

**UNC Demand Estimation Sub-Committee Minutes**  
**Wednesday 01 February 2012**  
**31 Homer Road, Solihull B91 3LT**

**Attendees**

Bob Fletcher (Chair)	(BF)	Joint Office
Lorna Dupont (Secretary)	(LD)	Joint Office
Ceiran Sheehan	(CS)	Total
Claudio Ziviani	(CZ)	Corona Energy
Colin Thomson	(CT)	Scotia Gas Networks
Fiona Cottam	(FC)	Xoserve
Joanna Ferguson	(JF)	Northern Gas Networks
Joseph Lloyd	(JL)	Xoserve
Mark Perry	(MP)	Xoserve
Martin Attwood	(MA)	Xoserve
Matt Jackson (Member)	(MJ)	British Gas
Mo Rezvani (Member)	(MR)	SSE
Paul Tuxworth	(PT)	National Grid NTS
Richard Pomroy	(RP)	Wales & West Utilities
Sallyann Blackett (Member)	(SB)	E.ON UK
Steve Baker (Member)	(SB1)	RWE npower
Tom Young	(TY)	E.ON UK

*Meeting papers are available at [www.gasgovernance.co.uk/desc/010212](http://www.gasgovernance.co.uk/desc/010212)*

**1. Introduction**

BF welcomed all to the meeting.

**2. Review of Minutes and Actions from the previous meeting(s)**

The minutes and actions from the meeting held on 09 December 2011 were reviewed.

**2.1. Minutes**

The minutes from the previous meeting were accepted.

**2.2. Actions**

**Action DE1201:** Project Nexus - New allocation algorithm: Provide draft Principles and Success Criteria for review and assessment prior to next meeting.

**Update:** See 3.1, below. **Closed**

**Action DE1202:** Project Nexus - New allocation algorithm: Consider the advantages and disadvantages of all Options put forward.

**Update:** See 3.1, below. **Closed**

**Action DE1203:** Project Nexus - New allocation algorithm: Provide Strawmen for each Option put forward and devise and publish a Strawmen Template to which interested parties may add specific comment.

**Update:** See 3.2, below. **Closed**

**Action DE1204:** Project Nexus - New allocation algorithm: Add items to February meeting agenda (Review of draft Principles and Success Criteria, and Review and Assessment of Strawmen).

**Update:** Completed. **Closed**

**Action DE1205:** Modification 0330 – Shippers to publish requirements, for review and assessment.

**Update:** Provided. **Closed**

**Action DE1206:** Modification 0330 – Shippers to define acceptance criteria, for review and assessment.

**Update:** Provided. **Closed**

**Action DE1207:** Modification 0330 – Xoserve to define a provisional timeline for the tender process.

**Update:** Provided. **Closed**

### **3. Project Nexus - New allocation algorithm**

#### **3.1 Review of draft principles and success criteria**

In response to Action DE1201, FC presented a draft set of principles and success criteria. These were reviewed and discussed.

MR suggested a timeline/timescale should be associated with the success criteria. FC pointed out that the algorithm was more likely to be included in the third phase of Project Nexus changes rather than the first. BF advised that a new set of modifications based on the Project Nexus Business Requirements conclusions will be rolled out as a package so that inter-related legal text can be easily produced. Most of the Business Requirements have been published; analysis is being completed and then the Transporters will raise the modifications in parallel.

SB suggested that the success criteria might include something on methodology for the calculation of Load Factors and anything else devised should support other industry processes, eg Aqs and SOQ derivation.

The following changes were also suggested:

- Allocation process results in an acceptable degree of greater accuracy (i.e. the same as or better than the current level) in apportionment of energy across sectors thus reducing levels of reconciliation compared to current regime

- Day ahead gas Nominations ~~more accurate~~ should display an acceptable degree of accuracy (i.e. the same as or better than the current level) for the NDM sector
- Supported by ~~all or the~~ majority of Users and Transporters within the industry.

FC noted the suggestions for additional criteria and changes to the wording.

### 3.2 Review and assessment of strawmen

At the previous meeting two parties had provided various suggested approaches for consideration. In response to Action DE1203, FC presented a potential process for each Option and the advantages and disadvantages identified so far. These were reviewed and discussed.

