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To:

Gas transportation licensees, gas interconnector licensees, gas shipper licensees, the Uniform Network Code Modification Panel, IUK and BBL shippers and the Dutch and Belgian TSOs and all other interested stakeholders

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Dear Colleague

Options for Great Britain's implementation of the European Union Network Code on Capacity Allocation Mechanisms in Gas Transmission Systems (Regulation 984/2013) at the Bacton entry point

The Network Code on Capacity Allocation Mechanisms (CAM) (the CAM Network Code)[1] comes into force on 3 November 2013 and must be implemented by 1 November 2015. In implementing the CAM Network Code, there are two Great Britain (GB)-specific issues relating to the Bacton gas terminal on which we are keen to hear industry views. The first concerns the implementing of "bundled" capacity products; the second concerns the way in which Bacton entry capacity will be sold under the CAM regime.

This letter (i) sets out the options for each issue; (ii) explores the advantages and disadvantages of each option; (iii) sets out our preferred approach and the rationale behind it; and (iv) summarises our current thinking on next steps.

Summary

CAM Implementation will bring significant changes to the way gas capacity is allocated and nominated at GB Interconnection Points (IPs)[2]. This letter seeks industry views on two issues related to these changes.

The first issue concerns how capacity products should be bundled at the Bacton aggregated system entry point (ASEP), where the European interconnectors 'meet' the National Transmission System (NTS), ie whether a bundled capacity product should include two Transmission System Operators (TSOs) or three TSOs. Given that both options would appear to be CAM compliant, we consider the two European gas interconnectors – Interconnector UK (IUK) and BBL – should propose which option they will implement subject to being CAM compliant and meeting their licence objectives.

The second issue concerns how capacity at Bacton, which accommodates gas arriving from the UK Continental Shelf (UKCS) in addition to the two interconnectors, should be treated under CAM given the narrow scope of CAM to IPs. Our current view is that the existing Bacton ASEP will need to be split, with the creation of a single European IP ASEP (encompassing both entry from IUK and BBL) and a UK Continental Shelf (UKCS) ASEP. In

[1] The CAM Network Code was published in the Official Journal of the European Union on 14 October 2013: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:273:0005:0017:EN:PDF

[2] An IP is a point that is subject to booking procedures and connects adjacent entry-exit systems or connects an entry-exit system with an interconnector.

order to maximise the offer of bundled capacity (as required under CAM), we consider that the baseline[3] of the European IP ASEP should be the sum of the maximum technical capacities of the two interconnectors (1302.0 GWh/day). The UKCS ASEP baseline would then be the existing Bacton ASEP baseline less the capacity provided to the European IP ASEP (481.4 GWh/day). We do not consider that there is a need to split the European IP ASEP any further. Also, we do not consider that capacity, either already purchased or purchased after CAM implementation, would be freely interchangeable between the UKCS and European IP ASEPs. However, we encourage NGG to consider the tools available for shippers to revise their UKCS ASEP and European IP ASEP capacity holdings as their needs change.

Background

Third Energy Package

The Third Package[4] of European energy reforms created a new legal framework to promote cross border trade, in response to the European Commission's inquiry into competition in gas and electricity markets published in January 2007. The inquiry found that there was insufficient integration between Member States' markets and highlighted that insufficient or unavailable cross-border transmission capacity and different market designs were hampering integration.

In an effort to rectify this, a number of legally binding network codes (in form of European secondary legislation to the Gas Regulation (No 715/2009) and the Electricity Regulation (No 714/2009)) are being established. These network codes are designed to promote the creation of liquid markets, the efficient use of cross-border transmission capacity and the integration between Member States' gas markets.

CAM Network Code

The CAM Network Code aims to facilitate access to cross-border capacity for shippers by introducing the following[5]:

- Bundled capacity products that will merge exit and entry products (which are underpinned by individual contracts within the relevant contractual framework eg the Uniform Network Code (UNC) in the case of National Grid Gas (NGG) within GB), thereby requiring shippers to buy fewer products in order to flow gas from one market to another market.
- The ability for a shipper to make a single nomination (declaration of how much gas a shipper intends to flow against the capacity it holds) against an associated bundled capacity quantity.
- The sale of capacity via joint web-based booking platforms.
- The offering for sale of capacity via an auction procedure for yearly, quarterly, monthly, daily and within–day standard capacity products[6].

[3] Licence baseline entry capacity means the volume of Entry Capacity that the Licensee must offer for sale as of 1 April 2013 as set out in Table 6 of Special Condition 5F (Determination of Incremental Obligated Entry Capacity volumes and the appropriate revenue drivers to apply).
[4] The term 'Third Package' refers to Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC ('Electricity Directive'); Regulation (EC) No 714/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the network for cross-border exchanges in electricity and repealing Regulation (EC) No 1228/2003 ('Electricity Regulation'); Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC ('Gas Directive'); Regulation (EC) No 715/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the natural gas transmission networks and repealing Regulation (EC) No 1775/2005 ('Gas Regulation'); and Regulation (EC) No 713/2009 of the European Parliament and of the Council of 13 July 2009 establishing an Agency for the Cooperation of Energy Regulators.
[5] CAM also requires coordination of maintenance and communications by transmission system operators (TSOs).
[6] The only exception is within-day interruptible capacity, which will be allocated by over-nomination procedure where TSOs decide that this will be offered.

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- A harmonised European gas day with gas flowing from 05:00 to 05:00 UTC (or 04:00 to 04:00 UTC during daylight saving)[7].

CAM will apply to all firm and interruptible capacity at Interconnection Points (IPs)[8] as well as to additional capacity ie capacity in excess of the technical capacity[9,10]. CAM does not apply to exit points to end consumers and distribution networks, entry points from liquefied natural gas (LNG) terminals and production facilities, and entry-exit points to or from storage facilities.

