# UNC Demand Estimation Sub-Committee Minutes Monday 05 March 2012 31 Homer Road, Solihull B91 3LT

#### **Attendees**

Bob Fletcher (Chair)	(BF)	Joint Office
Lorna Dupont (Secretary)	(LD)	Joint Office
Christian Ivaha	(CI)	British Gas
Fiona Cottam	(FC)	Xoserve
Joseph Lloyd	(JL)	Xoserve
Louise Gates (Member)	(LG)	EDF Energy
Louise Hellyer	(LH)	Total
Mark Perry	(MP)	Xoserve
Matt Jackson (Member)	(MJ)	British Gas
Mo Rezvani (Member)	(MR)	SSE
Paul Tuxworth	(PT)	National Grid NTS
Sallyann Blackett (Member)	(SB)	E.ON UK
Steve Baker (Member)	(SB1)	RWE npower
Tom Young	(TY)	E.ON UK
Tim Davis	(TD)	Joint Office

Meeting papers are available at <a href="https://www.gasgovernance.co.uk/desc/050312">www.gasgovernance.co.uk/desc/050312</a>

# 1. Introduction

BF welcomed all to the meeting.

# 2. Confirmation of membership and apologies for absence

FC confirmed that Xoserve was representing Scotia Gas Networks, Wales & West Utilities, and Northern Gas Networks.

The meeting was declared quorate.

# 3. Review of Minutes and Actions from the previous meeting(s)

The minutes and actions from the meeting held on 01 February 2012 were reviewed.

## 3.1. Minutes

In response to comments made by SB the following minor changes were accepted:

Page 3 – Option B (line 1)

"SB commented that the Xoserve proposal is different to a subset of E.ON's Option B."

Page 4 – Next Steps (bullet points 3 and 6)

"Decide how to assess what data items are not significant"

"Analyse across 2-3 LDZs and over at least a 3 year period".

The minutes from the previous meeting were then approved.

#### 3.2. Actions

**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.)

Update: Circulated and comments received. Closed.

**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. The Joint Office to write to the industry requesting nominations for membership.

**Update**: Nominations have been received. **Closed**.

**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.

**Update**: A proposed timeline for 2012 modelling process and consultation has been published, together with a more detailed Work Plan for April through to August 2012. **Closed.** 

**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.)

**Update**: Circulated and comments received. **Closed**.

**DE0205:** Evaluation of demand model performance for gas year 2010/11: RV Analysis and NDM Sample Analysis - Xoserve to consider producing Gemini values for slide 16 without impacts of DM interruptible AQs.

**Update**: Produced and published. **Closed**.

**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).

**Update**: MP confirmed that he would be responding to comments received from E.ON; the response will be circulated/published. **Closed.** 

#### 4. Project Nexus - New allocation algorithm

Observing that most of the material was unchanged since the last meeting, FC gave a presentation in response to Action DE0201. Attention was then drawn to the modifications and refinements that had been made to each of the Options.

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

It was noted that this was the only option that was sample-driven. MR questioned the use of DCC as a direct source as it may not be possible to use this. FC believed there might be an opportunity for the relevant Transporter to obtain necessary information but this would need to be checked out. Stratification was briefly discussed and FC reported the Nexus discussions. SB was not sure that a party would stratify on the basis of Market Sector Flag (MSF) unless there were additional categories. It was not an issue for DESC at present but may need to be addressed in the future together with the establishing of a view as to what data should be gathered, held and maintained. Depending on the differentiators that were agreed, it was likely that new Modifications would need to incorporate the capture and update of new differentiating data items.

SB commented that she had expected the list to indicate what was actually to be analysed, as opposed to a list of sources.

FC asked if Smart data would be required for testing. SB thought, not specifically; it was about an algorithm that would work. The sample does not have to be Smart, but needs to be large enough for statistical purposes; if Smart data is used, then there will not be enough historical data to make it work. FC summarised that the sample data could be Smart or not Smart but needed to be daily. TY observed that the existing NDM sample data would be needed to establish if it would fly ahead of Smart meter roll-out.

The use of various samples was discussed. MR observed that accuracy may be difficult to test, but the functionality of the systems could be tested. SB suggested that using the existing NDM samples would be the best option. FC expressed concerns relating to the collection of data through different forms of technology. TY questioned whether it was the technology and its accuracy that was of concern, or the behaviour of the Smart site versus the Dumb site. FC believed it to be more about the behaviours; there may be a step change from one technology to another and consumers may markedly change their behaviours when more conscious of the new technology in place.