#### *Option A – Dynamic Daily Sampling (E.ON)*

It was confirmed that the sample will not change daily, but the data will change daily.

SB suggested an additional advantage in that it will scale/adjust as the SMART population grows.

In response to questions FC explained the proposed position of Project Nexus in respect of allocation and reconciliation. It was observed that Suppliers may not choose to poll meters daily and although installed the communication function may not be switched on to access this; that Customers may also refuse to have a Smart meter installed; and that Monthly allocation/reconciliation will be more accurate than the RbD method currently in use.

SB pointed out that there was the potential to make this a really big sample and therefore to be scaling only a small amount across everyone, which should make it closer to what Customers are actually using. This was not possible with any of the other Options.

Moving to consideration of the disadvantages, SB questioned whether ‘Smart meters may behave differently to dumb’ was actually a disadvantage; Shippers would have taken account of this in their modelling. Looking at the third stated disadvantage, FC believed this would require some sort of contingency if data failed. Looking at the fifth stated disadvantage, SB suggested this could be done differently using historical data.

It was confirmed, following a brief discussion, that for gas there were no drivers for more frequent balancing other than daily balancing.

#### *Option B – Xoserve Proposal (E.ON)*

SB commented that the Xoserve proposal is different to E.ON’s Option B. Xoserve use the CWV as the weather variable input whereas E.ON’s approach is open to multiple weather variables, e.g. sunlight hours, cloud cover etc.

There were no additional comments following consideration of the advantages.

Reviewing the disadvantages, SB commented that though some sort of annual analysis was required, this did not necessarily have to be done in the spring (and potentially even less frequently as time moves on and other factors change).

*Option C – No ALP (E.ON)*

SB's comments regarding multiple weather variables to form relationships to demand rather than just CWV were also relevant to Option C.

TY commented that rather than using the word "profiles" in this option it should be replaced with "Regression Coefficients".

*Option D – EUC Model Based (National Grid NTS)*

This Option also did not include ALPs. PT explained that SND would have the same shape as an ALP. It was a simplification of the existing process, just doing away with certain elements. SB felt it to be less intuitive than a set of regressions. PT thought CWV could be defined differently. MR observed that a clear, transparent method was required for calculations; the relationship between all the variables was non-linear and so makes no sense. CWV should be dealt with separately. TY thought this could be accommodated in Option C – i.e. define relationships between demand and weather using individual weather variables rather than CWV. The other Options could also be looked at to see if doing this would be of more benefit. Recognising there were issues with CWV SB suggested looking at what happens if CWV is reweighted, or could be done away with, or split into constituent parts. SB pointed out that it should not disadvantage smaller companies to whom this CWV is provided (they may not have the skills to manipulate the data, and would have to get a contract with a weather data provider). It would have to be demonstrated that it was sufficiently better to justify any changes.

It was noted that Xoserve might also have to look for Shipper assistance to perform analysis that calls for use of variables which Xoserve does not necessarily have access to.

**Next Steps**

The group was unable to discount any Options at this point.

The following plan of action to take the analysis forward was suggested:

- Xoserve to work out what data was required for each Option
- Decide what forms of regression models should be used
- Decide what data items are not significant
- Decide which data items require assistance from Shippers
- Decide what sort of tests should be run and how measured (differences? comparisons?)
- Analyse across 2- 3 LDZs and over a 3 year period
- Circulate list of variables for comment.

**New Action DE0201: Project Nexus New Allocation Algorithm – Options: Xoserve to summarise its view of the data items required and circulate for comment. (Shippers to have 10 days to comment.)**

It was also noted and agreed that any additional data items suggested by Shippers should be known to be available in a timely manner and in forecast mode as well as for a reasonable historic period.

#### 4. **Modification 0331 – Demand Estimation Section H Changes to Processes and Responsibilities - Update**

This modification was implemented on 03 January 2012.

