

NTS Capacity



New Shipper Information

What is Capacity?

**Seats on the bus =
Obligated capacity**

**Standby seats sold =
Interruptible/Off Peak
capacity**



Capacity is a 'ticket to ride'

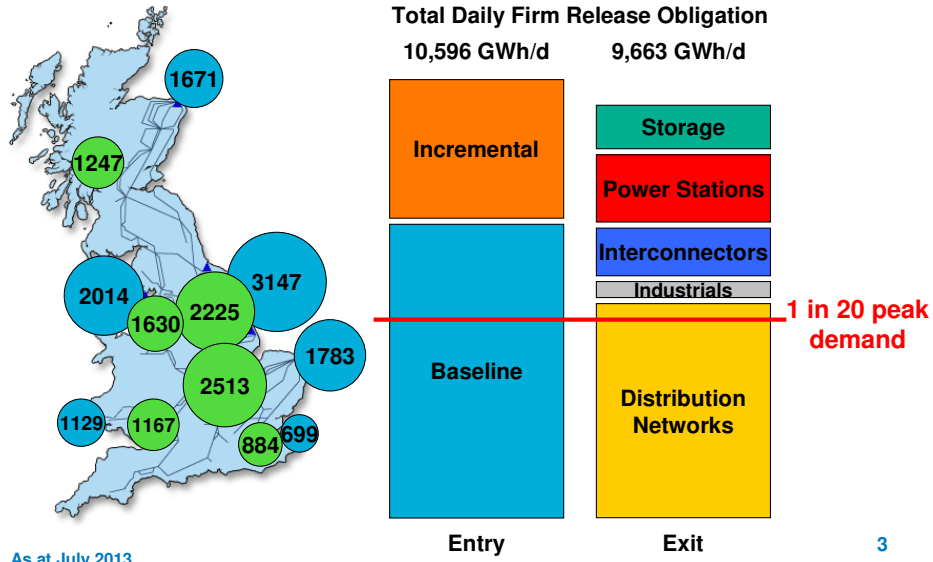
**Additional seats added
to bus permantly =
Incremental capacity**

**Additional seats added
to bus temporarily =
Non obligated**

what is capacity? Buying capacity is a bit like buying a ticket to ride on a bus. It gives you a ticket to ride, or a commercial right to flow. National Grid is the bus company. We sell the tickets, and have to decide how many seats to provide. We have to strike a balance between maximising the availability of seats, and minimising the amount we spend on buses. We don't want to leave people standing at the bus stop, but we also don't want to spend a lot of the industry's money on buses that run empty.

And why should you buy capacity? If you try to travel on the bus without a ticket, you might get caught and have to pay a fine. The bad news is that we have inspectors everywhere and you always get caught, so if you flow without capacity you get what's called an overrun charge which is much more expensive than buying capacity.

Capacity Release Obligations



This slide shows how much capacity we are obligated to sell – so this is obligated capacity including incremental capacity. So you can see that our obligations to release both entry and exit capacity are around 10,000 GWh/d. This is about 4 times the average demand on a day or nearly double the highest demand we expect to see. Obviously we aren't going to see all the entry capacity or exit capacity we sell flowed against on any given day; but what we don't know with any great degree of notice is where the gas is going to come in or go out. The obligation to release capacity is still there every day. Therefore we have to forecast where the passengers are going to get on and get off and size and locate our fleet of buses accordingly. The graphic on the left shows a very approximate geographical representation of our entry obligations in blue and our exit obligations in green.

Any interruptible or off peak capacity we release is in addition to the firm capacity shown here.

When Capacity is Available

	Y-17 to Y-2	Y-1 to Y	M-1	D-1	D
Entry	Firm Quarterly	Monthly	Monthly	Daily	Daily
	Interruptible			Daily	
<hr/>					
Exit	Firm Enduring	Annual		D-1 Daily	D Daily
	Off-peak			Daily	

Capacity is sold through a series of auctions and application windows. As a general rule the time period for which you can buy capacity gets shorter the closer you get to the gas day you want to flow on. So for example for entry capacity, quarterly capacity – which is like a season ticket for three months – is sold first, and you can buy that between 2 and 17 years ahead of the gas day. Then as you get closer to the gas day, the period reduces to monthly then daily. This allows you to refine your capacity position as you get closer to the gas day. For entry, auctions have reserve prices, which reduce as you get closer to the day – the reverse of a bus ticket, where booking in advance might get you a discount.