Objectives in implementing CAM

In implementing CAM, the aim is to make a positive difference for energy consumers by furthering the Third Package objectives of efficient use of cross-border capacity, transparent and non-discriminatory access for all network users and effective competition on, and flexible use of, gas transmission systems. Facilitating gas to flow according to market-driven price signals is a key enabler of these objectives.

As well as benefitting GB consumers, these objectives also meet the needs of market participants. For example, standardised capacity products and a single transmission capacity allocation mechanism should facilitate market access for shippers via a more efficient running of the networks. Meanwhile, consistency and simplicity in selling capacity across interconnectors should benefit Transmission System Operators (TSOs) by lowering transaction costs.

Applicability of CAM at GB IPs

CAM will bring significant changes to the way gas transmission capacity is allocated and nominated at GB IPs.

The GB gas market is physically connected to the continent via two gas interconnectors that connect to the National Transmission System (NTS) at the Bacton gas terminal: Interconnector UK (IUK) (GB-Belgium) and BBL (GB-Netherlands). Bacton is hence the aggregated system entry point (ASEP), where the European interconnectors 'meet' the NTS. The Bacton gas terminal is also an entry point from the UK Continental Shelf (UKCS).

The GB gas market is also connected to the Republic of Ireland (RoI) and Northern Ireland (NI) via the IP at Moffat. IC1 and IC2 transport gas from Moffat in Scotland to Loughshinny and Gormanstown in the RoI. The Scotland to NI pipeline (SNIP) transports gas from Moffat (first via IC1 and IC2) to Ballylumford in NI. Note that whilst this letter focuses on CAM implementation at Bacton only, CAM will also apply to the Moffat IP[11].

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[7] Ofgem has held two open meetings on the change to the gas day. Further details on the change are set out in the documentation relating to the open meetings, which can be found on our website (https://www.ofgem.gov.uk//gas/wholesale-market/european-market). NGG has also raised a UNC modification proposal in respect of the change to the gas day, this can be found at http://www.gasgovernance.co.uk/0461. We do not seek views on this issue in this letter.

[8] Defined in the CAM Network Code as a point that is subject to booking procedures and which connects adjacent entry-exit systems or connects an entry-exit system with an interconnector.

[9] Capacity in excess of the technical capacity is defined as additional capacity in 2.2.2.1 of Annex I of the Gas Regulation on Congestion Management Procedures (the CMP Guidelines) in the link http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2012:231:0016:0020:EN:PDF

[10] The CAM Network Code may also apply to entry points from and exit points to third countries, subject to the decision of the relevant National Regulatory Authority (NRA). Ofgem's view is that there are currently no such entry or exit points in GB where CAM would be applied.

[11] Ofgem is currently discussing the implementation of CAM with the relevant TSOs and NRAs in the RoI and NI. Ofgem may choose to issue an open letter with respect to the Moffat IP at a later date.

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Current Arrangements for the sale of capacity at Bacton and on the Interconnectors

Currently, shippers using IUK and BBL[12] to transport gas between the continent and GB must buy separate GB entry/exit capacity, interconnector capacity and entry/exit capacity in the neighbouring transmission system (Netherlands or Belgium, as applicable). Whilst on the interconnectors themselves capacity has mostly been sold under long-term contracts, although some capacity on BBL is offered on short term contracts. In addition, capacity should also be made available under the Congestion Management Procedures (CMP) Guidelines.

Currently, all entry capacity at Bacton is auctioned via the GEMINI platform under the governance arrangements set out under the UNC. When buying entry capacity, no distinction is made between UKCS and cross-border capacity. For example, a shipper holding GB entry capacity can use this capacity to transport gas into GB from the continent (through either interconnector) or from the UKCS. The baseline volume of entry capacity available to be sold is set out in the Gas Transporter Licence of National Grid Gas (NGG).

GB exit capacity at Bacton is sold in a very different way to GB entry capacity. Exit capacity products with longer[13] duration are not sold via auctions but by an application process, whilst exit capacity products with shorter duration are sold via auction. In addition, the volumes of exit capacity available at Bacton are set out in NGG's Gas Transporter Licence under separate baseline values with each dedicated to specific facilities (eg Bacton – IUK Interconnector[14], Bacton (Great Yarmouth)[15]). Furthermore, the enduring annual GB exit capacity product gives rights on an ongoing basis until the holder requests a reduction in these rights. This would be contrary to the standard capacity products required under CAM and revisions required at IPs. We set out our views on way forward on this issue in the section on 'Implementation issues' below.

Implementation Issues

There are two GB-specific issues in particular where we would welcome the views of industry. The first concerns whether, when bundling capacity products across IPs, the bundle should include two TSOs or three TSOs.

The second issue concerns how entry capacity in respect of gas flowing into the Bacton ASEP from UKCS should be treated, given that it is not captured under the scope of CAM. Currently no distinction is made between UKCS and cross-border flows in the allocation of Bacton ASEP capacity. However, the implementation of bundled capacity products at IPs under CAM suggests that this may no longer continue to be the case.

We are aware that a number of shippers have concerns regarding the reduction of flexibility that will result from the implementation of CAM. **We would welcome the views of shippers regarding which of the potential options discussed below will provide the greatest level of the flexibility that they are seeking, subject to the requirements of the CAM network code.**

We set out below the options that we consider are available in respect of these two issues and explore the potential advantages and disadvantages of each option. We then set out the rationale behind our current preferred approaches and invite industry views on these, based on the objectives for CAM implementation set out above.

[12] It should be noted that BBL is currently a uni-directional pipeline that can only physically transport gas from the Netherlands to GB.
[13] Gas shippers wishing to hold annual or enduring annual GB exit capacity (where enduring annual GB exit capacity can be kept by the shipper indefinitely, with charges set on an administrative basis not at the time of sale but in the year of use) must put in an application by the annual exit window each July.
[14] As defined in NGG's Gas Transporter Licence.
[15] In respect of the power station.