For Before the Day, FC noted the suggestion of 'by differentiating factor, eg MSF, LDZ, etc'; and, that as a starting point, historical allocation data and an NDM Sample would be required.

## Option B – Variation on Xoserve Proposal (E.ON)

The data items required were discussed.

SB pointed out that it was not necessarily deriving seasonal normal (AQ and SN stay exactly the same); enough data was needed (not necessarily 70 years' worth) to come up with a reliable relationship between demand and whatever multiple sensitivities were to be taken into account. This Option was just an extension of the Xoserve option, just deriving a sensitivity for, eg cloud cover, hours of sunlight, etc, in addition to or instead of CWV, ie not changing the CWV just changing the multipliers in the formula.

At this point MR observed that it might be useful to know if/how the data item required is different to the current process. He suggested that differences in the process and in the data items could be highlighted, ie what is new and what is existent. FC reminded DESC that current processes would not work in the future and that allocation required changing and improving; doing nothing/standing still was not an option.

FC noted the suggestion to add CVs to the meter asset data line (Before the Day), and reiterated that there were still concerns as to whether all the weather data would

be available.

# Option C – No ALP (E.ON)

Regression equations and the outputs expected were discussed. It was suggested that a day of the week indicator and a holiday indicator would be needed. FC commented that long run averages might be used (wind, rain, etc) in place of a seasonal normal weather value. FC will also add CVs to the list.

SB suggested considering the inclusion of some economic items, such as the retail price of gas. MR thought using price, as a determinant of demand, might be a problem from an economist's point of view, and suggested the retail price index for gas might be more useful. Concern was expressed that these might be monthly measures rather than daily, and would not necessarily be available day ahead. It was thought that including price raised all sorts of issues. FC suggested there might be more of a correlation between the spot price and gas demand at the top end of the market. Different economic indicators might be necessary and/or useful in different sections of the market. TY believed that working hours and holiday indicators would be useful to note and any associated rules. FC stated that when considering any new variables to be used in the future they must be (a) available on a daily basis in actual and forecast mode and (b) have a robust set of historical values.

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

PT reiterated that this proposed minimal change for the 'new world'. FC would add CV, the history of weather data, forecast of nominations, for After the Day and would add clarity to highlight the distinctions between this and the current process/data.

## Option E – Xoserve Proposal

FC reiterated this proposed the minimal changes necessary to accommodate the Nexus requirements. The data items were consistent with the National Grid model Option D.

#### Weather Data Access

FC outlined Xoserve's current access to weather data, and reiterated the other suggestions made by DESC.

She emphasised the three critical factors for any new data items: a long history, a reliable source of forecasts and timely Actuals.

# **Options - Next Steps**

DESC was asked if it had concluded that any of the five Options could be discounted at this point. The feasibility of progressing each were briefly discussed, and it was decided that Options A, C and E should be taken forward.

Although clearly not yet in a position to carry out any analysis, MP suggested that Xoserve could provide a 'mock up' of what the allocation formula might look like for review and further discussion. There was a short discussion on what form it might take and what might be included, and it was agreed that Xoserve would do this for Option E, and that Shippers would do the same for Options A and C.

Action DE0301: Project Nexus - New allocation algorithm: Option E - Xoserve to provide an example allocation formula.

Action DE0302: Project Nexus - New allocation algorithm: Options A and C - Shippers to provide an example allocation formula in respect of each Option.

# 5. Modification 0330 – Delivery of additional analysis and derivation of Seasonal normal weather

This Modification envisaged two procurement exercises, firstly for weather station substitution methodology and secondly for climate change methodology. FC explained that Xoserve had focussed on the first. DESC will be able to help with establishing and refining the requirements, but would not be able to be involved with the financial and contractual terms and conditions. FC then gave a brief presentation on initial views.

Initial view of requirements - Methodology

MR commented that a clear understanding was required, of what methodologies had been applied in the past, whether any had changed, and what was being applied going forward, in relation to gap filling and substitution.

SB suggested adding in something to cover deriving historical data for a weather station that may not have previously existed/replaces with a closed weather station, ie how to create a history/transformation when the move is made from one to the other, and in the event of any failure of a weather station and how data would be provided.

Different Service Providers might have different methodologies and Shippers might therefore be having different views depending on what they are purchasing and from whom.

