#### **DEMAND ESTIMATION TECHNICAL FORUM**

#### and

# DEMAND ESTIMATION SUB COMMITTEE

#### **Minutes**

# Friday 04 June 2010

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

#### Attendees (for both meetings)

Tim Davis (Chair) (TD) Joint Office Lorna Dupont (Secretary) (LD) Joint Office

Colin Thomson (CT) Scotia Gas Networks

Dave Parker (DP) EDF Energy
Gavin Stather (Member) (GS) ScottishPower

Joanna Ferguson (JF) Northern Gas Networks

Jonathan Aitken (Member) (JA) RWE npower

Linda Whitcroft (Transporter Agent) (LW) xoserve

Louise Hellyer (LH) Total Gas & Power

Mark Linke (ML) British Gas
Mark Perry (MP) xoserve
Mo Rezvani (Member) (MR) SSE

Paul Tuxworth (PT) National Grid NTS Richard Street (RS) Corona Energy Sally Lewis (Member) (SL) RWE Npower

Sallyann Blackett (Member) (SB) E.ON Sarah Palmer (Member) (SP) E.ON

Simon Trivella (ST) Wales & West Utilities

#### Attendees for DESC only

Rob Harrison (RH) Meteorological Office Simon Geen\* (SG) National Grid NTS

Steve Marland\* (SM) National Grid Distribution

#### **DEMAND ESTIMATION TECHNICAL FORUM**

#### 1. Introduction

TD welcomed all attendees.

# 2. Progress on Non-Daily Metered (NDM) profiling and capacity estimation algorithms for 2010/11

MP (xoserve) gave an overview of Demand Estimation, its associated consultation timetable, and presented the current completed analysis (including the modelling basis, and the results of the Small NDM analysis and

Large NDM analysis). MP pointed out that this was not a way of forecasting demand, but of apportioning aggregate NDM demand on a daily basis. The purpose of the demand models was to derive profiles and Load Factors (LFs).

Queries and views were invited on Transporter recommendations during or following on from the presentation.

#### 2.1 Timetable

It was confirmed that the NDM draft proposals, based on the recommendations discussed at this meeting, would be published on the xoserve website by 30 June 2010, and that User representations should be made by 15 July 2010. Consultation will then take place, and any representations received would be discussed and responded to at the next DESC meeting (provisionally arranged for 23 July 2010). The final proposals will be published on the xoserve website by 15 August 2010.

#### 2.2 Modelling

MP explained that the purpose of the DETF was to inform DESC of the numbers of validated data sets collected and to consider the most appropriate aggregations to apply to the most recently available sample data (2009/2010).

The validation and analysis of Small and Large NDMs would be considered separately.

Key aspects of the modelling basis and parameters were explained for the EUC demand modelling basis for Spring 2010 analysis, and the aggregate NDM demand models. A description of the proposed modelling components was given, together with data set identification and impacts, and modelling impacts in terms of Indicative Load Factors (ILFs). The statistical tools and mechanisms used to identify the recommended way forward were also presented, including Root Mean Squared Error (RMSE) and R² Multiple Correlation Coefficients. The WAR value of a supply point was defined and MP pointed out that the limits defining WAR band EUCs were a little higher than those of last year as winter 2009/10 was considerably colder than winter 2008/09. Supply points will be assigned the newly defined WAR band EUCs for 2010/11 based on their consumption behaviour over the previous winter (Dec 2009 – March 2010).

SB asked if DESC/DETF was to be given details of what was going to be excluded from the modelling, and the reasons for any such decision. MP would check to see if this information could be published.

Action TF0601: xoserve to consider whether details of any exclusions from the modelling, together with the reasons for such decisions, are able to be published.

SB asked if the evidence from the previous analysis, which showed an improvement when not applying warm weather cut offs to Bands 1 and 2, was available. SB also asked if analysis of removing warm weather cut offs for Bands 3 and above had been done, adding it would be good to see what the benefit of the Scaling Factor is over the summer.

