

DEMAND ESTIMATION SUB COMMITTEE

Minutes

Friday 05 February 2010

31 Homer Road, Solihull, West Midlands B91 3LT

Attendees

Bob Fletcher (Chair)	(BF) Joint Office
Lorna Dupont (Secretary)	(LD) Joint Office
Alison Chamberlain	(CW) National Grid Distribution
Claudio Ziviani	(CZ) Corona Energy
Gavin Stather (Member)	(GS) ScottishPower
Jonathan Aitken (Member)	(JA) RWE npower
Linda Whitcroft (Transporter Agent)	(LW) xoserve
Louise Hellyer	(LH) Total Gas & Power
Mark Perry	(MP) xoserve
Matt Jackson (Member)	(MJ) British Gas
Mo Rezvani (Member)	(MR) SSE
Richard Pomroy	(RP) Wales & West Utilities
Sally Lewis (Member)	(SL) RWE Npower
Sallyann Blackett (Member)	(SB) E.ON
Simon Geen	(SG) National Grid NTS

1. Introduction

BF welcomed all attendees.

1.1 Confirmation of Membership

The membership was confirmed and the meeting was declared quorate.

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

2.1 Minutes of the previous meeting – 22 December 2009

The minutes were approved.

2.2 Actions

Outstanding actions were reviewed (see Action Log below).

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.

Update: MP reported that xoserve had reviewed E.ON's query and had published a response on the JO website. SB stated she was not entirely convinced by the response; as it was manifesting consistently in the same LDZs,

she believed that it should be possible to pick up on, and the changes in temperature suggested that it was weather related. SA pointed out that, of the four items at the bottom of the response, two were in contradiction. Although xoserve had fulfilled its action, SB is to give xoserve's response more thought and would feed this into E.ON's response in June and also into the work of Review Group 0280. **Action closed**

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.

Update: Under consideration. No other views have been received so far and MP reported that by November xoserve might have some firmer views as to how better to present this. SB added that she would provide some suggestions as to what E.ON would find useful. **Action carried forward**

Action DE1076: Check/confirm that formal responses from the remaining Transporters to the formal letter submitted by Shippers had been issued/received.

Update: Responses had been received from all Transporters apart from Scotia Gas Networks. BF informed the meeting that although unable to be present, Scotia Gas Networks intended to send out a formal response by the end of the day. **Action Closed**

Action DE1077: Comparison of seasonal fit and bias – xoserve to provide information separated out into individual months.

Update: Provided and published on the JO website. **Action closed**

Action DE1078: Application of linearly varying increments – xoserve to provide information on the increments used (if agreed with the Met Office).

Update: A worked example had been published on the secure area of the xoserve website. SB reiterated that she would like to see the increments used. JA and MR pointed out that it was agreed that all of the WP8 data could be published and wondered why the whole data could not be released. MP reiterated that xoserve had had to obtain the agreement of the Met Office and pointed out that EP2 parties already have access to the data themselves and can therefore reproduce it.

The difficulty appeared to be caused by the fact that xoserve was not an EP2 party but had been permitted access, and also the terms of the Licence between xoserve and the Met Office whereby data could not be published without the Met Office's agreement despite the agreement of the EP2 Board.

SB stated that Shippers needed to be able to validate whatever xoserve had used to achieve the calculations, and asked if the data could be released to one Shipper so that at least one party could validate it. LW responded that she would have to ascertain the legal position to see if SB's request could be supported and report back before the next meeting via a post meeting note. In the meantime

the EP2 Board members would contact the Met Office to attempt to resolve the issues that seemed to beset the release of this data. **Action carried forward**

Action DE1079: Basis of results – xoserve to confirm if based on new or old CWVs.

Post Meeting Note: The degree days results for each LDZ ('Actual DDs', 'New SN basis' and '17 yr') are all based on the new CWV definitions and thresholds.

Update: Provided. No further comments. **Action closed**

3. Progress of Work Plan

All supporting documentation for the following sections will be found on the Joint Office website at: www.gasgovernance.co.uk/DESC/050210.

