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**UNC Demand Estimation Sub-committee Minutes**  
**Wednesday 04 April 2012**  
**31 Homer Road, Solihull B91 3LT**

**Attendees**

Bob Fletcher (Chair)	(BF)	Joint Office
Lorna Dupont (Secretary)	(LD)	Joint Office
Ceirán Sheehan	(CS)	Total
Christian Ivaha	(CI)	British Gas
Dave Parker	(DP)	EDF Energy
Fiona Cottam (Transporter Alternate)	(FC)	Xoserve
Joseph Lloyd	(JL)	Xoserve
Louise Gates (User Member)	(LG)	EDF Energy
Mark Perry	(MP)	Xoserve
Mo Rezvani (User Member)	(MR)	SSE
Paul Tuxworth (Transporter Member)	(PT)	National Grid NTS
Sallyann Blackett (User Member)	(SB)	E.ON UK
Steve Baker (User Member)	(SB1)	RWE npower

Meeting papers are available at [www.gasgovernance.co.uk/desc/040412](http://www.gasgovernance.co.uk/desc/040412)

**1. Introduction**

BF welcomed all to the meeting.

**2. Confirmation of membership and apologies for absence**

FC confirmed that she was attending as the alternate for National Grid Distribution but without the capacity to exercise any voting right.

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 05 March 2012 were reviewed.

**3.1. Minutes**

The minutes from the previous meeting were approved.

**3.2. Actions**

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

**Update:** See item 4 below. **Closed.**

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

**Update:** See item 4, below. **Closed.**

**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.

**Update:** (a) Provided by Xoserve; and (b) feedback provided at this meeting. **Closed.**

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

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

**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.

**Update:**(a) Drafted, circulated, comments received and ToR approved at this meeting; and (b) created and circulated. **Closed.**

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

Responding to actions DE0301 and DE0302, FC gave a presentation.

Project Nexus was at the pre-modification consultation stage, reviewing costs, benefits and priorities. Modifications will be raised in due course, and the Transporters will raise any modifications deemed appropriate by the DESC to dovetail with the Nexus programme. Attention was drawn to the implications for DESC activities, which it was felt must be commenced under current conditions and scope, but which may potentially result in work that becomes out-dated as the scope of Nexus is reassessed. The risk of doing work which may turn out to be not needed was noted, but it was recognised that there were some areas that DESC would look to progress as a matter of course with a view to improving the current position and there was likely to be benefit from planned and demonstrable improvements, regardless of Nexus' eventual conclusions. On the other hand there was also a danger that if DESC waited for increased degree of certainty of Nexus' direction before commencing any work then DESC may then be instrumental in causing or contributing to delays to the Nexus programme. DP observed that, whatever work was done, if it could be shown to be of benefit and was appropriate it would be that much easier to argue for its inclusion within Nexus.

FC attends both Nexus and DESC and was able to facilitate and co-ordinate any changes in focus in thinking and actions between the two groups. She reiterated the opinions that had been expressed and the consensus that had been reached within Nexus to date.

DESC members' views were sought on commencing work under these recognised conditions, and the Chair concluded that there was consensus in favour of commencement of some exploratory analysis.

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

FC provided an illustration and confirmed that there was a facility for the Transporter to obtain a reading so that reliance does not have to be made on the Shipper to provide it; the DCC will do whatever the Shippers want it to, so data should be available promptly via electronic transaction.

SB gave an explanation of the example of the allocation formula (provided by the Shippers) and different ways of calculating this were discussed. DP suggested excluding the top and bottom 5% and averaging it, to remove some of the 'noise', ie ignore the outliers.

PT suggested making reference to 'validated metered demand' might better express the concept, and that some validation rules would be required.

DP suggested that more thought was required to address high numbers at one end and zeroes at the other, and to address bias.

It was observed that this was not a trivial option and had a lot to recommend it. Pointing out that an automated validation process was required rather than a manual review, to support daily allocation timescales, FC was concerned that if Validation Business Rules to deal with this could not be written then it may not be viable.

The formula was queried by PT, and it was questioned whether it was a ratio that was being sought. The interpretation was briefly discussed; various ways of improving and rewriting the formula were suggested. These were noted and Xoserve will update the presentation.

