Demand Estimation Technical Work Group

Gas Demand EUC Modelling Results
Gas Year 2020/21

(3 of 3) Results - Large NDM

22nd May 2020

6: Results - Large NDM (>2,196 MWh pa)

- Large NDM for Demand Estimation purposes >2,196 MWh
- EUC consumption ranges not prescribed in Uniform Network Code, however there are no proposed changes to EUC definitions for Gas Year 2020/21
- Current EUC Bands / Consumption Ranges for Large NDM:
  - Consumption Band 5: 2,196 to 5,860 MWh pa
  - Consumption Band 6: 5,860 to 14,650 MWh pa
  - Consumption Band 7: 14,650 to 29,300 MWh pa
  - Consumption Band 8: 29,300 to 58,600 MWh pa
    All above also include 4 x Winter Annual Ratio (WAR) Bands alongside the Consumption Band EUC
  - Consumption Band 9: >58,600 MWh pa
- Large NDM is very much a minority component of overall NDM (c12% of total AQ)

6: Results - Large NDM: Agreed Modelling Runs (1)

Description / Range / EUC	Option 1	Option 2
Band 5 **2,196 to 5,860 MWh pa** **05B**	Individual LDZ analysis	LDZ WN (using WN/NW demands)
Band 6 **5,860 to 14,650 MWh pa** **06B**	Individual LDZ analysis	LDZ WN (using WN/NW demands) LDZ WS (using WS/SW demands)
Band 7 and Band 8 (combined) **14,650 to 58,600 MWh pa** **07B; 08B**	Individual LDZ analysis except for: LDZ WS (using WS/SW demands) LDZ SW (using WS/SW demands) LDZ NT (using NT/EA demands) LDZ WN (using WN/NW demands) LDZ SO (using SE/SO demands) LDZ SE (using SE/SO demands)	n/a
Band 9 **>58,600 MWh pa** **09B**	National analysis	n/a

6: Results - Large NDM (05B – Summary)

05B (Band 5 - 2,196 to 5,860 MWh pa)						
LDZ	Indicative Load Factor (ILF)		R2 Multiple Correlation Coefficient (All days)		Sample Size (Supply Points)	
	Option 1	Option 2	Option 1	Option 2	Option 1	Option 2
SC	44.1	.	97.7%	.	216	.
NO	40.9	.	97.7%	.	110	.
NW	41.1	.	98.0%	.	122	.
NE	41.0	.	97.1%	.	147	.
EM	40.5	.	97.1%	.	88	.
WM	38.6	.	97.8%	.	128	.
WN	42.4	41.8	93.8%	97.8%	19	141
WS	40.8	.	97.8%	.	38	.
EA	41.5	.	97.5%	.	87	.
NT	44.2	.	97.7%	.	140	.
SE	43.8	.	97.7%	.	162	.
SO	37.2	.	98.1%	.	117	.
SW	42.3	.	94.8%	.	64	.

R^2 value min & max range summary:

- Option 1: 93.8% to 98.1%
- Option 2: Much improved R^2 for LDZ WN
- Charts provided for highlighted LDZ / Option on next 2 slides

ILF observations:

- Similar to previous year – no issues

Sample size observations:

- WN suffers with low numbers (19) for Option 1, much improved when combined with NW (141)

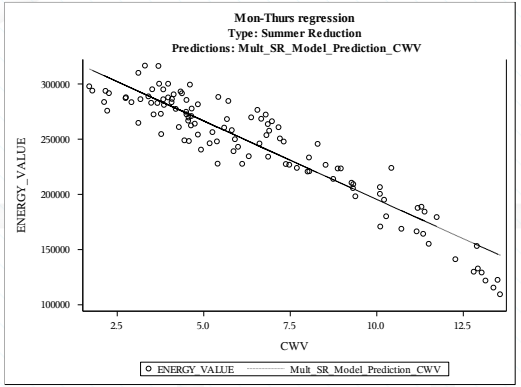
Xoserve proposals:

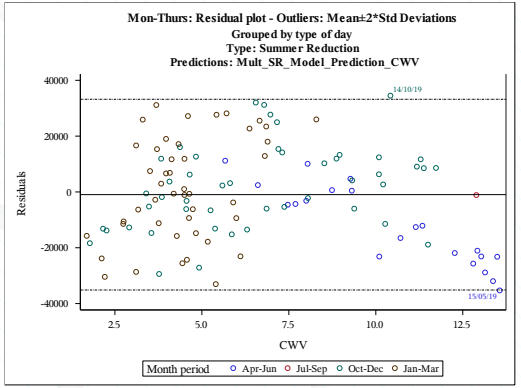
- Option 1 for all LDZs except for LDZ WN (Option 2)

6: Results - Large NDM (05B – Charts for LDZ WN)

05B; LDZ WN; Option 1

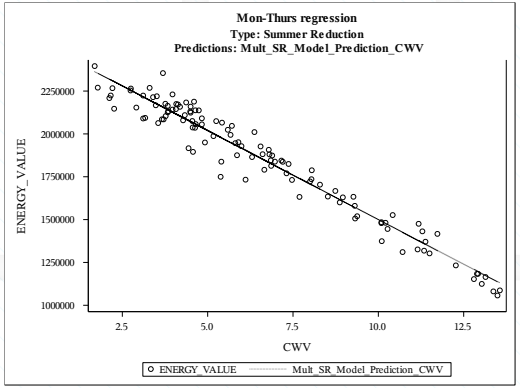
Model: Summer Reduction
EUC: 05B
LDZ: WN
Demand: WN
R^2 = 93.8%
ILF = 42.4
Sample Points = 19

