Staff Volume and Customer Forecasting Models

```
================================================================
Dependent Variable: DLOG(GWH01/(BDA0*NC01),0,4)
Method: Least Squares
Sample: 1983Q1 2008Q4
Included observations: 104
Convergence achieved after 9 iterations
Backcast: 1981Q4 1982Q4
================================================================
       Variable       CoefficienStd. Errort-Statistic  Prob.
================================================================
          C             0.012667   0.001649   7.683607   0.0000
DLOG(PRICE01S(-1),0,4)-0.116258   0.030257  -3.842286   0.0002
 DLOG(PPYR1(-1),0,4)    0.180298   0.077691   2.320707   0.0224
     D(WCDD0,0,4)       0.000321   4.48E-05   7.159834   0.0000
     D(WHDD0,0,4)       5.85E-05   1.34E-05   4.362532   0.0000
     D(WCDD3,0,4)       0.000303   5.66E-05   5.354882   0.0000
        MA(1)           0.258714   0.101837   2.540475   0.0127
        SMA(4)         -0.583920   0.087695  -6.658529   0.0000
================================================================
R-squared               0.882281    Mean dependent var 0.017592
Adjusted R-squared      0.873697    S.D. dependent var 0.058389
S.E. of regression      0.020751    Akaike info criter-4.838655
Sum squared resid       0.041337    Schwarz criterion -4.635241
Log likelihood          259.6101    F-statistic        102.7856
Durbin-Watson stat      2.034719    Prob(F-statistic)  0.000000
================================================================
Inverted MA Roots            .87
================================================================


================================================================
Dependent Variable: DLOG(GWH02/BDA0,0,4)
Method: Least Squares
Sample: 1983Q1 2008Q4
Included observations: 104
Convergence achieved after 12 iterations
Backcast: 1982Q1 1982Q4
================================================================
       Variable       CoefficienStd. Errort-Statistic  Prob.
================================================================
          C            -0.009554   0.005037  -1.896854   0.0609
DLOG(PRICE02S(-1),0,4)-0.137553   0.019999  -6.878154   0.0000
    DLOG(NC01,0,4)      2.456310   0.954956   2.572170   0.0117
    DLOG(NC02,0,4)      0.610926   0.057132   10.69318   0.0000
     D(WCDD0,0,4)       0.000242   2.19E-05   11.09064   0.0000
    D(WCDD24,0,4)      -5.16E-05   3.49E-05  -1.478533   0.1426
     D(WHDD0,0,4)       5.78E-05   8.64E-06   6.690391   0.0000
        AR(1)           0.505390   0.086726   5.827449   0.0000
        MA(4)          -0.949024   0.011944  -79.45728   0.0000
================================================================
R-squared               0.860171    Mean dependent var 0.011771
Adjusted R-squared      0.848396    S.D. dependent var 0.031320
S.E. of regression      0.012195    Akaike info criter-5.893032
Sum squared resid       0.014128    Schwarz criterion -5.664190
Log likelihood          315.4377    F-statistic        73.05039
Durbin-Watson stat      1.840636    Prob(F-statistic)  0.000000
================================================================
Inverted AR Roots            .51
Inverted MA Roots            .99
================================================================
```

Staff Volume and Customer Forecasting Models

```
Dependent Variable: DLOG(GWH04/BDA0,0,4)
Method: Least Squares
Sample: 1983Q1 2008Q4
Included observations: 104
Convergence achieved after 21 iterations
Backcast: 1981Q4 1982Q4
```

Variable	Coefficien	Std. Error	t-Statistic	Prob.
DLOG(PRICE04S(-1),0,4)	-0.020908	0.015970	-1.309211	0.1937
DLOG(PNEMP_N(-1),0,4)	0.598666	0.144078	4.155148	0.0001
D(WCDD0,0,4)	0.000178	1.67E-05	10.64876	0.0000
D(WHDD0,0,4)	3.61E-05	8.58E-06	4.211790	0.0001
D(D199504,0,4)	0.079532	0.011075	7.180924	0.0000
D(D199602,0,4)	-0.030684	0.010970	-2.797069	0.0063
D(WTC,0,4)	-0.044604	0.010987	-4.059559	0.0001
AR(1)	0.964035	0.011308	85.25532	0.0000
MA(1)	-0.249218	0.100883	-2.470374	0.0153
SMA(4)	-0.975380	0.011867	-82.18923	0.0000

