

xserve



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Technical Work Group Presentation of 2012 Models

27th June 2012

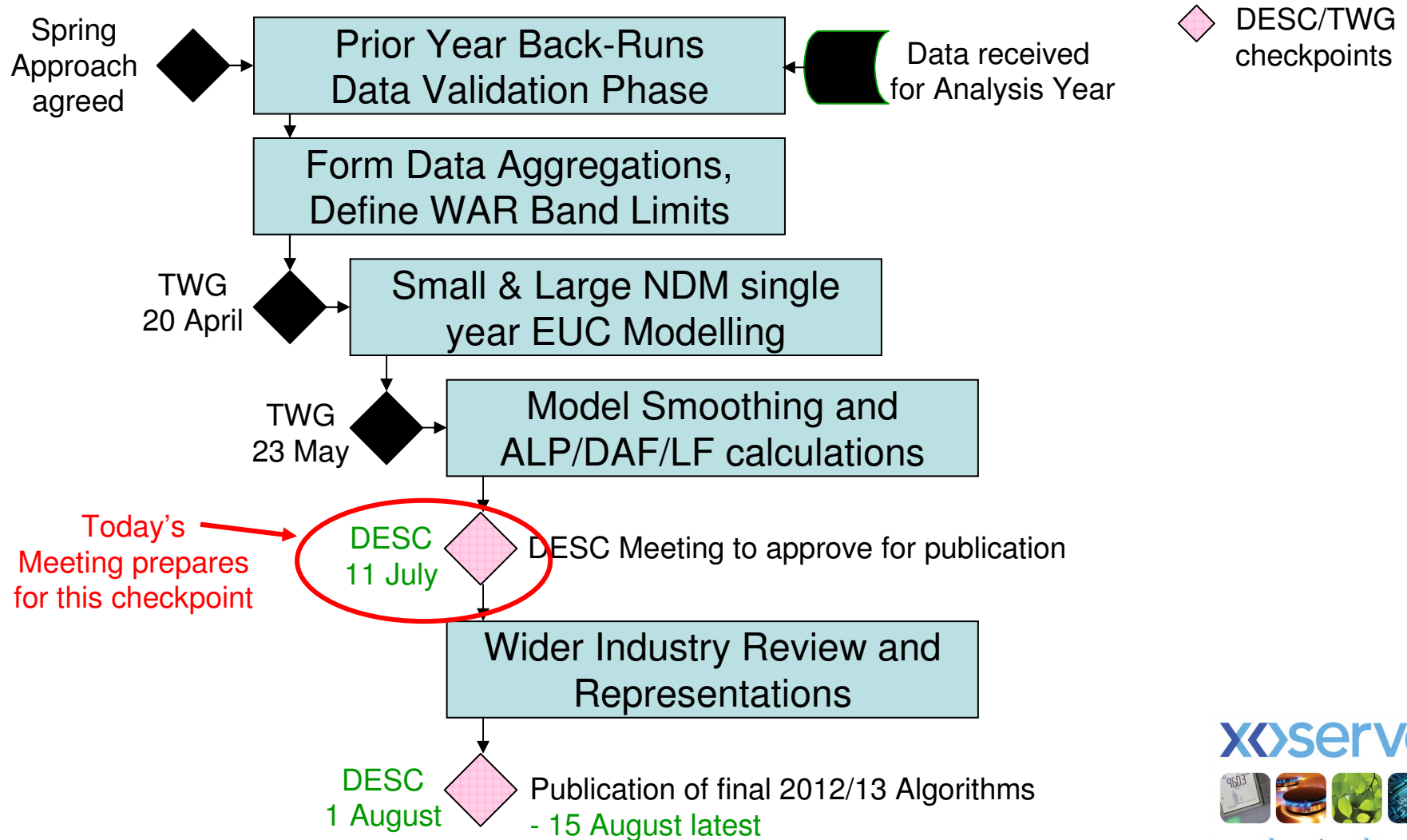
Agenda

- Recap on Timetable
- Summary of 2012 Algorithms
- Summary of TWG responses to proposed Algorithms and Xoserve clarifications
- Conclusions and next steps

