



Demand Estimation Technical Work Group

EUC Modelling 2018/19

Small NDM Single Year Modelling Results

Band 2 Domestic Model

22nd May 2018

Analysis of weekend effects – Band 2 Domestic

- Following the TWG meeting and correspondence since, Xoserve have reviewed some of the sample sites in the Southern and Northern LDZ grouping
- Focus was on the sites where there was an unexpected ratio when comparing with the weekend consumption to Monday to Thursday levels
- Investigations revealed 9 sites (6 in Southern and 3 in Northern group) where Xoserve are satisfied they are not domestic and have influenced the Sunday weekend effect (and other weekend days).
- The models have been rerun with these sites excluded and have returned high R^2 , results below:

	Original run 2 LDZ Groups			Rerun 2 LDZ Groups		
(SC/NO/NW/WN/NE/WM/EM)	40%	98%	67	40%	98%	64
(WS/EA/NT/SE/SO/SW)	36%	98%	66	37%	98%	60

Indicative Load Factor (ILF) : **R^2 Multiple Correlation Coefficient (All days)** : **Sample Size (Supply Points)**

- As expected, the removal of these nine sites has also had an impact on the weekend effects, viewable on the next slide

Analysis of weekend effects – Band 2 Domestic

	Original Run			Rerun (after removal of 6 Southern and 3 Northern group supply points)		
LDZ	02 Domestic (2 Groups)			02 Domestic (2 Groups)		
	Fri	Sat	Sun	Fri	Sat	Sun
SC	not sig. +	not sig. -	not sig. -	not sig. +	not sig. +	not sig. -
NO	not sig. -	not sig. -	not sig. -	not sig. +	not sig. +	not sig. -
NW	not sig. -	not sig. -	not sig. -	not sig. +	not sig. +	not sig. +
NE	not sig. -	not sig. -	not sig. -	not sig. +	not sig. +	not sig. -
EM	not sig. -	not sig. -	not sig. -	not sig. +	not sig. +	not sig. -
WM	not sig. -	not sig. -	not sig. -	not sig. +	not sig. +	not sig. +
WN	not sig. -	not sig. -	not sig. -	not sig. +	not sig. +	not sig. +
WS	not sig. +	not sig. -	0.944	not sig. +	not sig. +	not sig. -
EA	1.028	not sig. -	0.953	1.028	1.028	not sig. +
NT	1.028	not sig. -	0.953	1.028	1.030	not sig. +
SE	1.029	not sig. -	0.955	1.028	1.030	not sig. +
SO	1.025	not sig. -	0.960	not sig. +	1.036	not sig. +
SW	not sig. +	not sig. -	0.955	not sig. +	1.034	not sig. +

- The previous negative statistically significant Sunday effect in Southern group not present in the rerun model
- Rerun model now shows a positive effect (although not significant), except for WS where it was still negative (but not significant)
- Northern group now shows positive effect (although not significant) in all LDZs on Friday and Saturday with three LDZs showing positive effect on Sunday