BF displayed the legal text associated with the Modification 0330 and DESC reviewed and discussed its interpretation. The requirements and expectations as set out in the text were revisited. It did not anticipate any need for gap filling. FC reiterated the risk, of Xoserve procuring a methodology that was not subsequently approved by DESC and then having to repeat the process. Potential changes to datasets as a result of weather stations/substitutions were re-examined. It was noted the methodology only applies from November 2011 going forward, whereas DESC seems to require it historically. Stage 1 as set out in Modification 0330 was discussed, and it was believed that the legal text might present a 'grey area'.

Initial view of requirements – Revised Historic Dataset

These were discussed and appropriate units of measurement for each item were defined.

It was noted that 'cloud cover' measurement could be quite subjective, depending on the observer. CI believed solar radiation to be a better and more objective measure. MR pointed out that it was unlikely that historical data in respect of solar radiation would be available beyond 10 -15 years, and some weather stations do not have it even now.

How the Service Provider deals with the following categories should be established and clearly understood:

- Observed data needs to be clearly indicated/differentiated
- Filled in data needs to be clearly indicated/differentiated

- Created data needs to be clearly indicated/differentiated
- Substituted data needs to be clearly indicated/differentiated
- Data not available needs to be clearly indicated/differentiated.

Also it was questioned how the following would be dealt with/addressed:

- Data gaps for days when weather station equipment is not working
- Data gaps for when any particular measure had not been in existence
- Indication of what is gap-filled/substituted/created
- Are we asking a Service Provider also to create data to accommodate where it previously didn't exist?
- In what units is the data to be provided?

Initial view of required (existing) and potential additional weather stations

The list was discussed. FC believed there was an argument for the exclusion of:

- Belfast, as the UNC only operated across GB and not the UK
- London (central), as this weather station was closed
- Lerwick and Stornoway, as these were not part of the mainland gas network.

What was included might depend on how the tender responses define their pricing structures. It was suggested that if including stations did not increase the cost then Lerwick and Stornoway should remain, as they may potentially need to be used as substitutions.

It was agreed to exclude Belfast and London (central). If extra costs were involved then the list might need further refinement.

FC reiterated the need to properly understand what DESC's business requirements are and, in light of the discussions, will draft and circulate an expanded document for review and comments (which could potentially be used for inclusion in the tender, with the aim of avoiding 'surprises/disappointments'). It was agreed that the document will be drafted and circulated by 16 March 2012, and that Shipper comments should be received by 23 March 2012.

Action DE0303: Modification 0330 – Weather Station Substitution Methodology: (a) Xoserve to draft a Business Requirements document and circulate for review and comments; and (b) Shippers to review and respond with comments.

# 6. Modification 0331 – Demand Estimation Section H Changes to Processes and Responsibilities

#### 6.1 Terms of Reference (ToR)

BF reported that the draft DESC ToR had been presented and discussed at UNCC.

The UNCC Members unanimously approved the DESC ToR, whilst noting that further amendments may be submitted for approval at the March UNCC. Joanna Ferguson (Northern Gas Networks) is to provide a revised ToR to the next UNCC, and FC indicated that it was planned to publish a revised document this week.

SB expressed her disappointment that a revised document had not been brought before the DESC at this meeting before submission to the next UNCC.

It was pointed out that any party might submit a revised ToR to UNCC for consideration.

#### 6.2 Membership of the Demand Estimation Sub-committee

BF reported that the UNCC Members had unanimously determined that DESC membership should be provided by an election process managed by the Gas Forum (option 3) and that current membership of DESC is to be retained for the current year.

## 6.3 Technical Workgroup Membership

BF displayed the nominations received in response to the invitation extended by the Joint Office of Gas Transporters (JO) following the last DESC meeting. MR indicated his desire for his name to be added.

Noting that meetings of this group might need to be convened at very short notice and were likely to involve teleconferencing it was suggested that a specific contact list be created. All agreed that their contact details could be shared amongst the group. It was agreed to extend the deadline and that any further nominations should be provided to the JO by close of play on Friday 09 March 2012. Those who had already put forward nominations were asked to provide appropriate email and telephone contact details to the JO.

The proposed workings of the group were discussed and it was agreed that:

- a group specific ToR be created
- the group will operate under the Code of Practice guidelines followed for other industry meetings
- the JO to provide a Chair and Secretariat wherever possible
- · meeting papers will be published on the JO website.

Action DE0304: DESC Technical Workgroup: All nominees to provide email and telephone contact details to the JO.

