Offtake Arrangements Workstream Minutes Wednesday 15th February 2006 held at Novotel Birmingham Airport

Attendees

John Bradley (Chair)	(JB)	Joint Office
Dennis Rachwal (Secretary)	(DR)	Joint Office
Tim Davis	(TDa)	Joint Office
Bethan Winter	(BW)	National Grid DNCC
lain Ward	(IW)	National Grid DNCC
Andrew Fox	(AF)	National Grid NTS
Nigel Sisman	(NS)	National Grid NTS
Paul Roberts	(PR)	National Grid NTS
Steve Fisher	(SF)	National Grid NTS
Mark Freeman	(MF)	National Grid UKD
Paul Rimer	(PRi)	National Grid UKD
Phil Brown	(PB)	National Grid UKD
Steve Armstrong	(SA)	National Grid UKD
Brian Stoneman	(BS)	Northern Gas Networks
lan Johnson	(IJ)	Northern Gas Networks
Robert Cameron-Higgs	(RCH)	Northern Gas Networks
Tim Dewhurst	(TDe)	Ofgem (PA Consulting)
Bert Keys	(BK)	Scotia Gas Networks
Beverley Grubb	(BG)	Scotia Gas Networks
Leyon Joseph	(LJ)	Scotia Gas Networks
Stephen Courtney	(SC)	Scotia Gas Networks
Andy Hayes	(AH)	Wales & West Utilities
Martin Davies	(MD)	Wales & West Utilities
Liz Spierling	(LS)	Wales and West Utilities

1. Topic 001OF NTS Exit Capacity Reform – Enduring Offtake Options

1.1. Background and aims

When established, this workstream Topic was to include a watching brief on developments that should lead to UNC Modification(s) as part of NTS Exit Capacity Reform. Development work in this area has been and continues to be led by Ofgem's Enduring Offtake Working Group (EOWG) as part of its TRANSMISSION PRICE CONTROL REVIEW¹ (TPCR). Presentations and minutes are available on Ofgem's web site from the meetings held 4th Jan, 18th Jan, 1st Feb, and 8th Feb this year. The aim of this workstream meeting was to brief a broader audience (drawn in particular from Distribution Networks) and to seek understanding and views to feed into the EOWG that is scheduled to meet on 24th Feb and 8th March.

In discussion the aspiration of attendees was identified as:-

• Discuss Ofgem's aims and objectives of NTS Offtake Reform (see 1.2 below)

¹ http://www.ofgem.gov.uk/ofgem/work/index.jsp?section=/areasofwork/transpcr

- Discuss reform options, considering the balance of complexity vs. ideal (see 1.3 below)
- Discuss Distribution Network (DN) planning and operational issues arising from the prevailing regime and proposals/options for reform (see 1.4 below)
- Discuss NTS planning and operational issues arising from the prevailing and proposals/options for reform
- Discuss implications for NTS and DN network investment.
- Develop input to EOWG.

1.2. Ofgem's Transmission Price Control Review 2nd Consultation – gas offtake

On behalf of Ofgem, TDe ran through a presentation (circulated with these minutes) that outlined the background for Transmission gas offtake reform, key principles, options (as set out in the consultation) with simple worked examples and a high level appraisal. TDe also set out the next steps as: an Industry Seminar 24-Feb (a.m.), EOWG meetings on 24-Feb (p.m.) and 8 March, and TPCR third consultation 31 March.

Regarding the example of Zonal baseline / nodal product option (EX3), TDe confirmed that the example showed 1:1 capacity transfer between nodes within a zone, and acknowledged this was may be a simplification from a real physical network. Similarly, LJ enquired about the potential for a node to be supplied by more than one feeder, in which case there was a case for capacity transfer between nodes. TDe acknowledged this but pointed out that such transfer could lead to complexity and difficulty in defining zonal boundaries.

It was noted that baseline could be both an output measure and a revenue driver. SA expressed the need to know the relative prices of nodes, as this should assist investment signals to transmission and distribution network owners. Ideally, prices should be cost reflective, and stable over many years to facilitate evaluation against LDZ investment. NS commented that the complex model included in "Towards a New Industry Framework" (TANIF) would give price certainty over 3 years. TDe observed that for price stability a "sustained demand" test might be needed.

In terms of the programme for implementation in September 2007, and using the assumption that a 12 month IT development programme may be needed, PR suggested UNC development should proceed in the second quarter of 2006, following on from scheduled EOWG meetings.

RCH asked Ofgem to note that network owners such as Northern Gas Networks were not in existence at the time of TANIF consultations. It should not therefore be assumed that there is established knowledge in such organisations on the TANIF model for NTS offtake.

