

# Capacity Release in Constraints – Issues for Transmission Workgroup Discussion

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## Reminder of the Issue

- NG NTS proposes to include new wording in the Entry & Exit Capacity Release Statements, describing their ability to not run a Day-Ahead Auction for either Entry or Exit capacity where a constraint is foreseeable (or has already occurred).
- At NG NTS request, E.ON and other Shippers (including Energy UK) met with NG NTS towards the end of 2014 to discuss the draft wording. NG NTS subsequently brought the issue to December's Transmission Workgroup.
- We are conscious that NG NTS already has the ability to not release capacity into a constraint – these are not new powers - However, we believe that defining this course of action raises wider concerns, which warrant further industry discussion.
- The purpose of this presentation is to consider these issues in more depth.

## NG NTS Licence / UNC Obligations – Entry Capacity

- NG NTS Licence obligation to hold one clearing auction each day
- Several years ago, E.ON obtained a change to the UNC (TPD B 2.4.7) which requires NG NTS to hold an auction at each hour bar where there are bids from shippers on the system:

2.4.7 For each Day (or part of each such Day) in respect of each Aggregate System Entry Point, where Available Daily Capacity is available National Grid NTS will initiate a capacity allocation period. For the avoidance of doubt, where Daily NTS Entry Capacity in respect of an Aggregate System Entry Point is applied for on the Day for which such Daily NTS Entry Capacity is required, National Grid NTS will initiate a capacity allocation period on each of the next hour bars falling thereafter, until such daily capacity bid is no longer available in accordance with 2.4.14, up to and including 02:00 hours on such Day where Available Daily Capacity is available at that Aggregate System Entry Point.<sup>3</sup>

## Daily Flat Capacity - Firm

TPD B3.5 & Annex B-1

- Auctions held D-1 (15:00) and on D (08.00, 14.00, 18.00, 22.00 and 01.00) + discretionary auctions may be held with 1 hour notice
- From 30 September 2012 onwards
  - Makes unsold firm capacity available
  - Additional firm capacity at National Grid NTS discretion
- Non-zero reserve price
- Users place bids
  - Max 7 days in advance of the relevant Gas Day
    - E.g. for Gas Day 1<sup>st</sup> October, bid window opens 24<sup>th</sup> September
  - Fixed or reducing bid quantity
  - Bid price at or above reserve
  - Max 10 bids per User per NTS Exit Point
- Bids allocated on price within 60 minutes

## Daily Off-peak Capacity

TPD B3.6 & Annex B-1

- Capacity rights can be curtailed
- Users place bids
  - Max 7 days in advance up until D-1 14:00
  - Zero reserve price
- Amount released = UIOLI + MNEPOR + Discretionary
  - Use It Or Lose It (UIOLI) = 30 day average unutilised firm bookings
  - MNEPOR<sup>‡</sup> related release =  $(\text{MNEPOR} * 24) - \text{Aggregate Firm Holdings}$ 
    - If 13.30 D-1 Demand forecast > 80% of 1 in 20 peak day demand then MNEPOR is not released
  - Discretionary Release = an amount that may be released for that gas day at the discretion of National Grid NTS
- Allocation at D-1 15:00 hrs