R-squared	0.874104	Mean dependent var	0.018531
Adjusted R-squared	0.862051	S.D. dependent var	0.035910
S.E. of regression	0.013337	Akaike info criter	-5.705275
Sum squared resid	0.016721	Schwarz criterion	-5.451007
Log likelihood	306.6743	Durbin-Watson stat	1.945906

Inverted AR Roots	.96		
Inverted MA Roots	.99	.	.00+.99i-.00-.99i
	-.99		

```
Dependent Variable: DLOG(GWH07/BDA0,0,4)
Method: Least Squares
Sample: 1983Q1 2008Q4
Included observations: 104
Convergence achieved after 15 iterations
Backcast: 1982Q1 1982Q4
```

Variable	Coefficien	Std. Error	t-Statistic	Prob.
DLOG(PRICE07S(-2),0,4)	-0.181882	0.041391	-4.394210	0.0000
DLOG(NC07,0,4)	0.500455	0.161465	3.099471	0.0025
D(WCDD0,0,4)	0.000392	8.46E-05	4.634694	0.0000
D(WCDD24,0,4)	-0.000250	0.000139	-1.800128	0.0749
D(WHDD0,0,4)	0.000430	3.05E-05	14.09572	0.0000
MA(4)	-0.820121	0.070172	-11.68728	0.0000

R-squared	0.849526	Mean dependent var	0.005452
Adjusted R-squared	0.841849	S.D. dependent var	0.112203
S.E. of regression	0.044621	Akaike info criter	-3.325251
Sum squared resid	0.195124	Schwarz criterion	-3.172690
Log likelihood	178.9131	Durbin-Watson stat	1.822941

Inverted MA Roots	.95	.00-.9	.00+.95i	-.95

Staff Volume and Customer Forecasting Models

Dependent Variable: DLOG(GWH08/BDA0,0,4)
Method: Least Squares
Sample: 1983Q1 2008Q4
Included observations: 104
Convergence achieved after 24 iterations
Backcast: 1981Q4 1982Q4

Variable	Coefficien	Std. Error	t-Statistic	Prob.
C	0.012219	0.000632	19.34564	0.0000
DLOG(PRICE08S(-3),0,4)	-0.048535	0.016556	-2.931632	0.0042
D(WCDD0,0,4)	0.000455	2.76E-05	16.48240	0.0000
D(WCDD24,0,4)	-5.53E-05	4.50E-05	-1.227983	0.2225
D(WHDD0,0,4)	5.04E-05	1.00E-05	5.034979	0.0000
AR(1)	0.816846	0.213232	3.830786	0.0002
MA(1)	-0.766512	0.240032	-3.193378	0.0019
SMA(4)	-0.736427	0.082752	-8.899242	0.0000

R-squared	0.904582	Mean dependent var	0.012686
Adjusted R-squared	0.897624	S.D. dependent var	0.046784
S.E. of regression	0.014969	Akaike info criter	-5.491860
Sum squared resid	0.021511	Schwarz criterion	-5.288446
Log likelihood	293.5767	F-statistic	130.0143
Durbin-Watson stat	1.963356	Prob(F-statistic)	0.000000

Inverted AR Roots	.82		
Inverted MA Roots	.93	.	.00-.93i-.00+.93i
	-.93		

Dependent Variable: DLOG(GWH09/BDA0,0,4)
Method: Least Squares
Sample: 1983Q1 2008Q4
Included observations: 104
Convergence achieved after 16 iterations
Backcast: 1981Q4 1982Q4