Action TF0602: xoserve to check if historical analysis was available showing how much of an improvement was made by not applying warm weather cut offs for EUC Bands 1 and 2 and report to DESC.

SB recalled that some historical analysis might have been done prior to 2005 and the founding of xoserve and the Joint Office; PT thought that it might have been around 2003. SB pointed out that the same behaviour was not seen in every LDZ; maybe it used to help, but does not now.

MP then proceeded to present the results in greater detail.

# 2.3 Small NDM Analysis (up to 2,196 MWh pa)

MP reported the models appeared to be fairly robust this year, so there were no great surprises to be given further consideration.

Small NDMs represented a significant proportion of the total NDM load (90%, and 74% of which were located in Band1) and 99.96% of all Supply Points.

# Small NDM Data Recorders - available sample data

MP advised that the population of active data recorders within the sample had decreased by 164 over the analysis period. The position was closely monitored. Installation programmes were ongoing and there were no issues in respect of the modelling. LW commented that the main area of concern was loss of data recorders during meter exchanges, but Shippers now have greater focus on this through the monthly reports and improvements are being made.

RS referred to the iGEM standards whereby parties should either reconnect or inform the owner of the disconnected equipment or the inability to reconnect. Non-compliance with these standards could be brought to the attention of SPAA, which runs the RGMA processes and MAMCOP. SB added that UNC conditions were also not being met if equipment is being removed. LW agreed it would be useful to understand if disconnection of equipment was a major cause of, or contributing to loss of data. It would also be helpful if Shippers could follow up on this issue with their internal contacts.

Action TF0603: xoserve to advise Shippers of the contact names held/report recipient names to enable follow up of any equipment disconnection issues that may be contributing to loss of data.

#### Small NDM Dataloggers – available sample data

The number of validated supply points available for modelling over the analysis period had increased for Band 2, but slightly decreased for Bands 3 and 4.

#### **Small NDM: Proposed Data Sets for Analysis**

MP described the proposed data sets for analysis and explained that the small NDM analysis was undertaken at individual LDZ level. He confirmed that there had been a reduction of 47 Supply Points in Band 1, and a reduction of 170 Supply Points in Bands 2 - 4 compared to the previous year; the samples still provided sufficient data for analysis and the reductions would have no impact on the modelling approach.

The current small NDM EUC Bands were then identified and the appropriateness of the bandings had been investigated. The analysis from 2009 gave no significant reason for changing the EUC bandings. The 2010 analysis would investigate the most appropriate consumption bandings, splitting Band 2 at 145 MWh pa and Band 4 at 1,465MWh pa.

#### Band 1 (0 - 73.2MWh) Data Set Identification and Impacts

MP briefly revisited the results of previous analyses (Spring 2007 – January 2009) and confirmed that in each case no compelling statistical grounds had been demonstrated to indicate that a change to the current arrangements was required. SB pointed out that non-domestics had a different profile in Band 1. MP responded that a number of sites were not populated with an appropriate MSF; based on current systems there was no possibility of putting in a different solution to this problem. Whilst recognising the constraints that exist because there is no way of distinguishing between domestics and non-domestics at this level, MP pointed out that the sample replicates the aggregate population as it stands. TD suggested that perhaps an appropriate statistical approach would be to exclude outliners.

The results were then presented, and MP indicated that the proposed approach was to continue as for previous years, ie no change.

# Band 2 Small NDM 73.2 to 293 MWh pa split at 145 MWh pa, Consumption Band Analysis: ILF Comparison and Historical ILF Comparison

MP advised that analysis had been undertaken on a Band 2 split at 145 MWh pa. Aggregation of LDZs was required to allow for sufficient sample size. Differences in the ILF values across the sub bands were found to be inconsistent across LDZ groups both within and between years. No obvious trends were apparent; therefore it was not proposed to split Band 2. This conclusion was further supported by the fact that no overall improvement in RMSE analysis of model accuracy could be identified. RMSE analysis showed degradation in model/profile accuracy when splitting EUC Band 2. An example slide showing the Demand against CWV was presented, demonstrating a good fit for Band 2.