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Exit capacity

We noted in the section on 'current arrangements for the sale of capacity at Bacton and on the Interconnectors' that the current NGG enduring exit capacity product is contrary to the CAM requirements. Our view is that CAM implementation will require changes to be made to the current enduring GB exit capacity rights at IPs in line with CAM. We note that once existing long term capacity contracts on IUK expire in 2018, all unsold Bacton exit capacity onto IUK will be offered as a bundled product with IUK capacity. This could mean that shippers wishing to flow from NGG onto IUK would hence hold Bacton–IUK exit capacity twice unless they reduce their Bacton–IUK exit capacity enduring rights. **We would welcome the views of shippers currently holding this capacity as to whether they will choose to maintain their existing enduring Bacton-IUK Interconnector exit rights post 2018, and if not the process they would like to see regarding end dating of these contracts.** We would expect NGG to take forward this workstream, taking account of shippers' views.

1) 2 TSO Bundle or 3 TSO Bundle

CAM requires that cross-border capacity be bundled into a single capacity product[16] with a standard duration, and sold via a joint booking platform. However, the CAM text does not provide clear guidance on whether any such bundled product should incorporate 2 TSOs or 3 TSOs.

CAM defines an IP as "...a physical or virtual point connecting adjacent entry-exit systems or connecting an entry-exit system with an interconnector, in so far as these points are subject to booking procedures by network users"[17]. This definition appears to envisage a 2 TSO bundle as an interconnector would have an IP with NGG and another IP with the TSO on the continent. Therefore, any shipper wishing to flow gas from, say, the Netherlands to GB, would buy two products: a GTS exit–BBL entry bundle at Julianadorp and a BBL exit–NGG entry bundle at Bacton. In order to purchase a bundled product the participant must hold the appropriate underpinning contracts with both relevant TSOs.

However, the Gas Target Model[18] envisages an integrated gas market where shippers can buy single hub-to-hub[19] capacity products rather than a series of 'exit' and 'entry' capacity products. This would seem to advocate use of a 3 TSO bundle, whereby a shipper flowing gas from the Netherlands to GB would just buy one product, incorporating GTS exit, BBL entry, BBL exit and NGG entry capacity.

Hence both the 2 TSO and 3 TSO models would appear to be compliant with CAM. Given this, the question is which model should GB (working cooperatively with the Netherlands and Belgium) implement across each interconnector?

Option 1: 2 TSO bundle

We consider that a 2 TSO bundle[20] would have two main advantages when compared with the 3 TSO model. It could:

[16] Note that while capacity is bundled into a single product for the purposes of allocating that capacity via an auction mechanism, the individual 'components' of the bundle will still be supported by specific contracts within the relevant contractual framework eg UNC for NGG.
[17] CAM Network Code, Article 3(10)
[18] Details of the Gas Target Model can be found at http://www.energy-regulators.eu/portal/page/portal/EER_HOME/EER_CONSULT/CLOSED%20PUBLIC%20CONSULTATIONS/GAS/Gas_Target_Model/CD/C11-GWG-82-03_GTM%20vision_Final.pdf.
[19] A hub to hub product is defined as one product that can allow a shipper to transport gas from one gas hub to another as opposed to having to purchase more than one product to achieve the same outcome.
[20] We note that the 2 TSO model most closely resembles the current operation of IUK.

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- Accommodate a linepack[21] service on the interconnectors, as entry and exit flows on the interconnectors would not have to be equal over the course of a gas day. We note that this is a service which IUK currently offers.
- Accommodate UKCS production flowing directly onto an interconnector, as such a route to an adjacent hub would mean that the gas does not physically pass through the GB transmission systems from production site to hub[22]. (We note that the SILK pipeline[23] has the capability to deliver gas directly from UKCS to IUK).

However, a 2 TSO bundle could also give rise to two disadvantages. It could:

- Potentially run the risk that, shippers having bought one product (eg GTS-BBL) may be unable to obtain the second product (eg BBL-NGG). In order to flow hub-to-hub, the shipper would then either have to secure capacity made available under the CMP oversubscription or surrender mechanisms (assuming there is a shipper who was in the opposite position), use the secondary market, or trade gas.
- Mean that the interconnectors could be classified as balancing zones which could give rise to associated implementation costs and potential obligations for interconnectors under the Balancing Network Code[24]. (That said, we note that if interconnectors were classified as balancing zones, the provisions set out in the Balancing Network Code are able to be interpreted in a manner that takes into account the specific nature of interconnectors when compared to national transmission systems).

Option 2: 3 TSO bundle

The 3 TSO bundle[25] would have two advantages relative to the 2 TSO bundle option. It could:

- result in the interconnectors could not being classified as balancing zones and remove the risk of any unintended consequences arising from potential obligations under the Balancing Network Code.
- Result in lower transaction costs from shippers having to buy and nominate against fewer capacity products for transport over the same route. (That said, we anticipate that this would be a marginal cost saving compared to the 2 TSO bundle option).

Conversely, this model could also bring a number of disadvantages. It could:

- Oblige shippers to procure (and pay for) capacity they would not use in the case of a shipper flowing gas from a UKCS pipeline directly onto an interconnector (specifically IUK) and then to either GB or the continental markets. For example, for a shipper flowing gas to the continent in this manner, GB NTS exit capacity (which would not be required) would still have to be bought as part of the 3 TSO bundle. This in turn would potentially lead to complications over nominations[26] and could artificially create incidences of contractual congestion.
- Delay the benefits of CAM implementation where existing long-term entry and exit contracts could prevent the bundling of capacity for some time (except for capacity

[21] The amount of gas in the pipe is called the "linepack". By controlling the pressure in the pipe, a TSO can use the pipe to store gas during periods when there is less demand. Using linepack in this way allows pipeline operators to handle hourly fluctuations in demand and provide a gas storage service for shippers.
[22] For example, if gas arrives from UKCS into an interconnector en route to Belgium, then the purchase of GB exit capacity (which would apply if part of a 3 TSO bundle) would not seem appropriate.
[23] The Seal Interconnector Link Pipeline (SILK) transports UKCS gas directly into IUK, connecting at the SILK Connection Point. Our understanding is that gas has not been conveyed via this route since 2005.
[24] The Balancing Network Code can be found at http://www.entsog.eu/public/uploads/files/publications/Balancing/2012/BAL350-12_121026_Network_Code_on_Balancing_FINAL.PDF
[25] We note that the 3 TSO bundle most closely resembles the current operation of BBL.
[26] In such an instance a shipper will issue a single nomination to the three TSOs to flow. This would be interpreted by the three TSOs as an indication to flow from one hub to another. This will differ from the shipper's actual intention to flow from the production site onto the interconnector and to one hub.

