DEMAND ESTIMATION SUB COMMITTEE

Minutes

Monday 06 November 2006

London

Attendees

Dennis Rachwal	(Chair)	(DR)	Joint Office of Gas Transporters
Lorna Dupont	(Secretary)	(LD)	Joint Office of Gas Transporters
Sallyann Blackett	(Transporter Agent)	(SAB)	xoserve
Dean Johnson		(DJ)	xoserve
Euan Chisholm		(EC)	Scottish Power
Derek Abernethy		(DA)	Scottish Power
Steve Taylor (member)		(ST)	Centrica
Mo Rezvani (member)		(MR)	Scottish & Southern Energy
Steve Coles (member)		(SC)	E.On UK
Peter Osbaldstone		(PO)	National Grid Transmission
Chris Moloney		(CM)	xoserve
Hannah McKinney (member)		(HM)	EDF Energy
Jonathan Aitken (member)		(JA)	RWE Npower

Present for Item 4

Gareth Evans	(GE)	Total Gas & Power

Apologies

Sandra Spence	(SS)	Scottish Power
Tim Davis	(TD)	Joint Office of Gas Transporters

1. Confirmation of Membership and Apologies for Absence

1.1 Membership and alternates

Euan Chisholm attended in place of Sandra Spence.

1.2 Apologies

Apologies were received from Sandra Spence and Tim Davis

2. Review of Minutes and Actions from the Previous Meeting

2.1 Minutes

The minutes from the meeting held on 25 July 2006 were accepted.

2.2 Actions

Outstanding actions were reviewed (see Action Log below).All actions were closed except DE1021. SAB explained that examination of data relating to modelling of summer base load was ongoing.

3. Relevant UNC Modifications (potential DESC implications)

3.1 Modification Proposal 0088: Extension of DM service to enable Consumer Demand Side Management

GE, as the Proposer of the Modification Proposal, provided an update on current progress. GE informed the meeting that Version 4.0[1] had been issued in the previous week and varied substantially from the original but still sought to utilise Automated Meter Reading (AMR) to facilitate additional daily information for Transporters. Whereas it had originally been thought that new NDM profiles and algorithms might be needed, this was no longer the case. GE suggested the impact on the work programme monitored by the Demand Estimation Sub-Committee would be minimal.

Key points of the Proposal:

- Creation of a new category - DM (AMR)
- Utilising current DM methodology
- D-7 default if information is not provided.

GE was still concerned that defaulting to zero penalised everyone, and as this was not satisfactory GE might raise a Review Proposal at some point in the New Year to look at this.

SAB suggested the Committee should consider impacts on the algorithms arising from the potential switch of NDM sites to DM (AMR); in particular the sample numbers for larger NDMs could be reduced. It seemed likely that larger NDMs would be more likely to take up DM (AMR) (if available), rather than smaller NDMs. DMs were not currently included in NDM models, and the conversion of a number of other sites to DM (AMR) would mean that these too would be unavailable for analysis and could have an impact on accuracy. Boundaries for models may need to be changed to give better profiles and retain accuracy. Impacts on file format changes for EUC boundaries may arise, e.g. ALPS, DAFS, capacity charging. The nature and scale of impact would be dependent/triggered by the volume of sites that were re-categorised.

In response to a question from MR, GE currently thought it unlikely that the Review Proposal would be aimed at these modelling issues.

GE stated that a significant number (up to around 25%, 15,000) of Total's portfolio had expressed interest in a service that might be facilitated by Modification Proposal 0088.

[1] www.gasgovernance.com/Network Code/UNC Modification Proposals/Live Modification Proposals

The Proposal was due for consideration at the UNC Modification Panel meeting on 16 November and GE anticipated a consultation period of 15 days. Total Gas & Power had proposed an implementation date of 01 April 2007. In discussion it was considered there was no straightforward way of taking account of this Modification Proposal in Spring 2007 analysis for 2007/08 NDM Proposals since there was no certainty about how many and which consumers might switch from NDM to a DM (AMR) service.

3.2 Modification Proposal 0115: Correct Apportionment of NDM Error[1]

SAB updated the Committee on the progress of this Modification Proposal, which had been raised by Centrica and discussed at the last Distribution Workstream meeting.

SAB advised that it would impact underlying energy allocation to NDM market sectors. The Proposal argued that a lot of factors that affect the industry, eg Theft of Gas, unregistered Supply Points, etc contribute to unreconciled energy that is accommodated within the Small Supply Point NDM market. The Proposal looked to reallocate a proportion of this to the Larger Supply Point market. From DESC's perspective this would change the underlying amount of energy in the Bands, the relationship between demand and temperature, ALPs and DAFs, and will affect the models. It was thought that there would be definite impact on Load Band 1, but other 'knock on' impacts may need to be examined. It would depend on how much energy was moved out and to which new Load Band it was then reallocated to.