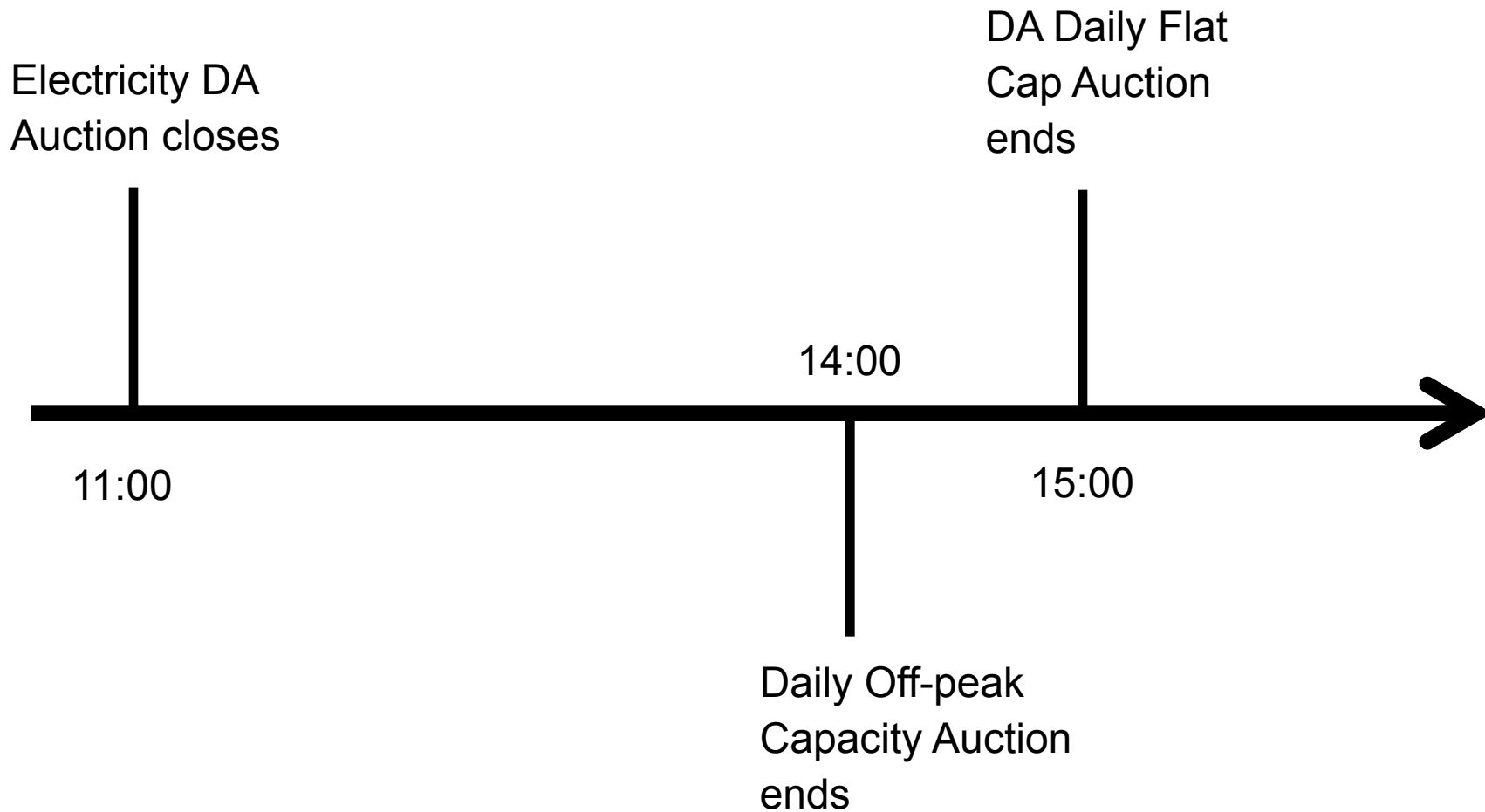
<sup>‡</sup> Maximum NTS Exit Point Offtake Rate (MNEPOR) = maximum instantaneous rate which it is feasible (technically) to make gas available for offtake at that NTS Exit Point