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released under CMP via the oversubscription or surrender mechanisms). By contrast, a 2 TSO approach would allow capacity to be bundled at one end of an interconnector even if the other end was "locked-up" in long term contracts.
- Be necessary to create a "unique-in Europe" 3 TSO bundling auction platform function which could involve higher IT capital costs for the auction platform than the current "off the shelf" 2 TSO bilateral interface already used in Europe[27]. Further, rather than being shared across all shareholders of the common booking platform, these IT costs may be borne entirely by the TSOs using any such bespoke product.

Ofgem's current view – potential to adopt both 2 TSO and 3 TSO bundles

Since both a 2 TSO and a 3 TSO approach would be CAM compliant[28], and given that each approach is characterised by its own advantages and disadvantages, we consider that the interconnectors should propose which option they will implement, taking into account their individual business models and subject to the requirements in CAM and the objectives in their interconnector licence regarding access rules. As such, Ofgem is not currently intending to stipulate a particular option for implementation. However, Ofgem will work closely with all TSOs involved in any interconnector-chosen implementation option to ensure compliance by 1 November 2015.

Questions

Ofgem would welcome stakeholder views on this, and in particular, on the following questions:

- Do you agree with the advantages and disadvantages of the 2 and 3 TSO bundle options as presented? Are there any further advantages or disadvantages to be considered?
- Do you consider that it would be possible for a 3 TSO approach to accommodate a linepack service (as currently offered by IUK)? If so, please provide details as to how this could be facilitated.
- To what extent do you consider the classification of interconnectors as balancing zones as an opportunity, rather than a disadvantage, of the 2 TSO model?
- Which of the bundle options (2 or 3 TSO bundle) would best enable shippers to react to price differentials between hubs?
- Do you have a preference for a 2 TSO or 3 TSO bundle? If so, please provide the reasons for your preference.
- Do you agree with our current view that interconnectors should choose the bundling model subject to meeting the requirements of CAM and the objectives of their access rules? Would you have any concerns if different options for bundling were chosen by the two interconnectors?

2) Future mechanism for selling entry capacity at Bacton

As outlined above, gas currently enters GB at the Bacton ASEP from more than one source. Bacton is unique in GB in that production from the UKCS, imported gas from the Netherlands via BBL and imports from Belgium via IUK all enter the NTS there. NGG currently makes no distinction when allocating entry capacity for gas from UKCS or Europe, as Bacton is a single entry point. The current arrangements for the allocation of entry capacity are set out in the UNC. The total amount of entry capacity available ('the baseline') at the Bacton ASEP is set out in NGG's Gas Transporter Licence[29].

Article 2.1 of CAM states *"This Regulation shall apply to interconnection points... This Regulation shall not apply to exit points to end consumers and distribution networks, entry*

[27] We note that not all TSOs are currently proposing to use the "off the shelf" platform, so this disadvantage may not materialise.
[28] Compliance also needs to be ensured with all other European network codes and relevant legislation.
[29] This is currently set at 1783.4 GWh/day

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points from 'liquefied natural gas' (LNG) terminals and production facilities, and entry-exit points to or from storage facilities." Given the particular characteristics of the Bacton ASEP, our view is that the part of the entry capacity that enables gas to enter GB from the interconnectors with Europe is within the scope of CAM; conversely, the part of the entry capacity that enables production from the UKCS to enter GB does not fall within the scope of CAM. This implies that if CAM is implemented according to its narrow scope at IPs, then from 1 November 2015 capacity for gas entering from Europe will be sold under CAM (CAM auctions) while gas entering from UKCS will continue to be sold under the existing UNC arrangements (UNC auctions).

We have considered a number of ways in which this divergence of auction mechanisms at the Bacton ASEP can be resolved. Firstly, CAM auctions could be rolled out across all GB entry points. This would ensure that all entry capacity, whether at IPs or at GB entry points, is sold under the same arrangements. However, this would be beyond the narrow scope of CAM and challenging to implement for 1 November 2015. We have therefore ruled this out under this timescale in order to focus on implementing CAM at IPs by the required deadline. (However, this does not rule out future UNC modifications being raised by industry to apply CAM auctions more widely across GB). An alternative would be that entry capacity for gas entering from UKCS at Bacton only is also sold under CAM auctions. This would likely be simpler than rolling out CAM auctions to all GB entry points. However, this would mean that different rules for gas entering from UKCS would apply depending on the entry terminal, and our view is that we do not think it appropriate to make a special case for UKCS gas arriving at the Bacton ASEP.

