

Modification proposal:	Uniform Network Code (UNC): Reform of the NTS offtake arrangements (UNC 0116V, 0116BV, 0116CVV, 0116VD, 0116A) and Introduction of Enduring NTS Exit capacity Arrangements (UNC 0195 and 0195AV)			
Decision:	The Authority ¹ directs that proposal 0195AV be made ²			
Target audience:	The Joint Office, Parties to the UNC and other interested parties			
Date of publication:	19 January 2009	Implementation Date:	1 April 2009	

Summary

The letter sets out the Authority's decision on the Uniform Network Code modification proposals 0116 and 0195 and their variants. These modifications arose as a result of the sale of some of the gas distribution networks and the consequential separation of operational responsibilities between the network and transmission system operators. Both sets of modifications have been the subject of impact assessments and the Authority's intitial decision to approve 0116V was also the subject of a Competition Commission appeal.

In coming to its decision, the Authority has given particular consideration to three elements of the proposals: user commitment, interruption and exit capacity flexibility. This letter describes the Authority views in relation to these three elements, but also frames its decision in relation to how its preferred option better fulfils compliance with the Relevant Objectives. We also include a section on future work which is required as part of this decision.

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¹ The terms 'the Authority', 'Ofgem' and 'we' are used interchangeably in this document. Ofgem is the Office of the Gas and Electricity Markets Authority.

This document is notice of the reasons for this decision as required by section 38A of the Gas Act 1986.

Background to the modification proposals

The proposal to introduce new arrangements for taking gas off the National Transmission System (NTS) – otherwise referred to as 'offtake' or 'gas exit' – was first raised during the process which preceded the sale by National Grid Gas (NGG) of some of its gas distribution networks (GDNs); this sale was completed in June 2005. Prior to the sale of the networks, the interface between the transmission and the distribution networks was managed within a single company. However, the sale of the GDNs implied that, in the future, this interface would be between separately owned transmission and distribution businesses³. At the time of the transaction, the Authority considered it important that through the change of ownership, the sale did not create the potential for inefficient investment or operational decisions to occur on either the transmission or the distribution networks. In light of this concern, the Authority sanctioned the introduction of a proposed enduring offtake framework as a condition of consent to the sale of the GDNs.

In June 2005, the introduction of enduring offtake arrangements was delayed to allow for further consultation in parallel with the Transmission Price Control Review (TPCR). In the meantime, a set of 'transitional' offtake arrangements were introduced in relation to capacity released between 1 October 2008 and 30 September 2010⁴. Subsequently, five UNC modification proposals were brought forward (0116V, 0116A, 0116BV, 0116VD, 0116CVV). Ofgem published an initial impact assessment on these proposals in June 2006 and a final impact assessment in February 2007. On 5 April 2007 the Authority published its Decision to implement modification proposal 0116V (the April 2007 Decision).

On 30 April 2007, E.ON appealed against the decision that 0116V should be implemented and that 0116A should not be implemented. The appeal went to the Competition Commission (CC), which in July 2007 upheld in part E.ON's appeal and quashed the Authority's April 2007 Decision⁵.

The CC's decision prompted the establishment of UNC Review Group 166 to consider a number of elements of the proposed offtake arrangements. This led to two new modification proposals (0195 and 0195AV) raised in early 2008. Ofgem published a new impact assessment in July 2008, which assessed these new proposals alongside the five original proposals submitted prior to the Authority's April 2007 Decision. Industry participants were invited to provide feedback on the new impact assessment following an industry workshop at Ofgem on 22 July 2008.

The modification proposals

Modification proposal 0116V (raised by NGG NTS)

The proposer of modification 0116V considered that it would allow all users of the network, including independent GDNs, non-discriminatory access to the NTS. In its modification proposal, NGG NTS outlined the release of two separate NTS exit capacity products from 1 October 2010, namely:

 $^{^{\}scriptsize 3}$ Four of the eight gas distribution networks were sold by National Grid to third parties in 2005

⁴ These transitional arrangements were subsequently extended to 30 September 2012 following the Authority's decision to implement UNC 198.

⁵ This decision can be read online at http://www.competition-commission.org.uk/appeals/energy/eon_final_decision.pdf

- An **NTS** "flat capacity" product. This product effectively provides users with the right to flow up to a maximum level (a maximum daily quantity) at a constant rate across the gas day⁶; and
- An NTS "flexibility capacity" product. This product allows users to vary their offtakes from the NTS throughout the gas day relative to the constant rate implied by a user's holding of flat capacity. NGG considered it likely that this product would be purchased by some GDNs with a diurnal flow profile and other users of the network that might offtake gas at a variable rate, such as gas-fired electricity generators.

NTS Exit "Flat Capacity"

The main characteristics of the proposed "flat capacity" product are:

- Long term allocation of existing "flat capacity": existing "flat capacity" would be made available at regulated prices. Existing users are assumed to have "prevailing rights" for such capacity and would be required to give 14 months notice should they wish to reduce their requirements.
- Long term allocation of incremental "flat capacity": incremental "flat capacity" (i.e. in excess of a user's prevailing rights) would be made available at regulated prices to all classes of network users, who would be required to commit financially to purchasing capacity rights for a four year period in order to trigger the release of incremental capacity (Users would be unable to reduce their aggregate requirements until the User Commitment period has been met).
- Medium / short-term capacity allocation: unsold capacity would be made available to network users in pay-as-bid auctions in the medium and short-term. Capacity would be offered for sale on a nodal (supply point) basis;
- Interruption arrangements: interruption of "flat capacity" would be managed by NGG NTS through the scaleback of the day-ahead interruptible product (made up of 'use it or lose it' (UIOLI) and NGG NTS discretion) and through the long-term buyback contracts with network users that NGG chose to contract with;
- Over-run charges: Overrun charges would apply if the aggregate end-of-day flow of all users at an exit point exceeded the aggregate end of day "flat capacity" held by all users at the exit point.
- Trading: shippers and GDNs would be able to trade capacity at a node but not between nodes, although GDNs would be able to request from the NTS (and vice versa) the ability to substitute capacity between nodes for operational reasons where this is possible.

