DEMAND ESTIMATION SUB COMMITTEE

Minutes

Tuesday 10 November 2009

Energy Networks Association, Dean Bradley House, 52 Horseferry Road, London SW1P 2AF

Attendees

- (BF) Joint Office
- (LD) Joint Office
-) (DJ) xoserve
 - (GS) ScottishPower
 - (JA) RWE npower
 - (LJ) Scotia Gas Networks
 - (LH) Total Gas & Power
 - (ML) Centrica
 - (MP) xoserve
 - (MJ) British Gas
 - (RS) Northern Gas Networks
 - (SL) RWE Npower
 - (SB) E.ON
 - (SM) E.ON
 - (SG) National Grid NTS
 - (SM) National Grid Distribution
 - (ST) National Grid NTS

**via teleconference (item 8 onwards)*

1. Introduction

BF welcomed all attendees.

2. Confirmation of Membership

2.1 Membership and alternates

The membership was confirmed and the meeting was declared quorate.

3. Review of Minutes and Actions from the Previous Meeting(s)

3.1 Minutes of the previous meeting

Comments received from SB (on behalf of all Shippers present at the previous meeting) were reviewed and briefly discussed. It was agreed that the following amendments would be made to the minutes of the previous meeting:

Page 4: Under "4. Seasonal Normal Review Update

4.1 Conclusion of Seasonal Normal Review Discussions on the Application of EP2 in derivation of SNCWV"

Paragraph 1: "To continue with the current approach <u>for 5 years</u> was not seen to be an option and all parties agreed change is required."

Paragraph 4: ".....data used in EP2. SB SG considered they were calculated in a different way to the history used for other analysis used by National Grid, there was a disjoint. "

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Paragraph 5: "SB remained of the view that there was still a fundamental problem predicated on a misunderstanding in the initial calculation; increments and base period together give the centred forecast. This was a view supported by all of the Shippers at the meeting. SB referred to page 7 of the WP8 report showing the difference value increments would need to take to apply historically, and there was a short debate relating to information on the base periods."

Paragraph 7: ".....JA thought the risk of loosing a weather station to be small compared to the inherent error of using the scaling factor increments against a different historical base, and one that is faced under the current regime."

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Paragraph 9: ".....Any further analysis would put other deliverables at risk. All Shippers present did not feel that the process followed constituted any form of consultation. MR still felt that Shippers needed to understand the commercial impacts on the Transporters of using SNs."

Paragraph 10: "......SB's suggested option was to use 2010 as the base year to compensate for the lack of cooling impact from averaging methodology. <u>This was supported by all the Shippers present</u>."

Paragraph 12: "Irrespective of what base periods it was applied to SB pointed out that <u>the Transporters' use of</u> increments contain a highly significant flaw. Shippers feel the impacts and the costs could be very significant......"

Paragraph 12: ".....to the consumer. EP2 is a reasonably sound methodology, and all parties should be following a methodology that could be supported and accepted. The methods used in the past....."

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Paragraph 14: "Following their interim discussion, DJ confirmed that the Transporters' views remained unchanged, ie the Transporters' unanimous decision was to use the EP2 <u>daily increment</u> approach as proposed by xoserve at the previous meeting."

Paragraph 21: "SB expressed her dissatisfaction and stated that she would <u>could see Shippers feeling they needed to</u> raise a Modification Proposal to require that a further Seasonal Normal Review be undertaken next year....."

SG (National Grid NTS) proposed the following amendments:

Page 4 Under "Action DE1070/Update"

Paragraph 2: "JA commented that the history of weather data held by National Grid was derived data and had many gaps; this data must have been cleaned/modified in some way. Shippers would not be able to replicate it by buying it. SG responded that, when a weather station had changed in the past, new weather station histories had been created for DESC and <u>the</u> equations etc used had also been presented. If these had been kept up to date then Shippers should be able to match the data. Shippers who purchased temperatures and wind speeds from the Met Office would have been able to use these equations to create their own backfilled temperature and wind speed histories. When a weather station changes a new CWV is created and a history provided (back to 1928) to Shippers. SB pointed out that the issue was that a SN could not be derived from CWVs under the current approach."

