](#)
- Walkthrough session on **how to complete and submit a DSR option offer** at 14:00 on Wednesday 6th September 2023 (Teams invitation to follow)
 - Further engagement sessions with **Chemical Industries Association** (12th Sept) and **Major Energy Users Council** (14th Sept)
 - **Letter to MDs** of industrial sites informing them of the gas DSR scheme and explaining how to get involved
 - **Bilateral meetings** to be sought with I&C shippers over the next couple of weeks
 - If any party would like a **bilateral meeting**, please email philip.hobbins@nationalgas.com

Outcome of 2022/23 DSR Options Tender

Winter Period 2022/23

a	Total Option Quantities offered under all DSR Option Offers*	2,100,000 kWh	(2,100 MWh)
b	Total Option Quantities for which offers were accepted	2,100,000 kWh	
c	The number of Users submitting DSR Option Offers	2	
d	The number of Supply Points in respect of which DSR Option Offers were submitted	2	
e	The weighted average Option Price under all accepted DSR Option Offers	0.63 p/kWh/day	(£6.3/MWh)
f	The lowest and the highest Option Prices for which DSR Option Offers were accepted:		
	Lowest	0.50 p/kWh/day	(£5/MWh)
	Highest	3.30 p/kWh/day	(£33/MWh)
g	The lowest and the highest Exercise Prices for which DSR Option Offers were accepted, separately for Exercise Prices:		
	Fixed	20.00 p/kWh	(£200/MWh)
	Indexed	9.30 p/kWh**	(£93/MWh)
h	The total Option Fees payable in respect of all accepted DSR Option Offers	£1,463,000	

*Offered quantities were for D-1 DSR options, no within-day offers were received.

**Indicative price only based on Argus Winter Q1 price on the 23.12.2022

What Next?

What Next?

- **NTS Licence Changes**

- We are currently operating under multiple derogations from DSR Licence obligations
 - In its [decision letter](#) of 4th August 2023, Ofgem stated that it will publish and consult on a **modification to NGT's Licence** to consolidate all the derogations and updates in relation to DSR

- **DM DSR reform 2024/25**

- Between now and Summer 2024, we plan to:
 - **Review this year's reforms** based on consumer feedback
 - **Develop new proposals**, in particular the concept of aggregation
- **Shipper engagement** starts at September Transmission Workgroup with a 'lessons learnt' session and a draft scope of work under (resurrected) UNC Request 0835R
- We will also engage **consumers** via established channels to develop this next programme of reform

- **NDM DSR**

- As indicated at the August 2023 Transmission Workgroup, we are currently planning to engage with industry on a **NDM DSR trial**