Variable	Coefficien	Std. Error	t-Statistic	Prob.
DLOG(PRICE09S(-4),0,4)	-0.034252	0.014294	-2.396192	0.0185
DLOG(PNEMP_N,0,4)	0.342078	0.059631	5.736600	0.0000
DLOG(NC09,0,4)	0.728954	0.035223	20.69524	0.0000
D(WCDD0,0,4)	0.000187	1.14E-05	16.46941	0.0000
D(WHDD0,0,4)	3.52E-05	5.76E-06	6.111134	0.0000
AR(1)	0.873030	0.067112	13.00856	0.0000
MA(1)	-0.459096	0.127062	-3.613170	0.0005
SMA(4)	-0.936669	0.020434	-45.83911	0.0000

R-squared	0.905963	Mean dependent var	0.022232
Adjusted R-squared	0.899106	S.D. dependent var	0.025384
S.E. of regression	0.008063	Akaike info criter	-6.729263
Sum squared resid	0.006241	Schwarz criterion	-6.525849
Log likelihood	357.9217	Durbin-Watson stat	1.984719

Inverted AR Roots	.87		
Inverted MA Roots	.98	.46	

Staff Volume and Customer Forecasting Models

Dependent Variable: D(NC01,0,4)
Method: Least Squares
Sample: 1983Q1 2008Q4
Included observations: 104
Convergence achieved after 16 iterations
Backcast: 1981Q4 1982Q4

Variable	Coefficien	Std. Error	t-Statistic	Prob.
C	13.69455	0.517997	26.43753	0.0000
AR(1)	0.930301	0.043447	21.41239	0.0000
MA(1)	0.302907	0.099955	3.030447	0.0031
SMA(4)	-0.934093	0.028959	-32.25536	0.0000

R-squared	0.866620	Mean dependent var	13.97254
Adjusted R-squared	0.862618	S.D. dependent var	4.912792
S.E. of regression	1.820929	Akaike info criteri	4.074273
Sum squared resid	331.5782	Schwarz criterion	4.175980
Log likelihood	-207.8622	F-statistic	216.5784
Durbin-Watson stat	1.892625	Prob(F-statistic)	0.000000

Inverted AR Roots	.93			
Inverted MA Roots	.98	.00+.9	-.00-.98i	-.30
	-.98			

Dependent Variable: D(NC02,0,4)
Method: Least Squares
Sample: 1983Q1 2008Q4
Included observations: 104
Convergence achieved after 7 iterations
Backcast: 1982Q4

Variable	Coefficien	Std. Error	t-Statistic	Prob.
AR(1)	0.983256	0.020294	48.44999	0.0000
SAR(4)	-0.452283	0.093344	-4.845312	0.0000
MA(1)	0.683246	0.076477	8.933979	0.0000

R-squared	0.960037	Mean dependent var	3.289471
Adjusted R-squared	0.959245	S.D. dependent var	4.905363
S.E. of regression	0.990282	Akaike info criteri	2.846769
Sum squared resid	99.04658	Schwarz criterion	2.923049
Log likelihood	-145.0320	Durbin-Watson stat	1.808162

Inverted AR Roots	.98	.58+.5	.58+.58i	-.58-.58i
	-.58-.58i			
Inverted MA Roots	-.68			

Staff Volume and Customer Forecasting Models

Dependent Variable: NC04
Method: Least Squares
Sample: 1983Q1 2008Q4
Included observations: 104
Convergence achieved after 4 iterations

Variable	Coefficien	Std. Error	t-Statistic	Prob.
C	2.257663	0.409458	5.513778	0.0000
AR(1)	0.339817	0.094872	3.581868	0.0005
AR(2)	0.319465	0.095691	3.338514	0.0012
AR(4)	0.292007	0.093059	3.137872	0.0022