Therefore, our view is that CAM implementation will require two separate auction processes for the allocation of entry capacity at Bacton. Management of entry capacity at Bacton

Given that Bacton entry capacity will in future be sold in part via CAM auctions and in part via UNC auctions, consideration needs to be given to how the allocation of entry capacity to each auction will be managed. We consider that there are four options and discuss the advantages and disadvantages below:

1. NGG manages any constraint;
2. Capacity reduction;
3. Competing auction; and
4. Split entry capacity[30].

Option 1: NGG manages any constraint

Under the first option the total baseline capacity would be made available for allocation under both the CAM auctions and the UNC auctions (even when these auctions are not held simultaneously). An advantage of this approach would be that it would require minimal changes to implement CAM. However, a disadvantage would be that NGG could run the risk of selling significantly more capacity than its baseline. This arises from total Bacton baseline being offered twice (once at each auction). This could have an impact on the capacity available at other ASEPs (NGG would manage any resultant constraint through existing mechanisms, such as buy-back of capacity, and this may result in significant costs). Furthermore, in the future, if total baseline is made available in both auctions it incorrectly signals that there is a high level of capacity availability. This could be problematic if signals from market participants for incremental capacity are not received as a result.

Options 2 and 3: Capacity reduction and competing auctions

We consider that there are two separate options, one relating to capacity reduction, the other relating to competing auctions. Given that we consider that the advantages and

[30] For the avoidance of doubt there is no such requirement for exit capacity. As noted previously, exit capacity at Bacton is already split with individual exit points.

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disadvantages of both relate to the timings of the auctions, we discuss both of these options together.

A capacity reduction option works by the capacity available in one auction being dependent on the outcome of a preceding auction, ie, if the capacity was sold in the first auction, then it would not be available for allocation in the second auction. A competing auction is where both rolling auctions are held simultaneously and requires the participants in both auctions to be made aware of the outcome of each round of the other and its impact on the capacity that remains available, ie, if capacity was sold in one auction, it would no longer be made available for allocation in subsequent rounds.

Both of these options require the timings of the UNC auctions and the CAM auctions to be aligned in specific (albeit different) ways. Such alignment would be required for all capacity products (yearly, quarterly, monthly, daily and within-day). However, we note that this is not currently the case, as illustrated below.

For example, CAM states that the bidding round for the Rolling Day Ahead auction shall open every day at 15:30 UTC (winter time) or 14:30 UTC (daylight saving). A bid can be submitted, withdrawn or amended until 16:00 UTC (winter time) or 15:00 UTC (daylight saving). Meanwhile, the UNC states that bids for Day Ahead entry capacity may be submitted at any time from the seventh day before the Gas Flow Day until 14:00 on the day ahead. The capacity relating to these bids is then allocated between 14:00 and 15:00. Shippers can continue to submit bids after 14:00 which will be considered in any future allocation. This poses two problems given the current timings:

- Bids can continue to be submitted under the UNC auction after 14:00, and therefore whilst the CAM Rolling Day Ahead is open. This appears to rule out capacity reduction, as there is a period of time when both auctions are open simultaneously.
- The first UNC bid window and allocation is complete before the CAM Rolling Day Ahead window opens. This would appear to rule out a competing auction.

In addition, in the case of the CAM Within-Day auction, the auction closes for 30 minutes of each hour while the UNC Within-Day auction remains open. We would note that this divergence means the competing auction option would provide those taking part in the UNC auction with an advantage over those participating in the CAM auction.

One solution to these timing challenges would be to change the times of the auctions. However, the CAM auction timings are set out in the Regulation, whilst amending the timings of the UNC auctions would require changes to the existing arrangements (which would be a considerable change for GB at all entry points, when this is not necessary to implement CAM). A further disadvantage is that there would need to be the development of some form of communication between auction platforms. We hence do not consider either of these options to be practical at this time.

Option 4: Split entry capacity

The fourth option is for the baseline[31] entry capacity at the Bacton ASEP to be split. This would allow for separately defined volumes of capacity to be made available in the UNC and CAM auctions, which would provide the advantage that the CAM and UNC auctions could be held independently of each other.

Further advantages of this option are that this would not require changes to the UNC or CAM auctions and would avoid sales of capacity significantly above the baseline and would avoid situation where signals from market participants for incremental capacity are not received. Furthermore, it should enable a more straightforward implementation of future network codes at Bacton when the scope of network code requirements limited to the interconnector component (eg short-term reserve price in the Framework Guideline on gas

[31] We discuss the treatment of capacity that has already been sold later in this letter.

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transmission tariffs) We note, however, that this option has the disadvantage of requiring further development on how the split is defined and on how long term capacity that has already been booked is managed. We expand on some of these issues below.

Ofgem's current view – baseline capacity to be split

We consider that the most appropriate solution is for baseline entry capacity at the Bacton ASEP to be split. As noted above, this would enable the CAM and UNC auctions to be held independently of each other.

Options for splitting capacity at the Bacton ASEP

For the purposes of this section, we assume that the Bacton ASEP will be split between the UKCS part of the Bacton ASEP (UKCS ASEP) and European interconnectors part of the Bacton ASEP (European IP ASEP). That is, entry capacity for BBL and IUK is treated as a single figure. The possibility of a further split between BBL and IUK is discussed later in this letter. In addition, we note that NGG's current licence baseline for entry capacity at Bacton is set at 1783.4 GWh/day. We also note that entry capacity at Bacton is not currently sold out. Given that we are focussing on CAM implementation we do not consider that there is a specific need at this time to review this aggregate baseline.

There are several ways in which capacity at the Bacton ASEP could be split. Each of these has advantages and disadvantages. We need to consider each of these both in terms of compliance with CAM and the impact of flows into GB. The three options we consider in this letter are:

- Splitting based on the technical capacity of the two European interconnectors;
- Splitting based on maximum flow predictions from UKCS; and
- Splitting based on existing holdings.

Option 1: Splitting based on the technical capacity of the two European interconnectors

Article 6.1(a) of CAM seeks to "maximise the offer of bundled capacity through optimisation of technical capacity". This could be interpreted as implying that the entry capacity made available at the European IP ASEP at Bacton is the sum of the declared technical capacities of BBL and IUK (ie 494.4 GWh/day plus 807.6 GWh/day). The remaining quantity (ie the current Bacton licence baseline quantity less that assigned to the European IP ASEP) would then be assigned to the UKCS ASEP. This would set the baselines for the European IP ASEP and UKCS ASEP at 1302.0 GWh/day and 481.4 GWh/day respectively.