Questions

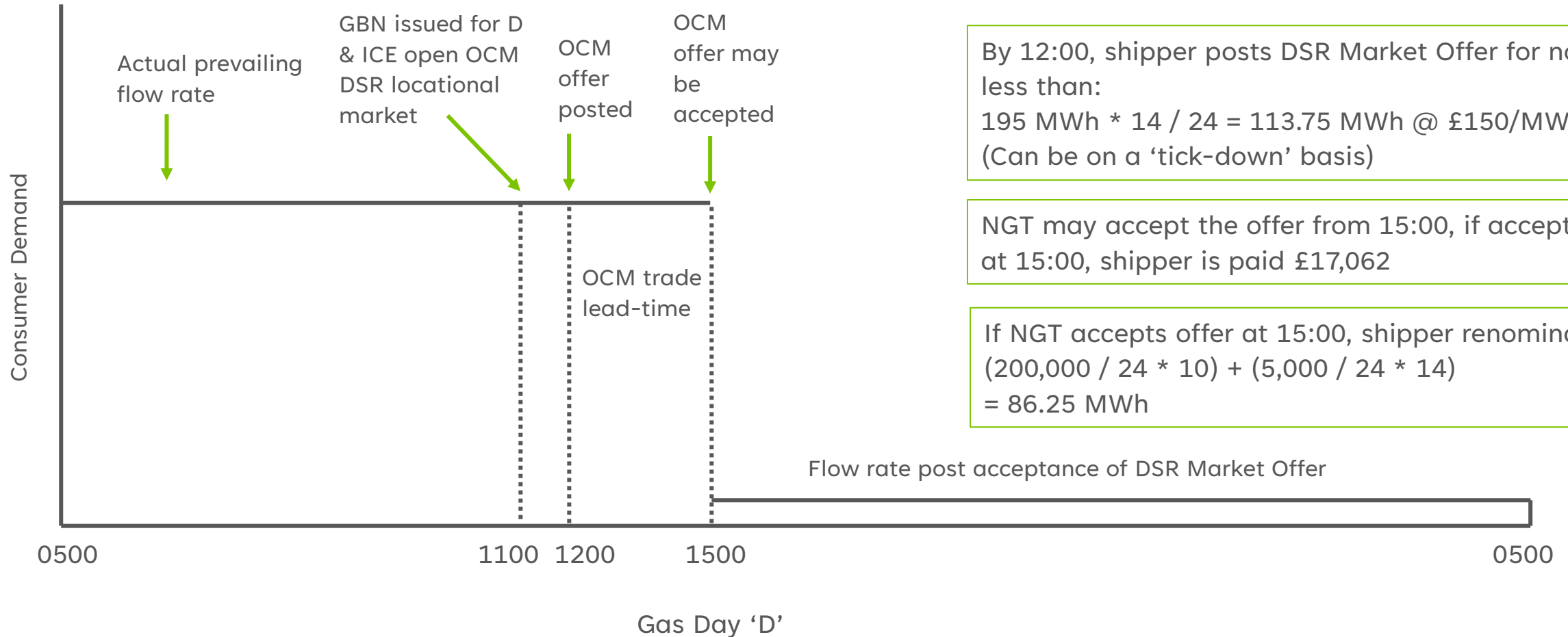


Appendix: Exercise of DSR Options

Worked Examples

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

Prevailing EOD nom = 200 MWh
 Tendered lead-time = 3 hours
 DSR Reduced Quantity = 5 MWh
 Exercise Price = £150/MWh (15p/kWh)



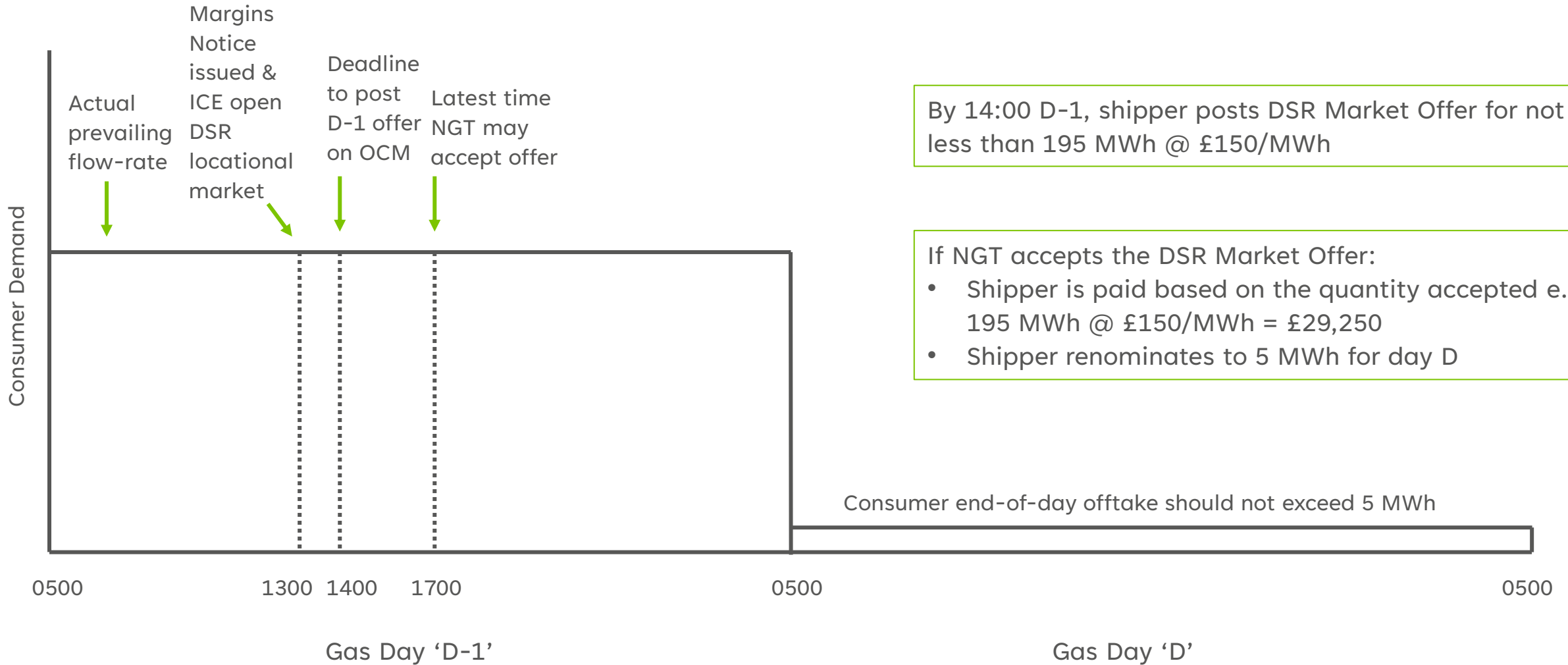
By 12:00, shipper posts DSR Market Offer for not less than:
 $195 \text{ MWh} \times 14 / 24 = 113.75 \text{ MWh} @ \text{£}150/\text{MWh}$
 (Can be on a 'tick-down' basis)