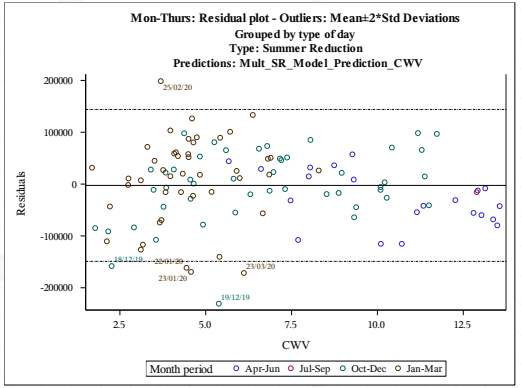




05B; LDZ WN; Option 2

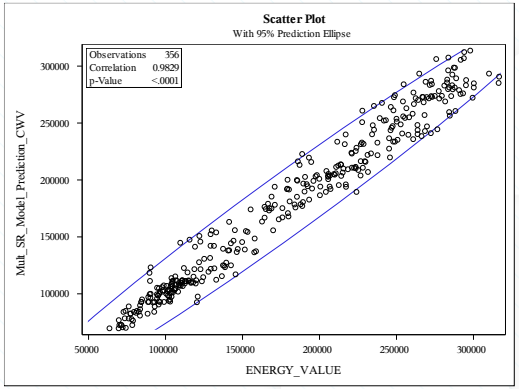
Model: Summer Reduction
EUC: 05B
LDZ: WN
Demand: WN & NW
R^2 = 97.8%
ILF = 41.8
Sample Points = 141

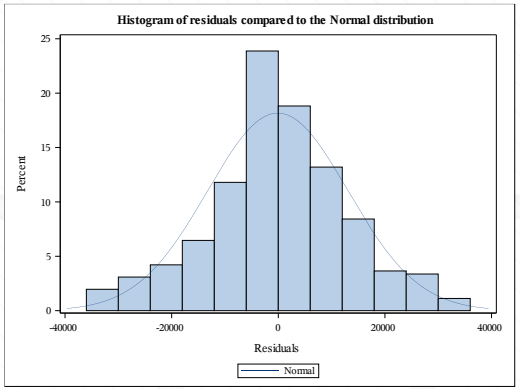


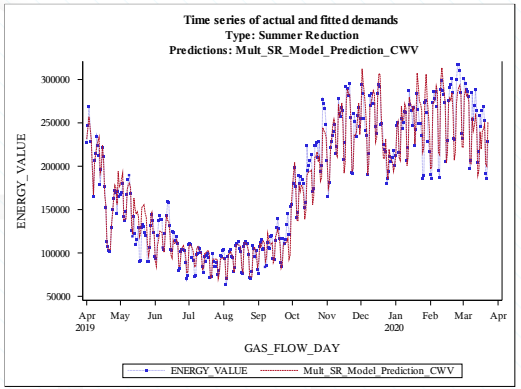


6: Results - Large NDM (05B – Charts for LDZ WN)

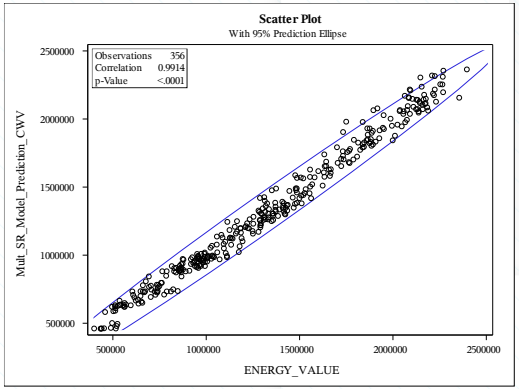
05B; LDZ WN; Option 1

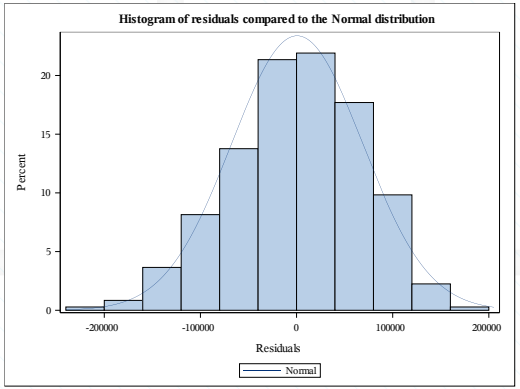


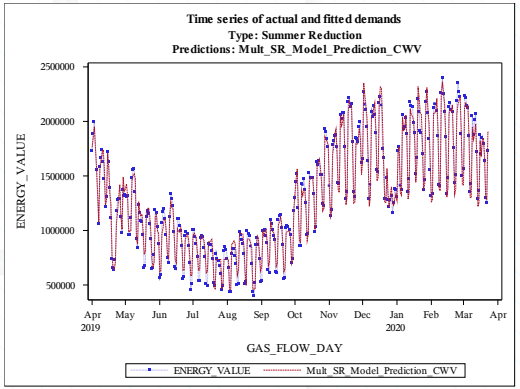




05B; LDZ WN; Option 2







6: Results - Large NDM (06B – Summary)