3.1 Re-evaluation of EUC definitions and Demand Model Performance: RV and NDM Sample Strands

Strand 2 - Reconciliation Variance Analysis

MP gave a presentation and explained how the Reconciliation Variance was carried out and how the RV analysis methodology was applied. Example graphs were displayed, with further examples being provided in an appendix to the presentation.

The RV analysis highlighted a 'peaky' trend of 'Over Allocation' in the winter and 'Under Allocation' in the summer, and 2008/09 resulted in 47% of profiles being defined as 'peaky' (42% in 07/08). Levels of reconciliations rejected were similar to previous years.

MP pointed out that the available reconciliation for analysis was incomplete, particularly for Bands 2 and 3 (non-monthly read meters). However the analysis is revised in Spring 2010, by which time more data will be available. AOs continue to reduce each year.

It was also pointed out that the analysis is not necessarily representative of the population, and should be considered alongside SF and WCF analysis together with NDM Sample data.

Strand 2 Analysis of NDM Sample Consumption

Using the actual NDM Sample consumption for 2008/09 the percentage error of sample consumption was compared against three models:

- Allocated using 2008/09 ALPs and DAFs, real system WCF and SF - ("As Used")
- Allocated using 2008/09 ALPs and DAFs, EWCF and SF = 1 – (Best Estimate 2008)
- Allocated using 2009/10 ALPs and DAFs, 08/09 EWCF and SF = 1 –

(Best Estimate 2009)

These were illustrated with further example graphs, and MP concluded that the “best estimate 2008” and the “best estimate 2009” analyses suggested that for bands 01, 02, 04, 05, 06, 07 and 08 there was under allocation (positive errors) in the winter, and over allocation (negative errors) in the summer, the profile being too flat.

For band 03 however, the analysis suggested over allocation (positive errors) in the winter and under allocation (negative errors) in the summer, the profile being too peaky.

The RV analysis indicated profiles that were too peaky in most LDZs in bands 02 and 03 (and generally below or at 5% level); good in most LDZs in bands 04, 05 and 06 (overall slightly too peaky in bands 04, 05 and 06, well below 5% level); a mixture of good, too peaky and too flat profiles in band 07 (overall a little too peaky, well below 5% level); and a mixed picture in band 08 where profiles that were too peaky predominate, (overall a little too peaky, well below 5% level).

Conclusions

There were limitations due to different, restricted data sets. The RV analysis excludes band 01B and was based on a sub-set of reconciled data. The NDM sample analysis is based on validated NDM sample data. Both analyses suffer from small numbers of contributing meter/supply points at the higher consumption bands.

However, it was important to note that both approaches, subject to their limitations, suggested only small inaccuracies and the Spring 2010 RV analysis is updated to provide better representation.

MR commented that it would be useful to have a table presenting the 3 year AQ by LDZ by EUC, in order to see the level of demand destruction. SB added: sum the aggregate demand, ie annual average consumption by EUC. MP agreed to consider production.

Action DE0201: Consider producing a table presenting the 3 year AQ by LDZ by EUC.

SB observed an over allocation in Band 1; a misalignment which may require reshaping.

3.2 Approach to Spring 2010 Modelling

MP reported that no comments had been received following the November meeting.

The main change to 2010 modelling was that the EUC and aggregated NDM demand modelling will use new CWVs and SNCWVs, but the general principles will be similar to the 2009 modelling approach.

An early preview of key files should be possible assuming DESC accept the proposals put forward at the Technical Forum in June.

The DESC 2010 meeting schedule was displayed, and MP reiterated the general programme to be covered throughout 2010. He added that an additional meeting (to address the Seasonal Normal Review Process) might be required before the next scheduled meeting in June, but he was unable to indicate a firm date or venue at present.

SB would like to know in advance what approach is going to be used for Band 1, to consider if it is appropriate before the analysis is done.