Agreed 2012 Modelling Workplan

- Workplan for 2012 Modelling agreed at March DESC meeting
- Workplan aims to provide more transparency of process and introduce checkpoints for DESC/TWG review
 - 2 TWG meetings to date – April and May
 - Further interaction/decisions via email
- Limited scope for 2012 to change the process or structure of models

Agreed 2012 Timetable



Objectives of this Meeting

- Third meeting of Technical Work Group
- Checkpoint following review of proposed Algorithms by TWG
- Key objectives of this meeting
 - Review TWG comments and agree any actions
 - Agree approach to presentation of proposals to DESC
- Required Outcome – TWG support for proposals prior to DESC review and discussion

Summary of modelling

- Data aggregations and WAR Band limits agreed at April meeting
- Single year modelling approved at May meeting
- Proposed NDM Algorithms published 11 June
 - Key statistics summarised on following slides

Small NDM – Summary of Models

	2012	2011
Straight Models	68	54
Cut-Off Only	53	47
Summer Reductions Only	31	51
No Slope	0	0
Cut-Off and Reductions	4	4
Total Number of EUCs	156	156

- Small NDM represents over 87% of current NDM AQ

Large NDM – Summary of Models

	2012	2011
Straight Models	163	156
Cut-Off Only	67	71
Summer Reductions Only	25	31
No Slope	13	13
Cut-Off and Reductions	5	2
Total Number of EUCs	273	273

- Large NDM represents less than 13% of current NDM AQ

Holiday Code Rules: Application to Christmas and New Year 2012/13

Demonstration - Christmas and New Year 2012/13

19-Dec	20-Dec	21-Dec	22-Dec	23-Dec	24-Dec	BH 25-Dec	BH 26-Dec	27-Dec	28-Dec	29-Dec	30-Dec	31-Dec	BH 01-Jan	SBH 02-Jan	03-Jan	04-Jan	05-Jan	06-Jan
Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun
		4	2	2	3	1	2	3	3	2	2	3	2	5	5	5		

Start: Monday before 25th December (but if 25th December falls on a Monday, Tuesday or Wednesday, it starts on the Friday before 25th December).		
End: First Friday on or after second Scotland New Year bank holiday.		
Holiday Code 1	1	25th December
Holiday Code 2	2	26th December, January 1st and any remaining bank holidays (except second Scotland New Year bank holiday) and any other Saturday and Sundays in the period.
Holiday Code 3	3	Any remaining Mondays to Fridays between 24th December and day before second Scotland New Year bank holiday inclusive.
Holiday Code 4	4	Remaining days before 24th December
Holiday Code 5	5	Remaining days (will always include second Scotland New Year bank holiday).

- New rules applied agreed in November 2011
- To be applied for first time for Christmas/New Year 2012/13
- Holiday Code – days designated by DESC
- Holiday Factors – reduced amount of demand for specified Holiday Code days