06B (Band 6 - 5,860 to 14,650 MWh pa)						
LDZ	Indicative Load Factor (ILF)		R2 Multiple Correlation Coefficient (All days)		Sample Size (Supply Points)	
	Option 1	Option 2	Option 1	Option 2	Option 1	Option 2
SC	48.0	.	97.2%	.	102	.
NO	49.7	.	96.0%	.	48	.
NW	48.0	.	97.2%	.	63	.
NE	57.6	.	95.4%	.	69	.
EM	49.5	.	96.3%	.	63	.
WM	44.8	.	96.5%	.	56	.
WN	53.6	48.8	97.1%	97.3%	5	68
WS	39.1	40.1	90.6%	97.3%	20	55
EA	50.4	.	94.6%	.	36	.
NT	47.5	.	96.8%	.	34	.
SE	48.6	.	96.4%	.	43	.
SO	47.2	.	94.8%	.	51	.
SW	41.1	.	96.6%	.	35	.

R^2 value min & max range summary:

- Option 1: 90.6% to 97.2%
- Option 2: Much improved R^2 for LDZ WS (minimal improvement LDZ WN)
- Charts provided for highlighted LDZ / Option on next 2 slides

ILF observations:

- Similar to previous year – no issues

Sample size observations:

- Option 2 addresses low numbers for LDZs WN & WS

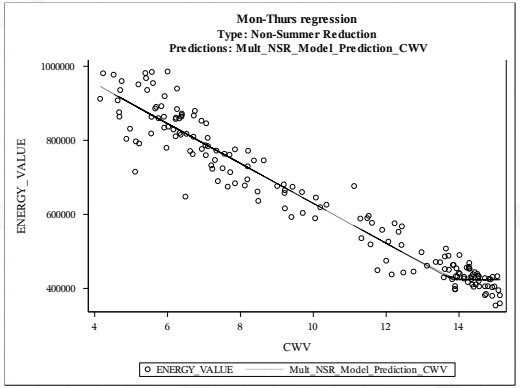
Xoserve proposals:

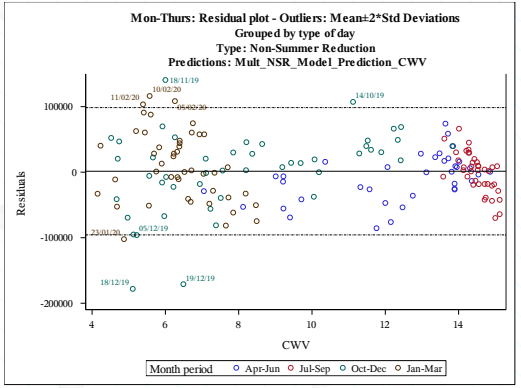
- Option 1 for all LDZs except for LDZ WN and WS (Option 2)

6: Results - Large NDM (06B – Charts for LDZ WS)

06B; LDZ WS; Option 1

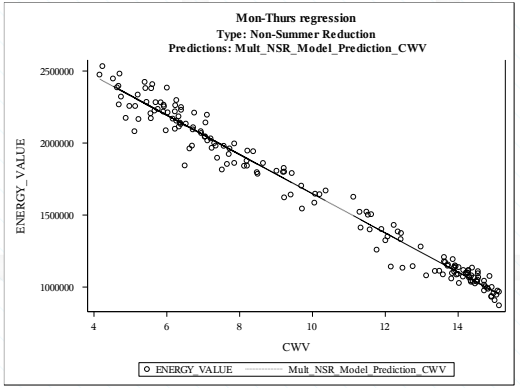
Model: No Summer Reduction
EUC: 06B
LDZ: WS
Demand: WS
R^2 = 90.6%
ILF = 39.1
Sample Points = 20

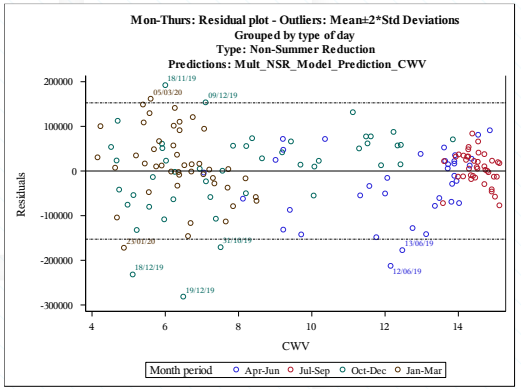




06B; LDZ WS; Option 2

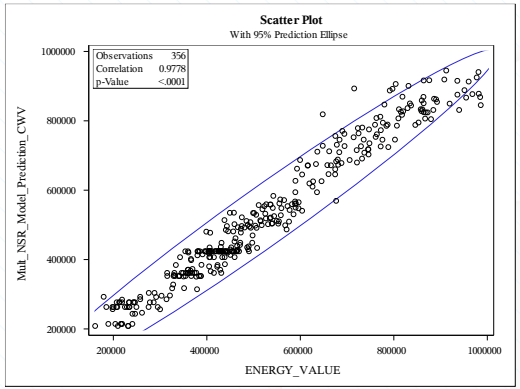
Model: No Summer Reduction
EUC: 06B
LDZ: WS
Demand: WS & SW
R^2 = 97.3%
ILF = 40.1
Sample Points = 55