# APX – UK Day Ahead Auction in Electricity Market

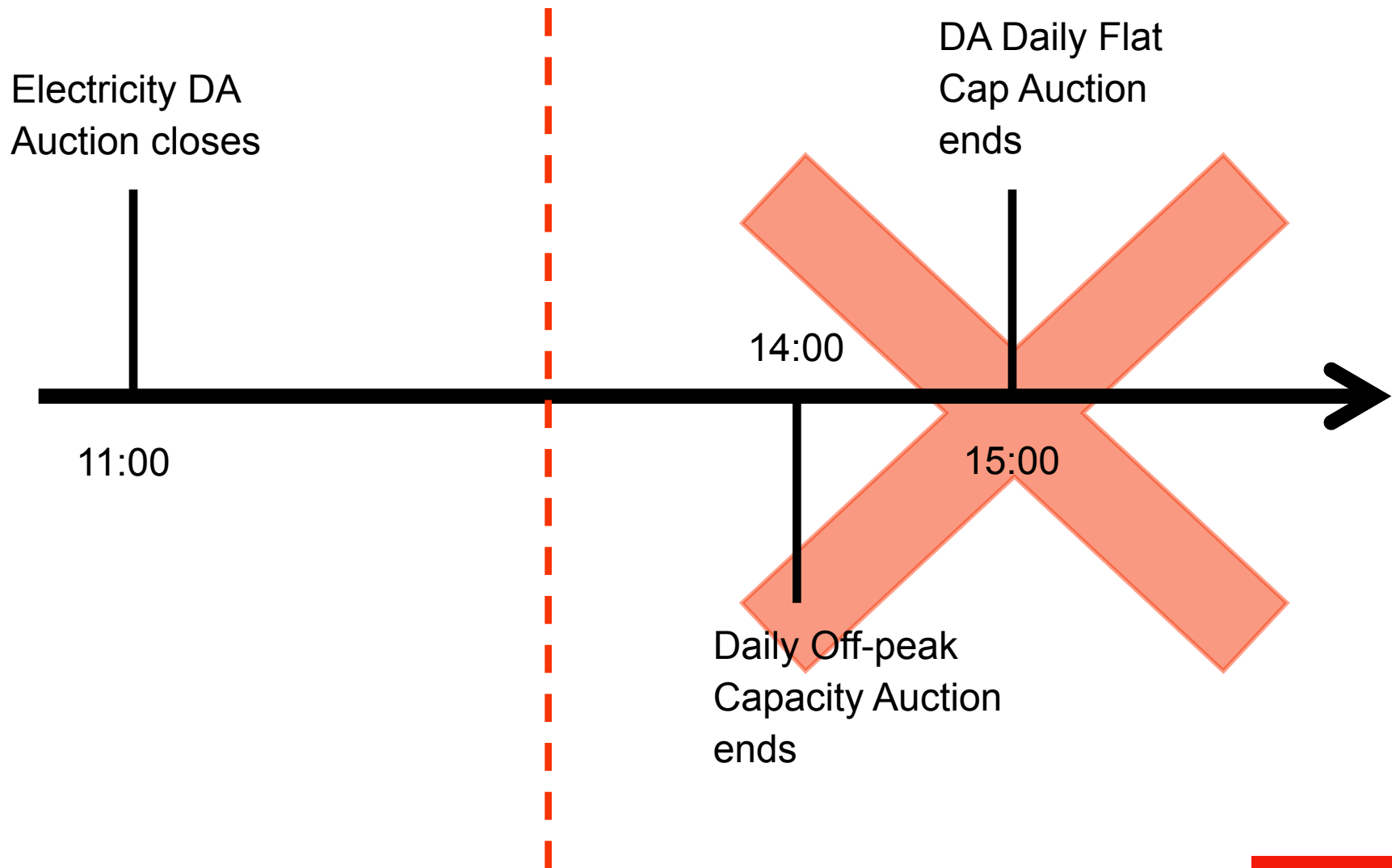
Process	(Time: UK Local Time)
Day prior to delivery	- 11:00 Market Closure - 11:42 Preliminary Market Results*
	*In a decoupling scenario the results may be delayed
Every business day	Financial settlement

Source: <http://www.apxgroup.com/trading-clearing/day-ahead-auction/>





# NG NTS makes decision not to release DA gas capacity for constraint management purposes





## The Result...

- Shipper / Generator left with a position to unwind in electricity market (if possible) and no way to obtain Short Term capacity in the gas market (assuming no within-day auctions).
- NG NTS has no obligation to communicate to Shippers that it is not running a DA auction, so Shippers have to wait until after DA auction results are published to confirm their position.