NTS Exit "flexibility capacity"

The main characteristics of the proposed "flexibility capacity" product are:

- Long-term allocation of a new "flexibility capacity" product: A firm NTS exit "flexibility capacity" product would be made available in annual bundles of daily rights on a national basis but at a zonal level. These bundles would be sold through annual pay-as-bid auctions for Y+1 to Y+5 (inclusive).
- Short-term capacity allocation: NGG NTS would offer for sale "flexibility capacity" in daily auctions if a constraint emerges during a particular gas day. In the absence of a constraint, shippers and GDNs would be able to secure "flexibility capacity" through the existing Offtake Profile Nomination (OPN) processes.

⁶ That is, the rate of offtake should be the same for each hour of the gas day up to the maximum daily quantity.

- "Flexibility capacity" over-runs: As with "flat capacity", overrun charges would be applied to those shippers and GDNs who have used "flexibility capacity" but have failed to purchase sufficient volumes of the product. These charges would only apply where there is an aggregate over-run within a zone.
- Flexibility trading/ transfers: Users would be able to transfer and trade "flexibility capacity" across zones (subject to regional maxima).

Modification proposal 0116BV (raised by RWE)

The RWE alternative modification proposal, 0116BV, takes the NGG NTS proposal as its basis but amends some aspects:

- it increases the tolerance associated with the flexibility product, thereby allowing greater utilisation of flexibility before overrun charges would be incurred;
- it provides that overrun charges would only be payable in respect of flexibility rights on days when there are constraints in the release of flexibility;
- it provides the ability for users to signal their requirements for incremental flat capacity rights outside of the annual booking window each July;
- it provides for sites that are commissioned after 1 July 2007 and before 1 October 2010 to secure firm prevailing "flat capacity" rights; and
- it provides for NGG NTS to release more information regarding the operation of the flexibility arrangements including forecast and actual utilisation of "flexibility capacity" and flexibility overrun quantities.

Modification proposal 0116VD (raised by Scotia Gas Networks)

This proposal also takes the NGG NTS proposal as its basis, with certain variations:

- it increases the tolerance for the flexibility product so that users would be able to use more NTS flexibility before overrun charges would be incurred;
- it changes the NGG NTS liability provisions in circumstances where it has failed to make gas available for offtake; and
- it brings forward the date against which offtake pressure requests are submitted by GDNs to NGG NTS and subsequently confirmed by NGG NTS.

Modification proposal 0116CVV (raised by BGT)

This proposal takes the NGG NTS modification as its basis but proposes the removal of the requirement on users to apply for the new "flexibility capacity" product – in other words, the flexibility arrangements would remain as currently laid out in the UNC.

As such, under this proposal, GDNs would continue to acquire "flexibility capacity" up to a level determined by NGG NTS, but the requirement to purchase this product would not be extended to other large users connected to the NTS (known as Transmission Connected Customers – TCCs). Instead, NGG NTS would be required to introduce a regime of monitoring and publishing information on "flexibility capacity" utilisation. In the event that NGG NTS was unable to deliver flexibility capacity on any gas day, NGG NTS would have the ability to reject nominations that are not consistent with holdings of flexibility capacity.

The BGT proposal also adopts a number of the changes contained in the RWE Trading proposal (0116BV) including the release of information (relating to forecast and actual

use of flexibility close to the gas day) and providing users with the ability to signal requirements for incremental "flat capacity" outside the annual July application window.

Modification proposal 0116A (raised by E.ON)

This proposal provides for the transitional offtake arrangements to be extended indefinitely and seeks to remove the "sunset" clause on these arrangements from the UNC.

Modification proposal 0195 (raised by RWE)

On 30 January 2008, RWE Trading proposed a new modification to the UNC relating to offtake arrangements. This proposal represented a consensus view of Review Group 166, whose report was published on 13 February 2008. It closely resembles 0116CVV in that it incorporates the 0116 proposals regarding flat and interruptible capacity but would not introduce a flexibility product. The proposal also incorporates a number of other adjustments from 0116CVV, the most important of which are:

- the inclusion of an ability to nominate an Exit Capacity Booking Agent for the initialisation process;
- some variations in the provisions for relinquishing enduring capacity;
- the inclusion of Modification 0139 principles, allows Distribution Networks to amend their flat requirements in the last 2 weeks of September if their Flexibility and/or pressure requests have not been met;
- provisions to allow Users to apply for additional enduring flat capacity (whether at new or existing exit points) outside of the Annual Application Window; for existing capacity, this ability only applies for defined large increments;
- the allocation of annual "flat capacity" via the July Application Window rather than through a pay-as-bid auction
- the inclusion of the 0.52p/kWh investment buyback limit:
- removal of NGG NTS liabilities where buybacks should have been undertaken; and
- the inclusion of a requirement on NGG NTS to publish (on D+1 with an update on D+6 and subsequently if more accurate information becomes available) by NTS Exit Zone, the quantity of gas offtaken by all users between 06:00 and 22:00, the quantity of gas offtaken by all users for the whole day and the flexibility utilised by all Users, the opening linepack and the actual closing linepack by Linepack Zone.

Modification proposal 0195AV (raised by E.ON UK)

On 21 February 2008, E.ON UK raised an alternative modification to 0195. This modification was subsequently varied and re-submitted as 0195AV. The main difference between 0195 and 0195AV is that NGG NTS would be required to make available daily interruptible capacity on all days when demand is forecast to be less than 80% of: the 1-in-20 peak day demand (this would be known as 'Off-Peak' NTS Exit (Flat) Capacity); plus UIOLI; plus any additional interruptible released at NGG NTS discretion. By contrast, under 0195⁷ NGG NTS would only release daily interruptible based on UIOLI and NGG NTS discretion.

The key features of the proposal are:

⁷ This is also true for all of the 0116 set of proposals, except 0116A under which the current arrangements would remain

- the volume of Off-Peak capacity that NGG NTS is required to make available at an exit point would be the "unsold" capacity at that exit point - defined as the difference between the maximum theoretical offtake rate⁸ for that exit point and all of the firm capacity holdings for that exit point (enduring, annual and daily);
- existing Users would be able to relinquish some or all of their prevailing rights entitlement if they were prepared to rely on obtaining Off-Peak capacity; and
- where a User incurred an overrun (irrespective of whether they hold Off-Peak capacity) the User would be required to apply for a volume of Enduring NTS Exit (Flat) Capacity equal to their maximum overrun for the subsequent 4 years.

Figure 1 illustrates the key differences with regard to the release of day-ahead interruptible capacity between the 0195AV modification and the other modification proposals (except 0116A).