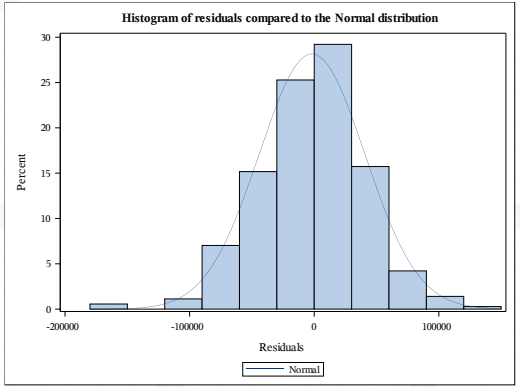


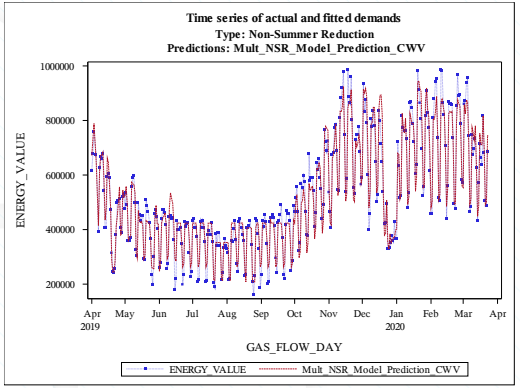


6: Results - Large NDM (06B – Charts for LDZ WS)

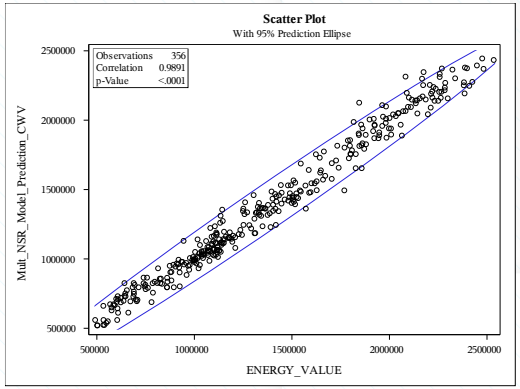
06B; LDZ WS; Option 1

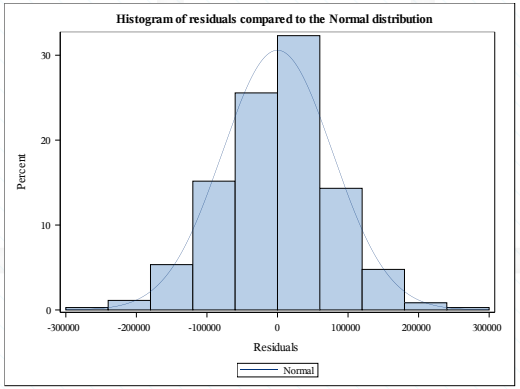


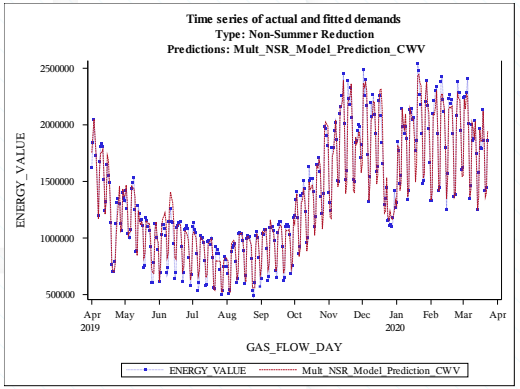




06B; LDZ WS; Option 2







6: Results - Large NDM (07B and 08B – Summary)

07B; 08B (Band 7 and Band 8 - 14,650 to 58,600 MWh pa)						
LDZ	Indicative Load Factor (ILF)		R2 Multiple Correlation Coefficient (All days)		Sample Size (Supply Points)	
	Option 1	Option 2	Option 1	Option 2	Option 1	Option 2
SC	66.5	.	90.0%	.	46	.
NO	66.2	.	84.0%	.	37	.
NW	61.4	.	92.5%	.	53	.
NE	65.7	.	87.4%	.	58	.
EM	67.7	.	92.2%	.	71	.
WM	44.9	.	95.0%	.	48	.
WN	64.3	.	91.0%	.	58	.
WS	65.5	.	73.5%	.	39	.
EA	68.6	.	70.9%	.	31	.
NT	60.5	.	86.4%	.	50	.
SE	57.6	.	91.2%	.	46	.
SO	55.4	.	90.4%	.	46	.
SW	64.9	.	73.7%	.	39	.

R^2 value min & max range summary:

- Option 1: 70.9% to 95.0%

ILF observations:

- Similar to previous year – no issues

Sample size observations:

- Limited numbers improved slightly by using the aggregations agreed with TWG on 27th April

Xoserve proposals:

- Strong model performance for most LDZs and with no other alternative identified by TWG - Option 1

6: Results - Large NDM (09B – Summary)

09B (Band 9 - >58,600 MWh pa)						
LDZ	Indicative Load Factor (ILF)		R2 Multiple Correlation Coefficient (All days)		Sample Size (Supply Points)	
	Option 1	Option 2	Option 1	Option 2	Option 1	Option 2
SC	70.7	.	84.5%	.	225	.
NO	70.9	.	85.0%	.	225	.
NW	69.0	.	85.2%	.	225	.
NE	70.3	.	84.2%	.	225	.
EM	69.8	.	84.1%	.	225	.
WM	68.7	.	83.7%	.	225	.
WN	69.6	.	84.7%	.	225	.
WS	68.9	.	82.1%	.	225	.
EA	69.5	.	80.8%	.	225	.
NT	69.5	.	80.6%	.	225	.
SE	68.5	.	81.0%	.	225	.
SO	66.4	.	81.2%	.	225	.
SW	68.5	.	80.9%	.	225	.