Further reduces ability to unwind position in electricity market (or at least increases the cost of doing so).

# A Shipper / Generator Perspective

- Buying Long Term Exit Capacity reduces the risk significantly, BUT...
  - Many sites cannot justify purchasing LT Firm Exit capacity at current cost (both generation and gas storage)
  - Currently, buying ST capacity is, in most cases, the commercially rational action to take
  - Exit capacity charging not within scope of Ofgem's GTCR, so not expecting any changes here soon(?)
- At Entry - Potential conflict between **UNC obligation** on NG NTS to carry out an auction where there are bids on the system and **NG NTS discretion** to not release capacity in advance of a constraint?
- Concerns at NG NTS acting on a "hunch" that a constraint may emerge – Impact on the traded market?

# Impact on Constraint Management SO Incentive

- As far as we understand, Capacity buyback arrangements sit under the SO Incentives – Constraint Management
- Constraint Management Incentive for Entry and Exit Capacity – Annual **Cap** ~ **£26M / Floor ~£70M**
- From April 2013, Incentive is fixed for 8 years – subject to uncertainty mechanism being triggered (but post-2017 only...)

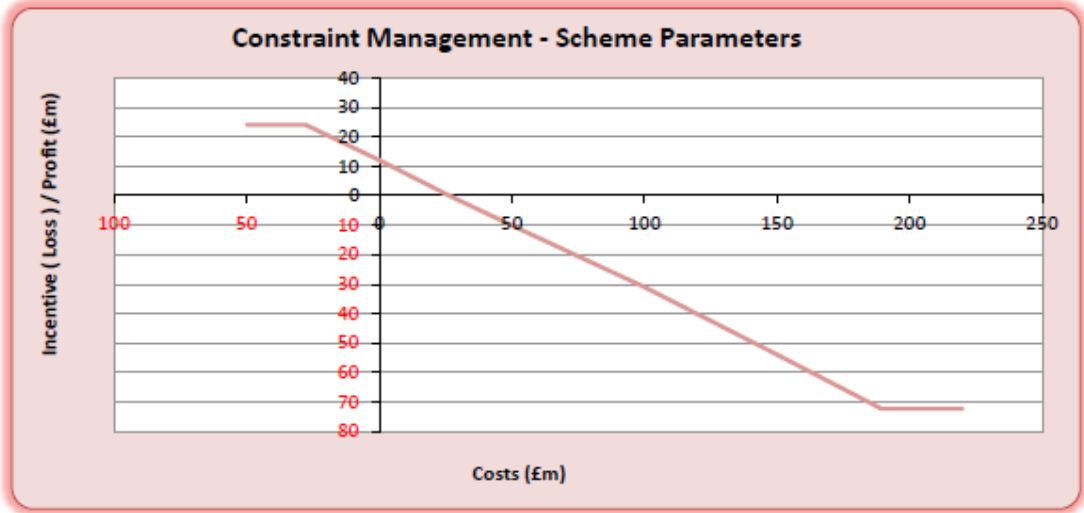
### Scheme Description

Performance Measure:- Entry and Exit operational constraint management cost.