The advantages of this approach are that it meets the requirements of CAM by ensuring the maximum technical capacity is made available to bundle with interconnectors. As GB becomes increasingly reliant on imported gas for security of supply it also seems appropriate to maximise the potential for flows from the continent. However we do note that CAM states any actions to maximise capacity "*shall not be detrimental to the offer of capacity at other relevant points of the concerned systems*"[32] and therefore it needs to be considered the extent to which this option could restrict available capacity at the UKCS ASEP.

Option 2: Splitting based on maximum flow predictions from UKCS

The reverse to this option could also be considered. That is, the UKCS ASEP is created with a baseline matching the maximum flow predictions for UKCS[33]. The residual amount would be assigned to the European interconnectors. The disadvantage of this option is the dependence on what the UKCS flow predictions are, which may not provide the maximum

[32] CAM Network Code, Article 6(1)(a)(1)
[33] Maximum flow predictions would need to be used, as there is not an applicable technical capacity figure that could be used.

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technical capacity for the European IP ASEP (and therefore not be CAM compliant). Data provided by NGG for winter 2011/12 shows that there were 46 days where flows from UKCS into Bacton exceeded 481.4 GWh/day. In line with the calculation above, there would hence have been insufficient entry capacity at the European IP ASEP on each of these days to meet the maximum technical capacities of BBL and IUK. By contrast, the maximum flow from UKCS into Bacton on any day in winter 2012/13 was 325 GWh/day, which would have provided sufficient entry capacity to the European IP ASEP[34]. We also note that total forecast future flows through Bacton show a reducing trend (from 199 TWh/year in 2013/14 to 131 TWh/year in 2022/23[35]). Thus, a disadvantage of this option is the inherent difficulty in predicting future flows and therefore future capacity requirements for the UKCS ASEP.

Option 3: Splitting based on existing holdings

An alternative option would be to split the Bacton ASEP based on existing capacity holdings. This could either be user led or based on historical flows. A user led approach would allow for wider input into the process. The alternative is that the split is based on existing capacity held by users complemented with actual flow information. The disadvantage of this option is that past flows do not necessarily reflect future requirements.

Ofgem's current view – European IP ASEP receives maximum technical capacity

Our current view is that capacity at the Bacton ASEP should be split so that the European IP ASEP receives the sum of the maximum technical capacities of the two interconnectors. The remainder of the existing baseline would be made available to the UKCS ASEP. We consider that this best meets the requirements of CAM. In addition, based on forecasts of future UKCS flows through Bacton, we do not consider this to raise significant concerns regarding flow constraints on the UKCS ASEP. This means that the European IP ASEP would have a baseline of 1302.0 GWh/day and the UKCS ASEP would have a baseline of 481.4 GWh/day.

One or two European IPs at Bacton

So far we have only considered the option of a European IP ASEP (ie BBL and IUK combined and referred to here as the 'one IP' model). A further split between BBL and IUK (the 'two IP' model) would be possible. The definition of an IP is "...*a physical or virtual point connecting adjacent entry-exit systems or connecting an entry-exit system with an interconnector, in so far as these points are subject to booking procedures by network users*"[36]. This definition would allow for the designation of one IP at Bacton between NGG and IUK and a separate IP at Bacton between NGG and BBL.

Both options would work in theory. We note, however, that NGG currently manages flows from both interconnectors into one aggregated entry point at Bacton. It is therefore assumed that the one European IP ASEP approach would not present NGG with any new issues to overcome compared with current arrangements.

Furthermore, if both BBL and IUK were provided with their full technical capacity under a one IP model (ie the capacity made available equalled the sum of the maximum technical capacities of each interconnector), we consider that there would effectively be no difference between the technical capacities being made available under the one IP versus the two IP approaches (one as an aggregated value, the other split). Further, we consider that one IP may also give both NGG and shippers more flexibility when managing entry capacity at Bacton.

[34] Data provided by NGG.
[35] Source NGG Ten Year Statement.
[36] CAM Network Code, Article 3 (Definitions) (10).

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Ofgem's current view - one IP

Provided that the capacity provided under the one IP model is the full technical capacity we do not consider the further splitting of Bacton entry capacity between BBL and IUK to be necessary for the implementation of CAM, especially given that this may reduce the flexibility available to shippers.

Treatment of Existing Entry Capacity at Bacton

There are existing long-term bookings for entry capacity at Bacton which are held for dates after CAM is implemented. These have been booked with the understanding that Bacton is one ASEP and the shipper is not limited to bringing gas into GB on a prescribed route (that is, the shipper has flexibility to flow from UKCS or from the interconnectors).

This raises the question whether, following the CAM implementation deadline of November 2015, historical capacity should be interchangeable across the future two Bacton ASEPs or whether shippers shall be required to specify ex-ante their capacity as being at either the European IP ASEP or UKCS ASEP.

Ofgem's current view

If Bacton entry capacity is split between a UKCS ASEP and European IP ASEP we do not consider that capacity should be fungible between the two ASEPs. That is, entry capacity held for one ASEP should not be freely usable at the other ASEP. This would be the case both for capacity booked after November 2015 and existing long-term bookings.

We recognise that this would mean a significant change to historically-booked capacity, in that Bacton ASEP entry capacity would no longer be a fully fungible product for use with all sources of gas arriving at Bacton. However, we cannot foresee how it would be possible for NGG to manage both CAM and UNC auctions under a regime where historical entry capacity could be fungibly used across all Bacton entry points. In such a case it would not be possible to ascertain the unsold capacity at the two new Bacton ASEPs (as this requires data both on technical and sold capacity, and the latter would be uncertain). Therefore NGG would not know how much capacity to offer in each auction.