The proposed approach for Band 2 was therefore to continue as before, ie no split.

MR questioned whether the variables were really not significant, including the sign (positive or negative), and whether t statistics had been looked at. It would be possible to change the whole approach, according to the dependent

variable. TD suggested that rather than take the mid point of the band, it may be preferable to let the data dictate any point of split. JA pointed out that just using R² encourages overfitting of the data, and encouraged xoserve to review measures of the significance of all the variables. PT believed the significance of the coefficients had been taken into account in the past. JA believed that the models did not have that many variables - too much reliance may be placed on models fitting in the winter, but perhaps not in the summer, and a more seasonal view might be more appropriate and worthy of greater attention.

MP pointed out that the raw data was available for Shippers to perform their own analysis, and he would welcome suggestions for improvement. MR believed that the results should show the t statistics on every equation.

# Band 3 and Band 4: Small NDM 293 to 2,196 MWh pa split at 1,465 MWh pa, Consumption Band Analysis

Analyses of Band 3 (293 - 732 MWh pa), and Band 4 using the current breadth (732 - 2,196 MWh pa) as well as a split (732 - 1,465 MWh pa) and 1,465 - 2,196 MWh pa) were presented. MP gave examples of the modelling undertaken.

There was very little difference overall and no significant trends evident. The sample size was quite high in Band 4 and it was possible to carry out individual LDZ analysis. No aggregation was required.

ILF variations for Band 4 were quite small and inconsistent across LDZ groups both within and between years; there was no improvement in RMSE when splitting the Band.

The proposal for Band 4 was therefore to retain the current approach, ie no EUC split at 1,465 MWh pa.

#### WAR Band Analysis 293 – 2,196 MWh pa

The Winter Annual Ratio (WAR) Band analysis was summarised. The analysis showed that WAR Band limits had moved towards 'one' as a result of the 2009/10 much colder winter, compared to winter 2008/09. MP reported that the sample sizes were reasonable for all 48 data sets and the model fits (R<sup>2</sup> values) for Bands 2,3, and 4 were 95% or better.

The proposal was therefore to retain the current approach.

#### Small NDM: EUC Smoothed Models

MP then reviewed the provisional results for Small NDM bands (EUC smoothed models) and explained the cut-offs applied and the associated effects.

The proposal was therefore to retain the current approach as the current analysis has not highlighted any requirements for change.

Recommendations were made by xoserve on behalf of the Transporters in respect of the Small NDM Analysis.

# 2.4 Large NDM Analysis (>2,196 MWh pa)

A description of the prescribed data sets was given.

MP reported that since 2009 there had been a reduction of 459 validated supply points in the Large and Small validated sample, and explained that there was a different spread across various bands but that this was still a good representation of the population.

The sample data aggregations were similar to that of the previous year (apart from Band 07), with the bandings remaining constant. No analysis is required to define the appropriateness of the bandings as they are fixed by UNC.

MP pointed out that the sample numbers and AQ are on the new seasonal normal basis whereas population figures are on the current 17 year seasonal normal basis.

MP confirmed that the available sample data counts were sound and the modelling outputs were satisfactory.

The results were much improved from last year.

An example graph was discussed (Demand against CWV, Monday to Thursday, Non Holiday: NE/EM/WM LDZ Group, 29,300 – 58,600 MWh pa, Consumption Band NE CWV). Low demand during cold week days of early January was noted, and it was suggested that this may indicate some sites in this particular EUC were probably not taking gas during those snowbound days. SP was not convinced by this suggestion, and thought there would be more value in carrying out more analysis to gain a better understanding of this, bearing in mind that evidence of cold weather behaviour was rare. SB asked if it was possible to learn what dates/days this effect relates to - it would be too easy just to accept it as 'snow effect', without matching data to conditions. MP pointed out that Shippers who had requested the NDM sample data could investigate these days for themselves.

Action TF0604: xoserve to confirm actual dates/days affected by assumed 'snow effect' and report back to DESC.

