



INTERNATIONAL

FINAL REPORT

Prepared For:

Working Group 3

California's Statewide Pricing Pilot: Commercial & Industrial Analysis Update

Technical Appendix

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Table of Contents

	Page
Variable Dictionary	3
Appendix A. Regression Results Underlying Table 3.1	
Summer 2004	
a. LT20	4
b. GT20	9
Summer 2004 & 2005, Common Customers, 2004 Dummy	
a. LT20	13
b. GT20	18
Summer 2004 & 2005, Pooled Customers, 2004 Dummy	
a. LT20	22
b. GT20	27
Summer 2004 & 2005, Pooled Customers	
a. LT20	31
b. GT20	35
Summer 2004 & 2005, Common Customers	
a. LT20	39
b. GT20	43
Appendix B. Regression Results Underlying Table 3.5	
Summer 2004 & 2005, Pooled Customers, Enabling Technology	
a. LT20	47
b. GT20	52
Appendix C. Regression Results Underlying Table 3.7	
Summer 2004 & 2005, Pooled Customers, CPP1, CPP2, CPP3	
a. LT20	56
b. GT20	61
Appendix D. Regression Results Underlying Table 3.8	
Summer 2004 & 2005, Pooled Customers, 2 Hr CPP Dummy	
a. LT20	65
b. GT20	69

Variable Dictionary	
Variable	Definition
A	Intercept for share equation
A_W	Weekend binary variable
A_W_04	(Weekend binary variable)*(2004 year binary variable)
B	Ln(Peak price/off-peak price)
B_04	Ln(Peak price/off-peak price) *(2004 year binary variable)
B_CPP	Ln(Peak price/off-peak price)*(Critical day binary variable)
B_CPP1	Ln(Peak price/off-peak price)*(Day-1 critical day binary variable)
B_CPP2	Ln(Peak price/off-peak price)*(Critical day binary variable)*(Day-2 critical day binary variable)
B_CPP2h	Ln(Peak price/off-peak price)*(2-hour-event binary variable)
B_CPP3	Ln(Peak price/off-peak price)*(Day-3 critical day binary variable)
B_ENABLED	Ln(Peak price/off-peak price)*(Enabling technology binary variable)
C	Peak-period cooling degree hours per hour minus off-peak cooling degree hours per hour
C_04	(Peak-period cooling degree hours per hour minus off-peak cooling degree hours per hour)*(2004 year binary variable)
C_CPP1	(Peak-period cooling degree hours per hour minus off-peak cooling degree hours per hour)*(Day-1 critical day binary variable)
C_CPP2	(Peak-period cooling degree hours per hour minus off-peak cooling degree hours per hour)*(Day-2 critical day binary variable)
C_CPP3	(Peak-period cooling degree hours per hour minus off-peak cooling degree hours per hour)*(Day-3 critical day binary variable)
C_W	(Peak-period cooling degree hours per hour minus off-peak cooling degree hours per hour)*(Weekend binary variable)
C_W_04	(Peak-period cooling degree hours per hour minus off-peak cooling degree hours per hour)*(Weekend binary variable)*(2004 year binary variable)
P	Intercept for daily equation
P_W_04	(Weekend binary variable)*(2004 year binary variable)
R	Daily average cooling degree hours per hour
R_04	(Daily average cooling degree hours per hour)*(2004 year binary variable)
R_CPP	(Daily average cooling degree hours per hour)*(Critical day binary variable)
R_CPP2h	(Daily average cooling degree hours per hour)*(Weekend binary variable)*(2-hour-event binary variable)
R_W	(Daily average cooling degree hours per hour)*(Weekend binary variable)
R_W_04	(Daily average cooling degree hours per hour)*(Weekend binary variable)*(2004 year binary variable)

Appendix A
Regression Results Underlying
Table 3.1

Summer 2004
LT20

The MODEL Procedure

Model Summary	
Model Variables	2
Parameters	9
Equations	2
Number of Statements	2

Model Variables	DIF_LN_PEAKUSE_OPEAKUSE_HOUR DIF_LN_DAILYUSE_HR
Parameters	A B C A_W C_W P R P_W R_W
Equations	DIF_LN_PEAKUSE_OPEAKUSE_HOUR DIF_LN_DAILYUSE_HR

The 2 Equations to Estimate	
DIF_LN_PEAKUSE_OPEAKUSE_HOUR =	F(A(1), B(DIF_LN_PEAKP_OPEAKP_AVE), C(DIF_Peak_OPEAK_DH_Hr), A_W(DIF_Weekend), C_W(DIF_Peak_OPeak_DH_Hr_WKD))
DIF_LN_DAILYUSE_HR =	F(P(1), R(DIF_DAILY_DH_HOUR), P_W(DIF_Weekend), R_W(DIF_DAILY_DH_HOUR_WKD))

Observations will be weighted by	WEIGHT
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NOTE: At SUR Iteration 1 CONVERGE=0.001 Criteria Met.

**The MODEL Procedure
SUR Estimation Summary**

Data Set Options	
DATA=	LOAD_7A_NOPT
OUT=	DATASET_1
OUTEST=	X
OUTS=	S

Minimization Summary	
Parameters Estimated	9
Method	Gauss
Iterations	1

Final Convergence Criteria	
R	0
PPC	0
RPC(B)	0.346478
Object	0.000218
Trace(S)	3201.982
Objective Value	1.998792

Observations Processed	
Read	11666
Solved	11666

The MODEL Procedure

Nonlinear SUR Summary of Residual Errors							
Equation	DF Model	DF Error	SSE	MSE	Root MSE	R-Square	Adj R-Sq
DIF_LN_PEAKUSE_OPEAKUSE_HOUR	5	11661	20781820	1782.2	42.2157	0.0681	0.0678
DIF_LN_DAILYUSE_HR	4	11662	16557916	1419.8	37.6805	0.1360	0.1358

Nonlinear SUR Summary of Residual Errors	
Equation	Durbin Watson
DIF_LN_PEAKUSE_OPEAKUSE_HOUR	2.7448
DIF_LN_DAILYUSE_HR	2.6414

Nonlinear SUR Parameter Estimates				
Parameter	Estimate	Approx Std Err	t Value	Approx Pr > t
A	-0.00249	0.00628	-0.40	0.6915
B	-0.04452	0.0144	-3.10	0.0020
C	0.003988	0.00214	1.87	0.0622
A_W	-0.40831	0.0162	-25.25	<.0001
C_W	0.009599	0.00170	5.65	<.0001
P	-0.00154	0.00560	-0.28	0.7832
R	0.020015	0.00338	5.93	<.0001
P_W	-0.49421	0.0133	-37.13	<.0001
R_W	0.012191	0.00218	5.60	<.0001

Number of Observations		Statistics for System	
Used	11666	Objective	1.9988
Missing	0	Objective*N	23318
Sum of Weights	45202184		

Summer 2004
GT20

The MODEL Procedure

Model Summary	
Model Variables	2
Parameters	9
Equations	2
Number of Statements	2

Model Variables	DIF_LN_PEAKUSE_OPEAKUSE_HOUR DIF_LN_DAILYUSE_HR
Parameters	A B C A_W C_W P R P_W R_W
Equations	DIF_LN_PEAKUSE_OPEAKUSE_HOUR DIF_LN_DAILYUSE_HR

The 2 Equations to Estimate	
DIF_LN_PEAKUSE_OPEAKUSE_HOUR =	F(A(1), B(DIF_LN_PEAKP_OPEAKP_AVE), C(DIF_Peak_OPEAK_DH_Hr), A_W(DIF_Weekend), C_W(DIF_Peak_OPeak_DH_Hr_WKD))
DIF_LN_DAILYUSE_HR =	F(P(1), R(DIF_DAILY_DH_HOUR), P_W(DIF_Weekend), R_W(DIF_DAILY_DH_HOUR_WKD))

Observations will be weighted by	WEIGHT
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NOTE: At SUR Iteration 1 CONVERGE=0.001 Criteria Met.