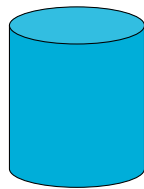
Exit is a bit different. Long term exit capacity can be enduring – it lasts forever. It's like having a season ticket for life. Enduring capacity can be increased and reduced, within certain rules. In addition to that, you can also buy annual exit capacity, which lasts for a year October to September. All the long term capacity is applied for in July each year. There are also daily auctions like for entry capacity.

In both cases interruptible and off-peak capacity are only sold day-ahead.

Pricing has different rules depending on which auction or application window you are participating in. As a general rule, for entry you pay the price at which you were allocated the capacity in the auction – even 17 years ahead. For exit, everyone pays the same price, and the price is only confirmed in the [May] before the gas year starts.

Capacity Types

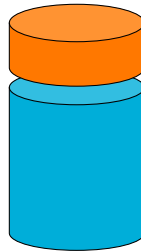
NG must offer for sale under terms of Licence



Baseline Obligation

Users indicate requirements above Obligated in long-term Auctions/Applications

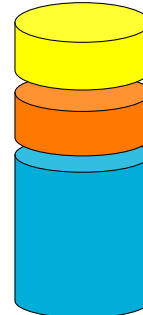
Obligation = Incremental + Baseline



Incremental Obligation

Users indicate requirements above Obligated but don't trigger incremental

Discretionary Release by NG



Non-obligated₅

There are a number of different types of capacity that we sell. Obligated capacity is the amount of capacity we have to sell every day. Interruptible and off-peak capacity is “stand-by” Capacity – we have to sell a certain amount, based on the average number of unused obligated capacity and some other rules; but we only let you on the network if there’s room, and we don’t give you your money back if there isn’t (although most of this capacity is free). Incremental capacity is how we grow obligated capacity – there are certain rules about how this gets triggered which rely on shippers committing to buy enough capacity once it’s released. And finally there is non-obligated capacity – in certain auctions, if there is demand for more capacity than we have to sell, and we think we aren’t taking on too much risk, we can meet some or all of that extra demand. But we aren’t obliged to do that again, we aren’t creating a new obligation.

System Operator Actions

Operational tools (internal)	Operational tools (external)	Commercial tools	Network Integrity
<p>Reconfigure network</p> <p>Optimise compressors</p> <p>Manage outages</p>	<p>Agree pressures</p> <p>Flow swaps</p> <p>Enforce rules in contracts</p> <p>Scale back capacity</p>	<p>National energy actions</p> <p>Locational energy actions</p> <p>Capacity actions</p>	<p>Operating Margins</p> <p>Terminal Flow Advice (entry)</p> <p>Critical transportation constraint</p> <p>Gas deficit emergency</p>
I n f o r m a t i o n P r o v i s i o n			

Capacity is a commercial right to flow and the regime is set up so that the amount of capacity we're releasing is far in excess of the amount of gas we can accept. What happens if the amount of gas that users want to put on or take off the network exceeds our physical ability to deliver?

Although the regime is set up on the basis of commercial rights and obligations, when it comes to managing the network we are basically trying to maintain the pressure of the gas between limits that are dictated by commercial obligations and safety rules. We can't let the pressure get too high and we can't let the pressure go too low. If either of those things happen it's what we call a constraint.

This slide illustrates the actions that we take as operators of the system to avoid a constraint occurring. Broadly speaking we move from left to right. So first of all we will reconfigure the network, turn compressors on and off, move gas around in a different way, to control the pressures. These are things we do every day. The next step is to use what I will glibly call the free tools we have available, including scaling back interruptible or off-peak capacity or enforcing the contractual rules. These directly affect users flexibility to use the network, as Dave mentioned earlier. These happen less often.

The third category are the ones which start to have a cost. I've included national balancing actions there for completeness, but the primary commercial tools we use are Locational actions, in which we buy or sell gas to directly affect flows on or off the network, or capacity actions which indirectly impact on flows by reducing shippers commercial rights – by surrendering their capacity they need to reduce their flow or pay overrun charges. In these cases we will publicise our requirement for one or other of these tools and are reliant on shippers responding to our request by posting offers to buy or sell us gas, or surrender capacity, at particular locations. It is relatively unusual that we get to this stage, and people quite rightly get rather excited if we do, because the costs and revenues are borne by shippers.

GEMINI

- The auctions & Applications are all conducted by using the Gemini system.
- Need to be a Registered User of Gemini in order to be able to place bids.
- Please contact the xoserve Customer Lifecycle team who should be able to assist www.xoserve.com/clc.asp . xoserve also offer Gemini e-training via www.xoserve.com/Gemini_Training.asp

Gemini is a required system to carry out capacity auctions and applications, and is also used for managing energy trade nominations etc. It is made available by Xoserve during the shipper registration process.