# Consumption Band 9 > 58,600 MWh pa: Model for National Aggregation

MP pointed out that supply points with AQs above 58,600 MWh should be mandatory DMs. From April 2010 there were only 8 left in this consumption range that were specified as NDM on UK Link, and a model for this consumption range was still required for default use. The NDM sample for this range uses all available DM firm supply points that pass validation because no other supply points are available.

This was then followed by the WAR Band analysis.

#### WAR Band Analysis >2,196 MWh pa

WAR Band limits had moved towards 'one' as a result of the much colder winter in 2009/010 compared to the previous winter (2008/09). WAR Band 1 was the least weather sensitive and WAR Band 4 was the most weather sensitive.

MP pointed out that it had been possible to avoid merging Bands 7 and 8 for yet another year. As in previous years, it was recognised that a potential merger may not be conducive to a good fit in either Band but a merger may have to be accommodated if AQs continued to move downwards, or perhaps WAR Bands could be done without for these particular Bands. He confirmed that xoserve would continue to monitor the position.

Consumption Band 5 (2,196 – 5,860 MWh pa): The model fit remained good and the LDZ group basis of data aggregation, as applied in previous years, remained appropriate for 2010.

## **Remaining Consumption Bands**

The same levels of aggregations were applied as in 2009 and three previous years.

Band 6 (5,860 – 14, 650 MWh pa): Three LDZ aggregations were applied; no issues were identified.

**Band 7 (14, 650 – 29,300 MWh pa):** National aggregations were applied; no issues were identified.

**Band 8 (29,300 – 58,600 MWh pa):** National aggregations were applied; sample sizes were insufficient for any lower level of aggregation to be considered.

In summary, the EUC Smoothed Models analysis showed no significant differences to the previous years' analyses.

There were no further questions.

#### 2.5 Recommendations

MP pointed out that, subject to the DESC Members' acceptance of the data aggregations and the resultant EUC demand models, it will be possible to provide an early preview of ALPS, DAFs, Load Factors, and aggregated NDM SND and WSENs by 11June 2010. The remaining supporting files and documentation would then be provided to the UNC deadline.

DESC Members present indicated their unanimous acceptance, and that the formal acceptance could be documented within the next meeting of the DESC (immediately following this DETF meeting).

It was confirmed that recommendations for 2010/11 were made by xoserve on behalf of the Transporters; draft proposals will be published by 30 June 2010 and representations invited by 15 July 2010.

SB then pointed out that the UNC indicates that consultation should be carried out on demand models as well as EUC definitions, and this should encompass the formulas/parameters in UNC TPD H1.8.1. She therefore requested that these be included within the scope of next year's DETF.

MR thought it would also be good to have sight of the details for this year so that any weaknesses could be addressed in time for next year.

MP agreed to consider this for the next year, and see if extra data could be published.

Action TF0605: xoserve to consider for next year's DETF whether additional model parameters could be made available – such as coefficients, standard errors and t statistics

#### 2.6 Note on Actions

Actions generated through this Demand Estimation Technical Forum (DETF) will be progressed through subsequent Demand Estimation Sub Committee (DESC) meetings, and documented on the Action Logs and Minutes of those meetings.

#### **DEMAND ESTIMATION SUB COMMITTEE**

#### 1. Introduction

TD welcomed all attendees.

# 2. Confirmation of Membership and Apologies for Absence

#### 2.1 Membership and alternates

The membership was confirmed and the meeting was declared quorate.

#### 2.2 Apologies

Apologies were received from Matt Jackson (British Gas).

# 3. Review of Minutes and Actions from the Previous Meeting

#### 3.1 Minutes

The minutes from the meeting held on 05 February 2010 were accepted.

#### 3.2 Actions

Outstanding actions were reviewed (see Action Log below).

**Action DE1075:** 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.

**Update:** SB would like to see an update on the SF and an explanation of why it is the shape it is. Other suggestions would be welcome. **Action carried forward.** 

**Action DE1078:** 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.

**Update:** Agreed completed. **Action closed.** 

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

Update: Ongoing. Action carried forward.