**The MODEL Procedure
SUR Estimation Summary**

Data Set Options	
DATA=	LOAD_7B_NOPT
OUT=	DATASET_1
OUTEST=	X
OUTS=	S

Minimization Summary	
Parameters Estimated	9
Method	Gauss
Iterations	1

Final Convergence Criteria	
R	0
PPC	0
RPC(C_W)	0.587444
Object	0.000419
Trace(S)	506.9195
Objective Value	1.998544

Observations Processed	
Read	14560
Solved	14560

The MODEL Procedure

Nonlinear SUR Summary of Residual Errors								
Equation	DF Model	DF Error	SSE	MSE	Root MSE	R-Square	Adj R-Sq	Durbin Watson
DIF_LN_PEAKUSE_OPEAKUSE_HOUR	5	14555	3107944	213.5	14.6127	0.1050	0.1047	2.6899
DIF_LN_DAILYUSE_HR	4	14556	4270563	293.4	17.1286	0.2125	0.2123	2.5436

Nonlinear SUR Parameter Estimates				
Parameter	Estimate	Approx Std Err	t Value	Approx Pr > t
A	-0.00113	0.00328	-0.35	0.7293
B	-0.06924	0.00830	-8.34	<.0001
C	0.002835	0.00115	2.46	0.0137
A_W	-0.28042	0.00860	-32.59	<.0001
C_W	0.002027	0.000956	2.12	0.0340
P	-0.00155	0.00384	-0.40	0.6859
R	0.008169	0.00247	3.31	0.0009
P_W	-0.48177	0.00904	-53.32	<.0001
R_W	0.009951	0.00174	5.71	<.0001

Number of Observations		Statistics for System	
Used	14560	Objective	1.9985
Missing	0	Objective*N	29099
Sum of Weights	19884996		

Summer 2004 & 2005, Common
Customers, 2004 Dummy
LT20

Summer 2004 2005 Common, Data with weights, Small C&I CPPV Track A, Weekend Interactions 2004 Dummy

08:04 Thursday, May 25, 2006

The MODEL Procedure

Model Summary	
Model Variables	2
Parameters	16
Equations	2
Number of Statements	2

Model Variables	DIF_LN_PEAKUSE_OPEAKUSE_HOUR DIF_LN_DAILYUSE_HR
Parameters	A B C A_W C_W B_04 C_04 A_W_04 C_W_04 P R P_W R_W R_04 P_W_04 R_W_04
Equations	DIF_LN_PEAKUSE_OPEAKUSE_HOUR DIF_LN_DAILYUSE_HR

The 2 Equations to Estimate	
DIF_LN_PEAKUSE_OPEAKUSE_HOUR =	F(A(1), B(DIF_LN_PEAKP_OPEAKP_AVE), C(DIF_Peak_OPEAK_DH_Hr), A_W(DIF_Weekend), C_W(DIF_Peak_OPeak_DH_Hr_WKD), B_04(DIF_LN_PEAKP_OPEAKP_AVE_04), C_04(DIF_Peak_OPeak_DH_Hr_04), A_W_04(DIF_WKD_04), C_W_04(DIF_Peak_OPeak_DH_Hr_WKD_04))
DIF_LN_DAILYUSE_HR =	F(P(1), R(DIF_DAILY_DH_HOUR), P_W(DIF_Weekend), R_W(DIF_DAILY_DH_HOUR_WKD), R_04(DIF_DAILY_DH_HOUR_04), P_W_04(DIF_WKD_04), R_W_04(DIF_DAILY_DH_HOUR_WKD_04))

Observations will be weighted by	WEIGHT
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NOTE: At SUR Iteration 1 CONVERGE=0.001 Criteria Met.

**The MODEL Procedure
SUR Estimation Summary**

Data Set Options	
DATA=	LOAD_7A_NOPT_COMMON
OUT=	DATASET_1
OUTEST=	X
OUTS=	S

Minimization Summary	
Parameters Estimated	16
Method	Gauss
Iterations	1

Final Convergence Criteria	
R	0
PPC	0
RPC(C_04)	2.760399
Object	0.00024
Trace(S)	3283.039
Objective Value	1.998744

Observations Processed	
Read	20601
Solved	20601

Summer 2004 2005 Common, Data with weights, Small C&I CPPV Track A, Weekend Interactions 2004 Dummy

08:04 Thursday, May 25, 2006

The MODEL Procedure

Nonlinear SUR Summary of Residual Errors							
Equation	DF Model	DF Error	SSE	MSE	Root MSE	R-Square	Adj R-Sq
DIF_LN_PEAKUSE_OPEAKUSE_HOUR	9	20592	39894603	1937.4	44.0157	0.0697	0.0693
DIF_LN_DAILYUSE_HR	7	20594	27712431	1345.7	36.6832	0.1338	0.1336

Nonlinear SUR Summary of Residual Errors	
Equation	Durbin Watson
DIF_LN_PEAKUSE_OPEAKUSE_HOUR	2.7378
DIF_LN_DAILYUSE_HR	2.7215

Nonlinear SUR Parameter Estimates				
Parameter	Estimate	Approx Std Err	t Value	Approx Pr > t
A	-0.00073	0.00488	-0.15	0.8806
B	-0.03761	0.0133	-2.84	0.0046
C	0.004885	0.00240	2.04	0.0417
A_W	-0.40539	0.0175	-23.22	<.0001
C_W	0.011636	0.00211	5.52	<.0001
B_04	-0.01487	0.0214	-0.70	0.4866
C_04	-0.00157	0.00343	-0.46	0.6474
A_W_04	-0.01744	0.0255	-0.68	0.4938
C_W_04	-0.00648	0.00289	-2.24	0.0251
P	0.000483	0.00407	0.12	0.9054
R	0.013411	0.00346	3.88	0.0001
P_W	-0.42491	0.0124	-34.17	<.0001
R_W	0.010572	0.00218	4.85	<.0001
R_04	0.006533	0.00495	1.32	0.1869
P_W_04	-0.06993	0.0188	-3.71	0.0002
R_W_04	-0.00103	0.00313	-0.33	0.7423

Summer 2004 2005 Common, Data with weights, Small C&I CPPV Track A, Weekend Interactions 2004 Dummy

08:04 Thursday, May 25, 2006

The MODEL Procedure

Number of Observations		Statistics for System	
Used	20601	Objective	1.9987
Missing	0	Objective*N	41176
Sum of Weights	81350217		

Summer 2004 & 2005, Common
Customers, 2004 Dummy
GT20

Summer 2004 2005 Common, Data with weights, >20kW C&I CPPV Track A, Weekend Interactions 2004 Dummy

08:04 Thursday, May 25, 2006

The MODEL Procedure

Model Summary	
Model Variables	2
Parameters	16
Equations	2
Number of Statements	2

Model Variables	DIF_LN_PEAKUSE_OPEAKUSE_HOUR DIF_LN_DAILYUSE_HR
Parameters	A B C A_W C_W B_04 C_04 A_W_04 C_W_04 P R P_W R_W R_04 P_W_04 R_W_04
Equations	DIF_LN_PEAKUSE_OPEAKUSE_HOUR DIF_LN_DAILYUSE_HR

The 2 Equations to Estimate	
DIF_LN_PEAKUSE_OPEAKUSE_HOUR =	F(A(1), B(DIF_LN_PEAKP_OPEAKP_AVE), C(DIF_Peak_OPEAK_DH_Hr), A_W(DIF_Weekend), C_W(DIF_Peak_OPeak_DH_Hr_WKD), B_04(DIF_LN_PEAKP_OPEAKP_AVE_04), C_04(DIF_Peak_OPeak_DH_Hr_04), A_W_04(DIF_WKD_04), C_W_04(DIF_Peak_OPeak_DH_Hr_WKD_04))
DIF_LN_DAILYUSE_HR =	F(P(1), R(DIF_DAILY_DH_HOUR), P_W(DIF_Weekend), R_W(DIF_DAILY_DH_HOUR_WKD), R_04(DIF_DAILY_DH_HOUR_04), P_W_04(DIF_WKD_04), R_W_04(DIF_DAILY_DH_HOUR_WKD_04))

Observations will be weighted by	WEIGHT
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NOTE: At SUR Iteration 1 CONVERGE=0.001 Criteria Met.