*Option C – No ALP (E.ON)*

Option C was illustrated, and SB presented an example of the allocation formula (provided by the Shippers), various factors/parameters/caveats/assumptions being noted. It was then pointed out that the formula had not replicated correctly when being reproduced for inclusion in this presentation, and this would be republished. A brief discussion ensued.

MR suggested that various equations might be required for different factors. PT commented that it exhibited a highly non-linear relationship and may not fit well with some modelling or multi-linear regression. DP thought it would be difficult to optimise the powers within the equation. A formula was required that was capable of transformation into a linear form. SB believed it should not be constrained to start with. CI suggested considering other factors.

MR suggested including a yearly trend. FC questioned whether past consumption was a true indicator of future performance. The effects of having/not having rolling AQ were considered and what information/time period might be required. DP considered significance and elasticity to be relevant and suggested these should be trialed in the analysis.

Responding to a question from PT, FC confirmed that the assumption is that a Load Factor was required from somewhere, and explained how Nexus envisaged the application/operation of the rolling AQ on SOQs.

FC observed that if this Option were to be taken forward then Xoserve would need to access further information that is not readily available to it at present. What was to be included would need further discussion and agreement.

*Option E – Xoserve Proposal*

An illustration was provided, together with an example allocation formula provided by Xoserve. Potential constraints were outlined, and two options for the format of DAF were suggested. FC indicated that Xoserve had a preference for option 1. The meeting confirmed that option 1 was acceptable.

FC explained the working of CWV, and agreed with SB that the SNET might not be needed. Notwithstanding its preference for DAF option 1, SB suggested that Xoserve might probably want to explore both options. PT observed that care needed to be taken that it was not cancelling out the WSENs and SND – it may not look as expected.

Worked examples were illustrated and discussed. FC explained the rationale and what the tables showed. As the CWVs were both different from Seasonal Normal by half a degree, the same amount of demand was lost or gained (same WSENs, DAF is proportional), and FC invited others to try it out for themselves.

**Options - Next Steps**

It was agreed that:

- All three Options should be trialed;
- All three Options should be tested against the same dataset;
- Analysis could be done by the Expert Group.

DP pointed out that an awareness of any potential bias in the ‘first sample’ (smart meters) should be maintained, and there ensued a short discussion on the sampling techniques to be used until there was a large penetration into the market.

The parameters of each Option were discussed and what variables should be included. Definitions might need restating and how the factors were to be calculated. Stratification (levels and parameters) was discussed. Shippers and Xoserve will cooperate to trial the Options.

It was agreed that Shippers collectively could trial Option A and Option E:

- for Option A they could split the sample data in two, with half providing the allocation factor and the other half being used to test the outcomes.

Shippers will discuss and produce some analysis/results. Xoserve will make the required sample data available on its website which will require Shippers to log in.

**Action DE0401: Shippers to trial Options A and E and produce and present analysis and results.**

**Action DE0402: Xoserve to publish the Demand Estimation sample data from last year used for gas year 2011/12.**

**5. Modification 0330 – Delivery of additional analysis and derivation of Seasonal normal weather: Procurement – Stage 1**

In response to Action DE0303(a), a Weather Station Substitution Methodology Technical Requirements document had been drafted and published for review and comment. This was briefly discussed.

It was suggested that the years of gas history should be explained. It was believed that 50 years should be sufficient, eg from 1960 onwards, commencing from 01 January 1960 to the current year.

It was also suggested that the Service Provider should clarify what it would do in the event of a weather station being substituted that did not carry all the data items, eg solar radiation, required for all GB weather stations but not currently measured at all.

Wind direction should also be shown as '0 – 359', and specify what compass point is zero and what value is used for zero/no wind.

Cloud cover rating should be '0 to 9' rather than '1 to 8'.

Solar radiation should be shown in Joules per cm<sup>2</sup> (rather than lumen), or should state if an equivalent is used.

Humidity should be shown as 'relative humidity'.

Reviewing the list of required current GB weather stations, DP suggested removing the names given in brackets.

**Action DE0403: a) Xoserve to update the Weather Station Substitution Methodology Technical Requirements document; and b) JO to publish for review/comment (within 7 days) and invite member approval by email.**

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

BF reported that two comments had been received and included in respect of the DESC Terms of Reference (ToR) and these were indicated to the meeting. The ToR will now be published.