R^2 value min & max range summary:

- Option 1: 80.6% to 85.2%

ILF observations:

- Similar to previous year – no issues

Sample size observations:

- Good sample size for the National model which is always used for this particular EUC

Xoserve proposals:

- Good model performance which has improved in all LDZs from previous year and with no other alternative identified by TWG - Option 1

6: Results - Large NDM: Agreed Modelling Runs (2)

Description / Range / EUC	Option 1	Option 2
Band 5 **2,196 to 5,860 MWh pa** **05 W01 to W04**	7 LDZ Group (SC and NO/NE and NW/WN and EM/WM and EA/NT and SE/SO and WS/SW) Agreed WAR Ratios: 0.372; 0.443 and 0.519	5 LDZ Group (SC and NO/NW/WN and NE/EM/WM and EA/NT/SE and WS/SO/SW) Agreed WAR Ratios: 0.372; 0.443 and 0.519
Band 6 **5,860 to 14,650 MWh pa** **06 W01 to W04**	3 LDZ Group (SC/NO/NW/WN and NE/EM/WM and EA/NT/SE/WS/SO/SW) Agreed WAR Ratios: 0.336; 0.400 and 0.486	n/a
Band 7 and Band 8 (combined) **14,650 to 58,600 MWh pa** **07 W01 to W04; 08 W01 to W04**	2 LDZ Group (SC/NO/NW/WN/NE/EM/WM and EA/NT/SE/WS/SO/SW) Agreed WAR Ratios: 0.325; 0.360 and 0.428	National analysis Agreed WAR Ratios: 0.325; 0.360 and 0.428

- Note: For Band 7 and 8 WAR an additional run was undertaken at national level

6: Results - Large NDM (05 WAR - Summary)

05 W01 to W04 (Band 5W - 2,196 to 5,860 MWh pa)												
OPTION 1												
LDZ	WAR Band 01 0 – 0.372			WAR Band 02 0.373 – 0.443			WAR Band 03 0.444 – 0.519			WAR Band 04 0.520 – 1.00		
	ILF	R^2	Sample	ILF	R^2	Sample	ILF	R^2	Sample	ILF	R^2	Sample
SC	76.3	90.7%	39	52.7	96.1%	63	38.5	97.6%	79	28.7	97.0%	35
NO	64.9	98.1%	52	50.8	97.1%	78	39.4	98.1%	71	25.8	95.0%	56
NW	64.7	95.6%	34	52.9	95.4%	42	38.4	97.7%	35	23.8	94.1%	30
NE	64.8	98.0%	52	50.1	95.8%	78	38.8	96.6%	71	24.8	92.1%	56
EM	65.4	97.0%	49	48.9	96.1%	67	37.7	96.1%	54	24.6	95.5%	46
WM	64.6	97.0%	49	47.7	96.3%	67	36.5	96.4%	54	23.4	95.8%	46
WN	64.9	95.6%	34	53.7	94.7%	42	39.1	97.4%	35	24.3	94.5%	30
WS	74.9	78.4%	22	50.5	90.7%	31	37.4	95.9%	24	26.5	93.4%	25
EA	75.5	88.7%	36	53.4	93.6%	64	41.2	97.0%	82	27.7	97.7%	45
NT	75.1	88.8%	36	53.1	94.0%	64	40.8	97.5%	82	27.5	97.7%	45
SE	72.6	87.2%	54	51.7	96.0%	85	37.9	97.8%	86	26.1	97.5%	54
SO	76.0	87.3%	54	49.7	95.6%	85	36.1	97.4%	86	24.7	97.2%	54
SW	74.7	78.3%	22	49.5	91.4%	31	38.1	92.1%	24	27.6	96.3%	25

6: Results - Large NDM (05 WAR - Summary)

05 W01 to W04 (Band 5W - 2,196 to 5,860 MWh pa)												
OPTION 2												
LDZ	WAR Band 01 0 – 0.372			WAR Band 02 0.373 – 0.443			WAR Band 03 0.444 – 0.519			WAR Band 04 0.520 – 1.00		
	ILF	R^2	Sample	ILF	R^2	Sample	ILF	R^2	Sample	ILF	R^2	Sample
SC	76.3	90.7%	39	52.7	96.1%	63	38.5	97.6%	79	28.7	97.0%	35
NO	66.2	96.9%	55	53.2	96.4%	73	39.7	98.0%	72	25.2	94.8%	51
NW	66.1	96.8%	55	51.5	96.1%	73	37.8	97.2%	72	23.2	94.3%	51
NE	62.8	98.2%	80	48.9	96.7%	114	38.4	97.3%	88	25.0	95.4%	81
EM	62.5	98.1%	80	49.4	96.5%	114	38.2	97.0%	88	24.9	95.1%	81
WM	61.9	98.1%	80	48.3	96.5%	114	36.9	97.0%	88	23.9	95.0%	81
WN	66.3	96.8%	55	52.2	95.4%	73	38.4	97.0%	72	23.7	94.8%	51
WS	73.2	91.4%	47	50.7	93.3%	63	37.6	96.7%	57	25.3	94.7%	52
EA	72.6	85.5%	65	53.3	95.5%	117	40.5	97.6%	135	27.9	97.8%	72
NT	72.4	85.8%	65	53.1	95.9%	117	40.3	97.9%	135	27.7	97.8%	72
SE	72.0	85.3%	65	52.2	95.2%	117	39.4	97.4%	135	27.1	97.7%	72
SO	71.7	91.5%	47	47.4	94.2%	63	35.2	96.4%	57	24.3	97.5%	52
SW	72.8	91.4%	47	51.0	93.3%	63	38.1	94.6%	57	26.4	97.4%	52