R-squared	0.887318	Mean dependent var	1.801356
Adjusted R-squared	0.883937	S.D. dependent var	0.341513
S.E. of regression	0.116347	Akaike info criter	-1.426784
Sum squared resid	1.353652	Schwarz criterion	-1.325077
Log likelihood	78.19279	F-statistic	262.4834
Durbin-Watson stat	2.266939	Prob(F-statistic)	0.000000

Inverted ÁR Roots	.98	.06-.6	.06+.63i	-.76

Dependent Variable: NC07
Method: Least Squares
Sample: 1983Q1 2008Q4
Included observations: 104
Convergence achieved after 8 iterations
Backcast: 1982Q1 1982Q4

Variable	Coefficien	Std. Error	t-Statistic	Prob.
C	20.07337	4.270137	4.700873	0.0000
AR(1)	0.992381	0.007371	134.6296	0.0000
MA(4)	0.318247	0.098299	3.237540	0.0016

R-squared	0.996643	Mean dependent var	15.78723
Adjusted R-squared	0.996576	S.D. dependent var	0.908194
S.E. of regression	0.053141	Akaike info criter	-3.003307
Sum squared resid	0.285223	Schwarz criterion	-2.927026
Log likelihood	159.1720	F-statistic	14991.36
Durbin-Watson stat	1.606077	Prob(F-statistic)	0.000000

Inverted AR Roots	.99			
Inverted MA Roots	.53-.53i	.53-.5	-.53+.53i	-.53-.53i

Staff Volume and Customer Forecasting Models

Dependent Variable: NC08
Method: Least Squares
Sample: 1983Q1 2008Q4
Included observations: 104
Convergence achieved after 4 iterations

Variable	Coefficien	Std. Error	t-Statistic	Prob.
C	2.069136	0.360342	5.742147	0.0000
AR(1)	0.990267	0.013579	72.92586	0.0000

R-squared	0.981181	Mean dependent var	1.820654
Adjusted R-squared	0.980997	S.D. dependent var	0.061506
S.E. of regression	0.008479	Akaike info criter	-6.683461
Sum squared resid	0.007333	Schwarz criterion	-6.632608
Log likelihood	349.5400	F-statistic	5318.181
Durbin-Watson stat	1.753316	Prob(F-statistic)	0.000000

Inverted AR Roots .99

Dependent Variable: DLOG(NC09,0,4)
Method: Least Squares
Sample: 1983Q1 2008Q4
Included observations: 104
Convergence achieved after 17 iterations
Backcast: 1982Q1 1982Q4

Variable	Coefficien	Std. Error	t-Statistic	Prob.
DLOG(PNEMP_N,0,4)	0.142001	0.050594	2.806652	0.0060
AR(1)	0.989522	0.002265	436.7847	0.0000
MA(4)	-0.956540	0.025335	-37.75612	0.0000

R-squared	0.892780	Mean dependent var	0.023961
Adjusted R-squared	0.890657	S.D. dependent var	0.011196
S.E. of regression	0.003702	Akaike info criter	-8.331418
Sum squared resid	0.001384	Schwarz criterion	-8.255138
Log likelihood	436.2337	Durbin-Watson stat	1.702425

Inverted AR Roots .99
Inverted MA Roots .99 -.00+.9i -.00-.99i -.99

Staff Volume and Customer Forecasting Models

Dependent Variable: DLOG(GWH12,0,12)
Method: Least Squares
Sample (adjusted): 1983M06 2008M12
Included observations: 307 after adjustments
Convergence achieved after 9 iterations

Variable	Coefficien	Std. Error	t-Statistic	Prob.
D(CDD0,0,12)	0.000386	8.20E-05	4.704364	0.0000
D(CDD0(-1),0,12)	0.000538	8.25E-05	6.517071	0.0000
D(HDD0,0,12)	0.000375	3.78E-05	9.923257	0.0000
D(HDD0(-1),0,12)	0.000535	3.73E-05	14.36846	0.0000
DLOG(NC12,0,12)	0.273386	0.129293	2.114474	0.0353
D(D200309,0,12)	-0.172227	0.048374	-3.560361	0.0004
AR(1)	0.169982	0.056456	3.010886	0.0028
AR(2)	0.188590	0.057522	3.278575	0.0012
AR(4)	0.189474	0.056485	3.354444	0.0009
SAR(12)	-0.456900	0.051555	-8.862417	0.0000

