

Modification proposal:	Uniform Network Code (UNC) 254: Facilitating the use of forecast data in the UNC (UNC254)		
Decision:	The Authority ¹ directs that this proposal be made ²		
Target audience:	The Joint Office, Parties to the UNC and other interested parties		
Date of publication:	28 August 2009	Implementation Date:	To be confirmed by the Joint Office

Background to the modification proposal

Gas Transporters (GTs) use demand models to estimate the **daily demands** for Local Distribution Zones (LDZs), End User Categories (EUCs) and for LDZ Aggregate Non Daily Metered (NDM) Points. Demand models are defined separately by each GT and reference certain variables such as weather and day of the week; one such variable is the *Composite Weather Variable (CWV)*. The CWV's purpose is to aid the estimation of the combined effect on demand of actual temperature, seasonal normal temperature, wind chill and the like.

In order to estimate the daily **seasonal normal demand** (SND) for an LDZ, an EUC or for LDZ Aggregate NDM Points, the *Seasonal Normal value of the CWV (SNCWV)* is incorporated into the applicable demand model. From an efficiency perspective, the more accurate the SNCWV is, the more accurately daily gas loads to supply points can be estimated, assigned and billed for accordingly. This should in turn deliver greater cost reflectivity in charging and reduced balancing risks, with eventual gains to consumers in the form of downward pressure on costs of service and therefore prices.

Previous UNC rules governing the determination of the SNCWV required GTs to use smoothed averages of the CWV values for a given day across a number of consecutive historical years to estimate its seasonal normal value in the present year. However, recognising the effects of climate change and improvements in meteorological modelling, the industry last year proposed a change to the UNC which would allow GTs to use forecast data in tandem with historical data when computing the SNCWV (UNC218). In particular, the industry was keen to amend the UNC so that 'EP2' data³, produced by the Met Office/Hadley Centre following an industry backed study of expected UK climate trends, could be adopted as the basis for the SNCWV.

Facilitating the use of forecast data in calculating the SNCWV is important because climate change means that, to an ever greater extent, historical weather alone is likely to be an unreliable proxy for future weather. An accurate view of seasonal normal weather is an important prerequisite for accurate daily demand forecasting.

UNC218 was approved by the Authority on 19 December 2008 in order to allow GTs the opportunity to use forecast data when computing the SNCWV where it provides a more appropriate basis⁴. However, it has since become apparent that some of the text remaining in the relevant section of the UNC may hinder the use of forecast data in calculating the SNCWV. Further, it has been noted that it would be desirable to insert new text into the relevant section, in order to enhance its clarity and usefulness.

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.

² This document is notice of the reasons for this decision as required by section 38A of the Gas Act 1986.

³ EP2 data has been endorsed by the Demand Estimation Sub-Committee (DESC), and is presently regarded as the best available tool for accurately forecasting short to medium term climate trends.

⁴ To view Ofgem's UNC218 decision letter, see: www.gasgovernance.co.uk

Modification Proposal

UNC254 proposes to make six changes to section H.1.5 of the UNC, mainly, but not exclusively, to facilitate the use of a range of climate data sources (including EP2 data) when calculating the SNCWV. These are:

1. The insertion of a new paragraph requiring the industry to review the SNCWV every 5 years after consultation with the relevant committees (with 2010 being the date of the first review). The paragraph permits a more frequent review by the GTs on the basis of 'unusual new weather experience'.
2. The removal of the existing requirement that the SNCWV must be calculated using *some* climate data no more than six years old. EP2 data uses historical data up to the year 2007, which would mean that its use after 2013 would not be permitted under the current rules. Given that EP2 data is presently regarded by some as the best available, and in any case would need reviewing at least every five years under the first proposed change, the requirement seems unduly restrictive.
3. That GTs should be able to compute the SNCWV using data records maintained by themselves, the Met Office or other reputable meteorological services providers, rather than simply their own records as required at the moment. The change increases flexibility over data sources and pre-empts possible restrictions on the use of climate models informed by the data records of credible third parties.
4. That GTs can compute the SNCWV using past, forecast, or a combination of past and forecast data. The proposer perceives a risk that current rules restricting the exclusive use of forecast data in calculating the SNCWV may be incompatible with EP2 data. The change removes this potential barrier and increases methodological flexibility going forward.
5. The removal of a redundant phrase from section H.1.5.2 of the UNC. It is proposed that the phrase 'in the current year and one or more future years' is deleted to aid clarity and readability. The word 'forecast', which is already used in the text, clearly permits data estimating weather in current and future years, making the extra wording unnecessary.
6. Removing the current requirement that the SNCWV must be computed using the 'smoothed average' values of the CWV data set the GTs have selected. Instead, it is proposed that the text is changed so that the CWV data set only has to be smoothed where required. The basis for this change is that EP2 data does not need smoothing, and alternative future data sets may also not need smoothing. As such, smoothing ought to be discretionary rather than requisite.