TWG Responses/Comments on Proposals

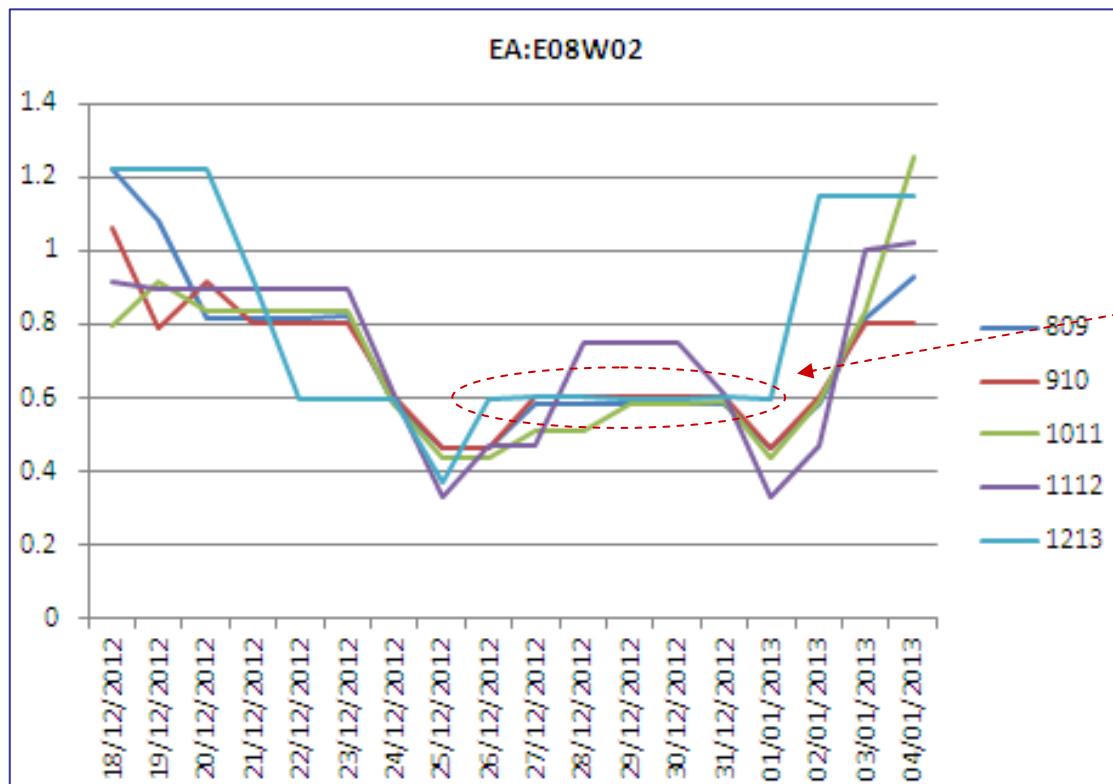
- Two responses received:
 - UK Transmission
 - E.on UK
- Comments from both parties covered on following slides

UKT Response

- Email circulated to TWG 20th June 2012
- High level summary of points made below
 - Following focus on holiday periods in recent years
Representations UKT performed a review of holiday factors for 2012/13 from published data – i.e. EUCHOL12S.TXT / EUCHOL12L.TXT
 - UKT observed that the ideal pattern within any defined holiday period is for holiday multipliers to increase for each holiday code
 - Random sample of 30 consumption band EUCs were analysed
 - Results showed 93.3% of cases conformed to the “ideal pattern”
 - Exceptions were noted and listed in the email
 - UKT felt this showed that the holiday code definitions are now “pretty good”

E.on Comment 1

- The ALPs in some specific EUC WAR bands, for example EUC08 W02, exhibit a flatter shape following Christmas 2012 in comparison to other EUC bandings. Is this expected and is there an explanation for why this certain WAR band behaves in such a way?



Appears flat
from 26/12/12
to 01/01/13

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E.on Comment 1 – Xoserve Clarification