Summer 2004 2005 Common, Data with weights, >20kW C&I CPPV Track A, Weekend Interactions 2004 Dummy

Data Set Options	
DATA=	LOAD_7B_NOPT_COMMON
OUT=	DATASET_1
OUEST=	X
OUTS=	S

Minimization Summary	
Parameters Estimated	16
Method	Gauss
Iterations	1

Final Convergence Criteria	
R	0
PPC	0
RPC(C_W_04)	2.222242
Object	0.000236
Trace(S)	498.8905
Objective Value	1.998885

Observations Processed	
Read	24905
Solved	24905

Summer 2004 2005 Common, Data with weights, >20kW C&I CPPV Track A, Weekend Interactions 2004 Dummy

08:04 Thursday, May 25, 2006

The MODEL Procedure

Nonlinear SUR Summary of Residual Errors								
Equation	DF Model	DF Error	SSE	MSE	Root MSE	R-Square	Adj R-Sq	Durbin Watson
DIF_LN_PEAKUSE_OPEAKUSE_HOUR	9	24896	5464232	219.5	14.8149	0.1043	0.1040	2.7274
DIF_LN_DAILYUSE_HR	7	24898	6956706	279.4	16.7155	0.2134	0.2132	2.5683

Nonlinear SUR Parameter Estimates				
Parameter	Estimate	Approx Std Err	t Value	Approx Pr > t
A	-0.00066	0.00248	-0.26	0.7913
B	-0.03557	0.0121	-2.94	0.0033
C	0.003334	0.00126	2.65	0.0081
A_W	-0.26731	0.00895	-29.88	<.0001
C_W	0.006192	0.00118	5.26	<.0001
B_04	-0.0174	0.0155	-1.12	0.2621
C_04	-0.00162	0.00177	-0.92	0.3601
A_W_04	-0.03175	0.0129	-2.46	0.0140
C_W_04	-0.00122	0.00159	-0.77	0.4434
P	-0.00005	0.00280	-0.02	0.9847
R	0.013914	0.00260	5.35	<.0001
P_W	-0.45777	0.00903	-50.70	<.0001
R_W	0.018693	0.00223	8.39	<.0001
R_04	-0.0036	0.00375	-0.96	0.3362
P_W_04	-0.00842	0.0133	-0.63	0.5264
R_W_04	-0.00843	0.00317	-2.66	0.0078

Number of Observations		Statistics for System	
Used	24905	Objective	1.9989
Missing	0	Objective*N	49782
Sum of Weights	35619674		

Summer 2004 & 2005, Pooled
Customers, 2004 Dummy
LT20

**The MODEL Procedure
Interactions, 2004 Dummy**

Model Summary	
Model Variables	2
Parameters	16
Equations	2
Number of Statements	2

Model Variables	DIF_LN_PEAKUSE_OPEAKUSE_HOUR DIF_LN_DAILYUSE_HR
Parameters	A B C A_W C_W B_04 C_04 A_W_04 C_W_04 P R P_W R_W R_04 P_W_04 R_W_04
Equations	DIF_LN_PEAKUSE_OPEAKUSE_HOUR DIF_LN_DAILYUSE_HR

The 2 Equations to Estimate	
DIF_LN_PEAKUSE_OPEAKUSE_HOUR =	F(A(1), B(DIF_LN_PEAKP_OPEAKP_AVE), C(DIF_Peak_OPEAK_DH_Hr), A_W(DIF_Weekend), C_W(DIF_Peak_OPeak_DH_Hr_WKD), B_04(DIF_LN_PEAKP_OPEAKP_AVE_04), C_04(DIF_Peak_OPeak_DH_Hr_04), A_W_04(DIF_WKD_04), C_W_04(DIF_Peak_OPeak_DH_Hr_WKD_04))
DIF_LN_DAILYUSE_HR =	F(P(1), R(DIF_DAILY_DH_HOUR), P_W(DIF_Weekend), R_W(DIF_DAILY_DH_HOUR_WKD), R_04(DIF_DAILY_DH_HOUR_04), P_W_04(DIF_WKD_04), R_W_04(DIF_DAILY_DH_HOUR_WKD_04))

Observations will be weighted by	WEIGHT
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NOTE: At SUR Iteration 1 CONVERGE=0.001 Criteria Met.

Summer 2004 2005 Common, Data with weights, Small C&I CPPV Track A, Weekend Interactions 2004 Dummy

08:04 Thursday, May 25, 2006

08:04 Thursday, May 25, 2006

The MODEL Procedure

Model Summary	
Model Variables	2
Parameters	16
Equations	2
Number of Statements	2

Model Variables	DIF_LN_PEAKUSE_OPEAKUSE_HOUR DIF_LN_DAILYUSE_HR
Parameters	A B C A_W C_W B_04 C_04 A_W_04 C_W_04 P R P_W R_W R_04 P_W_04 R_W_04
Equations	DIF_LN_PEAKUSE_OPEAKUSE_HOUR DIF_LN_DAILYUSE_HR

The 2 Equations to Estimate	
DIF_LN_PEAKUSE_OPEAKUSE_HOUR =	F(A(1), B(DIF_LN_PEAKP_OPEAKP_AVE), C(DIF_Peak_OPEAK_DH_Hr), A_W(DIF_Weekend), C_W(DIF_Peak_OPeak_DH_Hr_WKD), B_04(DIF_LN_PEAKP_OPEAKP_AVE_04), C_04(DIF_Peak_OPeak_DH_Hr_04), A_W_04(DIF_WKD_04), C_W_04(DIF_Peak_OPeak_DH_Hr_WKD_04))
DIF_LN_DAILYUSE_HR =	F(P(1), R(DIF_DAILY_DH_HOUR), P_W(DIF_Weekend), R_W(DIF_DAILY_DH_HOUR_WKD), R_04(DIF_DAILY_DH_HOUR_04), P_W_04(DIF_WKD_04), R_W_04(DIF_DAILY_DH_HOUR_WKD_04))

Observations will be weighted by	WEIGHT
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NOTE: At SUR Iteration 1 CONVERGE=0.001 Criteria Met.

The MODEL Procedure

Nonlinear SUR Summary of Residual Errors							
Equation	DF Model	DF Error	SSE	MSE	Root MSE	R-Square	Adj R-Sq
DIF_LN_PEAKUSE_OPEAKUSE_HOUR	9	23475	46487322	1980.3	44.5005	0.0685	0.0682
DIF_LN_DAILYUSE_HR	7	23477	32102698	1367.4	36.9785	0.1387	0.1384

Nonlinear SUR Summary of Residual Errors	
Equation	Durbin Watson
DIF_LN_PEAKUSE_OPEAKUSE_HOUR	2.7283
DIF_LN_DAILYUSE_HR	2.6806

Nonlinear SUR Parameter Estimates				
Parameter	Estimate	Approx Std Err	t Value	Approx Pr > t
A	-0.00117	0.00464	-0.25	0.8018
B	-0.02703	0.0130	-2.08	0.0375
C	0.003865	0.00236	1.64	0.1015
A_W	-0.44848	0.0170	-26.41	<.0001
C_W	0.014091	0.00208	6.79	<.0001
B_04	-0.01713	0.0204	-0.84	0.4003
C_04	0.000031	0.00329	0.01	0.9925
A_W_04	0.038795	0.0242	1.60	0.1086
C_W_04	-0.00426	0.00277	-1.54	0.1239
P	0.0003	0.00386	0.08	0.9380
R	0.01289	0.00338	3.81	0.0001
P_W	-0.46502	0.0120	-38.69	<.0001
R_W	0.012415	0.00213	5.83	<.0001
R_04	0.006719	0.00477	1.41	0.1592
P_W_04	-0.03109	0.0178	-1.74	0.0811
R_W_04	0.000309	0.00305	0.10	0.9193

Summer 2004 2005 Pooled, Data with weights, Small C&I CPPV Track A, Weekend Interactions, 2004 Dummy