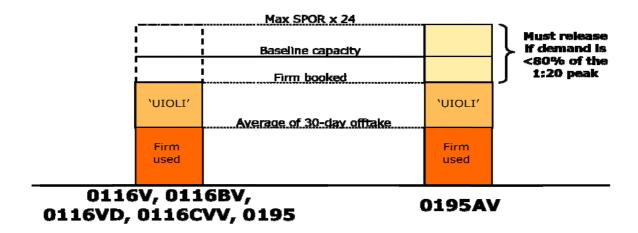


Figure 1 – key differences between 0195AV and other modification proposals with respect to the release of day-ahead interruptible capacity.

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⁸ The proposal calls this the Maximum Supply Point Offtake Rate (Max SPOR) and is defined as the rate of offtake (in kW) which NGG NTS determines to be the maximum instantaneous rate at which it is feasible to make gas available at a given offtake point under optimum operating conditions, taking into account the capability of the gas consuming plant

The key elements associated with each of the seven modification proposals are summarized in Table 1 below:

	User Commitment	Interruptibility	Flexibility
0116V	Prevailing rights (old) + 4 year commitment (new)	Long term buyback + day ahead interruptible release	Long term + short term sale of flexibility product
0116A	Extend transitional arrangements	Extend transitional arrangements	Extend transitional arrangements
0116BV	Transition to 0116V	As 0116V	Limits on flex overruns (incl. increased tolerances)
0116CVV	As 0116V	As 0116V	Monitoring regime only
0116VD	Some changes to 0116V allocation timings	As 0116V	Limits on overruns – increased tolerances
0195	Some changes to 0116V allocation rules + agent concept	As 0116V	Monitoring regime only
0195AV	Some changes to 0116V allocation rules + agent concept	As 0116V but prescribed volumes "off peak" are included in day ahead release and could be scaled back	Monitoring regime only

Table 1 - Key elements associated with each modification proposal

UNC Panel⁹ recommendation

The UNC Panel met to consider the 0116V, 0116BV, 0116VD and 0116A proposals on the 22 December 2006. It voted by majority to reject proposals 0116V, 0116BV and 0116VD. The UNC panel recommended approval of 0116A.

The UNC panel met to consider proposal 0116CVV on the 8 January 2007. It voted by majority to reject this proposal.

A separate Modification Panel meeting was held to evaluate proposals 0195 and 0195AV on 17 April 2008, following the CC's decision. The panel voted unanimously in favour of implementing modification proposal 0195. At the same time, the panel voted

⁹ The UNC Panel is established and constituted from time to time pursuant to and in accordance with the UNC Modification Rules

unanimously in favour of implementing proposal 0195AV. The panel then proceeded to a third vote, which determined that, of the two proposals, 0195AV would better facilitate the achievement of the Relevant Objectives¹⁰.

Following concerns raised by GDNs regarding their potential exposure to a TO Exit Commodity charge¹¹ (which their licence would not allow them to recover from shippers) should UNC195AV be implemented in its current form, the Panel held an emergency meeting on 4 December 2008. The Panel noted that revised legal text prepared in advance of this meeting reflected the original intent of the modification proposal and agreed to consult on this modified legal text; this consultation closed out on 15 December 2008. A supplementary report on this consultation was provided for the Authority; this report noted that all respondents were in agreement that the modified legal text resolved the GDNs concerns and did not alter the original intent of the modification proposal.

Impact assessment and consultation

Following the CC's decision, Ofgem issued a new impact assessment on the modification proposals¹². The impact assessment assessed the potential costs and benefits of modification proposals 0116V, 0116BV, 0116CVV, 0116VD, 0195 and 0195AV against the 0116A proposal (to continue operating under the transitional arrangements). Where possible, we quantified these costs and benefits but where we couldn't do this we assessed qualitative costs and benefits.

Our rationale for publishing this impact assessment was:

- to reconsider some of the assumptions and take account of the debate that had informed the February 2007 impact assessment in light of concerns raised by the CC and industry participants; and
- to expand the assessment to incorporate modification proposals 0195 and 0195AV.

Industry participants were invited to provide feedback on the new impact assessment following an industry workshop at Ofgem on 22 July 2008¹³.

The Authority's decision

The Authority has considered the issues raised by the modification proposals, taking into account the opinions put forward by industry participants during the consultation process that followed the CC's ruling of July 2007. The Authority has also taken into account the views expressed by the CC itself as part of its July 2007 ruling and the recommendations of the UNC Panel that met on 17 April 2008. The Authority has concluded that:

 $^{^{10}}$ Of the ten votes cast, three were in favour of implementing proposal 0195 in preference to 0195AV, whereas five were in favour of implementing proposal 0195AV in preference to 0195.

 $^{^{11}}$ Ofgem issued a letter on this matter, which can be found online at:

http://www.ofgem.gov.uk/Networks/Trans/GasTransPolicy/offrev/Documents1/Uniform%20Network%20Code.pdf

¹² This impact assessment can be found online at:

http://www.ofgem.gov.uk/Networks/Trans/GasTransPolicy/offrev/Documents1/Offtake%20IA%20Jul08%20Fina 13 The responses to the impact assessment can be found at:

http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=28&refer=Networks/Trans/GasTransPolicy/offrev

- 1. implementation of the arrangements proposed by modification proposals 0116V, 0116A, 0116BV or 0116VD would not better facilitate the achievement of the Relevant Objectives of the UNC¹⁴;
- implementation of each of modification proposals 0116CVV, 0195 and 0195AV would better facilitate the achievement of the Relevant Objectives of the UNC; and
- 3. of these proposals, 0195AV best facilitates the Relevant Objectives, meets the Authority's principal objective and is consistent with the Authority's statutory duties.

The Authority therefore directs that modification proposal 0195AV be implemented.

Reasons for the Authority's decision

In this section we set out the key issues that informed the Authority's decision and detail the Authority's assessment of the modification proposals against both the Relevant Objectives and its statutory duties.

We divide our discussion of the Authority's decision in to the three key elements of each modification proposal, namely:

- **User commitment arrangements**. That is, the extent to which a modification proposal introduces arrangements under which NTS users must provide some form of financial commitment to use the NTS;
- Interruption arrangements. The manner in which interruptible capacity is released to NTS users; and
- **Flexibility arrangements**. The manner in which the NTS flexibility is allocated to users of the NTS.