In addition, the current draft of the tariff framework guideline sets out that some tariff structures at IPs may differ from those at domestic points. This means that once the EU Tariffs Network Code is implemented, there may be a material difference in the tariff structure of the European IP ASEP and the UKCS ASEP products, adding weight to the argument that they should not be used interchangeably across the two ASEPs. Ofgem launched its Gas Transmission Charging Review (GTCR) on 24 June 2013[37]. The review will look at the way in which all of the entry and exit charges on the NTS are set. This includes looking at whether changes to the charging arrangements required at IPs only (under the tariffs framework guideline) should also be made at other points on the NTS.

We recognise that the splitting of the Bacton ASEP into two separate ASEPs will require existing long-term holdings to be split in some way. We will continue to work with stakeholders to understand how this can be achieved. A solution may be to ask shippers to notify to NGG their decision regarding how they wish to split their current capacity holdings between the European IP ASEP and the UKCS ASEP.

Similarly, we do not consider that the European IP ASEP capacity should be fungible between being bundled with IUK or BBL. That is, European IP ASEP capacity held for one

[37] Our Gas Transmission Charging Review can be found here: https://www.ofgem.gov.uk/publications-and-updates/gas-transmission-charging-review-%E2%80%93-call-evidence

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bundled product should not be freely usable to flow on the other interconnector as this would effectively break the bundle[38].

Flexible use of Bacton entry capacity

A further consideration is how to facilitate the flexible use of Bacton capacity following the implementation of CAM. An example would be if a shipper has Bacton European IP ASEP capacity bundled with BBL capacity, but decides it wishes to flow into GB via IUK rather than from UKCS. We note above the lack of fungibility of the Bacton entry capacity component of the bundle. However, currently, NGG has tools available to it in order to facilitate flexible use of capacity. Firstly, NGG has the ability to substitute unsold entry capacity between different points on the NTS over the long-term. Second, NGG can use its entry capacity 'transfer and trade' mechanism in order to ease congestion at certain points in the medium term. NGG can also offer interruptible capacity and additional capacity (above the baseline) where possible in the short-term. In addition, shippers can surrender capacity or trade capacity on the secondary market.

Ofgem's current view

As set out above, we note that there are a number of tools available for encouraging the flexible use of Bacton entry capacity. However, we consider that these tools may need to be further developed. We will therefore ask NGG to consider how these tools could be potentially revised to maximize the flexible use of Bacton entry capacity in the future, under different flow scenarios. For example, currently 'transfer and trade' can operate only on a month ahead basis and it may be beneficial to shippers if this were to operate over a shorter period. We recognise that consideration will need to be given to the interactions between the CAM auction and the UNC auction. We will also ask NGG to consider what new tools could be developed to boost such flexibility.

Summary of Ofgem's current view

In summary, our current view is that there is a need to split the existing Bacton ASEP. Our preferred option is to achieve this by creating a UKCS ASEP and a single European IP ASEP. Regarding the division of capacity between the two ASEPs, our preferred option is that the baseline of the European IP ASEP would be the sum of the declared technical capacity of BBL and IUK (ie, 1302.0 GWh/day). The UKCS ASEP baseline would then be the existing Bacton ASEP baseline less the capacity provided to the European IP ASEP (ie, 481.4 GWh/day). We do not consider that there is a need to split the European IP ASEP any further. Also, we do not consider that capacity – either existing long-term holdings or purchased after CAM implementation - would be fungible between the UKCS and European IP ASEPs.

Questions

Ofgem would welcome views from industry participants and stakeholders on this issue and in particular on the following questions:

- Do you agree with the advantages and disadvantages of the various options in respect of the future mechanism for selling entry capacity at Bacton? Are there any further advantages or disadvantages to be considered?
- Do you agree that, for the time being, CAM auctions should only be implemented in respect of capacity at IPs (and not extended beyond the scope of CAM)?
- Do you agree that it would be impractical to seek to change the timings of UNC auctions within the CAM implementation timescales?

[38] CAM Network Code, Articles 19(8) and (9), require single nomination for a bundled product and for bundled capacity not to be resold on secondary market as unbundled capacity.

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- Do you therefore agree that there is a need to split the Bacton ASEP? If not, please provide details of how you consider CAM can be implemented without the Bacton ASEP being split.
- If your view is that there is a need to split the Bacton ASEP, do you agree that it is appropriate to allocate NTS entry capacity at Bacton to meet the maximum BBL and IUK technical capacities and leave the remainder to be sold as UKCS entry under the UNC auction? If not, what do you consider should be the allocation?
- Do you agree that a single European IP ASEP approach is appropriate (ie, no further division of capacity between the two interconnectors)? If not, please explain why you consider that there should be two European IP ASEPs.
- Do you agree that capacity should not be fungible between UKCS ASEP entry and European IP entry? If not, how do you consider such fungibility should be accommodated given CAM network code requirements?
- How should long-term (historical) entry capacity contracts at Bacton be dealt with?
- What tools (either through the development of existing products or the introduction of new products) could be used to maximize the flexible use of overall Bacton entry capacity following splitting of the Bacton entry capacity into two ASEPs and capacity bundling under CAM?

Implementation Process

We consider there to be two stages for implementing CAM at Bacton. The first stage will be industry-led, with TSOs developing a 'concept document'. There will be separate concept documents for the Netherlands to GB route (drafted by GTS, BBL and NGG) and for the GB to Belgium route (drafted by Fluxys, IUK and NGG). This concept document will deal with the general issues from bundling, eg, what the components of a bundled product are and how capacity allocation works (with reference to firm, interruptible, bundled and unbundled, annual, quarterly, monthly, day-ahead and within-day products). It will also provide detail on a number of other issues, including the timing and process of nominations, and how congestion management procedures (oversubscription, surrender and long-term use it or lose it (UIOLI)) introduced under the CMP Guidelines will work with both bundled and unbundled products. The concept document should also set out whether a 2 or 3 TSO bundled approach is being proposed.