MF asked Ofgem to note the linkage between DN interruption regime reform and NTS Offtake Reform.

Regarding the appraisal of the options set out by Ofgem, SA observed that whilst incentives for transmission were described, the impacts on DNs were not. PB suggested that the NTS Exit capacity process should allow 6-12 months for assessment of DN investment alternatives to NTS Exit capacity. PB also observed that for implementation, time should be allowed for potential changes in network operation.

BG observed that a nodal model may provide the best long-term investment signals but zonal may be more efficient for short-term allocation of capacity.

1.3. NTS Flexibility Capacity Product options

National Grid NTS (NS) ran through a selection of his EOWG presentation material from 18-Jan and 1-Feb to recap for the workstream the current flat and flexibility capacity products, outline potential refinements, and highlighted issues with the "Old NTS Exit Capacity Product". The presentation also included 3 examples of actual offtake

utilisation data for the period June-Nov 2005 and showed a comparison with the expanding flexibility model and other products. NS confirmed that whilst the focus in this workstream was DN offtake, the products put forward were for consideration for both Direct Connects (DCs) as well as DNs in keeping with Ofgem's prevailing aspirations.

Regarding the current arrangements, RCH enquired how DN OPNs were used and NS replied that transmission had the right to reject these but had not done so to date.

Regarding the flexibility utilisation assessment principle, IW observed that 22:00 hours may not always be maximum stress on the NTS. However he did feel it corresponded well to the time of maximum LDZ stock depletion. IW also observed that the operational effect of DN consumer demand changes could trigger flex utilisation.

Regarding the high / low flexibility products NS stated there would be further development work needed on the user commitment period for the low flex product.

Regarding the "Old NTS Exit Capacity Product", NS felt that the implied unlimited flex capability would need to be addressed, either by commercial tools, or major investment. NS felt that some mechanism was needed to manage flex utilisation.

NS stated that the basis for any expanding flexibility product would need careful consideration. For example there might be a theoretical justification for throughput:flex substitution to be based on a slope as steep as 4:5:1. However it is likely that the substitution between throughput:linepack availability will generally be based upon a slope which is lower than that implied by the theoretical justification.

Action 1014 National Grid NTS (NS) Provide slide to outline derivation for ratio for substitution of flex capacity for flat capacity. Closed Slide circulated with these minutes.

In response to an enquiry from BW, NS stated there was no entry equivalent to the exit flex product nor any current plans to develop such a product.

Regarding the 2 product / 1 product booking options for the expanding flexibility concept the following points arose:-

- i) The NTS was in principle designed for zero flexibility at 1 in 20 peak demand. However, it was recognised that operationally there would be flow variation and therefore flexibility required near peak demand.
- ii) The single product option would not provide information to transmission on the off-peak flexibility requirement. Additional information would be helpful to transmission but the risk of firm capacity products might be manageable, possibly involving an appropriate buy back mechanism. SA expressed concern that poor definition of flex requirement might lead to inefficient transmission investment
- iii) In order for DNs to meet their licence 1 in 20 peak demand obligations, they would rely on firm NTS exit capacity since they would not be obliged to sell when transmission wanted to buy back.
- iv) Some parties felt that the two-product option had a better intuitive relationship to DN investment however NS cautioned that it would not necessarily reduce uncertainty for transmission.
- v) Relating flex pricing to demand would add complexity.
- vi) It was not yet known how well the models describe actual capability

Regarding the example data, IW suggested that the background to excursions above OCS flexibility should be considered – what was happening at adjacent offtakes?, had transmission made requests to DNs to assist with NTS operation?, was some DN plant shutdown? NS expressed a view that aggregation may reduce the numerical value of flex utilisation assessment but he felt that it would not eliminate flex excursions above the level of OCS bookings.

MF sought a view on whether DN flex bookings should just be for planned diurnal storage requirement and NS replied that there may not be clear definition for this.

1.4. DN Operational and Planning considerations

IW, as manager of Distribution National Control Centre, ran through a presentation that set out the key stages and concepts of DN daily operations, and highlighted that NTS flow variation would be last in the order of utilisation of physical options for managing a 12-15% diurnal swing in demand. Factors that DNCC has to take into account included not only efficient security of supply, but also minimisation of LDZ CV capping, staying within metering accuracy range, managing the current population of pressure controlled offtakes, managing consumer demand changes, and responding to NTS change requests. Finally IW provided two examples of sample data of actual utilisation aggregated at LDZ level for the period Oct-05 to Feb-06 and these showed a small proportion of days where the OCS booked flex was exceeded.