User commitment arrangements

All of the modification proposals apart from 0116A would introduce some form of user commitment under which users that trigger new investment would be required to commit to pay the prevailing transmission charge at that offtake point for a period of four years upon commissioning of the asset.

The Authority thinks that the proposed move to a four-year user commitment regime would promote efficient and economic system operation (Relevant Objective (a)) in three key respects.

- First, a four-year user commitment regime would provide NGG NTS with more
 efficient investment signals. By requiring parties seeking access to the NTS to
 underpin investment through financially backed user commitments, NGG NTS will
 receive more robust information about current and future demand for network
 capacity than is currently the case. In particular, the introduction of long term user
 commitment models should encourage users to consider more carefully their capacity
 requests. This will reduce the risk of NGG NTS investing in more capacity than is
 required.
- A second benefit, although of a lower order of overall magnitude than the first, is the fact that the introduction of a clear and transparent user commitment framework for

As set out in Standard Special condition A11(1) of the Gas Transporters Licence, see: http://epr.ofgem.gov.uk/document_fetch.php?documentid=13354

incremental "flat capacity" bookings would reduce the incidence of bilaterally-negotiated Advanced Reservation of Capacity Agreements (ARCAs). This would reduce the transaction costs associated with negotiating the terms of these ARCAs and would reduce the costs and delays associated with ARCA disputes and requests for Ofgem to determine these disputes.

• Third, the introduction of a four-year user commitment framework would also lead to a more proportionate allocation of risk to shippers, suppliers and customers. The Authority thinks that shippers are better placed than the network companies to manage the risks associated with whether investment should be triggered on the NTS and considers that it is reasonable that users who trigger investment in the network should bear a higher proportion of the risk associated with this investment than they currently do. The CC took a similar view in its July 2007 ruling¹⁵.

With regards the economic and efficient operation of the pipe-line system, the Authority is of the view that 0116A, which would retain the status quo, does not better facilitate the Relevant Objectives, and it considers that each the remaining proposals do to some extent. A number of industry participants in the consultation process acknowledged that there was a case to be made for greater user commitment, although there was some disagreement on the quantification of the benefits¹⁶ (which we estimated at £28.4m in our July 2008 IA).

Under both 0195 and 0195AV, users may apply for increases in Enduring Exit (Flat) Capacity outside the Annual Application Window if the increase would result in their level of enduring NTS Exit (Flat) Capacity exceeding 125% of the sum of the prevailing baseline and any obligated incremental Capacity, or if the increase would be greater than 10GWh/day. The Authority therefore considers that the 0195 proposals constitute a further refinement of the arrangements for user commitment insofar as they introduce additional flexibility into the arrangements.

Finally, the Authority also considers that 0195AV's proposal to require users to apply for additional Enduring NTS (Flat) Capacity in the event of an overrun *could* promote efficient and economic system operation (Relevant Objective (a)). But it is important that NG NTS keeps this part of the regime under review and makes sure that the overrun arrangements provide appropriate incentives on shippers to book firm capacity and are not excessive imposing inappropriate costs and risks on shippers.

Interruptibility

All of the modification proposals except 116A allow for interruption to be managed through the use of long-term contracts, UIOLI capacity auctions and the provision of further day-ahead interruptible capacity. The Authority considers that, in relation to interruptibility, all of the proposed modifications apart from 0116A would better the efficient and economic operation of the pipe-line system (Relevant Objectives (a)).

See paragraph 6.24 of the CC ruling (as referenced in footnote 5)

Some industry participants expressed concern that Ofgem's attempt to quantify the likely efficiency benefits was not robust because it made use of a single instance of disallowed revenue at a single entry point. One respondent also criticised the use of capital expenditure between 2008 and 2012 to project capital expenditure until 2027, arguing that investment in CCGT is unlikely to be sustained throughout the period.

The provision of a long-term buyback product should enhance the efficiency of system operation by providing NGG NTS with an additional tool that could allow it to prevent unnecessary investment in incremental capacity in a cost-effective manner. The Authority considers that additional network investment may not *always* be the most cost-effective way of meeting a user's request for additional capacity; rather, there may be circumstances where it might be possible to free up this capacity more cheaply by buying it back from another user or having the option to buy it back for a limited number of days when network capacity peaks. Capacity buyback contracts could therefore help alleviate constraints in a more cost-effective and/or timely manner. These contracts may prove attractive to users who currently book interruptible capacity and hence there may be competition to obtain such contracts, although this competition is likely to be local in nature. Therefore, the Authority considers that modification proposals 0116V, 0116BV, 0116VD, 0116CVV, 0195 and 0195AV should promote competition between shippers in the provision of interruption services to NGG NTS and better facilitate the achievement of objective (d).

The Authority has considered carefully the differences between the modification proposals in respect of the release of interruptible (or "offpeak") capacity at the day ahead stage.

A key consideration for distinguishing between the proposals is the extent to which it is appropriate for NGG NTS to have discretion when it releases interruptible capacity at the day ahead stage (as per most of the proposals) or whether the volume of capacity that is released should be set through rules set out in the UNC (as per 0195AV). In theory, NGG NTS has strong financial incentives to sell all the interruptible capacity that it is efficient for it to do so, since under its System Operator (SO) incentives NGG NTS will be able to retain the profits from such sales. However, since interruptible capacity is being offered on a nodal basis, in many instances only one shipper will participate in each auction for capacity and these auctions have a zero reserve price. The price of interruptible capacity may be zero or very low for much of the time (except possibly at peak periods when the probability of interruption is high). This may mean that in practice, NGG NTS will have little financial incentive to offer discretionary interruptible capacity¹⁷. For this reason the Authority concluded that at this time, the rules-based approach of 0195AV should ensure sufficient capacity is made available and that such an approach might deliver a more economic and efficient operation of the pipeline system (Relevant Objective (a)). 195AV should also inform shippers as to both the general availability of interruptible capacity and the NTS capability, thereby alleviating the effects of the informational asymmetries that currently exist.

The Authority considers that where possible and appropriate discretion, supplemented with an appropriately incentivised pipe-line system operator, is preferable to a rules-based system which is likely to lead to a sub-optimal outcome; for example, with a rules-based approach, there is a risk that some of the product is unavailable to the market (ie sterilised) due to failings in the rules that govern the release. However, we accept that the new arrangements mark a significant change and we understand shipper concern about relying solely on discretion, incentives and ex post action by Ofgem, and therefore think rules are appropriate for a transitional period. This view is reinforced by the manner in which the nodal allocation of capacity dilutes the incentive for capacity release, as described above.