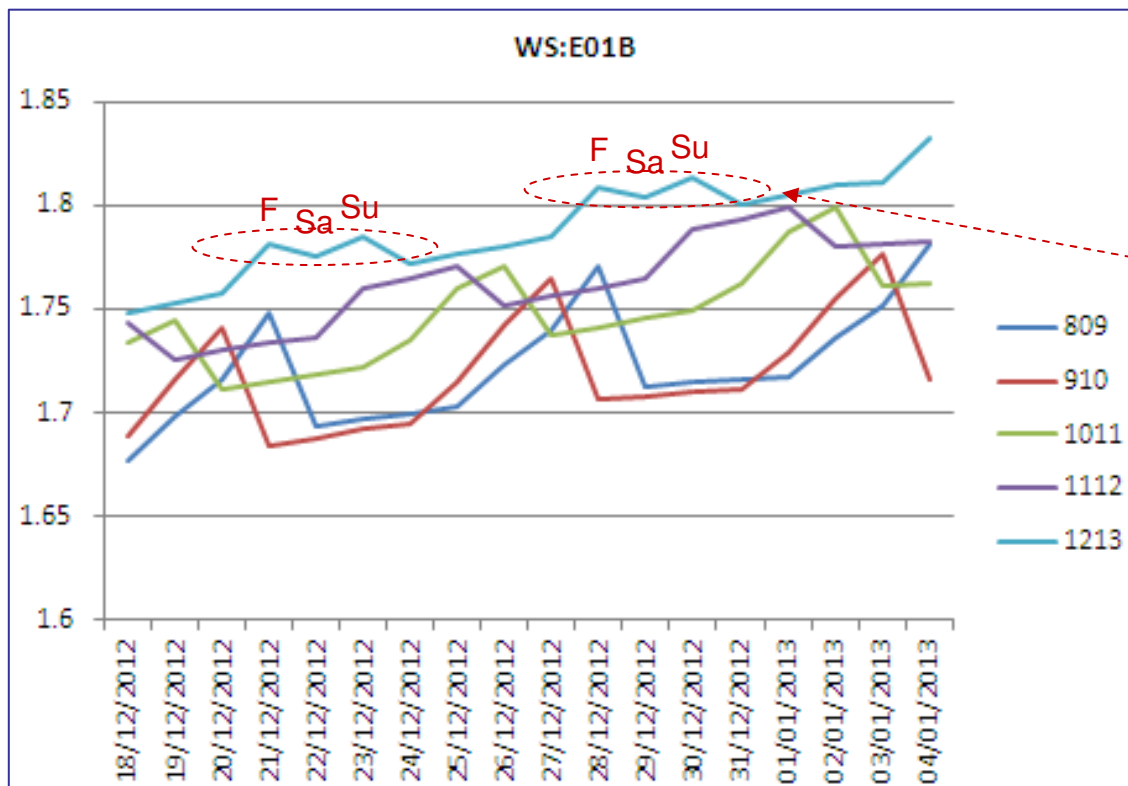
- Holiday factors are derived from historic data – relationship between holiday day consumption and the fitted model
- Factors for 2012/13 have used latest view of Holiday Codes and last 3 years demand
- ALPs over holiday period are not directly comparable to prior years due to changes to Holiday Code rules for 2012/13
- WAR Bands modelled nationally for EUC Band 8

E.on Comment 1 – Xoserve Clarification (2)

- Smoothed data shows little difference between Code 2 & 3 for EA08 WAR Band 2 (File EUCHOL12L):
 - Code 2: 0.486 (i.e. Code 2 days – 48.6% of fitted Mon-Thur demand)
 - Code 3: 0.489
- Individual years' data from 09/10 and 10/11 shows Code 2 higher than Code 3
 - would expect Code 2 to be lower than Code 3?
- Same pattern is visible in all Band 8 W02 models
- Trends are the results of actual data from last 3 years
- Model smoothing means that trends may appear later than they occur
- No additional information available on user behaviour

E.on Comment 2

- The weekend shape of the ALP for band 01B in EUC WS is now lower on a Saturday than on either a Friday or a Sunday. This is a change to standard behaviour. Is this difference in behaviour expected? What is the driver?



Appears to dip between Friday and Sunday

E.on Comment 2 – Xoserve Clarification

- Weekend factors are derived from historic data – relationship between weekend day consumption and the fitted model – Fri/Sat/Sun each modelled separately
- No holiday factors in any Band 1 models – previous DESC decision
- For 2012/13 proposals for Band 1
 - 9 LDZs go UP/UP (Fri-Sat/Sat-Sun)
 - 3 LDZs go DOWN/UP (Fri-Sat/Sat-Sun)
 - 1 LDZ goes SAME/UP