The proposer considered that, collectively, these changes would remove the barriers to GTs using EP2 data where it provides a more appropriate seasonal normal basis, whilst retaining sufficient flexibility for other methods to be adopted if sought. Therefore, the proposer considered that UNC254 could be expected to further relevant objective (a), (c), (d) and (f) as set out in Standard Special Condition A11 (1) of the Gas Transporters' Licence.

UNC Panel⁵ recommendation

At the Modification Panel (the "Panel") meeting held on 16 July 2009, the Panel voted unanimously in favour of implementing this modification proposal⁶. Therefore, the Panel recommended implementation.

The Authority's decision

The Authority has considered the issues raised by the modification proposal and the Final Modification Report (FMR). The Authority has considered and taken into account the responses to the Joint Office's consultation on the modification proposal which are attached to the FMR⁷. The Authority has concluded that:

1. implementation of the modification proposal will better facilitate the achievement of the relevant objectives of the UNC⁸; and
2. directing that the modification be made is consistent with the Authority's principal objective and statutory duties⁹.

Reasons for the Authority's decision

We consider that UNC254 removes both actual and potential barriers to the full use of EP2 and other forecast data when calculating the SNCWV. We believe that a better view of the SNCWV will have consequent benefits in terms of furthering relevant objectives (a), (c), (d) and (f) of the UNC. We have set out below why we expect UNC254 to further the achievement of these objectives.

We note that the Joint Office received 13 responses to its consultation on UNC254, all of which were supportive of the proposed amendments.

Relevant Objective (a) - the efficient and economic operation of the pipe-line system

The proposer was of the view that Annual Quantities (AQs) form the building blocks of many of the GTs' planning and system security activities. It considered that improvements in the accuracy of AQs would provide GTs with a clearer view of the energy needed to be transported through the pipe-line network, thereby allowing them to operate the system in a more economic and efficient manner. However, three respondents were of the view that any improvements in AQs resulting from the proposed changes would make no more than a marginal contribution to demand modelling and hence system planning, noting that AQs were only one of a significant number of other parameters which need to be taken into account. A number of respondents also considered that the proposed changes would allow for the calculation of more accurate SNCWV values, thereby leading to more accurate NDM demand allocations.

As indicated in our UNC218 decision letter, it is not the intention of these proposed changes to require GTs to use the seasonal normal values as defined in Section H of the UNC for operational and planning purposes as defined in Section O of the UNC. To this

⁵ The UNC Panel is established and constituted from time to time pursuant to and in accordance with the UNC Modification Rules.

⁶ Minutes of the Panel Meeting of 16 July 2009, including discussion of UNC254, can be found at: <http://www.gasgovernance.com/NR/rdonlyres/18C9A880-AC6C-411A-89E1-801394307BBB/35764/ModificationPanelMinutes8216Jul09v10.pdf>

⁷ UNC modification proposals, modification reports and representations can be viewed on the Joint Office of Gas Transporters website at www.gasgovernance.com

⁸ As set out in Standard Special Condition A11(1) of the Gas Transporters Licence, see: http://epr.ofgem.gov.uk/document_fetch.php?documentid=6547

⁹ The Authority's statutory duties are wider than matters which the Panel must take into consideration and are detailed mainly in the Gas Act 1986 (as amended).

end, we think that the potential impact of improved SNCWV on GTs' long term system planning is less relevant in the consideration of the merits of this modification.