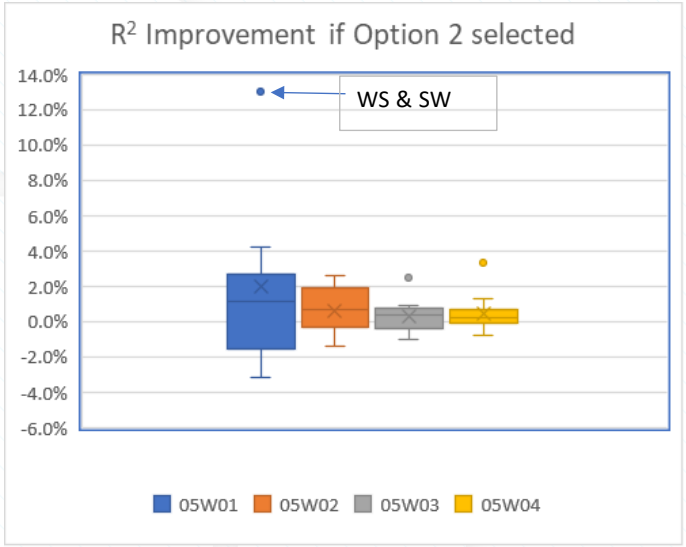
6: Results - Large NDM (05 WAR – Option differences)

R^2 comparison – showing improvement by choosing Option 2

	War band				Change direction			
LDZ	05W01	05W02	05W03	05W04	<0	0	>0	Average
SC	0.0%	0.0%	0.0%	0.0%		4		0.0%
NO	-1.2%	-0.7%	-0.1%	-0.2%	4			-0.6%
NW	1.2%	0.7%	-0.5%	0.2%	1		3	0.4%
NE	0.2%	0.9%	0.7%	3.3%			4	1.3%
EM	1.1%	0.4%	0.9%	-0.4%	1		3	0.5%
WM	1.1%	0.2%	0.6%	-0.8%	1		3	0.3%
WN	1.2%	0.7%	-0.4%	0.3%	1		3	0.5%
WS	13.0%	2.6%	0.8%	1.3%			4	4.4%
EA	-3.2%	1.9%	0.6%	0.1%	1		3	-0.2%
NT	-3.0%	1.9%	0.4%	0.1%	1		3	-0.2%
SE	-1.9%	-0.8%	-0.4%	0.2%	3		1	-0.7%
SO	4.2%	-1.4%	-1.0%	0.3%	2		2	0.5%
SW	13.1%	1.9%	2.5%	1.1%			4	4.7%
				Count	15	4	33	

Key

R2 >0
R2 <0



	War band			
	05W01	05W02	05W03	05W04
Min	-3.2%	-1.4%	-1.0%	-0.8%
Average	2.2%	0.7%	0.3%	0.5%
Median	1.1%	0.7%	0.5%	0.2%
Max	13.1%	2.6%	2.5%	3.3%

- Option 2 mostly improves R^2 of the models except for LDZs NO and SE
- Most significant improvement in LDZ SW and WS in war band 1 which is 13% improved R^2 (aggregation changed sample size from 22 to 47)

6: Results - Large NDM (05 WAR - Summary)

R^2 value min & max range summary:

- Option 1: 78.3% to 98.1% over all LDZ / WAR bands
- Option 2: 85.3% to 98.2% over all LDZ / WAR bands

Comparison:

- Option 2 mostly improves the R^2 in models with the exception of LDZs whose R^2 for War 1 – 4 are
  NO - 96.9%, 96.4%, 98%, 94.8% and
  SE - 85.3%, 95.2%, 97.4%, 97.7%
- All others improved with largest improvement 13.0% and 13.1% in War band 1 for LDZs WS and SW respectively.

Xoserve proposals:

- To proceed with Option 2

6: Results - Large NDM (06 WAR - Summary)