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interests is another matter).

¹⁷ Ofgem is aware that it is conceptually possible at least to design an incentive scheme that rewards NGG for release of interruptible capacity regardless of the price level (although whether this would be in customer

With this in mind, we would expect NGG NTS to keep under review their ability to move to a zonal capacity allocation scheme, and by no later than two years post implementation of this decision NGG NTS should implement a review on the merits of moving to zonal capacity allocation mechanism (if they have not already) with discretionary capacity release. By that stage, shippers should have a much greater understanding of the operation of the new arrangements and a track record of interruptible capacity release volumes which should deal with their current concerns.

In some respects, the changes proposed under 0195AV mean that the interruption arrangements will be relatively similar to the current arrangements. Given that demand is very rarely greater than 80% of the 1 in 20 peak demand, the arrangements imply that interruptible capacity is likely to be available on all but the days with the highest demand. The Authority considered, therefore, two further issues: (1) whether the widespread availablility of interruptible capacity might lead to concerns of an effective cross subsidy between customers that acquire firm access and those that choose not to; and (2) the ability of all users to access the interruptible product.

Alongside the modifications to the UNC being considered here, NGG are currently consulting on the proposals to modify the gas transmission transportation charging methodology¹⁸. Under the Transmission Licence, revenue forgone (ie capacity charges from interruptible shippers had they been firm) is collected as SO incentive revenue. Once an enduring offtake regime is in place, these revenues will become part of the Transmission owner (TO) revenues. We do not consider it appropriate that those shippers that book firm exit capacity should have to bear all of the cost of the forgone revenue through increased exit capacity charges. Instead, it would be more appropriate that any shortfall between allowed exit revenue and exit capacity charge revenues is recovered through a commodity charge so that all users of the system (both firm and interruptible) contribute towards the transmission system costs and would expect the current charging consultation to reflect these views.

With regards access to the interruptible product, the Authority noted that none of the proposals allow shippers on the GDN networks to opt for interruptible capacity on the NTS. The issue about whether shippers or GDNs should book exit capacity for shipper customers on the GDN was discussed as part of the GDN sales process but it was rejected at the time. If GDN shippers or customers connected to the GDN network wished to use the interruptible service, a GDN shipper could raise a modification to allow them to book their NTS exit capacity directly and opt out of the current GDN booking system. They could then choose to take the risk of relying on interruptible capacity and buying "firm capacity" from other shippers and/or paying higher charges/overruns in the event of interruption if they thought this was more efficient. Any such proposal would be considered against the relevant objectives in the normal manner.

Flexibility

In relation to the reform of flexibility arrangements, modification proposals 0116V, 0116VD and 0116BV, NGG NTS would allocate flexibility rights to GDNs and shippers primarily through annual auctions. By contrast, modification proposals 0116CVV, 0195 and 0195AV would extend the transitional arrangements, but with enhanced monitoring

National Grid Consultation Document "Modification Proposal to the gas transportation charging methodology: NTS GCM 05: NTS exit (flat) capacity & exit reform". See http://www.nationalgrid.com/NR/rdonlyres/EE824BB0-AC5E-499E-8D26-EA9EA0218093/27085/NTSGCM052008NTSExitFlatCapacityPricesv2.pdf

of the availability of flexibility. Modification proposal 0116A also looks to extend the existing arrangements, but without the introduction of any flexibility monitoring.

Much of the industry opposition to the Authority's April 2007 Decision centred on the proposal to introduce the flexibility product. The CC also raised points about the arguments which had underpinned the Authority's decision to approve the introduction of a flexibility product in the context of E.ON's appeal. In light of these concerns, Ofgem undertook a comprehensive reappraisal of the case for the flexibility product; this reappraisal was set out in its July 2008 IA.

Following this reappraisal and having considered the responses received to Ofgem's consultation, the Authority remains of the view that the existing transitional arrangements for the allocation of exit flexibility capacity are unsatisfactory. However, the Authority has also reached the conclusion that, at least for the moment, developing an exit-based flexibility product might not be the best solution to address these concerns. There are two reasons for this:

- First, in their response to the July 2008 impact assessment, shippers continued to maintain that the costs of implementing the flexibility product are high.
- Second, there was highly conflicting evidence from National Grid and shippers about whether flexibility will become scarce on the NTS in the near future. This makes it hard for us to to assess the potential inefficiencies and costs that would arise if a flexibility product is not introduced.
 - A number of industry participants criticised the NGG NTS estimate on the grounds that it presented too conservative an estimate of the availability of flexibility. For example, TPA Solutions suggested that up to a further 18% of flexibility would be available, still using very conservative assumptions¹⁹. The Authority has concluded that is difficult to establish whether, and if so when, flexibility capacity will become scarce. It follows that the benefits associated with auctioning flexibility capacity are also, therefore, uncertain. In response to enquiries by Ofgem, NGG NTS concluded that a scarcity of flexibility would be likely to emerge by the winter of 2012/13. However, NGG NTS itself warned that both the demand for and supply of flexibility were subject to a number of parameters that are liable to change and therefore this forecast was itself subject so some uncertainty.

The Authority still thinks that auctioning flexibility capacity is an efficient way of revealing the value to shippers of flexibility and allocating flexibility when or if it becomes scarce: an auction mechanism would ensure that flexibility is awarded to the parties that value it most highly. The efficient allocation of scarce resources would in turn help reduce industry costs and may lead to lower prices for consumers. However, given shippers claims about the costs of implementing such a regime, in the absence of clear evidence that scarcity is likely in the near future, the expected benefits may not outweigh shippers's costs.

The Authority also considered the argument that the introduction of the flexibility product could reduce the potential for undue discrimination between GDNs and shippers in the allocation of flexibility. Under existing arrangements, different arrangements apply for GDNs and shippers with respect to the release of flexibility capacity. Whilst the Authority remains concerned that the existing arrangements may give rise to undue discrimination,

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¹⁹ The TPA Solutions report also investigated an apparent increase in demand for NTS flexibility. TPA concluded that increases in demand for flexibility could not be explained by increases in overall GDN requirements linked to forecast peak-day demand. Instead, the report suggested that a key driver has been a reduced reliance on flexibility provided within the GDNs.

the Authority has given less weight to these concerns in view of the absence of any conclusive evidence that flexibility is likely to be scarce.