##### 4.1 **Terms of Reference (ToR)**

JF reported that the draft had been presented and discussed at UNCC. The UNCC had made some challenges to various points and suggested that the ToR should be reworked and resubmitted to the UNCC on 16 February 2012. JF gave a brief resume. It had proved to be fairly difficult to revise and a new draft was to be circulated by Friday; comments would be welcomed.

SB expressed her extreme disappointment that further progress had not been made, and explained the reasons why certain elements had been carefully included in the modification and incorporated in the legal text. It had been the intention to form an Expert Group in time to commence active involvement and positively contribute to the 2012 Spring Analysis. Shippers were very concerned that this opportunity might now be deferred for yet another year.

MR requested that it be formally minuted that, in his opinion, the procedures for Modifications 0330 and 0331 have been carried out and progressed despite the UNCC and the Transporters. MR believed that parties have been unhelpful rather than helpful.

RP observed that Shipper representatives also sit on the UNCC, some of whose organisations were also represented at DESC, and that other modifications have also followed tortuous processes.

Referring to Modification 0331, BF pointed out that much of the legal text development took place after the conclusion of the Workgroup, and that Ofgem's understanding had been incomplete. The ToR had been submitted to UNCC before the end of process for this Modification. There are 5 Shipper members who may be contacted for the UNCC view of the ToR.

BF explained the workings of the UNCC and indicated that a Technical Working Group could be set up.

DESC requested the formation of a Technical Working Group to focus on and contribute to the expansion of the Spring Analysis, and that a first meeting be arranged.

**New Action DE0202: Modification 0331 - Make arrangements for the formation and first meeting of a Technical Working Group to focus on and contribute to the expansion of the Spring Analysis. Joint Office to write to the industry requesting nominations for membership.**

##### 4.2 **Membership of the Demand Estimation Sub-committee**

Draft options had been published for discussion. BF gave a brief explanation of each option and requested that comments be submitted to the Joint Office by Tuesday 07 February 2012 in order that the document could be revised if appropriate and be submitted to the February UNCC meeting alongside the ToR.

#### 5. **Spring Approach for 2012 Modelling**

MP gave a presentation, observing that this is the first year that Xoserve will have run through the whole of the modelling process and as such, other than the agreed change to the Christmas and New Year holiday codes, the approach to the modelling would be the same as in 2011. MP outlined the key principles of the approach to be

taken and the draft timetable that had been devised following the implementation of Modification 0331, which had removed certain previously fixed dates.

Responding to questions from MR regarding band splitting, FC stated she had concerns about splitting bands in terms of Xoserve's systems, and realistically any intention to do this would have to have been planned a lot further ahead, for example any proposed changes to Band 1 which resulted in different allocation profiles at LDZ level would effectively undermine the current principles of RbD. Note: So far there has been no compelling case to split any of the bands

SB suggested that at some point the EUC Bands should be reviewed to assess whether they each start and finish at appropriate levels and whether changing the spread would be beneficial. (This particular analysis had not been performed before in respect of the bandings.) FC added that a systems impacts analysis would also need to be run at some point.

DESC was asked for its approval to the proposed approach.

MR had not read the Approach document and felt unable to agree at this point.

SB stated that E.ON would not agree to the Approach document, but would agree to the analysis proceeding subject to being consulted throughout the process.

The proposed timetable was discussed in more depth; UNC deadlines were identified and appropriate consultation points were established.

Xoserve would consider appropriate check points and required meeting dates to fit with the new timetable and would make arrangements with the Joint Office.

**New Action DE0203: Spring Approach for Modelling 2012 - Xoserve to produce a draft schedule for 2012 and consider appropriate meeting dates to fit with the new timetable and make arrangements with the Joint Office.**

## **6. Modification 0330 – Delivery of additional analysis and derivation of Seasonal normal weather– Update**

FC gave a presentation in response to Action DE1207, to define a provisional timeline for the tender process. Interdependencies were illustrated together with a potential timeline to fit with the requirements for the new Seasonal Normal Basis.

FC indicated that Xoserve would require the Shippers' assistance in compiling a shortlist of reputable organisations to approach.

It was suggested that preparations for the second tender could be overlapped while the first stages of the process were progressing.