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Paragraph 1: "...SG disagreed with this view and stated that the WP8 report made it clear that the SN base period values <u>for specific weather stations</u> were calculated separately from the increments, and did not rely upon <u>the</u> historical data <u>for UK climate districts</u> used <u>to calculate the increments</u> in EP2."

The suggested amendments were accepted and the minutes from the meeting held on 02 October 2009 were then approved.

3.2 Minutes of the meeting held on 23 September 2009

SG (National Grid NTS) proposed the following late amendments to the minutes for the meeting 23 September 2009:

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Paragraph 4: "Looking back to the graph, MP asked was it the expectation that it would be somewhere between the two lines? SB believed that it may be quite close to the bottom line (3600). SG commented that the way the base period temperature is calculated gives the difference between the two methodologies; applying increments to the gas industry history would be the xoserve approach. Under EP2 a the same warming element was applied to an average base and the methodology was differently applied calculated using a different methodology. This gives in a few LDZs a small difference but because it is derived slightly differently the mathematical difference has the potential to be quite large between the two base periods is significant compared to the EP2 warming values. SB commented that using a single set of increments will give a result skewed across 36 years and would give a significantly bigger difference."

The suggested amendments were accepted.

3.3 Actions

Outstanding actions were reviewed (see Action Log below).

Action DE1068: xoserve to consider and discuss with the Transporters possible amendments to the consultation process, and report back at November meeting.

Update: MP gave a brief presentation setting out the background, and illustrated the consultation process for the annual NDM proposals, as currently operated under the timescales set out in UNC TPD Section H, which gives opportunities to the various parties to prepare, receive, analyse and respond to data.

Whilst continuing to work within the current framework the Transporters would welcome suggestions in the summer in respect of the methodology and approach to be used for possible use in the following year's Spring Approach, assuming that any suggestions could be looked at in the autumn to clarify impacts and benefits and to gain agreement from DESC.

Transporters recognised the Shippers' concerns regarding the time available to review and respond to the NDM analysis results, and believed it to be possible to provide key NDM results approximately three weeks earlier than currently deadlined in the UNC. Early release would be subject to certain conditions and assumptions however, using 2010 as an example, this would give Shippers the opportunity to take advantage of approximately 24 working days in which to review, analyse and respond to data, which compares with 11 working days if the existing UNC timescales are followed.

SB commented that this extended period might result in the submission of more representations. SB also commented that she did not believe the current process was a consultation.

DJ wanted to encourage more involvement from Shippers whilst still allowing xoserve and Transporters time to consider and see what impacts any proposed changes to the methodology would have. He pointed out that change cannot be made instantly, due to the impact this change has on systems, processes etc, and the necessary procedures have to be followed to ensure the integrity of the process is maintained. DJ stated that perhaps a longer view was required over an extended timespan, enabling the Transporters and the Shippers to work together to influence change rather than immediate adoption of change requests. He hoped that everyone would like to have access to the data earlier, and trusted that this would go some way to address any potential internal planning/resource difficulties that Shippers encountered when reviewing the annual proposals. DJ caveated this by stating that if more representations were received then the Transporters may need to defer the July DESC meeting to a later date if necessary. Action closed

DJ stated that, although not directly related to this action, on a similar point the topic of the Seasonal Normal review consultation was raised at the July DESC meeting and possible changes were discussed. DJ asked if DESC Shippers could consider how thy envisage future SN Review consultation processes being undertaken.

NEW ACTION DE1073: Shippers to consider how they envisage future Seasonal Normal review consultation processes to be undertaken.

Action DE1071: Chair to report to the UNC Committee, on the failure of DESC to reach consensus regarding the application of EP2 data at the conclusion of the Seasonal Normal Review discussions.

Update: The failure to reach consensus had been reported by BF to the UNC Committee on 15 October 2009. The UNCC discussed the position and assigned further actions to various parties to clarify roles/processes and facilitate the way forward; progress was to be reported to the next UNCC. **Action closed**

Action DE1072: Demand Estimation Work Plan to be provided.