A further consideration was whether the existing arrangements might give rise to the potential for undue discrimination between the independently owned GDNs and those owned by NGG. The Authority's noted that, whilst there might still be some potential for such undue discrimination to occur, in the three years that have passed since the sale of the GDNs, there have not been any complaints of such undue discrimination from the independent GDNs. Therefore, although there are concerns that such discrimination could still occur, the Authority has given less weight to the issue than previously. The Authority was also satisfied that if any evidence did emerge, it could take action swiftly against National Grid under the relevant licences .

It has become clear during the course of industry debate that flexibility is not solely an exit-related issue; behaviours at entry also impact on the level of flexibility available on the system. We are concerned that seeking to fix any potential problem at exit without due regard to corresponding measures at entry could be problematic and might lead to inefficiencies or unintended consequences. Therefore, rather than focusing exclusively on exit as the proposed flexibility products within the 0116 variants do, we believe that there is merit in adopting a more holistic system-wide view of the issue.

In light of the uncertainty about the impending likelihood of a scarcity of flexibility and the interaction of entry and exit which is not addressed by any of the 0116 variants, we have looked at whether there are other alternatives to deal with the issue that:

- a) are symmetric between entry/exit;
- b) reveal information about the likelihood of impending scarcity; and
- c) don't require shippers to incur significant costs unless it is clear there is a problem.

In this context, the Authority welcomes the monitoring and publication of information about flexibility capacity utilisation contained in the 0116CVV, 0195 and 0195AV proposals. Such information would enhance the transparency of system operation and could provide an early warning of an impending scarcity of flexibility without imposing significant costs on industry.

Our IA proposed a dual strategy of clarifying and simplifying NGG's existing operational tools to limit shippers' ability to vary flows at entry and exit, and establishing an incentive scheme for NGG NTS on the management of system-wide flexibility as a means of addressing the potential problem. This was widely welcomed by respondents to the IA and the Authority considers the future progeression of these issues as an integral part of its reasoning for favouring UNC 0195AV over the 0116 flexibility variants. Accordingly, we expect NGG NTS to initiate a workstream with industry to further explore the options around these principles such that any necessary UNC modification proposals and/or licence changes to facilitate these can be in place by October 2009.

Overall assessment of the proposals against the Relevant Objectives

For the reasons outlined in the previous sections, the Authority considers that modification proposal 0195AV would best facilitate Relevant Objectives (a) to (d). The Authority's conclusions are summarised below.

Objective (a) (Standard Special Condition A11(1)(a)): the efficient and economic operation of the pipe-line system to which this licence relates.

The Authority considers that the introduction of greater user commitment under all modification proposals (except 0116A) would facilitate this objective by providing NGG NTS with more efficient investment signals and reducing the potential for ARCA disputes. In addition to this, the Authority believes that modification proposal 0195AV would further enhance the efficiency of system operation by introducing more flexibility into capacity booking arrangements and providing better information to NG NTS about future demand for exit capacity on its system leading to better and more efficient investment decisions.

The Authority considers that the long-term buyback arrangements and day-ahead auctions for interruptible capacity would also promote the efficient and economic operation of the pipe-line system. Providing NGG NTS with the ability to buy back long-term capacity from users would help prevent unnecessary investment in additional capacity. Day-ahead auctions would help ensure that interruptible capacity is awarded to users that value it most highly in the event that it should become scarce. These proposals are common to all modification proposals (except 0116A). However, modification proposal 0195AV also requires NGG NTS to make available daily interruptible capacity on all days when demand is forecast to be less than 80% of the 1-in-20 peak day demand. As discussed, the Authority believes this requirement to be more conducive to the efficient operation of the pipe-line system for a transitional period whilst shippers become familiar with operating under the new arrangements and gain more understanding of (and confidence in) NGG's release of interruptible capacity.

The Authority considers that due to the uncertainty as to the likelihood of a scarcity of flexibility and the lack of consideration of the interactions between entry and exit in relation to the total system flexibility, the introduction of a flexibility product solely focussed on exit, as proposed by modification proposals 0116V, 0116BV and 0116VD would not be conducive to the economic operation of the pipe-line system.

Overall, when considering the issues of user commitment, interruption and flexibility, the Authority concluded that Modification Proposal 0195AV would better facilitate Relevant Objective (a), relative to the other modification proposals raised in this context.

Objective (b) so far as is consistent with sub-paragraph (a): the co-ordinated, efficient and economic operation of (i) the combined pipe-line system, and/or (ii) the pipe-line system of one or more other relevant gas transporters.

The Authority considers that even in the absence of scarcity, the introduction of flexibility auctions should provide some signals to NGG NTS as to the value that GDNs and shippers place on flexibility, which can then influence NGG NTS's decisions on its allocation or necessary investments. The existence of this price information would also enable GDNs to compare the costs of buying flexibility with the costs of investing in flexibility capacity on their own networks. This would better facilitate objective (b).

However, in light of claims about the costs of implementing widespread flexibility auctions, the absence of clear evidence that exit flexibility scarcity is likely in the near future and the benefits of considering the flexibility issue on a system-wide basis, the Authority considered that UNC195AV better facilitated this relevant objective than the UNC116V and related suite of proposals.

Objective (c): so far as is consistent with paragraphs (a) and (b), the efficient discharge of the licensee's obligations under this licence;

The Authority considers that it has addressed the matters relevant to the efficient discharge of the licensee's obligations through its consideration of Objectives (a), (b) and (d).

Objective (d): so far as is consistent with sub-paragraphs (a) to (c) the securing of effective competition between relevant shippers; between relevant suppliers; and/or between DN operators (who have entered into transportation arrangements with other relevant gas transporters) and relevant shippers;

For the reasons set out above, the Authority considers that where scarcity exists, the introduction of the long term buy back product and the day-ahead auctions that would be proposed by all modification proposals (except 0116A) would facilitate greater competition for interruption and interruptible capacity. However, given the uncertainty associated with the likelihood of scarcity of flexibility capacity in the near future, we do not consider it prudent to claim that any of the modification proposals better facilitate this relevant objective

Assessment against the Authority's statutory objectives and duties

As well as evaluating how well each of the modification proposals would facilitate the Relevant Objectives, the Authority must consider whether the implementation of 0195AV is consistent with its principal objective and statutory duties.