Discussing the requirements for Weather Station Change Methodology, MR suggested that the variables be included as previously noted. It was believed that datasets should be available for the last 50 years (but probably not as far back as 1928). SB suggested it should be hourly for temperatures and wind speed, and perhaps should be requested for all weather stations associated with the EP2 data. It was suggested that data be provided up to the end of Gas Year 2011.

FC questioned if how a company gap fills data would be important to the requirements. SB confirmed that an awareness of the methodology a company used was important, and whether on a day a weather station was providing actuals or was gapfilled. A brief discussion ensued.

FC then summarised requirements as follows:

- Establish which methodology was used for the substitution of weather stations

- Availability of a clean set of historic data
- Indications of where gap fills are and how they have been gap filled
- Gap filling and weather station substitution are subtly different ways of addressing missing data and a clear understanding of both and how they are approached is required
- Methodologies used should be transparent and clearly explained.

FC questioned if the data provided is to be available to all or confined to certain parties, as this will have a bearing on the eventual cost. MR confirmed that the modification had indicated that access would be 'on request'.

It was agreed that Xoserve will draft requirements for tender and SB will provide a list of weather stations for circulation. Shippers will have 14 days to respond with comments.

**New Action DE0204: Modification 0330 - Xoserve to draft requirements for tender and E.ON to provide a list of weather stations for circulation. (Shippers to have 14 days to respond with comments.)**

## 7. Workplan Updates

### 7.1 Evaluation of demand model performance for gas year 2010/11: RV Analysis and NDM Sample Analysis

MA presented an overview of the analyses performed, illustrated with graphs.

A discussion ensued about the percentage change in Gemini AQ on slide 16. MR asked if the values could be shown without the impact of those DM interruptible sites which became NDM on 01 October 2011.

It was concluded that both approaches (subject to limitations) suggested only small inaccuracies over the year as a whole.

**New Action DE0205: Xoserve to consider producing Gemini values for slide 16 without impacts of DM interruptible AQs.**

### 7.2 Ad Hoc Analysis – Cold Weather/Shoulder Periods

JL presented an overview of the analysis performed, illustrated with graphs, and summarised the key results.

RP commented that the profiles should not be expected to perform well when operating at the margins and extreme weather conditions are experienced.

It was noted that the Autumn Shoulder Period fitted best to the profile and the two 'best estimates'; the 'average' seems to be a good fit and this was reassuring in terms of 'expected' rather than 'extreme' weather conditions.

JL summarised the Recommendations for DESC to consider when deciding on work plan items for future analysis.

### 7.3 Ad Hoc Analysis –Band 01B (0 to 73.2MWh p.a.)

This was not presented or discussed due to time constraints. Shippers are requested to provide any comments to Xoserve prior to the next meeting (Monday 05 March 2012).

**New Action DE0206: Ad Hoc Analysis –Band 01B (0 to 73.2MWh p.a.) - Shippers are requested to provide any comments to Xoserve prior to the next meeting (Monday 05 March 2012).**

**8. Meeting Dates for 2012 – DESC and Expert Group**

The 2012 programme is to be revisited following the implementation of Modification 0331, and Project Nexus developments.

It was agreed that the next meeting will be held at 10:30 on Monday 05 March 2012, at 31 Homer Road, Solihull B91 3LT, at which an update on Modification 0331 will be given.

**9. Any Other Business**

**9.1 New Service Provider**

RP confirmed that, following its recent sale OnStream will no longer be providing its previous services, and the DNs are in the process of procuring a new service provider for the collection of NDM data and its communication to Xoserve.

**10. Diary Planning**

DESC is due to meet again at 10:30 on Monday 05 March 2012, at 31 Homer Road, Solihull B91 3LT.