R-squared	0.696536	Mean dependent var	-0.001347
Adjusted R-squared	0.687340	S.D. dependent var	0.110519
S.E. of regression	0.061798	Akaike info criter	-2.697870
Sum squared resid	1.134230	Schwarz criterion	-2.576474
Log likelihood	424.1230	Durbin-Watson stat	2.046342

Inverted AR Roots	.90+.24i	.90-.2	.79	.66-.66i
	.66+.66i	.24+.9	.24-.90i	.03+.59i
	.03-.59i	-.24+.9	-.24-.90i	-.66+.66i
	-.66+.66i	-.	-.90-.24i	-.90+.24i

Dependent Variable: D(NC12,0,12)
Method: Least Squares
Sample (adjusted): 1983M02 2008M12
Included observations: 311 after adjustments
Convergence achieved after 9 iterations
Backcast: 1982M12 1983M01

Variable	Coefficien	Std. Error	t-Statistic	Prob.
AR(1)	0.954048	0.017949	53.15234	0.0000
SAR(12)	-0.437295	0.051641	-8.467929	0.0000
MA(1)	0.108103	0.058394	1.851258	0.0651
MA(2)	0.180872	0.058776	3.077331	0.0023

R-squared	0.933558	Mean dependent var	1.363344
Adjusted R-squared	0.932909	S.D. dependent var	24.27277
S.E. of regression	6.287124	Akaike info criteri	6.527663
Sum squared resid	12135.07	Schwarz criterion	6.575763
Log likelihood	-1011.052	Durbin-Watson stat	1.978663

Inverted AR Roots	.95	.90-.2	.90+.24i	.66+.66i
	.66-.66i	.24+.9	.24-.90i	-.24-.90i
	-.24+.90i	-.66+.6	-.66+.66i	-.90+.24i
	-.90-.24i			
Inverted MA Roots	-.05-.42i	-.05+.42i		

Staff Volume and Customer Forecasting Models

Dependent Variable: DLOG(MWH13,0,12)
Method: Least Squares
Date: 07/31/09 Time: 12:58
Sample (adjusted): 1993M02 2008M12
Included observations: 191 after adjustments
Convergence achieved after 17 iterations
Backcast: 1993M01

Variable	Coefficien	Std. Error	t-Statistic	Prob.
C	0.008151	0.004731	1.722795	0.0866
D(CDD0(-1),0,12)	0.000208	0.000104	1.998324	0.0472
D(HDD0(-1),0,12)	0.000240	4.70E-05	5.110979	0.0000
AR(1)	0.902044	0.070021	12.88253	0.0000
SAR(12)	-0.536912	0.066058	-8.127829	0.0000
SAR(24)	-0.369611	0.061480	-6.011932	0.0000
MA(1)	-0.793381	0.100736	-7.875886	0.0000

R-squared	0.391230	Mean dependent var	0.005084
Adjusted R-squared	0.371379	S.D. dependent var	0.072425
S.E. of regression	0.057422	Akaike info criter	-2.840808
Sum squared resid	0.606706	Schwarz criterion	-2.721615
Log likelihood	278.2972	F-statistic	19.70816
Durbin-Watson stat	2.274356	Prob(F-statistic)	0.000000

Inverted AR Roots	.95+.16i	.95-.1	.90	.90-.33i
	.90+.33i	.74+.6	.74-.61i	.61-.74i
	.61+.74i	.33+.9	.33-.90i	.16+.95i
	.16-.95i	-.16+.9	-.16-.95i	-.33-.90i
	-.33+.90i	-.61+.7	-.61-.74i	-.74+.61i
	-.74-.61i	-.90-.3	-.90+.33i	-.95+.16i
	-.95-.16i			
Inverted MA Roots	.79			