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
 $(200,000 / 24 \times 10) + (5,000 / 24 \times 14)$
 = 86.25 MWh

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

D-1 nomination for D = 200 MWh
 DSR Reduced Quantity = 5 MWh
 Exercise Price = £150/MWh (15p/kWh)

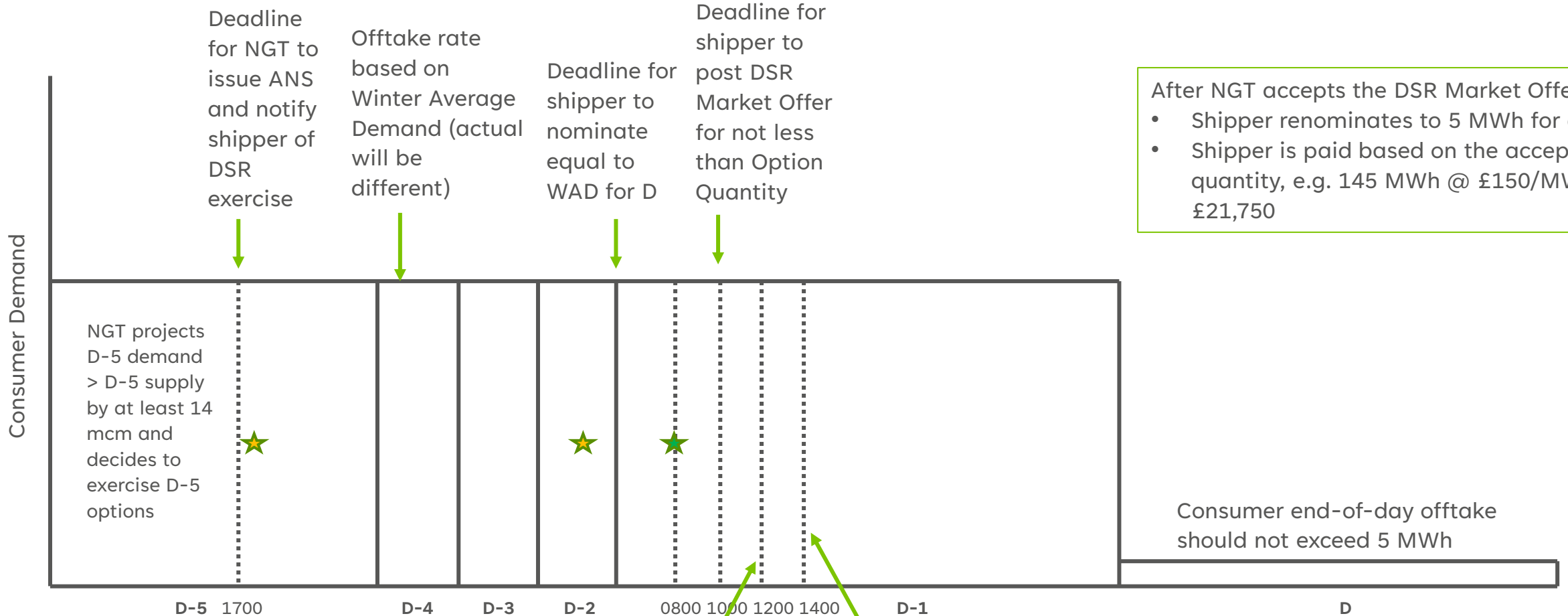


By 14:00 D-1, shipper posts DSR Market Offer for not less than 195 MWh @ £150/MWh

- If NGT accepts the DSR Market Offer:
- Shipper is paid based on the quantity accepted e.g. 195 MWh @ £150/MWh = £29,250
