

**Workgroup Report**  
**Delivery of additional analysis and derivation of Seasonal normal weather**  
**Modification Reference Number 0330**

Version 1.0

This Workgroup Report is presented for the UNC Modification Panel's consideration. The Distribution Workgroup considers that the Proposal is sufficiently developed and should now proceed to the Consultation Phase. The Workgroup also recommends that the Panel requests the preparation of legal text for this Modification Proposal.

## **1        The Modification Proposal**

### **Background**

Derivation of a seasonal normal basis for use in industry profiles, allocation and AQs is a Transporter code requirement. Currently this requirement is met on a five-year basis using analysis undertaken by Transporters and presented to DESC to allow Shipper comment.

Over the past few years the Met Office and Hadley Centre have been working on a climate model that could analyse climate change over the next decade. The model was derived to be consistent with the Hadley Centre UKIP09 analysis that covers 2020 onwards and had involvement across the energy industry with a view to providing output that could be used to support industry processes. The output from this modelling process was made available to Transporters for use in their seasonal normal analysis, commonly referred to as EP2.

Previously seasonal normal analysis has concentrated on use of historical data as a base for deriving the future view of seasonal normal weather and while there was no apparent warming trend this has been sufficient. During the review that defined the current view of seasonal normal the original proposed methodology used a “new” concept arguing a breakpoint in behaviour was evident. However, both methodologies assume that historical data is sufficient to define future behaviour and provide no climatological foundation for the breakpoint identified.

The methodology proposed, and implemented, by the Transporters this time has been changed on a number of occasions, which is in itself a concern. Initially it was proposed to use a historical basis as in previous methodologies as it gave similar average levels to the EP2 output. When DESC argued that this missed the shape inherent in the EP2 analysis a revised approach was proposed. This used partial EP2 data but there was not widespread support from Shippers for this. The proposed basis was reviewed by the Met Office and a number of issues identified.

At a special DESC meeting the Transporters proposed an interim solution building on their latest methodology but using a partial implementation of the EP2 data through a compromise estimate methodology suggested by the Met Office. Whilst Shippers agreed to accept the proposal as a temporary solution pending correct analysis and revision over the next year there was recognition from all Shippers that the underpinning methodology was not suitable as an enduring solution. The proposed version for 2010 uses a mixed methodology that has inherent flaws and has been

adjusted using a known approximation as a temporary fix. This does not provide the sound foundation that is required to provide assurance across the industry that allocation, AQ and pricing are accurate and unbiased. EP2 provided a sound justifiable methodology based on an independent assessment of climate impact. While there are some adjustments to the output required for optimum use the base methodology provides a solid foundation for moving forward as an industry. To fully revise the methodology appropriately will require this additional work. During use of EP2 it has been recognised that to correctly reflect CWV variability the basic temperatures and wind speeds should be available for CWV calculation prior to any averaging taking place. This will require an update of the Met Office analysis. Given the use throughout the industry of any seasonal normal it is vital that the analysis is based on a sound methodology. However whilst there has been agreement within the industry that there is a benefit of undertaking this additional work, there have been issues around the funding of this work and how the outcome of this work would be implemented

### The Proposal

The intent of this proposal is to facilitate the funding of this work, and ensure that it is subject to UNC Governance. For clarity this proposal will not force the adoption of this analysis, as it would appear premature to require the utilisation of work when the outcomes are not currently known. However, the additional analysis will ensure that the most robust and accurate data set for the derivation of seasonal normal weather is used. The proposer believes that the current UNC arrangements could facilitate implementation, or a further UNC Modification Proposal could be raised if appropriate.

It is proposed that the UNC is modified so that an obligation is placed on the Transporters to use best endeavours to deliver the additional analysis and outputs identified below.

#### **Stage 1.**

Currently a daily historical weather dataset (temperatures and wind speed) from 1927 to the current year for each LDZ has been compiled and is used by the gas industry to derive the coefficients for the composite weather variable (CWV). Periodically a weather station used to record actual data is closed down and the historical data associated with that station is adjusted to conform to the characteristics of a replacement weather station (usually sited nearby). The methodology used for the re-analysis of historical data is neither consistent nor published. A methodology needs to be agreed that will be used to re-analyse historical data as further station closures occur. The methodology needs to be published with enough detail to allow replication by users. The methodology and resulting database (including any updates) will be made available to all UNC signatories on demand This re-analysis could be carried out by any competent meteorological company at an estimated cost of £20,000. For the avoidance of doubt this exercise will need to be undertaken every time a weather station changes.