Update: The Demand Estimation Work Plan for 2010 was provided to this meeting and the scheduled meeting dates were confirmed. MP pointed out that, as well as the activities associated with DE, additional work was also scheduled for 2010 and would need to be taken into consideration. Key activities included the implementation of the SN Review process, the AMR Replacement project for Demand Estimation sample sites < 293,000, and also management of impacts resulting from Modification 0258. Given the significant workload currently planned DJ requested that DESC bear in mind that consideration should be given to the availability of resource and expertise that could be put into place at short notice to support should any additional activities/further changes to the workplan be required. **Action closed**

Note:

All Supporting documentation for the following sections will be found on the Joint Office website at: <u>www.gasgovernance.co.uk/DESC/101109</u>.

4. Re-evaluation of Model Smoothing Methodology

MP gave a presentation outlining the background to, and principles of, model smoothing. Three forms of analysis had been undertaken (predictive, volatility and trend) to confirm the appropriateness of the model smoothing.

Analysis 1: Predictive

MP explained the purpose and presented charts illustrating the results for various consumption and EUC bands. Although the analysis demonstrated a small improvement in the 'predictable' ability of the smoothed model, the results were not overwhelming. It was pointed out that the predictive element of the results was not the key reason for introducing model smoothing.

Analysis 2: Volatility

MP explained the purpose and presented charts illustrating the results for various consumption and EUC bands. The results were as expected, with the smoothed models demonstrating less year on year volatility. It was explained that this part of the analysis is particularly important in assessing the continued appropriateness of model smoothing.

Analysis 3: Trend

MP explained the purpose and outcomes. Over a 3 year analysis there were limited instances where trends occurred to a notable extent. The most frequently observed pattern was UP/UP. It was noted that trends this year

were not consistent with those of previous years, and no obvious trend appeared to be developing. This view was supported following the inclusion a fourth year in the analysis.

The current analysis was therefore consistent with results from previous analysis and supported the principles established for model smoothing. The Transporters' view was that the current methodology used for model smoothing over 3 years remained appropriate and fit for purpose. It was therefore recommended that model smoothing be applied for 2010/11 analyses.

SB observed that it did not show that it was any worse. DJ stated that model smoothing was a balance between modelling single year trends and averaging trends. There were no further comments.

DESC accepted the continued application of model smoothing for 2010/11 demand modelling.

5. Evaluation of Demand Model Performance for Gas Year 2008/09: Strand 1 - Scaling Factor (SF) and Weather Correction Factor (WCF)

MP gave a presentation outlining the background to the analysis and the key results for example LDZs were illustrated and explained through various charts. The examples given showed the impact that AQ errors could have on a process.

SB pointed out that E.ON's replications did not look as 'flat' as those described by xoserve, and requested that the xoserve graphs be produced to a different scale for future analysis. DJ agreed to this request although stated that the current scales does allow comparison with previous years.

The results tables were briefly discussed and JA commented on the WN LDZ result (slide 7) and questioned the reason it should stand out. Different suggestions were proffered, but no definitive explanation was settled on.

Diverging slightly from this topic, SB had noted and mentioned earlier this year, some extremely different SF shapes between LDZs, the cause/explanation of which was not immediately obvious. As it was still being seen this suggested it was not an issue with the DAFs, as had first been thought. SB produced a chart to indicate her results, and reiterated that it was not immediately obvious why some LDZs behaved significantly differently to other LDZs. SB requested that this be investigated further and agreed to provide copies of her charts/analysis to xoserve.

Action DE1074: E.ON to provide copies of LDZ/SF charts/analysis to xoserve for further investigation; xoserve to report back to the next meeting.

MP then summarised the conclusions reached regarding Scaling Factor Values for 2008/09. In most LDZs the SFs tended to be a little lower than 1, and for most LDZs the average values of SF for winter 2008/09 appeared to be closer to the ideal value of 1 than for the previous winter. For summer 2008/09 the average values of SF were mixed. Monthly RMS values of SF during 2008/09 were generally better than in 2007/08.

Even when lower than 1, the average SF values tended to be close to the ideal value.

MP then presented results relating to the average values of WCF-EWCF. He pointed out that as the parameters for 2009/10 would be different to those of 2008/09 DESC might need to think about what was required from the analysis and give consideration to ways of making a fairer comparison.

Action DE1075: All to consider what type of performance analysis should be done and what changes should be made to achieve a more valid comparison and submit suggestions to xoserve.