 - Shipper renominates to 5 MWh for day D

Shipper DSR: Exercise of D-5 Option

Winter Average Demand = 150 MWh
 DSR Reduced Quantity = 5 MWh
 Option Quantity = 145 MWh
 Exercise Price = £150/MWh (15p/kWh)



After NGT accepts the DSR Market Offer:

- Shipper renominates to 5 MWh for day D
- Shipper is paid based on the accepted quantity, e.g. 145 MWh @ £150/MWh = £21,750

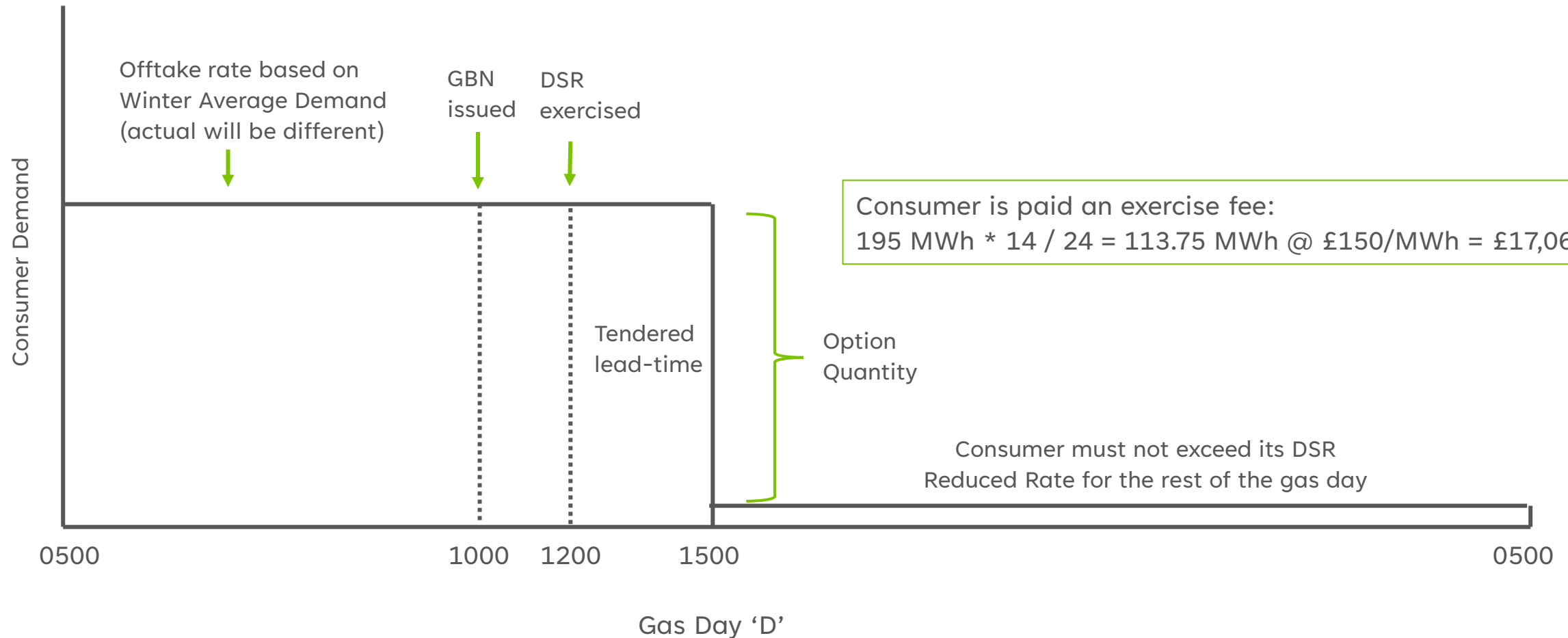
NGT must accept DSR Market Offer on OCM by 1200