Date	Time	Venue	Programme
Monday 05 March 2012	10:30	31 Homer Road, Solihull B91 3LT	<ul style="list-style-type: none"> <li>Modification 0331 Update</li> </ul>
Thursday 31 May 2012	10:30	ENA, Dean Bradley House, 52 Horseferry Road, London SW1P 2AF	<ul style="list-style-type: none"> <li>Technical Forum – Consultation on proposed revision of EUC definitions &amp; demand models.</li> <li>DESC Meeting</li> </ul>
Wednesday 25 July 2012	10:30	31 Homer Road, Solihull B91 3LT	<ul style="list-style-type: none"> <li>Response to representations.</li> </ul>
Wednesday 07 November 2012	10:30	ENA, Dean Bradley House, 52 Horseferry Road, London SW1P 2AF	<ul style="list-style-type: none"> <li>Evaluation of Algorithm Performance: Strand 1 - SF &amp; WCF</li> </ul>

**NB:** This programme might need to be revisited following the implementation of Modification 0331, and also to reflect Project Nexus developments.



**Action Log: Demand Estimation Sub Committee**

<b>Action Ref*</b>	<b>Meeting Date(s)</b>	<b>Minute Ref</b>	<b>Action</b>	<b>Owner</b>	<b>Status Update</b>
<b>DE1201</b>	09/12/11	3.3	Project Nexus - New allocation algorithm: Provide draft Principles and Success Criteria for review and assessment prior to next meeting.	Xoserve (FC/MP)	<b>Closed</b>
<b>DE1202</b>	09/12/11	3.3	Project Nexus - New allocation algorithm: Consider the advantages and disadvantages of all Options put forward.	ALL	<b>Closed</b>
<b>DE1203</b>	09/12/11	3.3	Project Nexus - New allocation algorithm: Provide Strawmen for each Option put forward and devise and publish a Strawmen Template to which interested parties may add specific comment.	Xoserve (FC/MP)	<b>Closed</b>
<b>DE1204</b>	09/12/11	3.3	Project Nexus - New allocation algorithm: Add items to February meeting agenda (Review of draft Principles and Success Criteria, and Review and Assessment of Strawmen).	Joint Office (BF/LD)	<b>Closed</b>
<b>DE1205</b>	09/12/11	4.0	Modification 0330 – Shippers to publish requirements, for review and assessment.	Shippers (SB et al)	<b>Closed</b>
<b>DE1206</b>	09/12/11	4.0	Modification 0330 – Shippers to define acceptance criteria, for review and assessment.	Shippers (SB et al)	<b>Closed</b>
<b>DE1207</b>	09/12/11	4.0	Modification 0330 – Xoserve to define a provisional timeline for the tender process.	Xoserve (FC/MP)	<b>Closed</b>
<b>DE0201</b>	01/02/12	3.2	Project Nexus New Allocation Algorithm – Options: Xoserve to summarise its view of the data items required and circulate for comment. (Shippers to have 10 days to comment.)	Xoserve (FC/MP)	<b>Circulate by 10/02/12</b> <b>Shipper comments by 24/02/12</b>
<b>DE0202</b>	01/02/12	4.1	Modification 0331 - Make arrangements for the formation and first meeting of a Technical Working Group to focus on and contribute to the expansion of the Spring Analysis. Joint Office to write to the industry requesting nominations for membership.	Joint Office (BF)	

<b>Action Ref*</b>	<b>Meeting Date(s)</b>	<b>Minute Ref</b>	<b>Action</b>	<b>Owner</b>	<b>Status Update</b>
<b>DE0203</b>	01/02/12	5.0	Spring Approach for Modelling 2012 - Xoserve to produce a draft schedule for 2012 and consider appropriate meeting dates to fit with the new timetable and make arrangements with the Joint Office.	Xoserve (FC/MP)	
<b>DE0204</b>	01/02/12	6.0	Modification 0330 -Xoserve to draft requirements for tender and E.ON to provide a list of weather stations for circulation. (Shippers to have 14 days to respond with comments.)	Xoserve (FC) E.ON (SB)	
<b>DE0205</b>	01/02/12	7.1	Xoserve to consider producing Gemini values for slide 16 without impacts of DM interruptible Aqs.	Xoserve (FC/MP)	
<b>DE0206</b>	01/02/12	7.3	Ad Hoc Analysis –Band 01B (0 to 73.2MWh p.a.) - Shippers are requested to provide any comments to Xoserve prior to the next meeting (Monday 05 March 2012).	Shippers	<b>Comments by 24/02/12</b>