08:04 Thursday, May 25, 2006

The MODEL Procedure

Number of Observations		Statistics for System	
Used	23484	Objective	1.9990
Missing	0	Objective*N	46945
Sum of Weights	91939118		

Summer 2004 & 2005, Pooled
Customers, 2004 Dummy
GT20

The MODEL Procedure

Model Summary	
Model Variables	2
Parameters	16
Equations	2
Number of Statements	2

Model Variables	DIF_LN_PEAKUSE_OPEAKUSE_HOUR DIF_LN_DAILYUSE_HR
Parameters	A B C A_W C_W B_04 C_04 A_W_04 C_W_04 P R P_W R_W R_04 P_W_04 R_W_04
Equations	DIF_LN_PEAKUSE_OPEAKUSE_HOUR DIF_LN_DAILYUSE_HR

The 2 Equations to Estimate	
DIF_LN_PEAKUSE_OPEAKUSE_HOUR =	F(A(1), B(DIF_LN_PEAKP_OPEAKP_AVE), C(DIF_Peak_OPEAK_DH_Hr), A_W(DIF_Weekend), C_W(DIF_Peak_OPeak_DH_Hr_WKD), B_04(DIF_LN_PEAKP_OPEAKP_AVE_04), C_04(DIF_Peak_OPeak_DH_Hr_04), A_W_04(DIF_WKD_04), C_W_04(DIF_Peak_OPeak_DH_Hr_WKD_04))
DIF_LN_DAILYUSE_HR =	F(P(1), R(DIF_DAILY_DH_HOUR), P_W(DIF_Weekend), R_W(DIF_DAILY_DH_HOUR_WKD), R_04(DIF_DAILY_DH_HOUR_04), P_W_04(DIF_WKD_04), R_W_04(DIF_DAILY_DH_HOUR_WKD_04))

Observations will be weighted by	WEIGHT
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NOTE: At SUR Iteration 1 CONVERGE=0.001 Criteria Met.

**The MODEL Procedure
SUR Estimation Summary**

Data Set Options	
DATA=	LOAD_7B_NOPT_POOL
OUT=	DATASET_1
OUTEST=	X
OUTS=	S

Minimization Summary	
Parameters Estimated	16
Method	Gauss
Iterations	1

Final Convergence Criteria	
R	0
PPC	0
RPC(C_W_04)	8.527792
Object	0.000144
Trace(S)	517.701
Objective Value	1.99915

Observations Processed	
Read	28484
Solved	28484

Summer 2004 2005 Pooled, Data with weights, >20kW C&I CPPV Track A, Weekend Interactions, 2004 Dummy

08:04 Thursday, May 25, 2006

The MODEL Procedure

Nonlinear SUR Summary of Residual Errors								
Equation	DF Model	DF Error	SSE	MSE	Root MSE	R-Square	Adj R-Sq	Durbin Watson
DIF_LN_PEAKUSE_OPEAKUSE_HOUR	9	28475	6301655	221.3	14.8763	0.0990	0.0988	2.7182
DIF_LN_DAILYUSE_HR	7	28477	8440473	296.4	17.2162	0.2160	0.2158	2.5307

Nonlinear SUR Parameter Estimates				
Parameter	Estimate	Approx Std Err	t Value	Approx Pr > t
A	-0.00068	0.00239	-0.28	0.7769
B	-0.0368	0.0118	-3.12	0.0018
C	0.003903	0.00123	3.16	0.0016
A_W	-0.27595	0.00880	-31.34	<.0001
C_W	0.005914	0.00114	5.17	<.0001
B_04	-0.03338	0.0147	-2.27	0.0235
C_04	-0.00099	0.00172	-0.58	0.5626
A_W_04	-0.00844	0.0125	-0.68	0.4988
C_W_04	-0.00327	0.00151	-2.16	0.0306
P	0.000056	0.00276	0.02	0.9837
R	0.014289	0.00260	5.50	<.0001
P_W	-0.49474	0.00904	-54.72	<.0001
R_W	0.016311	0.00213	7.65	<.0001
R_04	-0.00612	0.00362	-1.69	0.0913
P_W_04	0.009959	0.0129	0.77	0.4387
R_W_04	-0.00543	0.00278	-1.95	0.0509

Number of Observations		Statistics for System	
Used	28484	Objective	1.9991
Missing	0	Objective*N	56944
Sum of Weights	38915929		

Summer 2004 & 2005, Pooled
Customers
LT20

Summer 2004 2005 Pooled, Data with weights, Small C&I CPPV Track A, Weekend Interactions

08:04 Thursday, May 25, 2006

The MODEL Procedure

Model Summary	
Model Variables	2
Parameters	9
Equations	2
Number of Statements	2

Model Variables	DIF_LN_PEAKUSE_OPEAKUSE_HOUR DIF_LN_DAILYUSE_HR
Parameters	A B C A_W C_W P R P_W R_W
Equations	DIF_LN_PEAKUSE_OPEAKUSE_HOUR DIF_LN_DAILYUSE_HR

The 2 Equations to Estimate	
DIF_LN_PEAKUSE_OPEAKUSE_HOUR	F(A(1), B(DIF_LN_PEAKP_OPEAKP_AVE), = C(DIF_Peak_OPEAK_DH_Hr), A_W(DIF_Weekend), C_W(DIF_Peak_OPeak_DH_Hr_WKD))
DIF_LN_DAILYUSE_HR	= F(P(1), R(DIF_DAILY_DH_HOUR), P_W(DIF_Weekend), R_W(DIF_DAILY_DH_HOUR_WKD))

Observations will be weighted by	WEIGHT
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NOTE: At SUR Iteration 1 CONVERGE=0.001 Criteria Met.

*The MODEL Procedure
SUR Estimation Summary*

Data Set Options	
DATA=	LOAD_7A_NOPT_POOL
OUT=	DATASET_1
OUTEST=	X
OUTS=	S

Minimization Summary	
Parameters Estimated	9
Method	Gauss
Iterations	1

Final Convergence Criteria	
R	0
PPC	0
RPC(B)	0.417428
Object	0.000136
Trace(S)	3347.748
Objective Value	1.999345

Observations Processed	
Read	23484
Solved	23484

The MODEL Procedure

Nonlinear SUR Summary of Residual Errors							
Equation	DF Model	DF Error	SSE	MSE	Root MSE	R-Square	Adj R-Sq
DIF_LN_PEAKUSE_OPEAKUSE_HOUR	5	23479	46491954	1980.2	44.4989	0.0684	0.0682
DIF_LN_DAILYUSE_HR	4	23480	32111193	1367.6	36.9810	0.1384	0.1383

Nonlinear SUR Summary of Residual Errors	
Equation	Durbin Watson
DIF_LN_PEAKUSE_OPEAKUSE_HOUR	2.7282
DIF_LN_DAILYUSE_HR	2.6800

Nonlinear SUR Parameter Estimates				
Parameter	Estimate	Approx Std Err	t Value	Approx Pr > t
A	-0.00118	0.00464	-0.25	0.7988
B	-0.0316	0.00995	-3.17	0.0015
C	0.003827	0.00164	2.34	0.0192
A_W	-0.42907	0.0121	-35.54	<.0001
C_W	0.011856	0.00136	8.72	<.0001
P	0.000193	0.00386	0.05	0.9600
R	0.015861	0.00236	6.71	<.0001
P_W	-0.47854	0.00886	-53.99	<.0001
R_W	0.012382	0.00151	8.20	<.0001

Number of Observations		Statistics for System	
Used	23484	Objective	1.9993
Missing	0	Objective*N	46953
Sum of Weights	91939118		

Summer 2004 & 2005, Pooled
Customers
GT20

Summer 2004 2005 Pooled, Data with weights, >20kW C&I CPPV Track A, Weekend Interactions

08:04 Thursday, May 25, 2006

The MODEL Procedure

Model Summary	
Model Variables	2
Parameters	9
Equations	2
Number of Statements	2

Model Variables	DIF_LN_PEAKUSE_OPEAKUSE_HOUR DIF_LN_DAILYUSE_HR
Parameters	A B C A_W C_W P R P_W R_W
Equations	DIF_LN_PEAKUSE_OPEAKUSE_HOUR DIF_LN_DAILYUSE_HR

The 2 Equations to Estimate	
DIF_LN_PEAKUSE_OPEAKUSE_HOUR	F(A(1), B(DIF_LN_PEAKP_OPEAKP_AVE), = C(DIF_Peak_OPEAK_DH_Hr), A_W(DIF_Weekend), C_W(DIF_Peak_OPeak_DH_Hr_WKD))
DIF_LN_DAILYUSE_HR	= F(P(1), R(DIF_DAILY_DH_HOUR), P_W(DIF_Weekend), R_W(DIF_DAILY_DH_HOUR_WKD))

Observations will be weighted by	WEIGHT
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NOTE: At SUR Iteration 1 CONVERGE=0.001 Criteria Met.