The Authority's principal objective, as set out in section 4AA of the Gas Act, is to protect the interests of consumers in relation to gas conveyed through pipes, wherever appropriate by promoting effective competition between persons engaged in, or in commercial activities connected with, the shipping, transportation or supply of gas so conveyed.

Having assessed the proposals against the relevant objectives, the July 2008 impact assessment the statutory duties of gas transporters and the Authority's own statutory duties, the Authority considers that modification proposal 0195AV best meets the principal objective.

The Authority's views in relation to two of its statutory duties – the need to promote the efficient use of gas and the need to avoid any undue preference or undue discrimination – have already been outlined above. In addition to this, the Authority believes that its statutory duties require it to consider any implications that proposal 0195AV would have for the following:

- security of supply
- health and safety
- better regulation

We discuss each of these issues in turn.

Security of supply considerations

The Authority believes that 0195AV's proposed reforms to user commitment and interruptible arrangements would be conducive to security of supply in more than one respect.

- For reasons outlined above, the Authority believes that increased user commitment
 will provide NGG NTS with more accurate information on the need for investment in
 additional capacity than is currently the case. This would enhance security of supply
 by ensuring that investment is channelled into those areas of the NTS that are
 experiencing the strongest increases in demand for capacity.
- Proposal 0195AV introduces additional give in the arrangements by allowing users to apply for increases in Enduring Exit (Flat) Capacity outside the Annual Application Window under certain conditions. This means that new users, such as CCGTs, can acquire capacity quickly, thereby enhancing security of supply in the electricity market.
- Furthermore, the long-term capacity buyback option should increase the security of supply by providing NGG NTS with more options to meet demand for capacity.

During the consultation process, some industry participants expressed concern that the new interruption arrangements could compromise the security of supply by discouraging investment in storage facilities. Storage users – like any others - need to face the appropriate costs they impose on the system. Storage sites can choose to go firm or interruptible; if their costs rise as a result of going firm or as a result of competitive bidding for interruptible capacity then they would seek to recover these in the charges they levy. We think this is an efficient outcome; otherwise we would be favouring one form of storage over others by not properly reflecting their capacity costs. Other forms of storage and substitutes for storage include the use of back-up fuels at Combined Cycle Gas Turbines (CCGTs) and the utilisation of storage in Europe which can be accessed via gas interconnectors.

One area in which the Authority does have concerns regarding the security of supply relates to the proposed arrangements for allocating flexibility in the event that scarcity arises. In its April 2007 Decision the Authority noted that the existence of scarcity in flexibility creates the risk that some gas fired generators may not be able to offtake gas at the rate they desire. Other things being equal, restrictions on the ability of generators to generate may place upward pressure on electricity prices. By contrast, the introduction of flexibility auctions would enable generators that value flexibility the most to purchase this capacity when they may otherwise have been prevented from doing so.

Whilst the Authority considers that there is at present insufficient justification for introducing flexibility auctions, the Authority nevertheless considers that this strengthens the case for the development of additional incentive-based flexibility management tools for NGG NTS of the kind described in our July 2008 IA.

The Authority believes that modification proposal 0195AV enhances the security of supply relative to existing arrangements by providing additional monitoring and publication of information regarding the availability of flexibility capacity. The Authority considers that this could help provide early warning of an impending scarcity of flexibility, thereby giving parties time to formulate a response.

Safety considerations

The Authority believes that the reforms associated with modification proposal 0195AV will not diminish safety standards. During the consultation process, some industry participants suggested that the reforms would be likely to lead to less interruptible capacity being available with the result that an emergency scenario would more rapidly lead to Stage 3 of a National Gas Supply Emergency (NGSE). However, given the rules-

based approach to releasing interruptible capacity within 0195AV, we do not anticipate any significant decline in the number of parties likely to remain interruptible so there should not be a more rapid escalation to stage 3 of NGSE as a result of this Decision by the Authority.

The Authority recognises that development of the NGG NTS and GDN safety cases will be required and that revisions to the safety cases must be accepted by the HSE before they can be made. The Authority believes that this requirement should avoid any changes that would diminish safety standards.

Implications for sustainable development

The Authority considers that the implementation of modification proposal 0195AV would have a direct and beneficial effect on sustainable development by providing NGG NTS with the tools and price signals it requires to invest in the NTS in a more efficient manner. This brings benefits through the avoidance of both unnecessary investments and the consequential environmental impacts that entails.

Better Regulation

The Gas Act stipulates that the Authority must have regard to the principles of better regulation. As far as is practicable, the Authority should seek to promote regulatory arrangements that are transparent, accountable, proportionate, consistent and targeted. The Authority considers that the implication of modification proposal 0195AV is consistent with the principles of better regulation. In particular, the Authority considers that the implementation of these arrangements will improve the transparency of system operation, for example by increasing the monitoring and publication of information about the availability of flexibility capacity.

The Authority would also note that it has had regard to the principles of better regulation in considering whether it is appropriate for flexibility auctions to be introduced. In this respect, the Authority concluded that, at this time, it would not be proportionate to introduce flexibility auctions given the costs associated with implementing them and, combined with this, the absence of conclusive evidence of scarcity in the availability of flexibility capacity.

New duties under the Energy Act

The Energy Act 2008 (the "Energy Act") contains provisions which, once commenced, will modify the general duties of the Authority in carrying out its functions under the Gas Act 1986 and the Electricity Act 1989. In particular, those changes will mean that, when carrying out its functions in the manner which it considers is best calculated to further its principal objective, the Authority must do so by having regard to the need to contribute to the achievement of sustainable development equally with the need to have regard to the need to secure that all reasonable demands for electricity and gas are met and that licensees are able to finance their regulated activities.

It has also been highlighted within the text of the principal objective that the Authority's consideration of the interests of consumers includes both future as well as existing consumers.

The Energy Act received Royal Assent on 26 November 2008 but these provisions do not have legal force until they are commenced. We do not yet have a commencement date for the new provisions but it is likely to be early in 2009.

During the period between the Energy Act having received Royal Assent and commencement of the provisions which affect its duties, the Authority must continue to apply the principal objective and its statutory duties in accordance with the Gas Act 1986 and the Electricity Act 1989 as they currently stand (i.e. prior to the Energy Act amendments taking effect), although it will be mindful of the changes that are forthcoming. The Authority already takes account of sustainable development in its decisions but with the change in duties the weight that is attached to such considerations will be increased.