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

**Update:** LW reported that there had not been a review of the holiday codes for some time. She suggested that the review be done by the Expert Group (formation of which was proposed under RG0280), who could also decide how to improve it. SP did not believe that this should be left until such time as the Expert Group may or may not be formed as the problem may also manifest itself this year, and this needs to be addressed as soon as possible. The problem was briefly discussed and MP summarised the concerns as: Are the current holiday codes still valid or requiring review; how is an alternative decided upon, and what data could be used to establish an appropriate factor for each event.

SB believed that it was partly due to rolling on Modification 0204; a holiday factor needed to be derived to give an appropriate mechanism. She pointed out that this was supposed to be the Transporters' analysis. MP responded that he would be happy for SB to suggest a more appropriate method to apply to this scenario, and added 2008 and 2009 did not appear to be very different and that some analysis could be shared after the meeting.

It was suggested that the existing holiday factors be looked at to see if they were capable of alteration, and that those associated with previous years also be reviewed to see if a correlation could be applied.

DP suggested looking at the t statistic for the coefficient to see if this was significant, ie run the analysis with a dummy variable.

MP believed that timescales might be tight to achieve a change to the holiday codes; SB reiterated that it really needed to be done as soon as possible. SP added that the problem relates to Gemini aggregate data - it was in the ALPs but not in the DAFs. DP suggested that it should first be checked to see if it needed changing, and then approach a change with this methodology. SP added that an acceptable way of putting in 'new' holiday effect days was clearly required, and perhaps a methodology used in the past would be suitable?

The action was reworded to cover the focus of the discussion.

Reworded Action DE0202: xoserve to consider what can be done to review/change the holiday factors for the remainder of the year and establish a flexible mechanism for future application. DESC Members may be contacted for further assistance as necessary.

Action carried forward.

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

**Update:** SB confirmed that E.ON was not intending to move any site to DM Elective. ST advised that a Modification Proposal relating to voluntary DM sites would be discussed at the June Distribution Workstream. **Action closed.** 

#### 4. Seasonal Normal Review Update

MP introduced Rob Harrison (RH) from the Met Office who had been invited to participate in this meeting. MP then gave a presentation, detailing the updates that had been issued since the February meeting and progress made towards making available additional data.

National Grid NTS have agreed contractual arrangements, which facilitate the provision to the Met Office of gas industry weather data up to 31 March 2007, and interested UNC parties now have the opportunity to make their own arrangements for acquiring the data.

The 'linearly adjusted EP2 increments' used within the SNCWV methodology were published on UK Link docs in March 2010.

MP then gave an update on alternative increments, reporting that informal discussions had taken place with the Met Office regarding the production of a set of 'variable increments' which could be used as an alternative to the 'linearly adjusted increments'. The Met Office had advised that the work could be done. However, it believed any change to the current SNCWV values would be negligible and so, in its view, may not be a worthwhile approach.

MP noted that the Transporters had agreed in December 2009 to consider requests for specific analysis on the SNCWV values, that may be carried out in the Autumn (depending on resources and timescales), but in light of the Met Office view on alternative increments the Transporters now believe that, in the short term, they do not have anything new to analyse.

Although Transporters are happy with the gas industry weather data records, they acknowledge the feedback and recognise the dissatisfaction that shippers have regarding this dataset. Keeping this in mind, the Transporters believe it may now be worth pursuing longer term goals, and one such goal could possibly be an industry agreed weather history dataset.

The Transporters are supporting Review Group 0280 (RG0280) and are aware of potential changes, which may arise with regard to the decision making of demand estimation processes – which includes the seasonal normal methodology. In light of this, therefore, the Transporters believe it may be more appropriate to await the outcome of RG0280 rather than undertake additional analysis under the current regime.

In November 2009 the Met Office had reviewed xoserve's proposed approach for the new CWV basis, and had recommended a simple refinement – to use a 'linear trend approach'. (The only other trend that could be applied would be a bit of a 'dog leg'.)