Summer 2004 2005 Pooled, Data with weights, >20kW C&I CPPV Track A, Weekend Interactions

08:04 Thursday, May 25, 2006

**The MODEL Procedure
SUR Estimation Summary**

Data Set Options	
DATA=	LOAD_7B_NOPT_POOL
OUT=	DATASET_1
OUTEST=	X
OUTS=	S

Minimization Summary	
Parameters Estimated	9
Method	Gauss
Iterations	1

Final Convergence Criteria	
R	0
PPC	0
RPC(C_W)	0.219099
Object	0.000067
Trace(S)	517.7233
Objective Value	1.999551

Observations Processed	
Read	28484
Solved	28484

The MODEL Procedure

Nonlinear SUR Summary of Residual Errors								
Equation	DF Model	DF Error	SSE	MSE	Root MSE	R-Square	Adj R-Sq	Durbin Watson
DIF_LN_PEAKUSE_OPEAKUSE_HOUR	5	28479	6302497	221.3	14.8763	0.0989	0.0988	2.7176
DIF_LN_DAILYUSE_HR	4	28480	8442043	296.4	17.2169	0.2158	0.2157	2.5303

Nonlinear SUR Parameter Estimates				
Parameter	Estimate	Approx Std Err	t Value	Approx Pr > t
A	-0.00065	0.00238	-0.27	0.7859
B	-0.05781	0.00705	-8.19	<.0001
C	0.003131	0.000852	3.68	0.0002
A_W	-0.27981	0.00623	-44.94	<.0001
C_W	0.00381	0.000743	5.13	<.0001
P	0.000153	0.00276	0.06	0.9559
R	0.010708	0.00180	5.95	<.0001
P_W	-0.48936	0.00642	-76.20	<.0001
R_W	0.012711	0.00135	9.39	<.0001

Number of Observations		Statistics for System	
Used	28484	Objective	1.9996
Missing	0	Objective*N	56955
Sum of Weights	38915929		

Summer 2004 & 2005, Common
Customers
LT20

The MODEL Procedure

Model Summary	
Model Variables	2
Parameters	9
Equations	2
Number of Statements	2

Model Variables	DIF_LN_PEAKUSE_OPEAKUSE_HOUR DIF_LN_DAILYUSE_HR
Parameters	A B C A_W C_W P R P_W R_W
Equations	DIF_LN_PEAKUSE_OPEAKUSE_HOUR DIF_LN_DAILYUSE_HR

The 2 Equations to Estimate	
DIF_LN_PEAKUSE_OPEAKUSE_HOUR	F(A(1), B(DIF_LN_PEAKP_OPEAKP_AVE), = C(DIF_Peak_OPEAK_DH_Hr), A_W(DIF_Weekend), C_W(DIF_Peak_OPeak_DH_Hr_WKD))
DIF_LN_DAILYUSE_HR	= F(P(1), R(DIF_DAILY_DH_HOUR), P_W(DIF_Weekend), R_W(DIF_DAILY_DH_HOUR_WKD))

Observations will be weighted by	WEIGHT
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NOTE: At SUR Iteration 1 CONVERGE=0.001 Criteria Met.

**The MODEL Procedure
SUR Estimation Summary**

Data Set Options	
DATA=	LOAD_7A_NOPT_COMMON
OUT=	DATASET_1
OUTEST=	X
OUTS=	S

Minimization Summary	
Parameters Estimated	9
Method	Gauss
Iterations	1

Final Convergence Criteria	
R	0
PPC	0
RPC(C)	0.570733
Object	0.000204
Trace(S)	3285.254
Objective Value	1.999156

Observations Processed	
Read	20601
Solved	20601

The MODEL Procedure

Nonlinear SUR Summary of Residual Errors							
Equation	DF Model	DF Error	SSE	MSE	Root MSE	R-Square	Adj R-Sq
DIF_LN_PEAKUSE_OPEAKUSE_HOUR	5	20596	39917213	1938.1	44.0239	0.0692	0.0690
DIF_LN_DAILYUSE_HR	4	20597	27747228	1347.1	36.7035	0.1328	0.1326

Nonlinear SUR Summary of Residual Errors	
Equation	Durbin Watson
DIF_LN_PEAKUSE_OPEAKUSE_HOUR	2.7369
DIF_LN_DAILYUSE_HR	2.7205

Nonlinear SUR Parameter Estimates				
Parameter	Estimate	Approx Std Err	t Value	Approx Pr > t
A	-0.00064	0.00488	-0.13	0.8959
B	-0.04339	0.0104	-4.19	<.0001
C	0.003492	0.00170	2.05	0.0402
A_W	-0.41172	0.0127	-32.43	<.0001
C_W	0.007806	0.00143	5.46	<.0001
P	0.000418	0.00407	0.10	0.9182
R	0.015608	0.00245	6.36	<.0001
P_W	-0.45491	0.00934	-48.73	<.0001
R_W	0.009487	0.00155	6.12	<.0001

Number of Observations		Statistics for System	
Used	20601	Objective	1.9992
Missing	0	Objective*N	41185
Sum of Weights	81350217		

Summer 2004 & 2005, Common
Customers
GT20

The MODEL Procedure

Model Summary	
Model Variables	2
Parameters	9
Equations	2
Number of Statements	2

Model Variables	DIF_LN_PEAKUSE_OPEAKUSE_HOUR DIF_LN_DAILYUSE_HR
Parameters	A B C A_W C_W P R P_W R_W
Equations	DIF_LN_PEAKUSE_OPEAKUSE_HOUR DIF_LN_DAILYUSE_HR

The 2 Equations to Estimate	
DIF_LN_PEAKUSE_OPEAKUSE_HOUR	F(A(1), B(DIF_LN_PEAKP_OPEAKP_AVE), = C(DIF_Peak_OPEAK_DH_Hr), A_W(DIF_Weekend), C_W(DIF_Peak_OPeak_DH_Hr_WKD))
DIF_LN_DAILYUSE_HR	= F(P(1), R(DIF_DAILY_DH_HOUR), P_W(DIF_Weekend), R_W(DIF_DAILY_DH_HOUR_WKD))

Observations will be weighted by WEIGHT

NOTE: At SUR Iteration 1 CONVERGE=0.001 Criteria Met.