SB also pointed out that there was an issue with historical data, whereby it was not allowing for known holidays. She believed it should be possible for DESC to agree in advance what days should be included as holidays, eg 28 December 2009, and what allowance should be made for these 'fluid' days that may change from year to year. Perhaps DESC should create some rules to define what should be viewed as a 'holiday' day, as making no allowance for these variable days is clearly wrong. A clear rationale is needed to accommodate the 'holiday' effect rather than just ignoring it. MR believed there may be many methods of counteracting the effect, and suggested for example looking back and choosing a previous year that matched the same 'holiday' pattern as the current year. SB pointed out that the correct 'holidays' were included in the ALPs but not in the DAFs, and suggested that DESC should agree each year what this should be, so that we avoid knowingly putting in a misallocation. It was recognised that the process of agreeing what codes should be applied had not been done before, but this is no reason not to do it this year.

SG commented that it had been tried before for National Grid's modelling and it was found to be far more difficult than at first appeared; the days around Bank Holidays can have unintentional effects/consequences in other analysis. He agreed that a Bank Holiday factor was required but the surrounding days may be more difficult to manage. SB added that if this could not be done the reasons for not doing it should be made clear.

Action DE0202: xoserve to provide update on comments made regarding Spring Approach, including treatment of bank holidays and 01B weekend effects.

4. NDM Sample Update

MP reported that an overall deficit remained in the Datalogger population, however for the Large NDM supply points validated numbers from the Autumn analysis were in line with the Spring 2009 numbers. The autumn numbers suggested that the data aggregations used in 2009 would also be viable, but there was no assurance for Spring 2010, and any decline in the higher bands would be addressed through the Spring Approach methodology.

Data recorder numbers remained very healthy.

4.1 DM Elective

MP reminded DESC that DM Elective for Bands 6 and 8 was due to 'go live' in November 2010, and reiterated the potential impacts on Demand Estimation, the main concern being that a site would no longer be representative of typical NDM consumption. As agreed with DESC last year such sites would be kept in the sample and their usage would be monitored.

In response to a question from MR, LW thought that DM Elective may potentially affect around 4,500 sites, but xoserve was hoping to reconfirm numbers with Shippers this summer. Phase 1 would commence 23 November 2010 when Shippers will have to renominate and confirm status.

RP then advised that Wales & West Utilities was looking to change DM loggers and would not want to replace any that were intending to go to DM Elective shortly after, and requested that Shippers present check what was happening within their portfolios and report back to the Transporters so that unnecessary work/costs could be avoided where possible.

Action DE0203: Shippers to check if any sites within their portfolios were intending to move to DM Elective and report back to the Transporters.

4.2 Data Recorder Replacement

MP reported that xoserve expected to appoint a service provider and commence a replacement programme following the Spring data collection with the objective of having AMR devices installed by the end of Quarter 3 2010. DESC support was sought for the protection of new equipment and the continued dataflow for all sampled sites to maintain the integrity of the sample.

4.3 Shipper Sample Report

MP reported that from April 2010 xoserve would deliver a monthly portfolio report to Shippers via email, containing details of their demand estimation sites. At the Distribution Workstream meeting Shippers were asked to provide appropriate contact details for receipt of this new report. MR and RP suggested that PEG and MAM contacts might also be appropriate recipients.

MJ asked if the attachment of smart meters would cause any other sample issues. JA added that he had a smart meter fitted already and there did not seem to be any way that any other pieces of equipment could be connected to it. He pointed out that it did change consumer behaviour, and an interim solution might be needed to address any issues and to decide what is included in the sample.

5. Seasonal Normal Basis Update

MP gave an update on the Seasonal Normal review. The revised Composite Weather Variables and Seasonal Normal Values currently being applied to derive revised EUC and historical aggregate NDM demand models were equivalent to those derived in Spring 2009 using new CWV and SNCW.

The parameters to be used in calculation of WAALP values will be based on these revised models as set out in UNC TPD Section H3.4.3.