In February 2010 xoserve had requested a quotation from the Met Office for provision of a variable set of increments for the period 1971 – 2006. This was scientifically feasible, however based on the Met Office's understanding of the CWV formula and climate trends it thought that variable increments would make only a very small difference to the calculation of SNCWV, and it was not clear that this work would represent good value to the industry. Therefore the Met Office has made a recommendation for significant future work to move

The Met Office suggested that this might cover the following areas:

- Tmax, Tmin, Wind Speed, Solar Radiation
- Daily weather correlation between variables (this is absolutely critical)
- Downscaled to stations

everything forward.

Representative of present day weather

and that future work might include the application of daily weather from the Met Office Decadal prediction modelling system (DePreSys), and the testing and selecting from two alternative approaches, ie the Direct approach (which would be very challenging) and the Weather Regime Approach (which would be easier).

RH emphasised that before starting the work, it would be of the greatest importance to ensure as far as is possible that all industry requirements are captured at the outset. It would involve significant new research and development requiring industry input through working groups. It was envisaged that such a project might take a year, with an indicative budget of the order of £200k.

A discussion then ensued as the meeting considered the content of the presentation.

DP asked if RH was thinking about producing daily scenarios, creating years' worth of real weather applicable to 2010. RH responded positively, and then proceeded to explain and illustrate the linear method, with the aid of a flipchart.

It was questioned how this analysis would fit with the EP2 analysis – a consistent approach between the two could be a requirement.

SB commented that having the base data averaged gave the problem. JA pointed out the need to include as part of the work a mutually agreeable base period/weather history for as far back as the industry believes is required, then it would have everything it wanted. SG believed it should also be considered what weather stations/regions should be covered (for consistency), with meteorological rather than statistical backfilling. JA commented that the Met Office was aware that changes to weather stations caused the industry difficulties; if there were any significant changes in the future, he presumed that it could be assumed that acceptable alternatives could and would be produced using appropriate and consistent methodologies.

MR said that, bearing in mind that one of the issues has been the inaccessibility of the data because of National Grid's contract terms, and assuming the Met Office suggestions are agreed and to be funded in some

way, the information would need to be made available/accessible to all, including any future market participants.

SB pointed out to RH that the data was still not available, and he undertook to report back on the position, the cost of acquiring it and how it could be accessed.

JA believed there needed to be a way of splitting any cost fairly across UNC signatories. RS suggested a User Pays approach; otherwise a distinct community benefit would need to be demonstrated. SB queried if this may be affected by a smear under Modification 0194.

ML pointed out that climatology and SNT have been wildly out and that Smart meters may affect requirements. It was also pointed out that EP2 data was used by the electricity industry; perhaps this takes the potential study beyond the UNC arena.

ST suggested it could be funded in a similar way to EP2. However, SB thought that any suggestion that it be done outside of UNC could be seen as a big risk – the Transporters could refuse to consider using it.

MP advocated a co-operative approach in devising the industry requirements. JA asked what other parameters might be included, eg solar, precipitation, etc, and RH reiterated the importance of establishing the industry's primary needs.

SB stated that she was disappointed as she felt there was a need to look at SN far more quickly because of its significance. JA added he felt very uncomfortable with the present position and that he would prefer to see a review within the year.

PT believed that the CWV was of more importance than SN; SB disagreed – SN has significant impact and affects many areas. MR reiterated that Shippers disagreed, and the way to go forward is that, based on current practices, the Transporters undertook to have a review, or a Modification Proposal has to be raised.

JA suggested that the Met Office recommendations could be included in the RG0280 report, together with a recommendation on how the work might be funded. SB and DP were not content to leave this to be covered within RG0280 as the timescales would inevitably mean no actions to address these issues would take place for a long period, and it would probably have to come back to DESC anyway. She pointed out that Shippers still had the right to ask Ofgem for a disallowal, and then the position would revert to known problems.