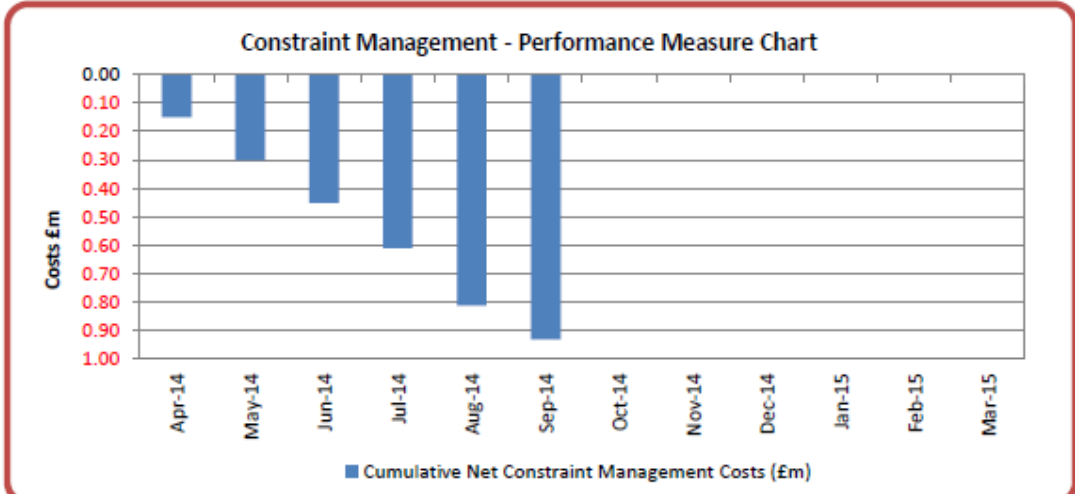
From 01 April 2013, National Grid Gas is subject to a new Constraint Management Incentive which has been set for 8 years and encompasses both Entry and Exit Capacity Constraint Management actions.

Incentive performance is driven by the difference between the net constraint management costs over a year and a target value for such costs.

For 2014/15 the target cost comprises of £26.5m for entry and exit operational constraint management, with National Grid Gas accruing 44.36% of the revenue or loss (the sharing factor).



### Performance



Source: <http://www2.nationalgrid.com/UK/Industry-information/Gas-system-operator-incentives/Incentives>



# Impact on Constraint Management SO Incentive

<b>Reliability and availability</b>	
<p>Make capacity available at entry and exit points to meet customer requirements</p> <ul style="list-style-type: none"><li>- <i>to ensure capacity is made available as required and in the most efficient way</i></li><li>- <i>to have in place and adhere to a methodology statement that details how it chooses between the different options (e.g. buy-back, invest) it has in respect of making capacity available</i></li></ul>	<p>Under RIIO-T1, NGGT to produce a methodology statement on how it makes capacity available. No further incentive.</p>

Source: <https://www.ofgem.gov.uk/ofgem-publications/39922/gas-so-incentives-2013-final-proposals-consultation.pdf>

# Impact on Constraint Management SO Incentive

- NG NTS is (rightly) incentivised to **minimise** the cost of constraint management actions, alongside the more general obligation to operate an “economic and efficient” system.
- In a world where ST Entry & Exit capacity significantly utilised, not releasing DA capacity will always be the “least cost” (or zero cost!) option for NG NTS to manage a constraint:
  - Will always be used before other, more costly constraint management actions (such as firm capacity buyback)
  - NG NTS highly unlikely to ever have to dip into the capacity buyback “pot” even in a constraint

## So, is the incentive working as it was intended?

- Is NG NTS overly incentivised to always choose the **least cost (or free!)** constraint management option – even where doing so potentially increases costs to Shippers in the market?
- NG NTS always over-achieving against cost target?

# Impact on Constraint Management SO Incentive

- Is it more “economic and efficient” for NG NTS to occasionally buy-back capacity? Do Shippers want to see more use of the constraint management pot?
- Are Shippers comfortable with NG NTS withholding capacity at the DA stage, or would we rather they are less “risk averse” and release it, and then only buy-back if necessary?
- Is this more “efficient and economic” for the market?
  - Avoids unnecessary costs for Shippers being incurred from having to unwind trading positions
  - Potentially allows gas to flow, which might otherwise be prevented by non-release of capacity



**If so, how can this be incentivised / realised in the market?**

# Potential Solutions – For Discussion

## **Near Term:**

- Obligation on NG NTS to communicate to Shippers that that it is not going to run a DA auction in gas – e.g. before 1100 at DA stage?
- Move gas / electricity auctions to similar timescales?
- More rules around when NG NTS can elect not to run a DA Capacity Auction? E.g. Minimum 3 or 4 hour notification period
- Any other suggestions?

**Longer Term:** Evaluate success (or otherwise) of the constraint management SO incentive? (Earliest change permitted is 2017 under Licence rules)