NGG will also need to set out in the concept document how any mechanisms to facilitate flexibility in using Bacton entry capacity (as discussed above) will work. Similarly, clarity will be required for how shippers flowing gas from UKCS into Bacton buy and use capacity (which could simply be a reference to the UNC if there is no change).

In addition, the interconnectors will need to set out in the concept document any issues that may be specific to their regimes, eg, whether and how linepack products are offered by interconnectors, how these will work and how UKCS production arriving directly onto the interconnectors will gain access.

Our current expectation is that TSOs will publish a consultation on this concept document in April 2014 (closing May 2014), before submitting it to NRAs in June 2014. NRAs intend to provide an opinion during September 2014.

The second stage will see relevant parties making changes to domestic industry codes, licences and internal contracts in order to reflect the new bundled regime, based on the NRAs' opinions on the concept document and subject to any final NRA approval required.

For NGG, the second stage will involve proposing changes to the UNC (which sets out the detailed rules governing GB market operations) and any other necessary ancillary documents to ensure compliance with CAM.

Meanwhile, for GB gas interconnector licensees, this will include (but may not be limited to) development of, or changes to, access rules (under standard licence condition 11A),

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bilateral agreements (under standard licence condition 3) and charging methodologies (under standard licence condition 10) and to ensure that their own contractual arrangements comply with CAM.

Splitting the Bacton Baseline

The proposed split to the Bacton ASEP baseline into a UKCS ASEP and a separate European IP ASEP will require a change to the NGG Gas Transporter Licence. If the consultation process for making this change were to follow directly on from the consideration of responses to this letter, this would mean the change could be made in Spring 2014. This could precede the suggested schedule for TSOs to submit their concept documents to NRAs and for the NRAs to give an opinion. Alternatively, it may be more beneficial to wait for the development of, and NRA opinion on, the TSO concept documents before undertaking this licence change process. We would welcome industry's views on the preferred timetable for this process.

Next Steps

Responses should be received by 12 December 2013 and sent to:

Clement Perry
Ofgem
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London, SW1P 3GE
Tel: 020 7901 3128
Email: Clement.Perry@ofgem.gov.uk

Unless clearly marked confidential, all responses will be published by placing them in Ofgem's library and on its website www.ofgem.gov.uk. Respondents may request that their response, or part of response, is kept confidential and those who wish to do so should clearly mark their documents to that effect and include reasons for confidentiality. Ofgem shall respect this request, subject to any obligation to disclose information, for example, under the Freedom of Information Act 2000 or the Environmental Information Regulations

A summary of the questions contained in this letter are set out below.

We are holding an industry workshop to discuss the issues set out in this letter on Monday 25 November from 2pm to 5pm at Hoare Memorial Hall, Church House, Dean's Yard, Westminster, London, SW1P 3NZ.
http://www.churchhouseconf.co.uk/about_church_house/location

To reserve a place at this workshop please contact Jessica Housden (Jessica.Housden@ofgem.gov.uk).

Should you wish to discuss any aspect of this letter please contact Clement Perry.

Yours sincerely,

Rob Mills
Head of European Wholesale Markets

Question Summary:

1. We would welcome the views of shippers regarding which of the potential options discussed in this document will provide the greatest level of the flexibility that you are seeking, subject to the requirements of the CAM network code.
2. Do you agree with the advantages and disadvantages of the 2 and 3 TSO bundle options as presented? Are there any further advantages or disadvantages to be considered?
3. Do you consider that it would be possible for a 3 TSO approach to accommodate a linepack service (as currently offered by IUK)? If so, please provide details as to how this could be facilitated.
4. To what extent do you consider the classification of interconnectors as balancing zones as an opportunity, rather than a disadvantage, of the 2 TSO model?
5. Which of the bundle options (2 or 3 TSO bundle) would best enable shippers to react to price differentials between hubs?
6. Do you have a preference for a 2 TSO or 3 TSO bundle? If so, please provide the reasons for your preference.
7. Do you agree with our current view that interconnectors should choose the bundling model subject to meeting the requirements of CAM and the objectives of their access rules? Would you have any concerns if different options for bundling were chosen by the two interconnectors?
8. Do you agree with the advantages and disadvantages of the various options in respect of the future mechanism for selling entry capacity at Bacton? Are there any further advantages or disadvantages to be considered?
9. Do you agree that, for the time being, CAM auctions should only be implemented in respect of capacity at IPs (and not extended beyond the scope of CAM)?
10. Do you agree that it would be impractical to seek to change the timings of UNC auctions within the CAM implementation timescales?
11. Do you therefore agree that there is a need to split the Bacton ASEP? If not, please provide details of how you consider CAM can be implemented without the Bacton ASEP being split.
12. If your view is that there is a need to split the Bacton ASEP, do you agree that it is appropriate to allocate NTS entry capacity at Bacton to meet the maximum BBL and IUK technical capacities and leave the remainder to be sold as UKCS entry under the UNC auction? If not, what do you consider should be the allocation?
13. Do you agree that a single European IP ASEP approach is appropriate (ie, no further division of capacity between the two interconnectors)? If not, please explain why you consider that there should be two European IP ASEPs.
14. Do you agree that capacity should not be fungible between UKCS ASEP entry and European IP entry? If not, how do you consider such fungibility should be accommodated given CAM network code requirements?
15. How should long-term (historical) entry capacity contracts at Bacton be dealt with?
16. What tools (either through the development of existing products or the introduction of new products) could be used to maximize the flexible use of overall Bacton entry capacity following splitting of the Bacton entry capacity into two ASEPs and capacity bundling under CAM?
17. If you are a current holder of Bacton-IUK Interconnector exit capacity, we would welcome your as to whether you will choose to maintain your existing enduring Bacton-IUK Interconnector exit rights post 2018, and if not the process you would like to see regarding end dating of these contracts.
18. Please provide your views on your preferred timetable for taking forward the changes to the baseline capacity as set out in NGG's Gas Transporter Licence.

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