LW understood that visibility of data and extra analysis was required, and asked what else was deemed to be missing. SB responded that a further review should be undertaken to decide whether to adjust the SN again. MP indicated that there was no additional data available that could be input into the model to arrive at a new SN. JA understood that it might not feasible to do this for October 2011 and was of the opinion that it would be far better to do a fuller study to be completed by October 2012.

If other non-gas parties were interested then maybe a creative pricing mechanism would be useful, or just User Pays for the gas industry.

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SB reiterated that if it was carried through the UNC route, then any output was more likely to be used by the Transporters and it would be good to have a guarantee on this. She pointed out that without changing the UNC, Shippers could not require an earlier review or have any guarantee that the output would be used - DESC cannot obligate the use of any such output.

ST responded that if DESC defined the requirements he felt there was no reason for Transporters to refuse to a review nor to refuse to use any appropriate output.

MP concluded that Shippers and Transporters both wanted to achieve a workable solution and fair mechanism.

It was noted that Shippers would discuss a way forward together offline and may also discuss with the Met Office as appropriate.

# 5. NDM Sample Update

MP presented an update on the NDM sample numbers.

#### Band 1 (0 - 73.2MWh) Data Recorders

Results indicated that actual recorder sample sizes were reasonably satisfactory, and that validated numbers for Spring 2010 were high and contributed to producing robust models.

However, as also noted last year, there was an ongoing issue of 'lost' data recorders in the event of a meter exchange being carried out. Although contact details were provided on the equipment, persons replacing the meters were failing to follow these through and 55 data recorders had been lost so far in 2010. A monthly report was issued to Shippers and details of losses/individual sites were now provided to Shippers at the end of each collection. MP would welcome any further assistance from Shippers that would help to reduce the 'losses'.

MP reported that work was ongoing in respect of the replacement of current data recorder equipment with new AMR technology.

#### **Datalogger Supply Points (>73.2 MWh)**

MP reported that the number of active sites had dropped by 347, to 11,111 since November 2009. The number of inactive sites, where no consumption/read has been received in the last two months, stood at 862. Investigations were ongoing to determine if inactivity was due to site closure or faulty equipment.

Generally across the LDZs Bands 4-8 were currently below sample requirements as set by DESC. Active recruitment of new sites was in progress. Numbers continue to be monitored and Transporters were informed of the sample numbers. DESC may need to review target numbers at the higher band if the sample targets becomes unrealistic to continue with, ie population smaller than target.

MP then reported on the efforts that National Grid Distribution had been making to boost sample numbers, and explained the difficulties that had been

encountered, which included failure to return any contact details for sites, and refusal of consumers to agree to installation work. Only a very small number of installations have been able to be completed and this is quite disappointing given the amount of effort and the importance placed on the sample numbers.

Shippers were keen to know if their Suppliers/Consumers were not responding and requested that Transporters contact them to discuss a way forward so that they could hopefully positively influence and improve the situation.

Action DE0606: xoserve to advise Transporters that DESC shippers are happy to be contacted to discuss difficulties with contacts details for the AMR installation programme and ways to boost the NDM sample.

#### **DM Elective**

The opportunity for eligible sites in Bands 6 and 8 to change to DM Elective goes 'live' in November 2010.

Although DESC had previously agreed to leave any such sites in the sample and monitor their usage, it was now queried whether it would be possible to do this without going against the intent of recently implemented Modifications and the UNC.

Action DE0607: Check if it is still allowed under UNC to continue to include the monitoring of any sites within the sample once they have changed status to DM Elective.

#### 5.1 Procurement of NDM Profiling Data

ST gave a brief presentation on Wales & West Utilities' proposals for the procurement of data for NDM profiling purposes, explaining the background and drivers for the proposals, the potential data requirements and data provider responsibilities and data delivery options.

RS suggested it might be worth asking any parties if they would be happy to trial this/donate data to trial.

LW pointed out the need to avoid any skewing of the data, and believed that a certain level of confidence would be required in regard to site behaviour. Some sites may already have AMR fitted, etc, and perhaps could share/provide data at reasonable cost.