06 W01 to W04 (Band 6 - 5,860 to 14,650 MWh pa)												
OPTION 1												
LDZ	WAR Band 01 0 – 0.336			WAR Band 02 0.337 – 0.400			WAR Band 03 0.401 – 0.486			WAR Band 04 0.487 – 1.00		
	ILF	R^2	Sample	ILF	R^2	Sample	ILF	R^2	Sample	ILF	R^2	Sample
SC	78.6	92.5%	36	61.9	95.8%	61	46.5	97.6%	78	30.0	97.6%	43
NO	78.6	92.5%	36	62.0	96.0%	61	48.0	96.9%	78	31.6	97.3%	43
NW	78.7	92.6%	36	60.7	95.5%	61	46.6	95.1%	78	29.6	95.9%	43
NE	82.0	94.0%	51	61.0	95.8%	69	42.5	95.6%	33	28.0	94.5%	35
EM	82.0	94.0%	51	60.5	95.8%	69	42.8	95.0%	33	27.7	93.8%	35
WM	82.0	94.0%	51	59.6	95.7%	69	41.4	95.1%	33	26.4	93.8%	35
WN	78.8	92.6%	36	61.0	95.5%	61	47.2	94.9%	78	30.2	95.8%	43
WS	78.0	96.6%	36	62.7	97.2%	57	43.6	96.9%	77	30.5	96.9%	49
EA	78.0	96.6%	36	63.1	97.4%	57	44.0	98.0%	77	31.0	97.4%	49
NT	77.9	96.6%	36	63.0	97.5%	57	43.8	98.2%	77	30.8	97.5%	49
SE	78.0	96.6%	36	62.1	97.4%	57	42.9	97.6%	77	30.0	97.4%	49
SO	78.0	96.6%	36	60.2	97.5%	57	40.9	97.6%	77	28.4	97.0%	49
SW	78.0	96.6%	36	64.4	97.1%	57	43.9	95.9%	77	30.9	96.1%	49

6: Results - Large NDM (06 WAR - Summary)

R^2 value min & max range summary:

- Option 1: 92.5% to 98.2% over all LDZ / WAR bands

ILF observations:

- Option 1: ILFs demonstrate distinct levels between WAR bands

Sample size observations:

- Limited numbers improved slightly by using the agreed aggregations

Xoserve proposals:

- Strong model performance and with no other alternative identified by TWG - Option 1

6: Results - Large NDM (07 and 08 WAR - Summary)

07 W01 to W04 & 08 W01 to W04 (Band 7 and Band 8 - 14,650 to 58,600 MWh pa)

OPTION 1

LDZ	WAR Band 01 0 – 0.325			WAR Band 02 0.326 – 0.360			WAR Band 03 0.361 – 0. 428			WAR Band 04 0.429 – 1.00		
	ILF	R^2	Sample	ILF	R^2	Sample	ILF	R^2	Sample	ILF	R^2	Sample
SC	89.4	86.1%	59	75.8	87.9%	104	61.1	95.8%	101	35.8	95.7%	54
NO	89.4	86.0%	59	75.8	88.2%	104	61.3	96.5%	101	36.8	96.2%	54
NW	89.5	86.1%	59	74.7	88.2%	104	59.3	96.6%	101	34.4	96.7%	54
NE	89.6	86.1%	59	75.4	88.2%	104	60.6	96.7%	101	35.6	96.5%	54
EM	89.6	86.1%	59	75.2	88.1%	104	60.1	96.4%	101	35.4	96.2%	54
WM	89.6	86.1%	59	74.5	88.0%	104	58.8	96.2%	101	34.3	95.9%	54
WN	89.7	86.2%	59	74.9	88.3%	104	59.7	96.8%	101	35.0	96.9%	54
WS	91.2	60.9%	30	75.6	83.5%	33	58.3	92.0%	33	39.2	94.5%	39
EA	90.9	60.7%	30	75.5	84.5%	33	58.6	93.4%	33	39.6	95.5%	39
NT	90.6	60.5%	30	75.4	84.8%	33	58.5	93.7%	33	39.3	96.0%	39
SE	91.0	60.8%	30	74.8	84.4%	33	57.4	93.1%	33	38.6	95.3%	39
SO	91.3	60.6%	30	73.5	84.2%	33	55.0	93.1%	33	36.8	94.3%	39
SW	90.9	60.8%	30	75.0	83.7%	33	59.0	91.1%	33	39.5	92.9%	39

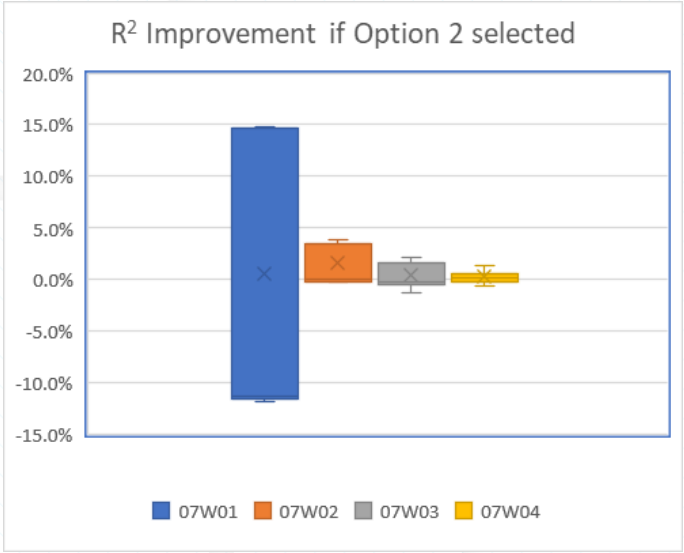
6: Results - Large NDM (07 and 08 WAR - Summary)