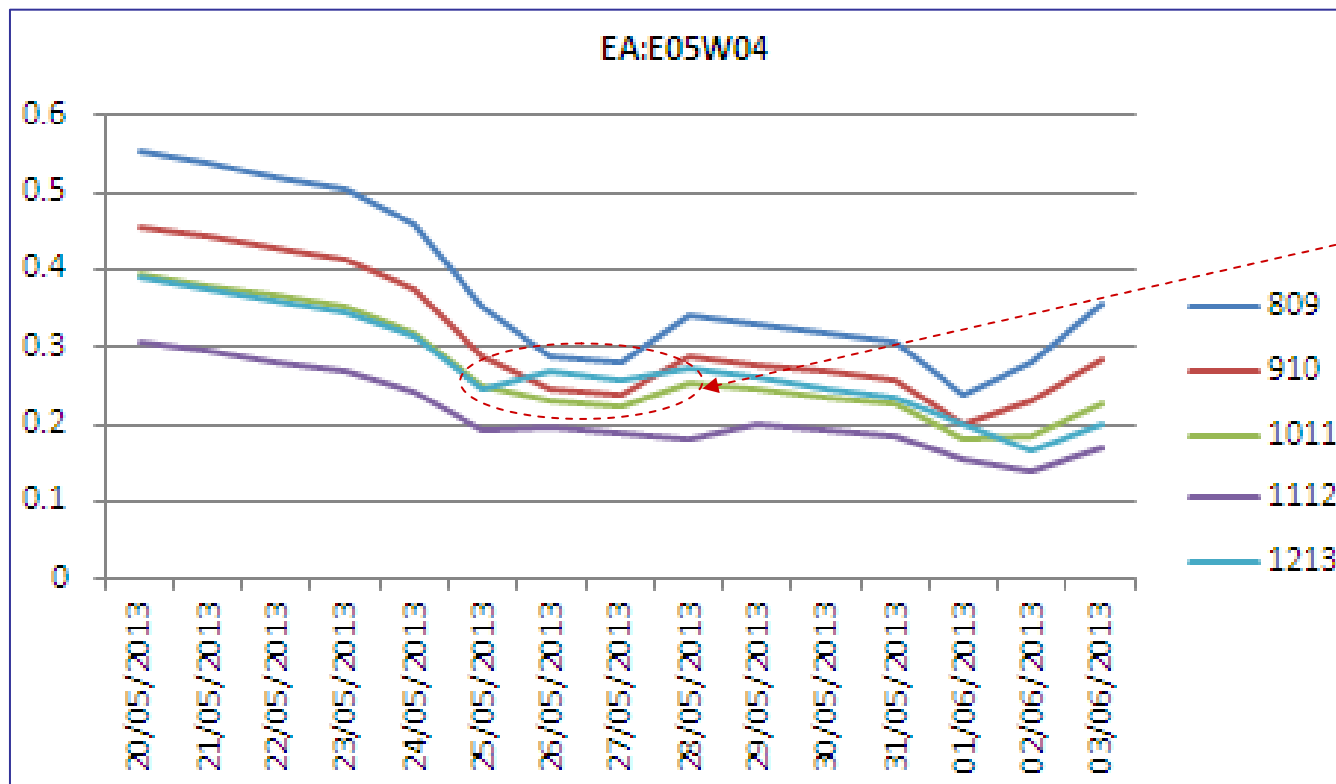
E.on Comment 2 – Xoserve Clarification (2)

WS Band 1 Analysis year – single year models	Average	2011/12	2010/11	2009/10
Friday factor	1.011	1.0	1.03	1.004
Saturday factor	1.006	1.008	1.011	1.0
Sunday factor	1.009	1.017	1.009	1.0
Sample size		248	246	253

- Friday factor increased by 3% last year
- Sample size is good
- Factors based on sample data
- No additional information available on user behaviour
- Trends are the results of actual data from last 3 years
- Model smoothing means that trends may appear later than they occur