MP added that the revised values of ALPt, DAft, EWCFt, used to compute revised daily WAALPs, would be made available to Shippers via UK Link documents in the spring. However, for gas year 2009/10 only the ALPt and DAft can initially be published. Values of EWCFt for gas year 2009/10 can only be made available in stages, as EWCF depends on actual weather on the day.

In the meantime xoserve had continued to have discussions with the Transporters and the Shippers to gain further views and develop a greater understanding as to how the Seasonal Normal review process can progress in a mutually acceptable way. A further meeting focused on Seasonal Normal will be added to the DESC schedule once a further update is available.

6. Any Other Business

6.1 Weather Data Dissemination

SG distributed a handout to the meeting, providing an update on the position with respect to release of data.

There was a discussion on the integrity of the proxy data used to backfill any gaps in history, and the need to understand when such substitutions were made and which weather station(s) was used, to enable recreation of the data by Shippers.

It was pointed out that such detailed information might not be available as data was inherited following various industry changes and sources/records of such substitutions within the legacy data may no longer be available, assuming they ever were.

SG confirmed that National Grid would not be issuing any dataset, and that Shippers would have to make their own arrangements to obtain a copy of the back history via the Met Office or METEO.

JA observed that it was now clear that the history of the data is not fully understood as Shippers had previously been led to assume. No audit trail of substitutions was of concern, because the use of different substitutions can produce different effects. The assumption previously made that National Grid's maintained history is 'the best' is therefore questionable, and no work has been done to verify if it is of better quality. The main concern is that the true basis of National Grid's history is not fully understood and cannot demonstrate consistency in its backfilling of data. It cannot lay claim to consistency.

SB added that she was more concerned with the approach to gap filling rather than weather station moving.

It was concluded that the parties present would consider the note provided and any further actions to take.

Post Meeting Note: The handout provided by National Grid NTS on the day has since been published on the Joint Office website.

7. Date of the next meeting

The next meeting is scheduled to take place at 10:00 on Friday 04 June 2010, at the Energy Networks Association, Dean Bradley House, 52 Horseferry Road, London SW1P 2AF.

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

Date	Work Items	Venue
04 June 2010	1) Demand Estimation Technical Forum - Consultation on proposed revision of EUC definitions and demand models 2) 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	1) Evaluation of NDM Sampling Sizes 2) 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 05 February 2010

Action Ref*	Meeting Date(s)	Minute 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.	E.ON (SB/SM) and xoserve (LW/MP)	Closed
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	All	Carried forward

Action Ref*	Meeting Date(s)	Minute Ref	Action	Owner**	Status Update
			comparison and submit suggestions to xoserve.		
DE1076	22/12/09	2.2	Check/confirm that a formal response from the remaining Transporter to the formal letter submitted by Shippers had been issued/received.	All	Closed
DE1077	22/12/09	4.1	Comparison of seasonal fit and bias – xoserve to provide information separated out into individual months	xoserve (LW/MP)	Closed
DE1078	22/12/09	4.2	Application of linearly varying increments – xoserve to provide information on the increments used (if agreed with the Met Office). a) LW to ascertain the legal position to see if SB's request could be supported and report back before the next meeting via a post meeting note. b) EP2 Board members to contact the Met Office to resolve the issues surrounding release of this data.	xoserve (LW/MP) xoserve (LW) EP2 Board members	Pending action – expanded
DE0201	05/02/10	3.1	Consider producing a table presenting the 3 year AQ by LDZ by EUC.	xoserve (LW/MP)	
DE0202	05/02/10	3.2	xoserve to provide update on comments made regarding Spring Approach, including treatment of bank holidays and 01B weekend effects.	xoserve (LW/MP)	
DE0203	05/02/10	4.1	Shippers to check if any sites within their portfolios were intending to move to DM Elective and report back to the Transporters.	Shippers	

* TF – Technical Forum

** Key to initials of action owner:

ALL: all present, MP: Mark Perry; BF: Bob Fletcher; LW: Linda Whitcroft