The Proposer has suggested implementation in 2007. If implementation is directed and, for example was to take effect in October 2007, then ideally the Spring 2007 analysis should take this Modification into account.

4. Progress of Work Plan

4.1 Re-evaluation of model smoothing

xoserve gave a presentation "Model Smoothing Sense Check"[2].

The Load Factors for the last four years had been analysed to explore for trends. A new model had been created each year, and aggregated with those from the previous two years. There did not look to be any consistent pattern across the LDZs/EUC Bands to change this practice. SAB advised that xoserve was mindful of not wanting to affect capacity charges by changing Load Factors each year.

DESC agreed to continue three-year model smoothing.

[1] www.gasgovernance.com/Network Code/UNC Modification Proposals/Live Modification Proposals

[2] http://www.gasgovernance.com/Code/UNCCSubCommittees/DESC/2006meetings/

4.2 Re-evaluation of NDM Sampling

xoserve gave a presentation "NDM Sample Reporting"[2].

- **Data Recorders (0 - 73.2MWh)**

It was reported that there was a surplus of recorders across all LDZs, and that a replacement programme was ongoing to maintain sample size and align to market population.

Data recorder terminations had increased in 2006. This seemed partly due to Shippers replacing meters with non-loggable meters. These are lower cost. This is a continuing issue as data is lost and new sites then have to be found. On a positive note, more recorders were being left on site or returned following meter replacement, and the autumn collection rate was 99%. SAB advised that some Shippers had informally guaranteed to find an alternative site for logging. SAB also commented that, depending on how a MAM managed its meter replacement activities, there could be practical difficulties for MAMs to have stock of loggable meters on vans when they arrived at a site that had a loggable meter. MR suggested that as this was going to be a future problem something more formal might be considered, perhaps by writing out to Shippers.

The impacts of data logger termination may be summarised as:

- A cost to Transporters in getting loggable meters attached
- Replacement of a loggable meter by a second loggable meter results in the loss of a few days of data.
- Replacement of a loggable meter by a non-loggable meter results in loss of data, and the loss of a supply point from the NDM sample.
- A new suitable supply point has to be found and a recorder to be fitted.
- Transporters have a diminishing set of meters in their ownership
- There is no direct financial incentive to fit a loggable meter.

Action DE1025: MR to examine SSE's policy in respect of replacement meters, and report as appropriate.

- **Data Loggers (>73.2MWh)**

It was observed that there was a surplus of loggers in Bands 2 and 3, but a deficit in Bands 4, 5 and 6, and there had been a high count of logger terminations over the last 12 months. A deficit was apparent in Bands 7 and 8, and identifying new and suitable sites was difficult. A high percentage of the market population was sampled, nevertheless a number of commissions were coming through in Bands 7 and 8 and the installation programmes would boost the sample count over the next few months. There were no significant concerns across any of the Bands at the present since there was still sufficient sample count for modelling purposes.

[2] http://www.gasgovernance.com/Code/UNCCSubCommittees/DESC/2006meetings/

The potential effect that Mod 0088 may have on the populations of the higher Bands was queried. SAB thought (as outlined in 3.1 above) that it was possible that these Bands may have to be aggregated for modelling purposes (including, for example, national profiles for larger NDM supply points) if there was substantial reduction in population and sample. In the event of implementation of Modification Proposal 0088 then a report on the take-up of DM (AMR) would be helpful.

Over the last 12 months in Bands 7 and 8 many sites had changed from NDM to DM status. SAB thought that it was unlikely to impact 2007 Spring Analysis, but may become a real issue in the future.

4.3 Re-evaluation of EUC definitions and Demand Model performance – WCF/SF strand[2]

xoserve gave a presentation "NDM Algorithm Performance – Strand 1, Weather Correction Factor (WCF) & Scaling Factor (SF)" and provided a report "Evaluation of Algorithm Performance – 2005/06 Gas Year, Scaling Factor and Weather Correction Factor"

Using the example graphs DJ gave an explanation of spikes, which generated a short discussion on Load Factors, models, and the effect of temperature and the time of year on consumer behaviour. It was observed that Load Profiles modelled seasonality so this would not explicitly model short-term weather impacts. This summer demand had reduced significantly, and it was always harder to predict consumer behaviour to temperature in the summer period. JA questioned whether the level of daylight hours had been examined. SAB said this had been investigated in previous years and it did not seem to have much of an effect as far as gas demand was concerned.

For most of the LDZs the WCF bias was negative across all days, winter and summer for the Gas Year 2005/06, and this negative bias is less than for the previous Gas Year 2004/05.

For the Gas Year 2005/06 most monthly average values of weather corrected aggregate NDM demand (as a percentage of aggregate NDM SND) were below 100%, giving an indication that the NDM SNDs for Gas Year 2005/06 may have been too high.