**The MODEL Procedure
SUR Estimation Summary**

Data Set Options	
DATA=	LOAD_7B_NOPT_COMMON
OUT=	DATASET_1
OUEST=	X
OUTS=	S

Minimization Summary	
Parameters Estimated	9
Method	Gauss
Iterations	1

Final Convergence Criteria	
R	0
PPC	0
RPC(P)	2.602768
Object	0.000166
Trace(S)	499.133
Objective Value	1.999306

Observations Processed	
Read	24905
Solved	24905

The MODEL Procedure

Nonlinear SUR Summary of Residual Errors								
Equation	DF Model	DF Error	SSE	MSE	Root MSE	R-Square	Adj R-Sq	Durbin Watson
DIF_LN_PEAKUSE_OPEAKUSE_HOUR	5	24900	5467165	219.6	14.8177	0.1038	0.1036	2.7266
DIF_LN_DAILYUSE_HR	4	24901	6961526	279.6	16.7203	0.2128	0.2127	2.5678

Nonlinear SUR Parameter Estimates				
Parameter	Estimate	Approx Std Err	t Value	Approx Pr > t
A	-0.0006	0.00248	-0.24	0.8087
B	-0.04581	0.00756	-6.06	<.0001
C	0.002207	0.000880	2.51	0.0121
A_W	-0.28226	0.00644	-43.84	<.0001
C_W	0.005215	0.000785	6.65	<.0001
P	0.000014	0.00280	0.00	0.9961
R	0.011003	0.00185	5.95	<.0001
P_W	-0.46218	0.00663	-69.75	<.0001
R_W	0.013856	0.00156	8.86	<.0001

Number of Observations		Statistics for System	
Used	24905	Objective	1.9993
Missing	0	Objective*N	49793
Sum of Weights	35619674		

Appendix B
Regression Results Underlying
Table 3.5

Summer 2004 & 2005, Pooled
Customers, Enabling Technology
LT20

The MODEL Procedure

Model Summary	
Model Variables	2
Parameters	11
Equations	2
Number of Statements	2

Model Variables	DIF_LN_PEAKUSE_OPEAKUSE_HOUR DIF_LN_DAILYUSE_HR
Parameters	A B b_cpp B_ENABLED C A_W C_W P R P_W R_W
Equations	DIF_LN_PEAKUSE_OPEAKUSE_HOUR DIF_LN_DAILYUSE_HR

The 2 Equations to Estimate	
DIF_LN_PEAKUSE_OPEAKUSE_HOUR	F(A(1), B(DIF_LN_PEAKP_OPEAKP_AVE), = b_cpp(DIF_LN_PEAKP_OPEAKP_AVE_CPP), B_ENABLED(DIF_enable_tech_price), C(DIF_Peak_OPEAK_DH_Hr), A_W(DIF_Weekend), C_W(DIF_Peak_OPeak_DH_Hr_WKD))
DIF_LN_DAILYUSE_HR	= F(P(1), R(DIF_DAILY_DH_HOUR), P_W(DIF_Weekend), R_W(DIF_DAILY_DH_HOUR_WKD))

Observations will be weighted by	WEIGHT
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NOTE: At SUR Iteration 1 CONVERGE=0.001 Criteria Met.

***The MODEL Procedure
SUR Estimation Summary***

Data Set Options	
DATA=	LOAD_7A_NOPT_POOL
OUT=	DATASET_1
OUTEST=	C_INTER.LT_COV_TECH
OUTS=	S

Minimization Summary	
Parameters Estimated	11
Method	Gauss
Iterations	1

Final Convergence Criteria	
R	0
PPC	0
RPC(B)	0.535121
Object	0.00016
Trace(S)	3345.394
Objective Value	1.999212

Observations Processed	
Read	23484
Solved	23484

The MODEL Procedure

Nonlinear SUR Summary of Residual Errors							
Equation	DF Model	DF Error	SSE	MSE	Root MSE	R-Square	Adj R-Sq
DIF_LN_PEAKUSE_OPEAKUSE_HOUR	7	23477	46432799	1977.8	44.4725	0.0696	0.0693
DIF_LN_DAILYUSE_HR	4	23480	32111124	1367.6	36.9810	0.1384	0.1383

Nonlinear SUR Summary of Residual Errors	
Equation	Durbin Watson
DIF_LN_PEAKUSE_OPEAKUSE_HOUR	2.7282
DIF_LN_DAILYUSE_HR	2.6800

Nonlinear SUR Parameter Estimates				
Parameter	Estimate	Approx Std Err	t Value	Approx Pr > t
A	-0.00125	0.00464	-0.27	0.7873
B	0.025529	0.0208	1.23	0.2186
b_cpp	-0.03055	0.0182	-1.68	0.0930
B_ENABLED	-0.08409	0.0181	-4.64	<.0001
C	0.003974	0.00163	2.43	0.0151
A_W	-0.41454	0.0129	-32.13	<.0001
C_W	0.012046	0.00136	8.85	<.0001
P	0.000194	0.00386	0.05	0.9599
R	0.015796	0.00236	6.68	<.0001
P_W	-0.47859	0.00886	-53.99	<.0001
R_W	0.012395	0.00151	8.21	<.0001

Number of Observations		Statistics for System	
Used	23484	Objective	1.9992
Missing	0	Objective*N	46949
Sum of Weights	91939118		

Summer 2004 & 2005, Pooled
Customers, Enabling Technology
GT20

The MODEL Procedure

Model Summary	
Model Variables	2
Parameters	11
Equations	2
Number of Statements	2

Model Variables	DIF_LN_PEAKUSE_OPEAKUSE_HOUR DIF_LN_DAILYUSE_HR
Parameters	A B b_cpp B_ENABLED C A_W C_W P R P_W R_W
Equations	DIF_LN_PEAKUSE_OPEAKUSE_HOUR DIF_LN_DAILYUSE_HR

The 2 Equations to Estimate	
DIF_LN_PEAKUSE_OPEAKUSE_HOUR	F(A(1), B(DIF_LN_PEAKP_OPEAKP_AVE), = b_cpp(DIF_LN_PEAKP_OPEAKP_AVE_CPP), B_ENABLED(DIF_enable_tech_price), C(DIF_Peak_OPEAK_DH_Hr), A_W(DIF_Weekend), C_W(DIF_Peak_OPeak_DH_Hr_WKD))
DIF_LN_DAILYUSE_HR	= F(P(1), R(DIF_DAILY_DH_HOUR), P_W(DIF_Weekend), R_W(DIF_DAILY_DH_HOUR_WKD))

Observations will be weighted by	WEIGHT
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NOTE: At SUR Iteration 1 CONVERGE=0.001 Criteria Met.

***The MODEL Procedure
SUR Estimation Summary***

Data Set Options	
DATA=	LOAD_7B_NOPT_POOL
OUT=	DATASET_1
OUEST=	C_INTER.GT_COV_TECH
OUTS=	S

Minimization Summary	
Parameters Estimated	11
Method	Gauss
Iterations	1

Final Convergence Criteria	
R	0
PPC	0
RPC(b_cpp)	0.723813
Object	0.000118
Trace(S)	517.6891
Objective Value	1.999377

Observations Processed	
Read	28484
Solved	28484

Summer 2004 2005 Pooled, Data with weights, >20kW C&I CPPV Track A, Weekend Interactions Tech Enabled, CPP Price

08:04 Thursday, May 25, 2006

The MODEL Procedure

Nonlinear SUR Summary of Residual Errors								
Equation	DF Model	DF Error	SSE	MSE	Root MSE	R-Square	Adj R-Sq	Durbin Watson
DIF_LN_PEAKUSE_OPEAKUSE_HOUR	7	28477	6301073	221.3	14.8751	0.0991	0.0989	2.7175
DIF_LN_DAILYUSE_HR	4	28480	8442048	296.4	17.2169	0.2158	0.2157	2.5303

Nonlinear SUR Parameter Estimates				
Parameter	Estimate	Approx Std Err	t Value	Approx Pr > t
A	-0.00066	0.00238	-0.28	0.7827
B	-0.0493	0.0159	-3.10	0.0019
b_cpp	0.008118	0.0141	0.57	0.5656
B_ENABLED	-0.04032	0.0120	-3.36	0.0008
C	0.00315	0.000853	3.69	0.0002
A_W	-0.27847	0.00678	-41.08	<.0001
C_W	0.003815	0.000743	5.14	<.0001
P	0.000153	0.00276	0.06	0.9557
R	0.010658	0.00180	5.93	<.0001
P_W	-0.48936	0.00642	-76.19	<.0001
R_W	0.01271	0.00135	9.39	<.0001

Number of Observations		Statistics for System	
Used	28484	Objective	1.9994
Missing	0	Objective*N	56950
Sum of Weights	38915929		

Appendix C
Regression Results Underlying
Table 3.7

Summer 2004 & 2005, Pooled
Customers, CPP1, CPP2, CPP3
LT20

Summer 2004 2005 Pooled , Data with weights, Small C&I CPPV Track A, Weekend Interactions, CPP1 CPP2 CPP3

09:17 Friday, May 26, 2006

The MODEL Procedure

Model Summary	
Model Variables	2
Parameters	15
Equations	2
Number of Statements	2