In response to a query, IW indicated that CV management was an issue for many LDZs and may increase in the future. Similarly NTS – LDZ interaction that impacts offtake profile was stated to occur in many LDZs, and these may be as often as every few days.

Regarding offtake metering, an operational need might arise to switch gas offtake from a suspect meter to other offtakes such that incorrect odorisation or poor assessment of LDZ balance was averted. Such circumstances could incur substantial (e.g. 1 MCM) flexibility utilisation at two or more offtakes in order to manage safety.

LS enquired whether the more certain planned DN diurnal flex requirement could be differentiated from the operational flex requirement, and IW enquired whether certain flex utilisation might be exempt from overrun assessment. Also the potential interaction with energy balancing was raised as an issue – would DN consumer demand change lead to transmission re-balancing and should a NTS offtake flexibility capacity product address any or all of this?

NS expressed a view that DNs may be relying on more flexibility than OCS bookings provide, and that currently transmission would not be able to meet all needs. BG observed that the NTS had been built over many years and there had been no issue to date. NS replied that as transmission no longer has control over 80% of its offtake there needed to be safeguards against inappropriate behaviour change in the new regime of network ownership.

DN representatives requested indication from transmission as to where flat and flexibility capacity may be available but recognised that network planning tools do not readily facilitate this. Several parties recognised that a marginal cost for provision of NTS storage for DNs has been part of the investment process for some years. PR explained that the intention of reform was to provide opportunity for connecttees to provide investment signals to transmission. PR also stated there needs to be an allocation process for flat and flexibility capacity in the "constrained period" i.e. where there is insufficient lead-time for investment to create additional capacity.

1.5. Product options and current ability to evaluate

The product options were listed as follows and discussed:-

- 1. AS IS i.e. flow/flex for DNs and single product for DCs
- 2. Towards A New Industry Framework (TANIF)
- 3. Expanding Flexibility a) two product booking, b) single product booking
- 4. High flex product, low flex product

LS, expressed some support for 3 but this was qualified by the need to explore the rationale behind the slope of the line and other details.

BG, whilst wishing to see further development for 3, expressed a preference for 1, and agreed to consider addressing the perceived shortcomings of this option and feed into EOWG.

BG indicated the need to look at any potential transmission buy back mechanism and what the incentive regime for this might be.

In terms of investment signals, BG enquired what transmission would actually build in the event that some incremental flexibility capacity requirement was identified.

NS suggested that NTS Exit Capacity should be one of the cost drivers for DN transportation prices.

MF felt that a lack of knowledge of system capability compared to models was a barrier to evaluation but would support exploration of option 3.

RCH stated that NGN had insufficient detail to discount any option at present and advocated an approach whereby models were developed and tested against data and scenarios to see where they might break down.

1.6. NTS Exit Capacity Allocation Options

National Grid NTS (PR) stated that capacity allocation was another key element for the enduring regime and he briefly referred to elements of his EOWG presentation of 8th Feb. Specifically, PR referred to the 3 broad options for "long/medium term" firm capacity booking process (1. minimum change, 2. extended registration timescales or 3. long term auctions), and the year parameters "x", "y" and "z" for constrained release, release below baseline, and release above baseline.

There was insufficient time at this meeting to explain and discuss in detail but a preliminary view was that if only one option were developed then option 2. might keep both options 1 and 3 open.

1.7. Way forward

PR/NS acknowledged the requests for "straw-man/men" development but emphasised this was resource intensive to achieve a useful level of detail. There did not seem to be sufficient steer from DNs at this time to select a specific outline for business rule development. Following on from this meeting, the focus for development needs to be through EOWG, with UNC development coming at a later stage. DN representatives indicated that if Ofgem wanted rapid development and steer from EOWG then there may be a need for attendance of additional experts. TDe agreed to convey this view within Ofgem.

2. Topic 007OF Gas transporter cooperation on planning and investment in networks. (Transitional)

Action Closed OF1011 Draft terms of reference for this Topic have been prepared by LS of Wales and West Utilities.

There was insufficient time to discuss these draft terms of reference at this meeting so a teleconference was arranged for 13:00 hours 17-Feb-06 to move this forward before the next scheduled workstream meeting. *Post meeting update: Teleconference minutes and refined terms of reference circulated in parallel with these minutes.*

3. Date of next UNC Offtake Arrangements Workstream meeting

Date: Tuesday 28th February 2006

Venue: National Grid House, Warwick

Time: 13:00 hours

For the avoidance of doubt, in the light of 1.7 above, it is planned that the meeting on 28th Feb would receive no more than a brief update from EOWG of 24th Feb.