SM asked if this change could be incorporated for next year? DJ stated that this would depend on the type of analysis requested and the ability to deliver this by next year. DJ stated if possible, it would be considered.

In summary, for gas year 2007/08 the WCF-EWCF was a measure of the WCF bias, and was negative in most LDZs for this period. However, for gas year 2008/09 a WCF bias was not indicated, because the WCF was no longer dependent on the aggregate NDM SND. It was noted that WCF deviation had worsened in 2008/09, and was caused by the difference between the aggregate NDM SND used to calculate the EWCF and the sum of the ALP weighted daily average consumption in each LDZ used to calculate the WCF.

MP concluded the presentation with a 'snapshot' of the aggregate NDM AQ changes (start of gas year 2009/10), which indicated that the AQs had dropped again following the review, by about 4.4% overall.

6. Review of Demand Attribution to EUC Models newly with/without Cut Offs in 2008/09

The issue of EUC models flipping between cut off/no cut off status and vice versa was raised in the Summer 2008 representation, and the Transporters whilst believing this had no material effect, had agreed to carry out further analysis. MP gave a presentation outlining the background to the analysis and summarising the number of EUC models that had 'flipped' in either direction. As a percentage of the total NDM load, the effect of either status change was seen to be minor and affected demand attribution very slightly. The key results were illustrated and explained through charts.

It was concluded that the Transporters' initial view was supported by the analysis and that the current approach to cut offs should be retained. SB believed that there were more significant problems than this particular one at the present time. No other comments were made.

7. NDM Sample Size Update

MP presented an update on the NDM sample sizes of data recorders and dataloggers.

The data recorder population numbers remained satisfactory; however losses of data recorder equipment were still occurring on the event of a meter exchange. xoserve was liaising with DESC members to investigate details of any losses discovered during the autumn collection, and continued assistance is welcomed.

xoserve was in discussion with various service providers regarding options for the replacement of current data recorder equipment with new AMR technology, and a further update would be provided at the February 2010 meeting.

MP then presented charts indicating the numbers of dataloggers across all LDZs and bands. Active sites had increased by 225 since May 2009, however 317 sites were inactive and were under investigation to establish the cause.

There was a deficit in sample requirements across bands 4 - 8, and xoserve was working with the Transporters to address this. Approximately 280 new dataloggers have been installed since the last update and the deficit in bands 2-5 has decreased.

MP pointed out that the targets were continually moving; the AQ revisions changed the banding of some of the samples and the target numbers for the higher bands 6,7 and 8 become less achievable as the populations steadily reduce in number. The primary cause of terminations continued to be site closure, and xoserve continued to work with Transporters to address the issues.

It was noted that UNC Modification Proposals 0258/0258A may offer a potential option to Transporters to allow AMR equipment to be fitted to smaller Supply Points, and an option to purchase relevant information from third parties. DESC will need to consider the potential impact of implementation of Modification Proposal 0258A. BF confirmed that the UNC Modification Panel had recommended the implementation of both Modification Proposals, but favoured 0258A, and a decision was awaited from Ofgem.

MP added that due to UNC Modification Proposal 0258/0258A and the project to install AMR equipment, the way the sample is managed is likely to change over the next 12 to 18 months. xoserve will continue to keep DESC updated.

8. UNC Modification Proposal 0268 – Change to the Provisions Determining the Earliest Reading Date Applicable within the AQ Review

Initial discussions on this had been held at the Distribution Workstream and the Workstream was keen to receive the view from DESC before progressing.

MP provided an overview of the potential impacts in respect of the AQ calculation, and the timescale required to derive and implement WAALPs. SB asked if the daily calculations/loading of WAALPs would be visible to Shippers. DJ responded that xoserve was looking at ways to provide this to Shippers and would give an update at the next meeting.

MP stated that as a result of the Seasonal Normal review a change was necessary, and the basis on which AQs should be reasonably calculated was then presented in detail. Associated anticipated impacts of changing the AQ backstop date had been identified in relation to this Modification Proposal. MP outlined the issues and impacts and pointed out the section of UNC that would be amended. He then went on to explain the potential perceived effects on the backstop date and how it would be seen to work should the Modification Proposal be implemented. Detailed analysis of the potential impacts had been undertaken on specific areas and MP explained these in more detail. The impact of a backstop date change is anticipated to be small. The key benefit would be an improvement in the accuracy of AQs, which would subsequently improve the allocation process and reconciliation.