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

Consumer DSR: Exercise of Within-Day Option

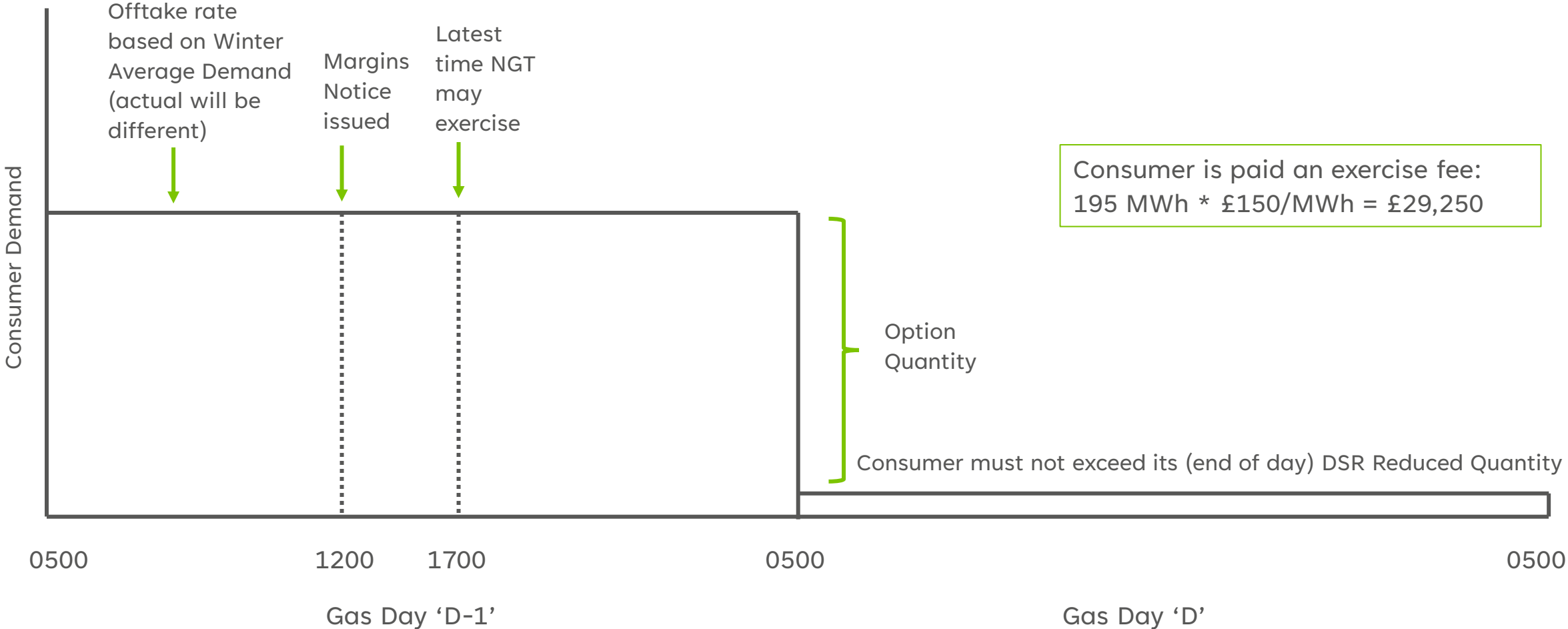
WAD = 200 MWh
DSR Reduced Quantity = 5 MWh
Option Quantity = 195 MWh
Tendered lead-time = 3 hours
Exercise Price = £150/MWh (15p/kWh)