However, we continue to believe that more accurate SNCWV values may afford shippers an opportunity to better understand demand fundamentals, thus creating an opportunity for more informed purchasing decisions with a view to improving their ability to balance. Improved balancing performance on the part of shippers could reduce the role of the System Operator in balancing the system, thereby better facilitating the efficient and economic operation of the pipeline system.

To the extent that UNC254 facilitates the use of forecast data in the derivation of a better view of SND, we consider that implementation of this proposal will at a minimum, marginally further facilitate the efficient and economic operation of the pipeline system.

Relevant Objective (c) - so far as is consistent with sub-paragraphs (a) and (b), the efficient discharge of the licensee's obligations under its licence

The proposer considered that a more accurate view of SNCWV could result in more accurate initial allocations of demand, leading to more accurate NDM commodity charging. The proposer considered that the proposed amendments were therefore consistent with Standard Special Condition A5.5. One respondent in favour of the proposal agreed with this view, but noted that UNC254 would not by itself achieve this, and would need to be accompanied by improvements in other areas, such as meter reading and recording, in order to have effect.

As noted in our UNC218 decision letter, in allowing GTs access to a fuller range of information in order to be able to determine the most appropriate SNCWV values, we believe the changes proposed by UNC254 should allow for improvements in cost reflective charging. We therefore consider that UNC254 is consistent with the charging principles set out in Standard Special Condition A5 of the Gas Transporters licence and that the proposal will better facilitate the achievement of relevant objective (c).

Relevant Objective (d) - so far as is consistent with sub-paragraphs (a) to (c) the securing of effective competition between relevant shippers, suppliers and DNs

The proposer and a number of respondents felt that UNC254 would aid the NDM allocation process by facilitating more accurate estimates of gas loads to supply points (through improvements in SNCWV, SND and subsequently allocation). Improved initial demand allocations should lead to reduced reliance on Reconciliation by Difference (RbD) between market sectors, which in turn should reduce the potential for cross subsidies between shippers, thereby promoting competition. One respondent noted that UNC254 would particularly benefit shippers serving Smaller Supply Points (SSPs), as domestic gas demand, which is highly sensitive to weather, dominates loads to these supply points.

Some respondents felt that lower RbD risks may also increase confidence among prospective market entrants, as they should be able to form a more certain view about the economics of entering the gas market as a shipper or in some other capacity.

We agree that improvements in SNCWV values will likely bring about improvements in initial demand allocations and reduced reliance on RbD. By reducing the potential for energy to be misallocated between shippers we consider that the proposal should further effective competition among established market players and potentially encourage new entrants. We therefore consider that UNC254 will better facilitate the achievement of relevant objective (d).

Relevant Objective (f) - so far as is consistent with sub-paragraphs (a) to (e), the promotion of efficiency in the implementation and administration of the network code and/or the uniform network code

The proposer was of the view that the proposed changes would bring clarity to the UNC, which could be considered as improving the efficiency of the UNC's implementation and administration. Several respondents also noted that the changes proposed by UNC254 would allow the intended effect of UNC218 to be fully realised, which could be considered as aiding the implementation of the code. Another respondent noted that the proposal sought to remove redundant clauses and set out more clearly the options available to GTs when calculating the SNCWV, which would also contribute to the facilitation of relevant objective (f).

We agree that UNC254 improves the clarity of section H.1.5 of the UNC, and removes potential obstacles to the use of forecast data going forward. These changes will further efficiency in the implementation and administration of the UNC. We therefore consider that UNC254 will better facilitate the achievement of relevant objective (f).

Decision notice

In accordance with Standard Special Condition A11 of the Gas Transporters Licence, the Authority hereby directs that modification proposal UNC254: 'Facilitating the use of forecast data in the UNC', be made.

Ian Marlee
Director, Trading Arrangements

Signed on behalf of the Authority and authorised for that purpose.