Staff Sales Volume Forecast
Without Change in Weather Assumption
(GWH)

S.C.	RY2011	RY2012	RY2013
1	14,506	14,868	15,232
2	2,267	2,298	2,316
4	6,833	6,921	7,039
7	190	192	192
8	2,070	2,104	2,129
9	20,451	20,910	21,366
12	466	468	466
13	149	151	152
Total	46,933	47,911	48,892

Difference from Company's Forecast
(GWH)

S.C.	RY2011	RY2012	RY2013
1	62	28	20
2	19	7	(3)
4	(40)	(53)	(65)
7	(0)	(0)	0
8	(0)	0	(0)
9	(85)	(57)	(7)
12	3	4	5
13	0	0	0
Total	(40)	(71)	(49)

Difference from Company's Forecast
(Percentage)

S.C.	RY2011	RY2012	RY2013
1	0.4%	0.2%	0.1%
2	0.9%	0.3%	-0.1%
4	-0.6%	-0.8%	-0.9%
7	-0.1%	0.0%	0.0%
8	0.0%	0.0%	0.0%
9	-0.4%	-0.3%	0.0%
12	0.6%	0.9%	1.2%
13	0.0%	0.0%	0.0%
Total	-0.1%	-0.1%	-0.1%

Weather Forecast: 10-Year Average Versus 30-Year Average

Weather Forecast Based on 10-Year Average (1)

	Billing Cycle Weighted		Calendar Month Total	
	Heating	Cooling	Heating	Cooling
Period	Degree Days	Degree Days	Degree Days	Degree Days
RY2011	4004.2	1615.8	3980.3	1613.9
RY2012	4028.2	1615.8	4013.4	1613.9
RY2013	4004.2	1615.8	4006.2	1613.9

Difference from the 30-Year Average (2)

	Billing Cycle Weighted		Calendar Month Total	
	Heating	Cooling	Heating	Cooling
Period	Degree Days	Degree Days	Degree Days	Degree Days
RY2011	-35.8	61.7	-38.8	59.9
RY2012	-35.8	61.7	-40.7	59.9
RY2013	-35.8	61.6	-41.1	59.9

Difference in Percentage

	Billing Cycle Weighted		Calendar Month Total	
	Heating	Cooling	Heating	Cooling
Period	Degree Days	Degree Days	Degree Days	Degree Days
RY2011	-0.9%	3.8%	-1.0%	3.7%
RY2012	-0.9%	3.8%	-1.0%	3.7%
RY2013	-0.9%	3.8%	-1.0%	3.7%

Note: (1) Data source: Con Edison responses to DPS-47.16 and DPS-47.23.
(2) Data source for 30-year average: Con Edison response to DPS-47.23.

Staff Sales Volume Forecast Summary
With Change in Weather Assumption
(GWH)

S.C.	RY2011	RY2012	RY2013
1	14,605	14,969	15,336
2	2,273	2,304	2,322
4	6,850	6,938	7,056
7	190	191	191
8	2,083	2,117	2,143
9	20,505	20,965	21,422
12	466	466	466
13	149	151	152
Total	47,121	48,101	49,088

Difference from Company's Forecast
(GWH)

S.C.	RY2011	RY2012	RY2013
1	162	129	124
2	25	13	3
4	(23)	(36)	(47)
7	(1)	(1)	(1)
8	13	13	14
9	(31)	(2)	49
12	3	3	5
13	0	(0)	0
Total	148	119	146

Difference from Company's Forecast
(Percentage)

S.C.	RY2011	RY2012	RY2013
1	1.1%	0.9%	0.8%
2	1.1%	0.5%	0.1%
4	-0.3%	-0.5%	-0.7%
7	-0.5%	-0.5%	-0.4%
8	0.6%	0.6%	0.6%
9	-0.2%	0.0%	0.2%
12	0.5%	0.5%	1.1%
13	0.0%	0.0%	0.0%
Total	0.3%	0.2%	0.3%