In general this negative WCF bias would lead to Scaling Factors tending to be higher than the ideal value, but across all days, winter and summer for the Gas Year 2005/06, the averages have been broadly closer to 1 in most of the LDZs. This was better compared to the previous Gas Year. The RMS values of Scaling Factor were also generally better. Possible explanations for this included AQs being too high (tending to depress Scaling Factors) and a negative WCF bias (tending to inflate Scaling Factors). Comparing AQ values before and after 01 October 2006 showed a reduction in AQ of 2.4%,

Focusing on the first ten days in October SC asked if the AQs needed to come down further. SAB commented that consumers behaviour may lag the

[2] http://www.gasgovernance.com/Code/UNCCSubCommittees/DESC/2006meetings/

changes in temperature, and it was really too early to tell at present. PO observed that demand was now (November) getting closer to the forecast.

There was a query as to whether the 17 year long period for SN may still be too long, with a suggestion being made to reduce it to a 10 year average in an attempt to make it more representative of what is happening now. It was observed that the 2005 calendar year was very close to forecast and also some LDZs ran colder than the new SN last year. PO remarked that the 17-year period excluded the last significant cold year experience, and that reducing to 10 years may make no appreciable difference. SAB reported that in accordance with UNC H1.4.2 the next review of CWV was scheduled for 2010 and the analysis for this would start in 2008 after the 2008 Spring Analysis. In discussion it was observed that it might be feasible to bring this analysis forward by one year if there was evidence to justify such early analysis.

4.4 CWV replacement for London Weather Centre

SAB gave a presentation "CWV Review – London Weather Station Move" following on from the previous information supplied at July's meeting.[2]

SAB advised that if LWC closed before the end of this Gas Year, then a pseudo CWV for LWC would be created for the rest of the Gas Year, and a switch would be made to Heathrow at the start of the next Gas Year. She went on to explain the contents of the example graphs, pointing out that "out-lying" data was excluded, and showed comparisons of profiles and the fit of CWV parameters.

The revised CWVs based on the Heathrow data have been developed for use in the models for three LDZs. These will be used in the Spring 2007 NDM analysis, to be implemented on 01 October 2007. There were no substantive queries from DESC at this meeting.

SAB advised that DESC's formal agreement to the weather station change would be sought at the next meeting.

Action DE 1026: SAB to seek DESC's formal agreement to the weather station change at the next meeting (16 January 2006).

[2] http://www.gasgovernance.com/Code/UNCCSubCommittees/DESC/2006meetings/

5. Review of Workplan

Dates for January and June 2007 meetings are set out below, and SAB indicated that scheduling Work Items might be adjusted between the November and January meetings.

Date	Work Items	Venue
16 January 2007	*Annual end of gas year performance evaluation (RV strand and NDM Sample strand)* *Discussion on approach to Spring 2007 modelling* *NDM Sample reporting*	11:00am xoserve offices, 51 Homer Road, Solihull
04 June 2007	Consultation on EUC definitions and demand models NDM algorithm performance for April 2006 to March 2007	10:30am Elexon, 350 Euston Road, London

6. AOB

None.

7. Date of next meeting

The next meeting will be held at 11:00am on Tuesday 16 January 2007 at xoserve's offices, 51 Homer Road, Solihull, West Midlands B91 3QJ.

Action Log – UNC Demand Estimation Sub Committee 06 November 2006

Action Ref	Meeting Date(s)	Minute Ref	Action	Owner*	Status Update
DE 1019	25/07/06	3.0	Facilitate liaison between Development Working Group 0088 and DESC as appropriate	Joint Office (DR)	**Closed** Discussed 6/11/06
DE 1020	25/07/06	3.0	Notify current relevant UNC Modification Proposals as a standard item to the DESC Agenda for future meetings and incorporate in Terms of Reference.	Joint Office (DR)	**Closed** Standard agenda item included in Terms of Reference
DE 1021	25/07/06	3.0	Examine and report on data relating to modelling of summer base load	xoserve (SAB)	06 November 2006; analysis ongoing. **Carried forward**
DE 1022	25/07/06	5.1	Transporters conduct a further 5 day consultation on the different SND forecasts for NDM Proposals "option A or B".	Users	Responses received (02 August 2006) and considered. **Closed**
DE 1023	25/07/06	5.2	Ask the Transporters to ensure that Users are kept informed and given advance notice of any potential changes in sources of weather data.	xoserve (SAB)	**Closed** included in Terms of Reference
DE 1024	25/07/06	6	Notify the Joint Office which Work Items would be reported and discussed in November and January DESC meetings	xoserve (SAB)	**Closed** Indicated in Terms of Reference
DE 1025	06/11/06	4.2	Data Recorders: examine SSE's policy in respect of replacement meters, and report as appropriate.	SSE (MR)	16 January 2007
DE 1026	06/11/06	4.4	LWC closure: SAB to seek DESC's formal agreement to the weather station change at the next meeting (16 January 2006)	xoserve (SAB)	16 January 2007

* Key to initials of action owner

SAB – Sallyann Blackett, DR – Dennis Rachwal, MR – Mo Rezvani