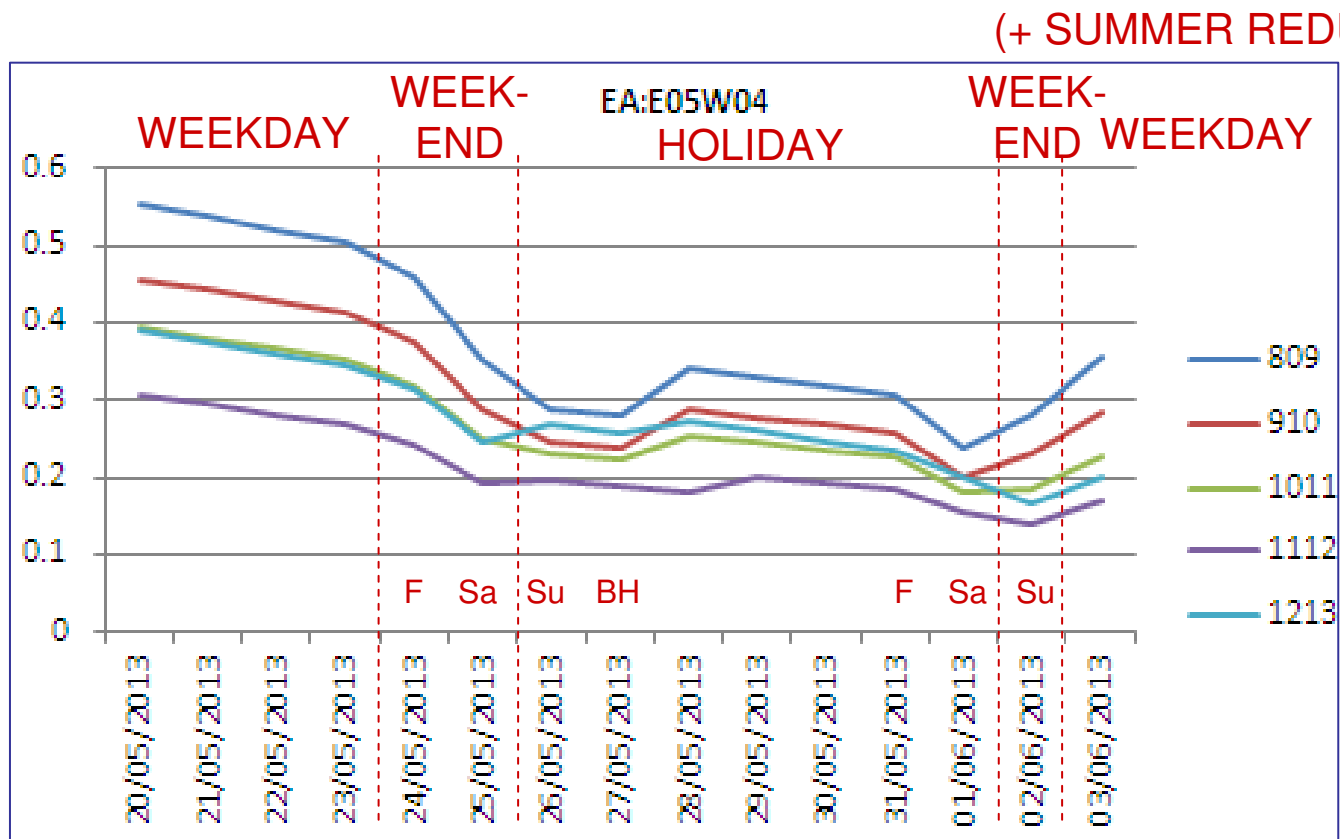
E.on Comment 3

- As can be seen in the chart below for banding EA:E05W04, there appears to be a new weekend shape in comparison to previous years, for the weekend prior to the Late May Bank Holiday, and also the weekend following.



E.on Comment 3 – Xoserve Clarification

- Late May Bank Holiday demonstrates interaction of numerous different factors



E.on Comment 3 – Xoserve Clarification (2)

- For 2012/13 models:
 - Saturday 25/05 = weekend
 - Sunday 26/05 & Bank Holiday Monday 27/05 = holiday code 11
 - Tuesday 28/05 to Friday 31/05 = holiday code 12
 - Saturday 01/06 = holiday code 11
 - Sunday 02/06 = weekend
- Holiday factors are derived from historic data – relationship between holiday day consumption and the fitted model
- Models may not show smooth progression at boundaries of factors

E.on Comment 3 – Xoserve Clarification (3)

EA05W04	2012/13 Proposals	2011/12 Live Factors
Saturday factor	0.782	0.777
Holiday Code 11 factor	0.894	0.835
Sunday factor	0.786	0.785

- Same trend was visible in 2011/12 algorithms but less pronounced
- Factors based on sample data
- No additional information available on user behaviour
- Trends are average of the results of actual data from last 3 years
- Model smoothing means that trends may appear later than they occur

Recap

- Recap on Comments and Xoserve clarifications
- Consensus and next steps?

Approach to July DESC meeting

- Required Outcome – DESC approval of proposed Algorithms, agreement to proceed to wider industry review
- Suggested approach
 - High level summary of process and outputs
 - Summary of TWG involvement and decisions
 - Summary of TWG reps and any agreed actions
 - TWG recommendation