## 7. **Any Other Business**

### 7.1 **Minimising Losses of Xoserve AMR Equipment**

FC brought the group's attention to the loss of AMR equipment following meter exchange or removal.

Xoserve's website: [www.xoserve.com/LRP\\_Home.asp](http://www.xoserve.com/LRP_Home.asp) carries guidance for meter installers/meter workers in respect of equipment attached to meters and FC strongly urged Shippers to bring this to the attention of the appropriate persons within their organisations in order to minimise losses of AMR equipment. Shippers noted Xoserve's concerns and will highlight this within their organisations.

SB referred to the obligations under Modification 0258A (Facilitating the Use of Remote Meter Reading Equipment for the Purposes of Demand Estimation Forecasting Techniques) that allows non-Transporter parties to provide data for a sample. FC confirmed that it had not been called into use; practicalities were being considered.

SB was concerned that it might need to be used and that the feasibility of making it work will not have been tested, before sample size becomes a problem.

FC recognised that readings could be procured from elsewhere and agreed to speak with Chris Warner (National Grid Distribution), who had previously been investigating the practicalities, to establish a view.

MR referred to Electricity Modification P223 and offered to provide details of this for review and discussion.

**Action DE0404: Contact Chris Warner (National Grid Distribution) to establish a view on the procurement of non-Transporter data for samples as permitted under Modification 0258A.**

**Action DE0405: Use of non-Transporter data samples (Modification 0258A) - Provide details of Electricity Modification P223 for review and discussion.**

**8. Diary Planning**

As discussed at the previous meeting, MP confirmed Xoserve's intention to arrange a teleconference for Friday 20 April 2012 and to write out to all parties to confirm the details. The material to be reviewed and discussed will be made available in the week commencing 16 April 2012.

Date	Time	Venue	Programme
Friday 20 April 2012	09:30	Teleconference to be arranged by Xoserve (no JO involvement)	<ul style="list-style-type: none"> <li>Confirm modelling runs to take forward</li> </ul>
Wednesday 23 May 2012	10:30	31 Homer Road, Solihull B91 3LT	<ul style="list-style-type: none"> <li>Review overall modelling results and gain approval to commence model smoothing stage</li> </ul>
Wednesday 11 July 2012	10:30	31 Homer Road, Solihull B91 3LT	<ul style="list-style-type: none"> <li>Review of NDM Proposals and Report</li> </ul>
Wednesday 01 August 2012 (provisional)	10:30	31 Homer Road, Solihull B91 3LT	<ul style="list-style-type: none"> <li>Review of representations received (if any) and consideration of response(s)</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 and WCF</li> </ul>

**Action Log: Demand Estimation Sub-committee**

Action Ref*	Meeting Date(s)	Minute Ref	Action	Owner	Status Update
DE0301	05/03/12	4.0	Project Nexus - New allocation algorithm: Option E - Xoserve to provide an example allocation formula.	Xoserve (FC/MP)	Closed
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)	Closed

Action Ref*	Meeting Date(s)	Minute Ref	Action	Owner	Status Update
DE0303	05/03/12	5.0	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.	Xoserve (FC) and Shippers	Closed
DE0304	05/03/12	6.0	DESC Technical Workgroup: All nominees to provide email and telephone contact details to the JO.	ALL	Closed
DE0305	05/03/12	6.0	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.	JO (BF)	Closed
DE0401	04/04/12	4.0	Shippers to trial Options A and E and produce and present analysis and results.	All Shippers	Pending
DE0402	04/04/12	4.0	Publish the Demand Estimation sample data from last year used for gas year 2011/12.	Xoserve (FC, MP, and JL)	Pending
DE0403	04/04/12	5.0	a) Xoserve to update the Weather Station Substitution Methodology Technical Requirements document; and b) JO to publish for review/comment (within 7 days) and invite approval by email.	Xoserve (FC)  JO (BF)	Pending
DE0404	04/04/12	7.0	Minimising Losses of Xoserve AMR Equipment - Contact Chris Warner (National Grid Distribution) to establish a view on the procurement of non-Transporter data for samples as permitted under Modification 0258A.	Xoserve (FC)	Pending
DE0405	04/04/12	7.0	Use of non-Transporter data samples (Modification 0258A) - Provide details of Electricity Modification P223 for review and discussion.	SSE (MR)	Pending