We do not believe that our decision in relation to the UNC116 and UNC195 modification proposals would have been affected had these changes been in effect at the time of the Authority's decision.

Other considerations

Treatment of parties downstream of the Moffat Interconnector

The Moffat pipeline connects the NTS to the transmission systems of Northern Ireland, the Republic of Ireland and the Isle of Man. Currently, the security of supply of these countries and jurisdictions is heavily reliant on gas that flows through this interconnector. Consequently, the parties from those jurisdictions are concerned that any changes to the current regime could have an adverse impact on their security of supply. The current system incorporates a "ticket-to-ride" concept whereby shippers can only book capacity at Moffat if they have a matching order for that capacity from one of the downstream parties; capacity can only be issued for that purpose. The main concern regarding the proposed 0195AV regime is that the existing shippers will be allocated the enduring rights to the capacity without the ticket-to-ride arrangement, thereby creating the potential for a mismatch between upstream bookings and downstream requirements, thereby endangering downstream security of supply. It could also open the possibility for those upstream shippers to hold the downstream parties to ransom through hoarding of that capacity. There are additional issues regarding the impending application of exit capacity substitution and how that might affect the availability of capacity at Moffat in the longer term, but these risks are independent of the advent of enduring exit reform.

Ofgem and the parties downstream of Moffat are signatories to the regulatory interregional protocol²⁰ which facilitates co-operation and consultation on any regulatory changes which might impact on other regulatory regimes. During the enduring exit reform processes, Ofgem has held a number of meetings with these regulators in order to explain our views and to understand better their concerns in relation to these proposals. But we understand the parties downstream of Moffat still retain a number of concerns.

The Authority can assure the downstream parties that if the Moffat shippers act in such a manner to abuse their position, we will pursue any such complaints quickly and effectively. As previously stated, the issues with regard the introduction of exit capacity

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²⁰ 'Memorandum of Understanding: co-operation agreement between the energy regulators of the North West region of the Gas Regional Initiatives (NW GRI)' – signed on 23 October 2007

substitution are outwith the exit reform regime and we will discuss and consult with them further before any decisions are reached on this matter.

We remain open to the prospect of parties raising further UNC modification proposals in relation to Moffat, which we would assess as normal against the Relevant Objectives.

Legal status of the 0116 proposals

During the June-September 2008 consultation, some industry participants expressed uncertainty as to whether modification proposals 0116V, 0116A, 0116BV, 0116CVV or 0116VD could legally be implemented given that some of the dates specified in these proposals have now passed. Views differed as to whether a *Consent to Modify* could be used to address this issue. The Authority acknowledges that there is some doubt as to whether it has power to direct implementation in these circumstances.

The Authority's approach has been to consider first the 0116 suite of modification proposals and proposals 0195 and 0195AV on their merits, with a view to addressing the issue of implementing out-of date proposals if that became necessary. The July 2008 Impact Assessment and industry consultation process therefore continued to evaluate the proposals for offtake arrangements proposed by each of the 0116 and 0195 modification proposals.

In the event, the Authority has decided to consent to proposal 0195AV on its merits and has not needed to consider whether it has power to implement out-of date proposals.

Impact on small businesses

The Authority does not consider that the implementation of modification proposal 0195AV would have any significant direct impact on small businesses.

Compliance with European Law

The Authority believes modification proposal 0195AV to be compliant with European law.

The Authority has previously expressed its concern about the compliance of the existing transitional arrangements for interruptible capacity with the European Transmission Access Regulation EC No 1775/2005, which requires that interruptible capacity products be priced on the basis of probability of interruption. The Authority believes that proposal 0195AV goes some way towards alleviating these concerns.

- The day-ahead UIOLI auction mechanism should ensure that bid prices reflect (at least in part) users' willingness to pay for interruptible capacity.
- This willingness to pay for interruptible capacity will be determined by the relative attractiveness of firm and interruptible capacity to users.
- This relative attractiveness should in turn be a function of the perceived probability of being interrupted in the event that the interruptible product is purchased.

For reasons already outlined, the Authority considers that a move to formal zonal arrangements would further enhance competition for interruptible capacity and lead to prices that better reflect the probability of interruption relative to the proposed modifications.

Implementation timeframe

Modification proposal 0195AV is to be implemented by 1 April 2009. Some industry participants expressed concerns regarding the timeframe for implementing modification proposal 0195AV. However, the Authority refers to the Modification Report on the Introduction of Enduring NTS Exit Capacity Arrangements produced by the Joint Office of Gas Transporters on 17 April 2008, which concluded that 1 April 2009 would be a realistic implementation date²¹.

Future work

Notwithstanding the comparative simplicity of the 0195AV modification relative to those that introduce a flexibility product for shippers, we recognise that there is a significant amount of work to be done to implement this reform; the implementation date is particularly challenging. NGG NTS has drawn up work plans for the various proposals and there will be a significant interaction with the affected parties in order to realise this change; we trust that the industry will fully engage with and support this work program.

Our Decision to approve UNC 0195AV as against the 0116 variants which introduced a flexibility product was based on NGG NTS progressing two future strands of work:

- Consideration of whether a move from a nodal to a zonal capacity allocation mechanism for capacity would enhance the competitiveness of the allocation regime, alongside a move from the rules-based scheme of 915AV to an incentivebased discretionary allocation scheme. We consider that this should be done within two years of implementation of this decision.
- Reviewing the impact of entry and exit on the availability of system-wide flexibility and instigating procedures for managing the availability of flexibility. Our initial view is that this could be effected by clarifying and simplifying NGG's existing operational tools to limit shippers' ability to vary flows at entry and exit, and establishing an incentive scheme for NGG NTS on the management of system-wide flexibility. We expect this work to be progressed such that any necessary UNC modification proposals and/or licence changes to facilitate these can be in place by October 2009.

Decision notice

In accordance with Special Standard Condition A11 of the Gas Transporters Licence, the Authority hereby directs that the modification proposal 0195AV be made, with a recommended implementation date of 1 April 2009.

Stephen Smith Managing Director, Networks

Signed on behalf of the Authority and authorised for that purpose

See http://www.gasgovernance.com/NR/rdonlyres/7CA8EAA9-7B23-411F-9A12-AD7091E918EE/25056/01950195AVFinalModificationReportv20.pdf, pp36-37