#### **Stage 2.**

The gas industry currently uses historical weather data to derive the coefficients for the composite weather variable (CWV). Until a few years ago, the database described above was employed, however the drift in average temperature caused by climate change has meant that historical temperature data now requires prior adjustment to make historical data consistent with today's climate. An attempt at using climate trends to adjust the data has been employed but the method does not have the full confidence of many industry participants and the Met Office, when asked to comment, suggested it would constitute a stop-gap solution at best. The Met Office has since proposed a methodology that would effectively adjust each year of the historical dataset (as described in stage 1) to a level consistent with climate change. This would effectively provide over eighty years of adjusted data that could be used as 'scenarios'; it would thus feed directly into the analysis used to generate the CWV and be fully consistent with the current climate. This work would be based on the EP2 approach to climate adjustments and as a by-product, would update the existing climate averages used by industry participants. This methodology behind the analysis would be fully documented and the resulting historical datasets made available to UNC signatories on demand. A provisional estimate of the cost of this work, provided by the Met Office is £200,000.

To facilitate this work the Transporters will work with the Demand Estimation Sub-Committee and seek confirmation and approval of the scope of work specified in the relevant invitation to tender, and that the completed work and proposed methodology would also be subject to approval by the Demand Estimation Sub-Committee. This will be gained by simple majority vote of DESC members.

The work that the Transporters will be expected to deliver is:

- To develop a methodology that will be used to re-analyse historical data as further weather station closures occur. The methodology needs to be published with enough detail to allow replication by users. The methodology and resulting data (including any updates) will be made available to all UNC signatories on demand.
- To develop a methodology that would effectively adjust each year of the historical dataset (as described above) to a level consistent with climate change. The methodology behind the analysis would be fully documented and the resulting historical datasets made available to UNC signatories on demand.

## **2 User Pays**

### **a) Classification of the Proposal as User Pays or not and justification for classification**

Currently, the obligation is on the Transporters to deliver this analysis as a code requirement.

### **b) Identification of Users, proposed split of the recovery between Gas Transporters and Users for User Pays costs and justification**

A 50/50 split of cost amongst the NDM Shippers and Transporters based on cost sharing agreed at EP2 is proposed. The Shipper split is to be based on the NDM shipper's customer numbers. The Transporters did not believe they would benefit from implementation and that application of the User Pays Guidance suggests that the Transporter share should be zero.

It is expected that the analysis identified in stage 1 could be carried out by any competent meteorological company at an estimated cost of £20,000.

A provisional estimate of the cost of the work to be conducted in stage 2 has been provided by the Met Office at £200,000.

**c) Proposed charge(s) for application of Users Pays charges to Shippers**

Equal amount per registered NDM meter point on date of implementation of this proposal.

If the above calculation leads to a liability for less than £1,000 for any User, this will be set to zero and the remainder recalculated to ensure full cost recovery.

**d) Proposed charge for inclusion in ACS – to be completed upon receipt of cost estimate from Xoserve**

Charges applicable for inclusion in ACS to be confirmed.

**3 Extent to which implementation of the proposed modification would better facilitate the relevant objectives**

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

Implementation would not be expected to better facilitate this relevant objective.

**Standard Special Condition A11.1 (b): *so far as is consistent with sub-paragraph (a), the (i) the combined pipe-line system, and/ or (ii) the pipe-line system of one or more other relevant gas transporters;***

Implementation would not be expected to better facilitate this relevant objective.

**Standard Special Condition A11.1 (c): *so far as is consistent with sub-paragraphs (a) and (b), the efficient discharge of the licensee's obligations under this licence;***

Implementation would not be expected to better facilitate this relevant objective.

**Standard Special Condition A11.1 (d): *so far as is consistent with sub-paragraphs (a) to (c) the securing of effective competition: (i) between relevant shippers; (ii) between relevant suppliers; and/or (iii) between DN operators (who have entered into transportation arrangements with other relevant gas transporters) and***

***relevant shippers;***

Implementation of this proposal would allow the development of alternative methodologies that could be used to assess and, if concluded necessary, to improve the accuracy of energy allocation between NDM Shippers in the SSP and LSP markets. The availability of alternative methodologies will ensure that the most accurate energy allocation possible occurs to Shippers in the SSP and LSP market by D+5. The accurate allocation of costs by D+5 will benefit competition by ensuring that Shippers are exposed to the costs that they have incurred and so ensure that there is a limited cross subsidy between Shippers, even if this were to occur on a cash flow basis. Ensuring costs are accurately targeted is a fundamental requisite of a competitive market.

Further implementation of this proposal would also reduce SSP Shippers' exposure to RbD and LSP Shippers' exposure to reconciliation due to profile errors on allocation. These are both viewed as a risk to Shippers as they occur at SAP and Shippers are unable to manage or hedge this exposure. Removing a risk would also represent removing a barrier to entry and so also benefit competition. Based on a 0.2% volume correction allocation, the benefit would be around £8M per month across the industry. This is based on a calculation presented in a letter shippers sent to Ofgem in November 2009 "For example, reconciliation for 2009 to date has adjusted over 1TWh of the initial allocation for January 2009 from LSP to SSP markets. Given price changes between purchase could be large this is a high value risk. For example the differential between Sept 2008 purchase prices and Jan 2009 SAP used for reconciliation, only a 4 month difference, was up to 23pence per therm and this amounts to just under £8million on a 0.2% volume change for a single month. It can be seen from this that the risk to Shipper organisations can be significant"

***Standard Special Condition A11.1 (e): so far as is consistent with sub-paragraphs (a) to (d), the provision of reasonable economic incentives for relevant suppliers to secure that the domestic customer supply security standards (within the meaning of paragraph 4 of standard condition 32A (Security of Supply – Domestic Customers) of the standard conditions of Gas Suppliers' licences) are satisfied as respects the availability of gas to their domestic customers;***

Implementation would not be expected to better facilitate this relevant objective.