BF asked DESC for its views on this Modification Proposal and all present indicated they were in support of the Modification Proposal. This view would be relayed to the next Distribution Workstream.

9. Any Other Business

9.1 Letter to Transporters

Following SB's intimation earlier in this meeting, JA reiterated that a letter (on behalf of all the Shippers) would be sent to the Transporters later this week, (xoserve to be copied in), requesting a reassessment of the seasonal normal analysis.

SB reported that subsequent to the Shippers' formation of the view that the Transporters' decision was based on inappropriate analysis, the Met Office had carried out an independent review and produced a report. The report had been received on Monday. A copy of the report would be enclosed with the letter requesting a reassessment of the Transporters' decision.

DJ asked if the report recommended any alternative options. SB confirmed that it did and said that the Shippers would like to meet with the Transporters to discuss a way forward as soon as possible. SB stated that it would not make sense to carry on when it was possible to do something positive about it.

DJ confirmed that at present xoserve and the Transporters would continue to operate on the basis that the decision has already been made, and looked forward to receiving the letter and report. Subject to the reaction of the Transporters to the content of the report, the December DESC meeting may have to be cancelled/rearranged as appropriate.

10. Date of the next meeting

The next meeting is scheduled to take place at 10:00 on Tuesday 22 December 2009, at 31 Homer Road, Solihull, West Midlands B91 3LT.

Dates for 2010 scheduled meetings are set out below, together with the topics expected to be covered.

Date	Work Items	Venue		
22 December 2009	 CWV Review: Present revised CWVs for all LDZs 	10:00am 31 Homer Road, Solihull B91 3LT		
05 February 2010	 Evaluation of Algorithm performance: Strands 2 and 3 (RV and NDM Sample Data) Spring 2010 Approach 	10:00am 31 Homer Road, Solihull B91 3LT		

04 June 2010	 Demand Estimation Technical Forum Consultation on proposed revision of EUC definitions and demand models Demand Estimation Sub Committee 	10:00am Energy Networks Association, Dean Bradley House, 52 Horseferry Road, London SW1P 2AF
23 July 2010 (if required)	1) Response to representations	10:00am 31 Homer Road, Solihull B91 3LT
10 November 2010	 Evaluation of NDM Sampling Sizes Evaluation of Algorithm Performance: Strand 1 – Scaling Factor and Weather Correction Factor 	10:00am Energy Networks Association, Dean Bradley House, 52 Horseferry Road, London SW1P 2AF

Action Log: UNC Demand Estimation Sub Committee 10 November 2009

Action Ref*	Meeting Date(s)	Min ute Ref	Action	Owner**	Status Update
DE1068	24/07/09	4.0	xoserve to consider and discuss with the Transporters possible amendments to the consultation process, and report back at November's meeting.		Closed
DE1071	02/10/09	4.1	Chair to report to the UNC Committee, on the failure of DESC to reach consensus regarding the application of EP2 data at the conclusion of the Seasonal Normal Review discussions.	DESC Chair (BF)	Closed
DE1072	02/10/09	5.1	Demand Estimation Work Plan to be provided.	xoserve (DJ/MP)	Closed
DE1073	10/11/09	3.3	Shippers to consider how they envisage future Seasonal Normal review consultation processes to be undertaken.	Shippers	Pending

Action Ref*	Meeting Date(s)	Min ute Ref	Action	Owner**	Status Update
DE1074	10/11/09	5.	E.ON to provide copies of LDZ/SF charts/analysis to xoserve for further investigation. xoserve to investigate and report back to next meeting.		Pending
DE1075	10/11/09	5.	All to consider what type of performance analysis should be done and what changes should be made to achieve a fairer comparison and submit suggestions to xoserve.	All	Pending

* TF – Technical Forum

** Key to initials of action owner: ALL: all present, MP: Mark Perry; DJ: Dean Johnson; BF: Bob Fletcher