Model Variables	DIF_LN_PEAKUSE_OPEAKUSE_HOUR DIF_LN_DAILYUSE_HR
Parameters	A B C A_W C_W B_CPP1 C_CPP1 B_CPP2 C_CPP2 B_CPP3 C_CPP3 P R P_W R_W
Equations	DIF_LN_PEAKUSE_OPEAKUSE_HOUR DIF_LN_DAILYUSE_HR

The 2 Equations to Estimate	
DIF_LN_PEAKUSE_OPEAKUSE_HOUR =	F(A(1), B(DIF_LN_PEAKP_OPEAKP_AVE), C(DIF_Peak_OPEAK_DH_Hr), A_W(DIF_Weekend), C_W(DIF_Peak_OPeak_DH_Hr_WKD), B_CPP1(DIF_LN_PEAKP_OPEAKP_AVE_CPP1), C_CPP1(DIF_Peak_OPeak_DH_Hr_CPP1), B_CPP2(DIF_LN_PEAKP_OPEAKP_AVE_CPP2), C_CPP2(DIF_Peak_OPeak_DH_Hr_CPP2), B_CPP3(DIF_LN_PEAKP_OPEAKP_AVE_CPP3), C_CPP3(DIF_Peak_OPeak_DH_Hr_CPP3))
DIF_LN_DAILYUSE_HR =	F(P(1), R(DIF_DAILY_DH_HOUR), P_W(DIF_Weekend), R_W(DIF_DAILY_DH_HOUR_WKD))

Observations will be weighted by	WEIGHT
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NOTE: At SUR Iteration 1 CONVERGE=0.001 Criteria Met.
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**The MODEL Procedure
SUR Estimation Summary**

Data Set Options	
DATA=	LOAD_7A_NOPT_POOL
OUT=	DATASET_1
OUTEST=	C_INTER._04_05_CI_CPP_LT
OUTS=	S

Minimization Summary	
Parameters Estimated	15
Method	Gauss
Iterations	1

Final Convergence Criteria	
R	0
PPC	0
RPC(C_CPP3)	8.795431
Object	0.00018
Trace(S)	3346.84
Objective Value	1.999001

Observations Processed	
Read	23484
Solved	23484

Summer 2004 2005 Pooled , Data with weights, Small C&I CPPV Track A, Weekend Interactions, CPP1 CPP2 CPP3

MODEL Procedure

Nonlinear SUR Summary of Residual Errors

Equation	DF Model	DF Error	SSE	MSE	Root MSE	R-Square	Adj R-Sq
DIF_LN_PEAKUSE_OPEAKUSE_HOUR	11	23473	46458887	1979.2	44.4887	0.0691	0.0687
DIF_LN_DAILYUSE_HR	4	23480	32111051	1367.6	36.9810	0.1384	0.1383

Nonlinear SUR Summary of Residual Errors	
Equation	Durbin Watson
DIF_LN_PEAKUSE_OPEAKUSE_HOUR	2.7283
DIF_LN_DAILYUSE_HR	2.6800

Nonlinear SUR Parameter Estimates				
Parameter	Estimate	Approx Std Err	t Value	Approx Pr > t
A	-0.00126	0.00464	-0.27	0.7867
B	0.024386	0.0209	1.17	0.2430
C	0.003856	0.00171	2.26	0.0238
A_W	-0.41496	0.0129	-32.14	<.0001
C_W	0.011922	0.00139	8.57	<.0001
B_CPP1	-0.04738	0.0198	-2.40	0.0166
C_CPP1	-0.00146	0.00154	-0.94	0.3452
B_CPP2	0.020651	0.0179	1.15	0.2496
C_CPP2	0.001689	0.00223	0.76	0.4495
B_CPP3	-0.02633	0.0230	-1.15	0.2518
C_CPP3	0.002451	0.00285	0.86	0.3901
P	0.000193	0.00386	0.05	0.9601
R	0.015868	0.00237	6.71	<.0001
P_W	-0.47871	0.00886	-54.01	<.0001
R_W	0.012432	0.00151	8.23	<.0001

Number of Observations		Statistics for System	
Used	23484	Objective	1.9990
Missing	0	Objective*N	46945
Sum of Weights	91939118		

Summer 2004 & 2005, Pooled
Customers, CPP1, CPP2, CPP3
GT20

Summer 2004 2005 Pooled, Data with weights, >20kW C&I CPPV Track A, Weekend Interactions, CPP1 CPP2 CPP3

09:17 Friday, May 26, 2006

The MODEL Procedure

Model Summary	
Model Variables	2
Parameters	15
Equations	2
Number of Statements	2

Model Variables	DIF_LN_PEAKUSE_OPEAKUSE_HOUR DIF_LN_DAILYUSE_HR
Parameters	A B C A_W C_W B_CPP1 C_CPP1 B_CPP2 C_CPP2 B_CPP3 C_CPP3 P R P_W R_W
Equations	DIF_LN_PEAKUSE_OPEAKUSE_HOUR DIF_LN_DAILYUSE_HR

The 2 Equations to Estimate	
DIF_LN_PEAKUSE_OPEAKUSE_HOUR =	F(A(1), B(DIF_LN_PEAKP_OPEAKP_AVE), C(DIF_Peak_OPEAK_DH_Hr), A_W(DIF_Weekend), C_W(DIF_Peak_OPeak_DH_Hr_WKD), B_CPP1(DIF_LN_PEAKP_OPEAKP_AVE_CPP1), C_CPP1(DIF_Peak_OPeak_DH_Hr_CPP1), B_CPP2(DIF_LN_PEAKP_OPEAKP_AVE_CPP2), C_CPP2(DIF_Peak_OPeak_DH_Hr_CPP2), B_CPP3(DIF_LN_PEAKP_OPEAKP_AVE_CPP3), C_CPP3(DIF_Peak_OPeak_DH_Hr_CPP3))
DIF_LN_DAILYUSE_HR =	F(P(1), R(DIF_DAILY_DH_HOUR), P_W(DIF_Weekend), R_W(DIF_DAILY_DH_HOUR_WKD))

Observations will be weighted by	WEIGHT
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NOTE: At SUR Iteration 1 CONVERGE=0.001 Criteria Met.
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Summer 2004 2005 Pooled, Data with weights, >20kW C&I CPPV Track A, Weekend Interactions, CPP1 CPP2 CPP3

09:17 Friday, May 26, 2006

Data Set Options

DATA=	LOAD_7B_NOPT_POOL
OUT=	DATASET_1
OUTEST=	C_INTER._04_05_CI_CPP_GT
OUTS=	S

Minimization Summary	
Parameters Estimated	15
Method	Gauss
Iterations	1

Final Convergence Criteria	
R	0
PPC	0
RPC(B_CPP2)	1.79857
Object	0.000124
Trace(S)	517.6902
Objective Value	1.999226

Observations Processed	
Read	28484
Solved	28484

The MODEL Procedure
Interactions, CPP1 CPP2 CPP3

Nonlinearrings								
Equation	DF Model	DF Error	SSE	MSE	Root MSE	⁶ R-Square	Adj R-Sq	Durbin Watson
DIF_LN_PEAKUSE_OPEAKUSE_HOUR	11	28473	6300221	221.3	14.8751	0.0992	0.0989	2.7178
DIF_LN_DAILYUSE_HR	4	28480	8442047	296.4	17.2169	0.2158	0.2157	2.5303

Nonlinear SUR Parameter Estimates				
Parameter	Estimate	Approx Std Err	t Value	Approx Pr > t
A	-0.00066	0.00238	-0.28	0.7815
B	-0.05107	0.0159	-3.20	0.0014
C	0.003457	0.000897	3.85	0.0001
A_W	-0.27794	0.00678	-40.97	<.0001
C_W	0.00366	0.000760	4.81	<.0001
B_CPP1	-0.00213	0.0145	-0.15	0.8830
C_CPP1	0.000119	0.000800	0.15	0.8815
B_CPP2	-0.00067	0.0122	-0.06	0.9561
C_CPP2	-0.00063	0.00114	-0.55	0.5826
B_CPP3	-0.01173	0.0156	-0.75	0.4521
C_CPP3	-0.00353	0.00141	-2.50	0.0125
P	0.000156	0.00276	0.06	0.9549
R	0.010412	0.00180	5.78	<.0001
P_W	-0.48957	0.00642	-76.22	<.0001
R_W	0.012783	0.00135	9.45	<.0001