Publication Provision-Long Term Capacity

- Invitation letters are published on behalf of National Grid by the Joint Office of Gas Transporters, via email and on their website at <http://www.gasgovernance.co.uk/auctions> If you would like to receive an email notification from JOGT when an invitation letter is issued please contact them to request inclusion on their email distribution list.

NTS Entry Capacity

General Information

Entry Capacity

- All auctions, other than QSEC, are pay as bid auctions. QSEC is a demand driven auction and has a number of price steps which allocations may clear at based upon the allocation rules.
- Over run charges are penalties applied to shippers who flow more than their capacity entitlement at the ASEP.
- All firm capacity auctions are subject to a reserve price, for the within day auctions this reserve price is zero.
- Results are published on Gemini under:
 - Entry - [Product > Publish Reports > MOS results](#)

Entry Capacity

Quarterly System Entry Capacity	Monthly System Entry Capacity	Rolling Monthly, Trade & Transfer	Day Ahead System Entry Capacity	Within Day System Entry Capacity
<p>QSEC</p> <ul style="list-style-type: none"> •Up to 90% of SO baseline •All pay same for long term capacity per quarter per ASEP •Aids long term investment strategy 	<p>MSEC</p> <ul style="list-style-type: none"> •4 rounds, 25% available capacity in each •Pay as you bid •Blind Auction 	<p>RMTnTSEC</p> <ul style="list-style-type: none"> •Users surrender capacity during Surrender Window •Surrendered capacity added to any remaining baseline capacity •Initial analysis stage •Trade & Transfer stage (if required) •Allocations completed 	<p>DADSEC</p> <p>Daily Firm</p> <ul style="list-style-type: none"> •3 auctions run D-1 •Obligated to offer unsold baseline capacity up to 07:00 D •Visible auction 	<p>WDSEC</p> <p>Daily Firm</p> <ul style="list-style-type: none"> •Run hourly within day •Visible auction •Within Day bids may be accepted and begin in the next hour +1 and last rest of day
Years 2 to 17 Ahead		Years 1 & 2 Ahead	Month Ahead	
GAS DAY (D)				
			Gas Day and Day Ahead	

•As well as all these auctions shippers can trade firm and interruptible capacity between each other over the counter.

Interruptible ■ A right to deliver gas however, can be removed by National Grid Gas with no liabilities

A 'standby ticket to ride,' with no guarantees

Sold to prevent the hoarding of firm capacity

- Based on preceding 7 days, how much firm capacity was not utilised?
- Sell this amount again as interruptible each day for the next 7 days
- + any 'discretionary' amounts

Obviously the NTS can't accommodate firm + interruptible flows at the same time!!!

Hence when firm users indicate their intention to flow, interruption occurs

Firm Entry Capacity Auctions Summary



Auction Type	Auction Held	Transaction Period	Quantity available for sale
Day Ahead Daily System Entry capacity (DADSEC)	Day Ahead	Next Gas Day	All unsold
Within Day Daily System Entry capacity (WDDSEC)	Each Hour bar within the day	Current Gas day	All unsold
Daily Interruptible System Entry capacity (DISEC)	13:00 D-1	Next Gas Day	Use It or Loose it (UIOLI) + Discretionary Interruptible
Quarterly System Entry Capacity (QSEC)	March	Capacity Year +2 to Capacity Year +16 (example 2010 QSEC: Oct 2011 to Sep 2012)	= 90% of Baseline + Previously offered Unsold Incremental Capacity
Annual Monthly System Entry Capacity (AMSEC)	Feb	Capacity Year to Capacity Year +1 (example: 2010 AMSEC: Apr 2010 to Sep 2011)	= Any Unsold Capacity left from QSEC+10% of NTS Initial Baseline
Rolling Monthly Transfer and Trade System Entry Capacity (RMTISSEC & RMTNTSEC)	Month ahead	First day to the last day of a month	Any Unsold Capacity left from AMSEC
Discretionary Release of System Entry Capacity (DRSEC)	Adhoc	Short Term<one week Long Term=duration of one week up to one Capacity Year	N/A
Entry Capacity Buy Back (ECBB) in line with the UNC B (2.8) National Grid buy back capacity as a method of constraint management	Adhoc	Adhoc	N/A

Publication Provision-Long Term Entry Capacity Auctions

- Long Term Entry Capacity auction information is published on the National Grid website under the Entry Capacity Auction Publications section. (<http://marketinformation.natgrid.co.uk/Gas/CapacityReports.aspx>)
- The following example shows what needs to be selected to obtain QSEC information