***Standard Special Condition A11.1 (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.***

This proposal will provide an additional source of data to Transporters when deciding which methodology to use when deriving seasonal normal weather. This proposal will therefore ensure that the Transporters are not constrained to a single data set and methodology and so could be seen to facilitate this requirement by ensuring that the

requirements in the UNC are efficiently met.

**4 The implications of implementing the Modification Proposal on security of supply, operation of the Total System and industry fragmentation**

No implications on security of supply, operation of the Total System or industry fragmentation have been identified.

**5 The implications for Transporters and each Transporter of implementing the Modification Proposal, including:**

**a) implications for operation of the System:**

There are no implications for operation of the System.

**b) development and capital cost and operating cost implications:**

Potentially £220,000 for implementation of both stages across the industry, based on quotes from Weather data providers.

**c) extent to which it is appropriate to recover the costs, and proposal for the most appropriate way to recover the costs:**

100% cost recovery through Code User Pays mechanisms to NDM Shippers and Transporters base on a 50/50 split. Transporters do not agree that they should bear a share of costs.

**d) Analysis of the consequences (if any) this proposal would have on price regulation:**

No consequences have been identified.

**6 The consequence of implementing the Modification Proposal on the level of contractual risk of each Transporter under the Code as modified by the Modification Proposal**

No such consequence is anticipated.

**7 The high level indication of the areas of the UK Link System likely to be affected, together with the development implications and other implications for the UK Link Systems and related computer systems of each Transporter and Users**

No changes to systems would be required as a result of implementation of this Proposal.

**8 The implications of implementing the Modification Proposal for Users, including administrative and operational costs and level of contractual risk**



***Administrative and operational implications (including impact upon manual processes and procedures)***

If Shippers chose to support the work of DESC then this may represent an additional operational cost to Shippers. However it is expected that this cost will only occur when the benefits outweigh the costs.

***Development and capital cost and operating cost implications***

Additional operational and development costs to NDM Shippers.

***Consequence for the level of contractual risk of Users***

This proposal may result in improved energy allocation by D+5 across the industry, thereby reducing contractual risk as certainty of costs is crystallised at an earlier stage.

**9      *The implications of implementing the Modification Proposal for Terminal Operators, Consumers, Connected System Operators, Suppliers, producers and, any Non Code Party***

Improved energy allocation at D+5 should benefit NDM customers.

**10     *Consequences on the legislative and regulatory obligations and contractual relationships of each Transporter and each User and Non Code Party of implementing the Modification Proposal***

No consequences have been identified.

**11     *Analysis of any advantages or disadvantages of implementation of the Modification Proposal***

***Advantages***

- Ensures Transporters are actively involved in the processes envisaged in this Proposal
- Allows the adoption of a methodology agreed by Transporters and Shippers prior to the development of the seasonal normal value.
- As the current seasonal normal value was implemented under dispute, the Workgroup believe this modification will result in a seasonal normal value that is likely to be acceptable to all parties.

***Disadvantages***

- May require a further UNC Modification Proposal for implementation of any recommendations emerging as a result of implementing this Proposal.

- There is a risk that the resulting data does not influence or change the current seasonal normal value and therefore does not provide the benefits identified.

**12 Summary of representations received (to the extent that the import of those representations are not reflected elsewhere in the Workstream Report)**

No written representations have been received.

**13 The extent to which the implementation is required to enable each Transporter to facilitate compliance with safety or other legislation**

No such requirement has been identified.

**14 The extent to which the implementation is required having regard to any proposed change in the methodology established under paragraph 5 of Condition A4 or the statement furnished by each Transporter under paragraph 1 of Condition 4 of the Transporter's Licence**

No such requirement has been identified.

**15 Programme for works required as a consequence of implementing the Modification Proposal**

The Transporters would be required to establish a process to procure the information envisaged within this Proposal.

**16 Proposed implementation timetable (including timetable for any necessary information systems changes)**

This Proposal can be implemented immediately on direction from Ofgem. A potential service provider has indicated that the required analysis should take no longer than 12 months.

Advance notice of implementation is required to allow for the capture of meter point portfolio counts for each Shipper.

**17 Implications of implementing this Modification Proposal upon existing Code Standards of Service**

No implications of implementing this Modification Proposal upon existing Code Standards of Service have been identified.

**18 Workstream recommendation regarding implementation of this Modification Proposal**

The Distribution Workgroup considers that the Proposal is sufficiently developed and should now proceed to the Consultation Phase. The Workgroup also recommends that the Panel requests the preparation of legal text for this Modification Proposal.