Action DE0305: DESC Technical Workgroup: JO to (a) draft a ToR and circulate for approval by email; and (b) create a specific DESC Technical Workgroup Contacts list and circulate to nominees and DESC Members.

# 7. Work Plan for 2012

MP gave a presentation in response to Action DE0203 and outlined the proposed revised Work Plan schedule for 2012, indicating what modelling and analyses might be covered at certain points throughout the period April – August and where involvement/contact/meetings with the Technical Workgroup might be expected.

SB suggested that Xoserve might also wish to discuss with the Technical Workgroup at an earlier point what has been included in/excluded from the sample data and reasons for decisions. MP explained what level of data was being worked on at that early point; it may be that it may not have progressed to an appropriate level for meaningful discussions.

SB would like to see the numbers before the outcomes, ie what has been dropped out and for what reasons. FC asked whether this should be viewed as an

'information point' or a 'decision point'? SB thought that might depend on the percentage that was being pulled out.

It was suggested that the NDM Report might benefit from being deconstructed/reassembled for easier reading, and this was briefly discussed. The Technical Workgroup might be tasked to undertake a review and re-assessment.

It was agreed that a folder for the Technical Workgroup should be set up in 'UK Link docs' to enable the access of appropriate material and the sharing of documents.

FC reiterated that a lot of system testing might be required, before any proposed changes can be initiated following any review by the Technical Workgroup, e.g. to EUC boundaries.

# 8. Meeting Dates for 2012 - DESC and Expert Group

Following discussions of the proposed new work schedule at (7) above, it was agreed to cancel the meetings previously arranged for 31 May and 23 July 2012. Various new meeting dates were agreed and appropriate arrangements/rearrangements will be made and confirmed by the JO.

# 9. Any Other Business

None raised.

# 10. Diary Planning

Date	Time	Venue	Programme		
Wednesday 04 April 2012	10:30	31 Homer Road, Solihull B91 3LT	<ul><li>Project Nexus Allocation Algorithm</li><li>Mod 330 procurement (Stage 1)</li></ul>		
Thursday 19 or Friday 20 April 2012 (provisional)	(tbc)	Teleconference to be arranged by Xoserve (no JO involvement)	Confirm modeling runs to take forward		
Wednesday 23 May 2012	10:30	31 Homer Road, Solihull B91 3LT	Review overall modelling results and gain approval to commence model smoothing stage		
Wednesday 11 July 2012	10:30	31 Homer Road, Solihull B91 3LT	Review of NDM Proposals and Report		
Wednesday 01 August 2012 (provisional)	10:30	31 Homer Road, Solihull B91 3LT	Review of representations received (if any) and consideration of response(s)		
Wednesday 07 November 2012	10:30	ENA, Dean Bradley House, 52 Horseferry Road, London SW1P 2AF	Evaluation of Algorithm Performance:     Strand 1 - SF & WCF		

# **Action Log: Demand Estimation Sub Committee**

Action Ref*	Meeting Date(s)	Minute Ref	Action	Owner	Status Update
DE0201	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)	Closed
DE0202	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)	Closed
DE0203	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)	Closed
DE0204	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)	Closed
DE0205	01/02/12	7.1	Xoserve to consider producing Gemini values for slide 16 without impacts of DM interruptible AQs.	Xoserve (FC/MP)	Closed
DE0206	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	Closed
DE0301	05/03/12	4.0	Project Nexus - New allocation algorithm: Option E - Xoserve to provide an example allocation formula.	Xoserve (FC/MP)	Produce by 20/03/12
DE0302	05/03/12	4.0	Project Nexus - New allocation algorithm: Options A and C – Shippers to provide an example allocation formula in respect of each Option.	Shippers (SB/MR)	Produce by 20/03/12

Action Meeting **Minute Action Owner** Status Ref\* Date(s) Update Ref **DE0303** Produce by 05/03/12 5.0 Modification 0330 - Weather Station Xoserve 16/03/12 Substitution Methodology: (a) Xoserve to (FC) and draft a Business Requirements document Shipper **Shippers** comments and circulate for review and comments; by 23/03/12 and (b) Shippers to review and respond with comments. By 12/03/12 **DE0304** 05/03/12 6.0 DESC Technical Workgroup: All nominees ALL to provide email and telephone contact details to the JO. **DE0305** 05/03/12 6.0 DESC Technical Workgroup: JO to (a) JO (BF) draft a ToR and circulate for approval by email; and (b) create a specific DESC Technical Workgroup Contacts list and circulate to nominees and DESC Members.