07 W01 to W04 & 08 W01 to W04 (Band 7 and Band 8 - 14,650 to 58,600 MWh pa)												
OPTION 2												
LDZ	WAR Band 01 0 – 0.325			WAR Band 02 0.326 – 0.360			WAR Band 03 0.361 – 0. 428			WAR Band 04 0.429 – 1.00		
	ILF	R^2	Sample	ILF	R^2	Sample	ILF	R^2	Sample	ILF	R^2	Sample
SC	89.7	74.5%	89	76.1	87.7%	137	61.1	94.6%	134	37.8	95.5%	93
NO	89.7	74.2%	89	76.0	88.0%	137	61.4	95.2%	134	39.0	95.9%	93
NW	89.8	74.5%	89	74.8	88.2%	137	59.2	96.0%	134	36.3	96.9%	93
NE	90.0	74.8%	89	75.6	88.0%	137	60.6	96.3%	134	37.4	97.0%	93
EM	90.0	74.8%	89	75.4	87.9%	137	60.0	96.0%	134	37.2	96.7%	93
WM	89.9	74.7%	89	74.5	88.0%	137	58.7	96.0%	134	36.0	96.5%	93
WN	90.0	74.7%	89	75.1	88.2%	137	59.6	96.5%	134	36.8	97.3%	93
WS	91.1	75.4%	89	74.8	87.4%	137	60.5	94.1%	134	36.7	95.8%	93
EA	90.7	75.3%	89	75.0	87.8%	137	59.5	95.0%	134	37.3	95.3%	93
NT	90.5	75.2%	89	74.9	87.9%	137	59.4	95.2%	134	37.1	95.4%	93
SE	90.9	75.4%	89	74.3	87.7%	137	60.1	94.2%	134	36.4	95.1%	93
SO	91.3	75.4%	89	72.9	87.8%	137	58.2	93.7%	134	34.6	94.5%	93
SW	90.8	75.6%	89	74.3	87.5%	137	60.8	93.3%	134	37.3	93.7%	93

6: Results - Large NDM (07 WAR – Option differences)

R^2 comparison – showing improvement by choosing Option 2

	War band				Change direction			
LDZ	07W01	07W02	07W03	07W04	<0	0	>0	Average
SC	-11.6%	-0.2%	-1.2%	-0.2%	4			-3.3%
NO	-11.8%	-0.2%	-1.3%	-0.3%	4			-3.4%
NW	-11.6%	0.0%	-0.6%	0.2%	2	1	1	-3.0%
NE	-11.3%	-0.2%	-0.4%	0.5%	3		1	-2.9%
EM	-11.3%	-0.2%	-0.4%	0.5%	3		1	-2.9%
WM	-11.4%	0.0%	-0.2%	0.6%	2	1	1	-2.8%
WN	-11.5%	-0.1%	-0.3%	0.4%	3		1	-2.9%
WS	14.5%	3.9%	2.1%	1.3%			4	5.5%
EA	14.6%	3.3%	1.6%	-0.2%	1		3	4.8%
NT	14.7%	3.1%	1.5%	-0.6%	1		3	4.7%
SE	14.6%	3.3%	1.1%	-0.2%	1		3	4.7%
SO	14.8%	3.6%	0.6%	0.2%			4	4.8%
SW	14.8%	3.8%	2.2%	0.8%			4	5.4%
				Count	24	2	26	



Key

R2 >0	
R2 <0	

	War band			
	07W01	07W02	07W03	07W04
Min	-11.8%	-0.2%	-1.3%	-0.6%
Average	1.6%	1.7%	0.5%	0.3%
Median	1.6%	1.6%	0.2%	0.3%
Max	14.8%	3.9%	2.2%	1.3%

- Option 2 benefits the southern LDZs at the detriment of the northern LDZs (except for some War band 4)
- Most significant changes are in WAR band 1 with -11% to 14% changes

6: Results - Large NDM (07 and 08 WAR - Summary)

R^2 value min & max range summary:

- Option 1: 60.5% to 96.9% over all LDZ / WAR bands
- Southern group LDZs for WAR Band 1 has R^2 circa 60% (marginally better than last years 54%). Last year also included a national modelling run (which was the preferred model)
- We have ran a National group, indicating that that northern LDZs suffer whereas southern LDZs especially in WAR band 1 benefit from the national aggregation.

ILF observations:

- In both options ILFs demonstrate distinct levels between WAR bands

Xoserve proposals:

- There is no clear benefit from the national run, so recommend Option 1

6: Results - Large NDM (Conclusions)

- Good R^2 Coefficients for majority of Consumption Band and WAR Band models, with some lower values in WAR Band 1
- Merging demand data for Bands 7 and 8 for modelling purposes has helped results remain acceptable
- The Demand Estimation team has performed a number of checks across 432 options for Large NDM models, including comparisons to previous years and reviews of exceptions/outliers which has provided assurance that the models are ready for the next phase
- Are TWG happy to move to Demand Model Smoothing phase with the Large NDM modelling results presented today ?

7: Conclusions and Next Steps

- Once all Gas Demand Models have been approved the “Model Application” phase commences. This begins with Demand Model Smoothing i.e. the process of ‘averaging the effects’ from the 3 latest analysis years. During this phase it is possible the CDSP may need to contact TWG for further prompt decisions on modelling analysis (probably by email)

- The CDSP then use the output from the Smoothed Demand Models as the basis for producing the annual Gas Demand Profiles which consist of Annual Load Profiles (ALPs), Daily Adjustment Factors (DAFs) and Peak Load Factors (PLFs)

- By 12th June Xoserve to publish the draft Gas Demand Profiles for DESC and TWG to review and provide feedback

- TWG and DESC have 2 weeks to review draft Demand Estimation parameter values and provide feedback (by no later than Friday 26th June)

- Combined TWG and DESC meeting planned for 6th July to review feedback received and seek approval to publish to wider industry participants