Auction Type	Quarterly System Entry Capacity
Report Type	Invitation Letter
	Bid Window Report *(in line with the UNC, after each IBW National Grid will notify Gemini Users of the cumulative amounts of Quarterly NTS Entry Capacity no later than 20:00 hours. Please note this is not allocation results)
	Allocation Results
From Year/Month To Year/Month	Transaction Period for relevant QSEC

Useful report – Long Term Summary Report

- This report is updated on the first working day of each month and shows the Quarterly and Monthly NTS Entry Capacity sold and available in the QSEC, AMSEC and RMTNTSEC auctions.
- <http://marketinformation.natgrid.co.uk/Gas/CapacityReports.aspx>

The screenshot shows a web browser window displaying the National Grid website. The page is titled 'Entry Capacity Auctions' and features a navigation menu with categories like Gas, Electricity, Metering, Property, Interconnectors, Land and Development, and Gas LNG. Below the navigation is a banner image of a National Grid gas van. The main content area is a form for generating reports, with the following details:

Criteria

- Auction Type: Long Term Summary
- Report Type: Summary Report
- From Year: 2010
- To Year: 2026
- From Month: March
- To Month: September

Reports

View	Report
View XLS	Summary Report - January 01, 2010 to March 31, 2026
View XLS	Summary Report - December 01, 2009 to March 31, 2026
View XLS	Summary Report - November 01, 2009 to March 31, 2026
View XLS	Summary Report - October 01, 2009 to March 31, 2026

Long Term NTS Capacity

Enduring NTS Exit (Flat) Capacity

Exit Capacity Applications

- Enduring Annual NTS (Flat) Exit Capacity
- EAFLEC
- Covering the period
 - Y+4 to Y+6
 - Enduring Capacity
- Increases and Reductions
- 1st of month start dates for Increases
- Always held during July
- Minimum increase of 100,000kWh
- No minimum quantity for reductions
- Reduction for 1st of any month for any period M+6 onwards
- Adhoc Increase Enduring NTS (Flat) Exit Capacity
- AIEFLEC
- Covering the period
 - M+6 to Oct Y+4
 - Enduring Capacity
- Increases only
- Window open from October to end of June
- Minimum increase of 10 GWh or 125% current baseline
- 1st of month start dates available

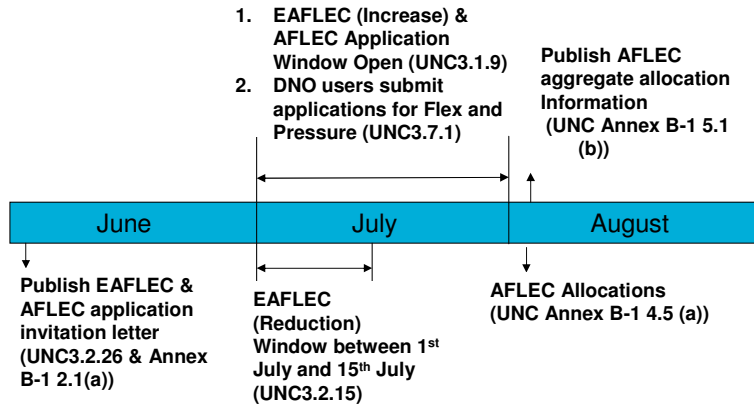
Exit Capacity Applications

- Adhoc Decrease Enduring NTS (Flat) Exit Capacity
- ADEFLEC
- Covering the period
 - M+6 to Y+4
 - Enduring Capacity
- Reductions Only
- Held at National Grid discretion
- No minimum quantity for reductions
- Annual NTS (Flat) Exit Capacity
- AFLEC
- Covering the period
 - Y+1 to Y+3
 - Only valid for the year requested
- Increases Only
- Always held during July
- Minimum increase of 100,000kWh
- October start dates

Exit Capacity Application

- Increase are 'Increase by'
 - i.e. Increasing 10 units to 15 units is an **increase by** 5 units.
- Reductions are 'Reduce to'
 - i.e. Decreasing 15 units to 10 units is a **reduction to** 10 units.
- Enduring means that once increased the Capacity will remain at the new higher level from the increase start date until the User reduces the amount
- Enduring increases come with a **User Commitment of 4 years** starting at the date the increase applies from; meaning Reductions at that location will normally not be accepted until after the Commitment period.
- Reductions are ALWAYS enduring.
- Annual mean that the Capacity is only increased for the single year (October to September)

Exit Capacity Application Timeline



Enduring Annual NTS Exit (Flat) Capacity Application (EAFLEC): Capacity for Y+4, Y+5, Y+6

Annual NTS Exit (Flat) Capacity Application (AFLEC): Capacity for Y+1, Y+2, Y+3

Exit Capacity Application Timeline