Consumer is paid an exercise fee:
 $195 \text{ MWh} * 14 / 24 = 113.75 \text{ MWh} @ £150/\text{MWh} = £17,062$

Consumer DSR: Exercise of D-1 Option

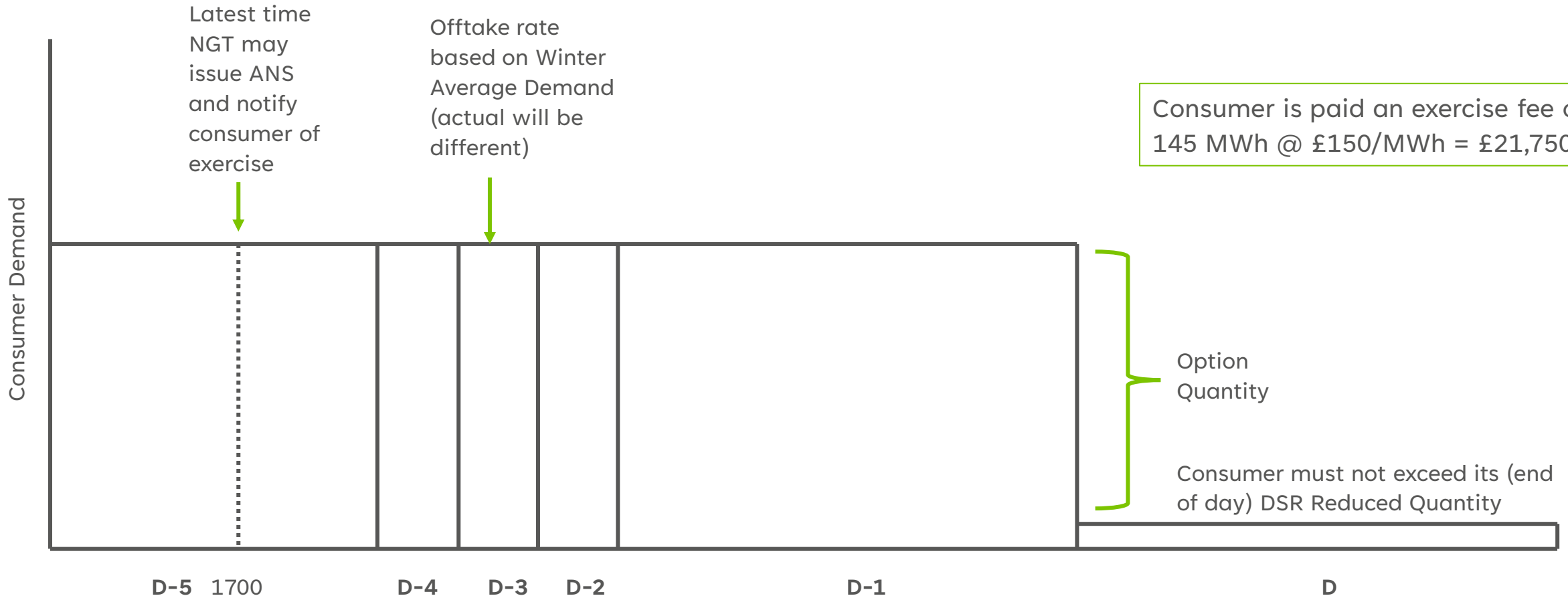
Winter Average Demand = 200 MWh
 DSR Reduced Quantity = 5 MWh
 Option Quantity = 195 MWh
 Exercise Price = £150/MWh (15p/kWh)



Consumer is paid an exercise fee:
 $195 \text{ MWh} * £150/\text{MWh} = £29,250$

Consumer DSR: Exercise of D-5 Option

Winter Average Demand = 150 MWh
DSR Reduced Quantity = 5 MWh
Option Quantity = 145 MWh
Exercise Price = 150 £/MWh (15p/kWh)



Consumer is paid an exercise fee of 145 MWh @ £150/MWh = £21,750