Number of Observations		Statistics for System	
Used	28484	Objective	1.9992
Missing	0	Objective*N	56946
Sum of Weights	38915929		

Appendix D
Regression Results Underlying
Table 3.8

Summer 2004 & 2005, Pooled
Customers, 2 Hr CPP Dummy
LT20

The MODEL Procedure

Model Summary	
Model Variables	2
Parameters	13
Equations	2
Number of Statements	2

Model Variables	DIF_LN_PEAKUSE_OPEAKUSE_HOUR DIF_LN_DAILYUSE_HR
Parameters	A B C A_W C_W B_CPP B_CPP2h P R P_W R_W R_CPP R_CPP2h
Equations	DIF_LN_PEAKUSE_OPEAKUSE_HOUR DIF_LN_DAILYUSE_HR

The 2 Equations to Estimate	
DIF_LN_PEAKUSE_OPEAKUSE_HOUR	$= F(A(1), B(DIF_LN_PEAKP_OPEAKP_AVE), C(DIF_Peak_OPEAK_DH_Hr), A_W(DIF_Weekend), C_W(DIF_Peak_OPeak_DH_Hr_WKD), B_CPP(DIF_LN_PEAKP_OPEAKP_AVE_CPP), B_CPP2h(DIF_LN_PEAKP_OPEAKP_AVE_CPP2h))$
DIF_LN_DAILYUSE_HR	$= F(P(1), R(DIF_DAILY_DH_HOUR), P_W(DIF_Weekend), R_W(DIF_DAILY_DH_HOUR_WKD), R_CPP(DIF_DAILY_DH_HOUR_CPP), R_CPP2h(DIF_DAILY_DH_HOUR_CPP2h))$

Observations will be weighted by	WEIGHT
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NOTE: At SUR Iteration 1 CONVERGE=0.001 Criteria Met.

**The MODEL Procedure
SUR Estimation Summary**

Data Set Options	
DATA=	LOAD_7A_NOPT_POOL
OUT=	DATASET_1
OUTEST=	M
OUTS=	S

Minimization Summary	
Parameters Estimated	13
Method	Gauss
Iterations	1

Final Convergence Criteria	
R	0
PPC	0
RPC(B)	0.536215
Object	0.000171
Trace(S)	3346.723
Objective Value	1.999104

Observations Processed	
Read	23484
Solved	23484

Summer 2004 & 2005, Pooled
Customers, 2 Hr CPP Dummy
GT20

The MODEL Procedure

Nonlinear SUR Summary of Residual Errors							
Equation	DF Model	DF Error	SSE	MSE	Root MSE	R-Square	Adj R-Sq
DIF_LN_PEAKUSE_OPEAKUSE_HOUR	7	23477	46461712	1979.0	44.4863	0.0690	0.0688
DIF_LN_DAILYUSE_HR	6	23478	32110661	1367.7	36.9823	0.1384	0.1383

Nonlinear SUR Summary of Residual Errors	
Equation	Durbin Watson
DIF_LN_PEAKUSE_OPEAKUSE_HOUR	2.7281
DIF_LN_DAILYUSE_HR	2.6800

Nonlinear SUR Parameter Estimates				
Parameter	Estimate	Approx Std Err	t Value	Approx Pr > t
A	-0.00126	0.00464	-0.27	0.7864
B	0.025791	0.0208	1.24	0.2145
C	0.003966	0.00164	2.42	0.0153
A_W	-0.41465	0.0129	-32.12	<.0001
C_W	0.012043	0.00136	8.84	<.0001
B_CPP	-0.04254	0.0197	-2.16	0.0308
B_CPP2h	-0.01934	0.0147	-1.32	0.1873
P	0.000191	0.00386	0.05	0.9604
R	0.015631	0.00246	6.35	<.0001
P_W	-0.47874	0.00887	-53.99	<.0001
R_W	0.012566	0.00156	8.08	<.0001
R_CPP	-0.00113	0.00184	-0.61	0.5404
R_CPP2h	0.00267	0.00226	1.18	0.2372

Number of Observations		Statistics for System	
Used	23484	Objective	1.9991
Missing	0	Objective*N	46947
Sum of Weights	91939118		

The MODEL Procedure

Model Summary	
Model Variables	2
Parameters	13
Equations	2
Number of Statements	2

Model Variables	DIF_LN_PEAKUSE_OPEAKUSE_HOUR DIF_LN_DAILYUSE_HR
Parameters	A B C A_W C_W B_CPP B_CPP2h P R P_W R_W R_CPP R_CPP2h
Equations	DIF_LN_PEAKUSE_OPEAKUSE_HOUR DIF_LN_DAILYUSE_HR

The 2 Equations to Estimate	
DIF_LN_PEAKUSE_OPEAKUSE_HOUR =	F(A(1), B(DIF_LN_PEAKP_OPEAKP_AVE), C(DIF_Peak_OPEAK_DH_Hr), A_W(DIF_Weekend), C_W(DIF_Peak_OPeak_DH_Hr_WKD), B_CPP(DIF_LN_PEAKP_OPEAKP_AVE_CPP), B_CPP2h(DIF_LN_PEAKP_OPEAKP_AVE_CPP2h))
DIF_LN_DAILYUSE_HR =	F(P(1), R(DIF_DAILY_DH_HOUR), P_W(DIF_Weekend), R_W(DIF_DAILY_DH_HOUR_WKD), R_CPP(DIF_DAILY_DH_HOUR_CPP), R_CPP2h(DIF_DAILY_DH_HOUR_CPP2h))

Observations will be weighted by	WEIGHT
----------------------------------	--------

NOTE: At SUR Iteration 1 CONVERGE=0.001 Criteria Met.

**The MODEL Procedure
SUR Estimation Summary**

Data Set Options	
DATA=	LOAD_7B_NOPT_POOL
OUT=	DATASET_1
OUTEST=	N
OUTS=	S

Minimization Summary	
Parameters Estimated	13
Method	Gauss
Iterations	1

Final Convergence Criteria	
R	0
PPC	0
RPC(R_CPP2h)	0.772981
Object	0.00012
Trace(S)	517.5914
Objective Value	1.999304

Observations Processed	
Read	28484
Solved	28484

The MODEL Procedure

Nonlinear SUR Summary of Residual Errors								
Equation	DF Model	DF Error	SSE	MSE	Root MSE	R-Square	Adj R-Sq	Durbin Watson
DIF_LN_PEAKUSE_OPEAKUSE_HOUR	7	28477	6297755	221.2	14.8712	0.0996	0.0994	2.7170
DIF_LN_DAILYUSE_HR	6	28478	8441993	296.4	17.2174	0.2158	0.2157	2.5303

Nonlinear SUR Parameter Estimates				
Parameter	Estimate	Approx Std Err	t Value	Approx Pr > t
A	-0.00067	0.00238	-0.28	0.7799
B	-0.04488	0.0159	-2.82	0.0049
C	0.003257	0.000853	3.82	0.0001
A_W	-0.27773	0.00678	-40.97	<.0001
C_W	0.003701	0.000743	4.98	<.0001
B_CPP	0.016242	0.0143	1.14	0.2552
B_CPP2h	-0.05133	0.0101	-5.11	<.0001
P	0.000151	0.00276	0.05	0.9564
R	0.010862	0.00191	5.70	<.0001
P_W	-0.48928	0.00643	-76.09	<.0001
R_W	0.012634	0.00141	8.96	<.0001
R_CPP	-0.00041	0.00155	-0.27	0.7901
R_CPP2h	0.000293	0.00192	0.15	0.8786

Number of Observations		Statistics for System	
Used	28484	Objective	1.9993
Missing	0	Objective*N	56948
Sum of Weights	38915929		