ST asked Members if there was sufficient data and interest for this approach to be given consideration as a viable option and would welcome the submission of any comments on the options and views on the balance of risk and cost.

#### 6. Approval of the Demand Estimation Technical Forum Proposals

The DESC gave its approval to the draft proposals put forward by xoserve at the Demand Estimation Technical Forum that preceded this DESC meeting.

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The initial proposals will be published by 30 June 2010 and final proposals will be published by 15 August 2010.

#### 7. Review of Work Plan

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

Date	Work Items	Venue
23 July 2010	<ol> <li>Response to representations on EUC definitions and demand models</li> <li>Finalisation of proposed revisions</li> </ol>	10:00am 31 Homer Road, Solihull B91 3LT
10 November 2010	Evaluation of NDM Sample sizes     Evaluation of Algorithm     Performance: Strand 1 - Scaling Factor and WCF analysis	10:00am Energy Networks Association, Dean Bradley House, 52 Horseferry Road, London SW1P 2AF

In response to a question from TD, those present indicated that they were happy to continue with the custom of alternating the location of the DESC meetings between Solihull and London.

# 8. Any Other Business

### 8.1 Project Nexus Requirements for AMR

RS highlighted the Project Nexus requirement for AMR going forward and asked Members to consider how the LSP market could be encouraged to evolve and support the provision of timed data coming in throughout the gas Day rather than using estimates, and how this 'Smart Data' could be used. This might result in better modelling. There will be no NDMs, so systems will be reengineered, there will be better daily balancing, and there may be other tertiary benefits as well, such as Transporters gaining a better understanding of what is going on on their networks.

#### 9. Date of next meeting

The next meeting will be held at 10:00am on Friday 23 July 2010 at 31 Homer Road, Solihull B91 3LT, and will be followed by a meeting of Review Group 0280.

# Action Log: UNC Demand Estimation Sub Committee 04 June 2010

Action Ref*	Meeting Date(s)	Min ute Ref	Action	Owner**	Status Update
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	Carried forward
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	Closed
DE0201	05/02/10	3.1	Consider producing a table presenting the 3 year AQ by LDZ by EUC.		Carried forward
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 to consider what can be done to review/change the holiday factors for the remainder of the year and establish a flexible mechanism for future application. DESC Members may be contacted for further assistance as necessary.	(LW/MP)	Action reworded  Carried forward
DE0203	05/02/10	4.1	Shippers to check if any sites within their portfolios were intending to move to DM Elective and report		Closed

Action **Meeting Date(s)** Min Action Owner\*\* **Status Update** Ref\* ute Ref back to the Transporters. 2.2 TF0601 04/06/10 xoserve to consider whether details xoserve of any exclusions from the (LW/MP) modelling, together with the reasons for such decisions, are able to be published. TF0602 04/06/10 2.2 xoserve to check if historical xoserve analysis was available showing how (LW/MP) much of an improvement was made by not applying warm weather cut offs for EUC Bands 1 and 2 and report to DESC. TF0603 04/06/10 2.3 xoserve to advise Shippers of the xoserve contact names held/report recipient (LW/MP) names to enable follow up of any equipment disconnection issues that may be contributing to loss of data. 2.4 TF0604 04/06/10 xoserve to confirm actual xoserve dates/days affected by assumed (LW/MP) 'snow effect' and report back to DESC. TF0605 04/06/10 2.5 xoserve to consider for next year's xoserve DETF whether additional model (LW/MP) parameters could be made available - such as coefficients, standard errors and T statistics. **DE0606** 04/06/10 5.0 xoserve to advise Transporters that | xoserve DESC shippers are happy to be contacted to discuss difficulties with contacts details for the AMR installation programme and ways to boost the NDM sample. **DE0607** 04/06/10 5.0 Check if it is still allowed under xoserve UNC to continue to include the (LW/MP) monitoring of any sites within the sample once they have changed status to DM Elective.

<sup>\*</sup> TF – Technical Forum